



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

**Report of the Ad Hoc Working Group on Long-term Cooperative Action
under the Convention on its seventh session, held in Bangkok from
28 September to 9 October 2009, and Barcelona
from 2 to 6 November 2009**

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I. Opening of the session

(Agenda item 1)

A. Host Governments welcoming ceremonies

1. The formal opening of the session was preceded by a welcoming ceremony organized by the Government of Thailand to mark the opening of the seventh session of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) and the ninth session of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP).
2. Statements were made by Mr. Yvo de Boer, Executive Secretary of the UNFCCC, Ms. Noeleen Heyzer, Executive Secretary of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Mr. Suwit Khunkitti, Minister of Natural Resources and Environment of Thailand, Ms. Connie Hedegaard, Minister of Climate and Energy of Denmark, and Mr. Abhisit Vejjajiva, Prime Minister of Thailand.
3. A welcoming ceremony organized by the Government of Spain marked the resumption of the seventh session of the AWG-LCA and the ninth session of the AWG-KP.
4. Statements were made by Mr. Yvo de Boer, Ms. Núria Marín i Martínez, Mayor of Hospitalet, Mr. Jordi Hereu i Boher, Mayor of Barcelona, Ms. Connie Hedegaard, Ms. María Teresa Fernández de la Vega, Vice-President of Spain, and Mr. José Montilla i Aguilera, President of the Generalitat de Catalunya.

B. Opening and resumption of the session

5. The first part of the seventh session of the AWG-LCA was held at the United Nations Conference Centre at UNESCAP in Bangkok, Thailand, from 28 September to 9 October 2009
6. The Chair of the AWG-LCA, Mr. Michael Zammit Cutajar (Malta), opened the session and welcomed all Parties and observers. He also welcomed Mr. Luiz Alberto Figueiredo Machado (Brazil) as Vice-Chair of the AWG-LCA and Ms. Lilian Portillo (Paraguay) as Rapporteur.
7. The Chair expressed his appreciation to the Government of Thailand for its offer to host the first part of the seventh session of the AWG-LCA. He encouraged Parties to work hard in order to meet the upcoming deadline set by the Bali Action Plan (decision 1/CP.13) to reach an agreed outcome.
8. The resumed seventh session of the AWG-LCA was held at the Fira Barcelona Convention Centre in Barcelona, Spain, from 2 to 6 November 2009.
9. Following the welcoming ceremony, the Chair of the AWG-LCA declared open the resumed seventh session of the AWG-LCA and thanked the Government of Spain, the Generalitat de Catalunya and the Barcelona City Council for their hospitality. The Chair welcomed all Parties and observers to the resumed seventh session. He further reminded Parties and observers that the agenda had been adopted at the first part of the session.

II. Organizational matters

(Agenda item 2)

A. Adoption of the agenda

(Agenda item 2 (a))

10. At its 1st meeting, on 28 September, the AWG-LCA considered a note by the Executive Secretary containing the provisional agenda and annotations (FCCC/AWGLCA/2009/11).

11. At the same meeting, the agenda was adopted as follows:
 1. Opening of the session.
 2. Organizational matters:
 - (a) Adoption of the agenda;
 - (b) Organization of the work of the session.
 3. 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) A shared vision for long-term cooperative action;
 - (b) Enhanced national/international action on mitigation of climate change;
 - (c) Enhanced action on adaptation;
 - (d) Enhanced action on technology development and transfer to support action on mitigation and adaptation;
 - (e) Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation.
 4. Other matters.
 5. Report on the session.

B. Organization of the work of the session

(Agenda item 2 (b))

12. The AWG-LCA considered this sub-item at its 1st meeting, on 28 September, and at its 4th meeting, on 2 November.
13. At the 1st meeting, the Chair drew delegates' attention to the scenario note prepared for the first part of the session, contained in document FCCC/AWGLCA/2009/12.
14. At the same meeting, the Chair proposed that two additional plenary meetings of the AWG-LCA be held during the first part of the seventh session, on 2 and 9 October. He also proposed that additional matters regarding the organization of the work of the session be taken up under item 3 of the agenda. The AWG-LCA agreed to the proposed organization of work.
15. At the 4th meeting, the Chair drew delegates' attention to the scenario note prepared for the resumed seventh session, contained in document FCCC/AWGLCA/2009/13. He invited delegates to take note of a typographical error in document FCCC/AWGLCA/2009/13, paragraph 16, line 33, where the word "cooperative" in sub-item 2 (a) should read "comprehensive".
16. At the same meeting, the Chair proposed that a closing plenary meeting be held during the afternoon of Friday, 6 November. The AWG-LCA agreed to the proposed organization of work.

III. 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:

(Agenda item 3)

A shared vision for long-term cooperative action

(Agenda item 3 (a))

Enhanced national/international action on mitigation of climate change

(Agenda item 3 (b))

Enhanced action on adaptation

(Agenda item 3 (c))

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

(Agenda item 3 (d))

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

(Agenda item 3 (e))

1. Proceedings

17. The AWG-LCA considered these sub-items together at its 1st, 2nd, 3rd, 4th and 5th meetings, on 28 September, 2 October, 9 October, 2 November and 6 November, respectively. It had before it documents FCCC/AWGLCA/2009/INF.1 and Add.1, FCCC/AWGLCA/2009/INF.2 and Add.1 and 2, FCCC/AWGLCA/2009/MISC.6 and FCCC/AWGLCA/2009/MISC.7.

18. At its 1st meeting, on 28 September, the AWG-LCA agreed to establish six contact groups for its seventh session, on:

- (a) A shared vision for long-term cooperative action, chaired by the Chair of the AWG-LCA;
- (b) Enhanced action on adaptation and its associated means of implementation, co-chaired by Mr. William Kojo Agyemang-Bonsu (Ghana) and Mr. Thomas Kolly (Switzerland);
- (c) Enhanced action on mitigation and its associated means of implementation, chaired by the Chair of the AWG-LCA;
- (d) Enhanced action on the provision of financial resources and investment, chaired by the Vice-Chair of the AWG-LCA;
- (e) Enhanced action on development and transfer of technology, co-chaired by Mr. Kishan Kumarsingh (Trinidad and Tobago) and Mr. Kunihiko Shimada (Japan);
- (f) Enhanced action on capacity-building, co-chaired by Ms Fatou Ndeye Gaye (Gambia) and Mr Georg Børsting (Norway).

19. The task of the contact groups was to support the AWG-LCA in continuing and accelerating its negotiations on the agreed outcome on the basis of the documents before it.

20. The AWG-LCA further agreed that the contact group on mitigation would divide the bulk of its work into sub-groups covering the specific subject matters of subparagraphs 1 (b) (i–vi) of the Bali

Action Plan and that the overall coherence of the negotiations on mitigation, as well as proposals by Parties that apply to mitigation as a whole, would be considered in the contact group.

21. At the same meeting, the AWG-LCA agreed that informal consultations would be convened by the Chair on general concepts and issues raised in proposals by Parties that need to be resolved to give final shape to the agreed outcome envisaged in the Bali Action Plan.
22. The AWG-LCA further agreed that informal consultations would be convened by the Vice-Chair on the preparation for, and organization of work at, the resumed seventh session of the AWG-LCA.
23. The Chair presented his views on the essential elements of an ambitious, effective and fair agreed outcome in the areas of adaptation, mitigation, finance and technology, including institutional arrangements, and reiterated his commitment to support the negotiations in order to achieve progress.
24. Statements were made by 16 Parties, including one speaking on behalf of the Group of 77 and China, one on behalf of the Alliance of Small Island States (AOSIS), one on behalf of the African Group, one on behalf of the Umbrella Group, one on behalf of the least developed countries (LDCs), one on behalf of the Environmental Integrity Group (EIG) and one on behalf of the European Community and its member States.
25. At the 2nd meeting, on 2 October, the Chair invited the Vice-Chair and the co-chairs to provide an oral report on the status of the work undertaken by the respective contact groups, and reported on the status of work of the contact groups on shared vision and mitigation. The Chair summarized the progress reported in order for the AWG-LCA to take stock of progress made in the negotiations.
26. At the same meeting, statements were made by 30 Parties, including one speaking on behalf of the Group of 77 and China, one on behalf of AOSIS, one on behalf of EIG, one on behalf of the European Community and its member States, one on behalf of LDCs, one speaking on behalf of six Parties, one speaking on behalf of nine Parties and one speaking in its capacity as the President *pro tempore* of the Central American Integration System on behalf of six Parties.
27. Statements were also made on behalf of the business and industry non-governmental organizations and indigenous peoples organizations, and by a representative of the constituency of the environmental non-governmental organizations (ENGOs).
28. At the 3rd meeting, on 9 October, the Chair, Vice-Chair and co-chairs provided an oral report on the work of the contact groups.
29. At the same meeting, the Chair invited the Vice-Chair to report on the results of the informal consultations referred to in paragraph 22 above. The Vice-Chair reported that agreement had been reached on maintaining the same working arrangements throughout the entire seventh session of the AWG-LCA, namely:
 - (a) A combination of formal and informal meetings to carry on the work undertaken by the AWG-LCA;
 - (b) A maximum of two formal meetings to take place under the AWG-LCA at any one time.
30. The Vice-Chair further reported that a brief plenary meeting on organizational matters was envisaged to mark the resumption of the seventh session of the AWG-LCA.
31. Statements were made by 39 Parties, including one speaking on behalf of the Group of 77 and China, one on behalf of LDCs, one on behalf of the European Community and its member States, one on behalf of the African Group, one on behalf of the AOSIS, one on behalf of EIG, one on behalf of five Parties and one speaking in its capacity as the President *pro tempore* of the Central American Integration System on behalf of five Parties.

32. Statements were also made on behalf of the trade union non-governmental organizations and local government and municipal authorities, and by a representative of the ENGO constituency.

33. At the 4th meeting, on 2 November, the Chair proposed that the contact groups established at the first part of the seventh session, as referred to in paragraph 18 above, continue their work at the resumed session and that the chairs, co-chairs and facilitators who assisted the contact groups and sub-groups at the first part of the session continue in these functions during the resumed session to the extent that they are available.

34. Owing to the unavailability of the respective chair and co-chair, the Chair further amended the following arrangements for the resumed seventh session:

- (a) The contact group on enhanced action on the provision of financial resources and investment to be co-chaired by Mr. Farrukh Iqbal Khan (Pakistan) and Mr. Jukka Uosukainen (Finland);
- (b) The contact group on enhanced action on capacity-building to be co-chaired by Ms. Portillo and Mr. Børsting.

35. At the same meeting, the AWG-LCA agreed to continue the informal consultations convened by the Chair that would be open to all Parties, to enable them to maintain an overview of the progress of the negotiations under the AWG-LCA towards the agreed outcome called for by the Bali Action Plan and to address issues arising, including the consideration of the documentary form and legal nature of the agreed outcome.

36. The AWG-LCA further agreed that informal consultations would be convened to lay the ground for work at the eighth session and in preparation for it as needed.

37. Statements were made by five Parties, namely one speaking on behalf of the Group of 77 and China, one on behalf of the Umbrella Group, one on behalf of the European Community and its member States, one on behalf of EIG and one on behalf of AOSIS.

38. At its 5th meeting, on 6 November, the AWG-LCA considered conclusions¹ proposed by the Chair following the informal consultations referred to in paragraph 22 above and adopted them as orally amended in the course of the meeting. In presenting the conclusions, the Chair noted that not all the non-papers referred to in the conclusions below have the same degree of maturity nor of acceptance.

2. Conclusions

39. The AWG-LCA requested the secretariat to compile the texts contained in the latest available non-papers produced by the chairs, co-chairs and facilitators of the groups during the seventh session of the AWG-LCA into an annex to the report on its seventh session for facilitating negotiations of the AWG-LCA at its eighth session in order to enable the Conference of the Parties to reach an agreed outcome at its fifteenth session. The report shall be made available in a timely manner, preferably two weeks in advance of the eighth session of the AWG-LCA.

40. The AWG-LCA reiterated its understanding that all texts and submissions from Parties, including those contained in documents FCCC/AWGLCA/2009/INF.1 and FCCC/AWGLCA/2009/INF.2, remain before the AWG-LCA and that the documentary form does not prejudice the form and legal nature of the agreed outcome envisaged under the Bali Action Plan.

¹ Contained in document FCCC/AWGLCA/2009/L.5.

41. The AWG-LCA agreed to carry out its work under agenda item 3 at its eighth session through one contact group in order to conclude its work on all the elements of the Bali Action Plan in a comprehensive and balanced manner.

IV. Other matters

(Agenda item 4)

42. No other matters were raised or considered.

V. Report on the session

(Agenda item 5)

43. At its 5th meeting, on 6 November, the AWG-LCA considered and adopted the draft report on its seventh session.² At the same meeting, on a proposal by the Chair, the AWG-LCA authorized the Rapporteur to complete the report on the session, with the assistance of the secretariat and under the guidance of the Chair.

VI. Closure of the session

44. At the 5th meeting, on 6 November, the Chair thanked the Vice-Chair, the Rapporteur and the secretariat for their work. The Chair also thanked delegates for their contributions. Statements were made by representatives of 24 Parties, including one speaking on behalf of the Group of 77 and China, one on behalf of AOSIS, one on behalf of the African Group, one on behalf of LDCs, one on behalf of the Umbrella Group, one on behalf of EIG and one on behalf of the European Community and its member States.

45. At the same meeting, a statement was also made by a representative of the youth constituency.

VII. Documents before the Ad Hoc Working Group on Long-term Cooperative Action under the Convention at its seventh session

Documents prepared for the session

FCCC/AWGLCA/2009/11	Provisional agenda and annotations. Note by the Executive Secretary
FCCC/AWGLCA/2009/12	Scenario note on the first part of the seventh session. Note by the Chair
FCCC/AWGLCA/2009/13	Scenario note on the resumed seventh session. Note by the Chair
FCCC/AWGLCA/2009/INF.1 and Add.1	Revised negotiating text. Note by the secretariat
FCCC/AWGLCA/2009/INF.2 and Add.1 and 2	Reordering and consolidation of text in the revised negotiating text. Note by the secretariat
FCCC/AWGLCA/2009/MISC.6 and Add.1	Ideas and proposals on the elements contained in paragraph 1 of the Bali Action Plan. Submissions from Parties
FCCC/AWGLCA/2009/MISC.7 and Add.1	Ideas and proposals on the elements contained in paragraph 1 of the Bali Action Plan. Submissions from intergovernmental organizations

² FCCC/AWGLCA/2009/L.4.

Other documents before the session

FCCC/AWGLCA/2009/4 (Parts I and II)	Fulfilment of the Bali Action Plan and components of the agreed outcome. Note by the Chair
FCCC/AWGLCA/2009/8	Negotiating text. Note by the Chair
FCCC/AWGLCA/2009/10	Report of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention on its sixth session, held in Bonn from 1 to 12 June 2009
FCCC/AWGLCA/2008/16/Rev.1	Ideas and proposals on paragraph 1 of the Bali Action Plan. Revised note by the Chair

Annex**Compilation of texts**

This annex compiles the content of the non-papers referred to in paragraph 39 of this report. The structure, paragraph numbering and heading styles used in the non-papers remain unchanged. Minor editorial changes have been made to titles and to footnote wording and numbering to orient the reader.

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I. A SHARED VISION FOR LONG-TERM COOPERATIVE ACTION*

This non-paper includes the content of:	Page
1. Non-paper 33 (23 October 2009): Revised annex I to document FCCC/AWGLCA/2009/INF.2	13
2. Non-paper 43 (6 November 2009): Revised annex I to document FCCC/AWGLCA/2009/INF.2	25
3. Non-paper 37 (4 November 2009): Revision of paragraphs 15 and 16 of non-paper No. 33	30
4. Non-paper 38 (5 November 2009): Revision of paragraphs 17 and 24 of non-paper No. 33	31

* As tabled by the facilitator on 6 November 2009 (non-paper no. 52).

Content of non-paper no. 33 (23 October 2009)

Preambular

Alternative 1 (paragraphs 1-13)

1. Recalling the Bali Action Plan (decision 1/CP.13) adopted by the Conference of the Parties at its thirteenth session, and recognizing the need for long-term cooperative action among all Parties to enable the full, effective and sustained implementation of the Convention now, up to and beyond 2012, in order to achieve its ultimate objective.
2. Renewing the political determination to strengthen a global partnership that enhances long-term cooperative action and addresses existing implementation gaps, and to continue building an inclusive, fair and effective [climate regime] [implementation of the Convention] – one that takes into account the first and overriding priorities of all developing countries, which are the promotion of sustainable economic and social development and poverty eradication, as well as the integrity of the climate regime, the equitable development needs of present and future generations, the survival of the most vulnerable and the particular vulnerability of SIDS and LDCs.
3. Recalling the findings contained in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and more recent scientific information confirm that warming of the climate system, as a consequence of human activity, is unequivocal; current per-capita emissions in developed countries remain relatively high compared with those in developing countries; negative impacts of climate change are already evident and widespread, in particular in vulnerable regions of the world.
4. Recognising that early and urgent undertaking to accelerate both mitigation and adaptation actions by all countries, on the basis of equity and according to their common but differentiated responsibilities and respective capabilities, is necessary. Scientific evidence shows that the global costs of mitigation and adaptation to the adverse effects of 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, thereby reducing the risk of crossing tipping points that could result in abrupt climate change.
5. Recognizing further that due to their historical responsibility for the accumulation of greenhouse gas emissions in the atmosphere and their disproportionate historical use of the shared global carbon space, developed country Parties must 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, in particular by taking on ambitious economy-wide quantified emission limitation and reduction commitments or actions. Delay by developed country Parties in implementing their commitments to reduce emissions will increase their climate debt to the developing country Parties and significantly constrain opportunities to achieve lower stabilization levels of greenhouse gases, intensifying the risk of more severe climate change impacts and the consequent need for, and cost of, adaptation. Deep cuts in GHG emissions [by developed countries] [by all Annex I country Parties] [by all developed countries] are urgently required to prevent dangerous interference with the climate system and the modification of long-term emission trends consistent with the ultimate objective of the Convention.
6. Recalling that long-term cooperative action, including a long-term global goal for emission reductions, shall be guided by the ultimate objective of the Convention in accordance with its provisions and principles, in particular the principles of common but differentiated responsibilities and respective capabilities, [Articles 3, paragraphs 1, 2, 3 and 5, and Article 4, paragraphs 3 and 7, of the Convention,] equity, the Rio principles, including the precautionary principle and the polluter pays principle, as well as state responsibility.

7. Noting the need to take account of national circumstances, including environmental, social and economic [and political] conditions and other relevant factors and future changes in these circumstances as well as the constant evolution of scientific knowledge relating to climate change, its causes and effects, and recognizing that the application of the Convention principles as regards individual Parties should [evolve] [be improved].
8. Convinced that the profound changes that the structure of the global economy has undergone since the entry into force of the Convention and the grave challenge of harmonizing sustainable development while addressing climate change and demands for a more equitable utilization of the global atmospheric resource necessitate [an economic transition][a paradigm shift] that adjusts global economic growth patterns towards a sustainable [lifestyle] [low-emission] [trajectory] [climate-resilient] [economy] [development] allocating global financing and investment according to the priorities identified by the international community, with climate change stabilization being one of these priorities, based on innovative technologies, more sustainable production and consumption, [while ensuring a just transition of the workforce, which creates decent work and quality jobs] and seeking the active participation of all stakeholders [, be they governmental, including subnational and local government, private business or civil society, including the youth and addressing the need for gender equity].
9. Recognizing that, led by developed country Parties, this transition is needed by all the Parties. As there is still no model a concrete roadmap for low-emission development, especially for developing country Parties, is urgently needed. 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. Those developing countries that were and are low-emission economies need sufficient financial incentives and appropriate technology transfer to keep avoiding greenhouse gas (GHG) emissions in their path to sustainable development and to prevent adopting the high GHG emission trajectories of developed countries and global crises, such as the financial crisis, should not constitute an obstacle to the provision of financial and technical assistance to developing countries.
10. Recognising further that all Parties should contribute to the global effort to combat climate change under an enlightened sense of solidarity, in accordance with their common but differentiated responsibilities and respective capabilities, envisaging a spectrum of effort within which all Parties should aim to undertake a similar level of effort to others at a similar level of development and with similar national circumstances, while recognising that 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 developing countries face serious adverse effects of climate change as well as threats to their future economic potential owing to insufficient access to shared global atmospheric resources.
11. Acknowledging the important role of the Kyoto Protocol in contributing to the ultimate objective of the Convention, the need to broaden the legal commitments under the Convention and that long-term cooperative action does not include commitments for developing countries, but rather entitles developing countries to technology transfer, capacity-building and financial resources for project implementation regarding national programmes for mitigation and adaptation. Developing countries will contribute to a global mitigation effort in accordance with the Convention, including through nationally appropriate mitigation actions. 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 finance and transfer of technology. Developing country Parties could adopt bolder measures of mitigation if developed country Parties make even deeper cuts in their own domestic emissions and provide adequate means of implementation. Furthermore, deeper cuts would create a demand for expanded carbon markets that should go hand in hand with significantly increased access to this market, and an early and enhanced role of forestry in it.
12. Recalling paragraphs 20 and 21 of the preamble to the Convention and confirming that developed country Parties shall implement policies and measures to respond to climate change in such a

way as to minimize adverse effects, including effects on international trade and social and economic impacts on other parties, especially developing country Parties, and in particular those identified in Articles 4.8, 4.9 and 4.10 of the Convention, taking fully into account Article 3 of the Convention, in particular its paragraphs 2, 3 and 5. In this regard that developed country Parties shall not resort to any form of unilateral measures, including countervailing border measures, against goods and services imported from developing countries on the grounds of protection and stabilization of climate.

13. Noting that a shared vision for long-term cooperative action should take account not only of the rights of human beings, but also of the rights of Mother Earth and all its natural beings as the adverse effects of climate change also have a range of direct and indirect implications for the full and effective enjoyment of human rights – including the right to sustainable development, self determination, statehood, life, the right of people not to be deprived of their own means of subsistence, the right to water and the right to live well – and are increasingly posing a risk to security and the survival, sovereignty and territorial integrity of states.

Alternative 2 (paragraph 14)

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

Recognizing, in the 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],

Substantive paragraphs

15.

Alternative 1

A shared vision for long-term cooperative action should be comprehensive and include mitigation, adaptation, finance, technology and capacity-building as well as sustainable development. It should guide short- and medium-term action on adaptation and mitigation and recognize the strong link between them as well as the cross-cutting role played by financing, technology transfer and capacity-building, thus galvanizing greater attention and efforts towards adaptation at all levels to minimize the adverse impacts of climate change and to assist in building sustainable [and climate-resilient] [and climate-compatible] development. Failure to implement ambitious and immediate mitigation actions by developed country Parties will increase the need for adaptation in [all developing countries, [particularly]] [the most vulnerable countries], and therefore for financial support. At the same time, increased financial support and technology transfer to developing countries will help these countries in their implementation of NAMAs.

Alternative 2

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 countries vulnerable to the impacts of climate change. Actions taken shall play a significant role in ensuring that global greenhouse gas concentrations in the atmosphere are 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 make 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.

Alternative 3

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 Article 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 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.

Alternative 4

The agreement on the shared vision for long-term cooperative action should address all aspects of the Bali Action Plan and form the basis of a framework decision by the Conference of the 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 term (2020) and the long term (2050), with the associated stabilization levels of greenhouse gases and global mean temperature rises. It should also include the year of maximum global emissions and the differentiated contribution to the goal by all the groups of countries, Parties to the Convention and be led 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.

The guiding principles of the Convention should support subparagraphs (b) and (c) above, in terms of common but differentiated responsibilities and respective capabilities, historical responsibilities in greenhouse gas emissions and the related historical ecological debt generated by the cumulative greenhouse gas emissions since 1750 and the most recent scientific information. The objective of the shared vision should be expressed as guidance to integrate the global cooperative action to enable the full, effective and sustained implementation of the Convention, from now, up to and beyond 2012. The previous should be linked to a series of more specific and mutually coherent agreements on mitigation, adaptation, technology and financing issues, which should be included in a series of COP decisions so as to complement the framework decision on the shared vision.

Alternative 5

Deep cuts in global emissions by developed country parties in accordance with their historical responsibilities, as well as the principles of equity and common but differentiated responsibilities, will be required to prevent dangerous interference with the climate system and achieve the ultimate objective of the Convention. Early and urgent action to this end is necessary.

Further delay by developed country parties in implementing their commitments to reduce 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.

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;
- (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.

The difference between the assigned total amounts of Annex I Parties and their actual domestic amounts of GHG emissions shall be quantified as an increase in their emissions debt 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.

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 of meeting their commitments, towards the full, effective and sustained implementation of the Convention.

Alternative 6

Annex I Parties shall ensure that their aggregate anthropogenic carbon dioxide equivalent 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, and 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;

- (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.

Enhanced action on the four building blocks, namely adaptation, mitigation, technology and financing

16. [...]

Note: Place holder for text reflecting the essential elements of a long-term cooperative action on adaptation, mitigation, technology and financing.

A long-term global goal for emission reductions [with related medium-term goals]

17. The shared vision includes a long-term [aspirational] global goal for emission reductions that is based on best available science [and economic analysis] [, incorporating the ecological rationality of natural systems as one of its guiding principles, as this ultimately affects the dynamics of planet Earth and its climate, and to which the economic rationality should be subordinate], recognizes the scale and urgency of the challenge as outlined in the Fourth Assessment Report of the IPCC and provides direction to long-term cooperative action, making it sufficiently effective to bring about the deep cuts in global emissions required to achieve the ultimate objective of the Convention [with flexibility and diversity of nationally appropriate actions]. The emission reduction goals set for the short and medium term should enable the fulfilment of this long-term goal.

18. In order to achieve the ultimate objective of the Convention as contained in its Article 2, the long-term global goal is set

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 (CO₂ eq) and a temperature increase limited to 2 °C or below above the pre-industrial level [with a probability greater than 50 per cent]. For this purpose, the Parties should collectively reduce global emissions by at least [50] [81–71] [85] per cent [from 1990] levels by 2050.

Option 2

as a stabilization of GHG concentrations in the atmosphere well below 350 ppm CO₂ eq and a temperature increase limited to below 1.5 °C above the pre-industrial level. For this purpose, the Parties should collectively reduce global emissions by [81–71] [more than 85] [at least 95] per cent from 1990 levels by 2050.

Alternative to options 1 and 2

(a) as

(i) a global temperature increase limited to [lower than] [2 °C] [1.5 °C] above the pre-industrial level [with a probability greater than 50 per cent];

(ii) a stabilization of GHG concentrations in the atmosphere at [[well below 350] [400] [not more than 450] [450] [least 450] ppm carbon dioxide equivalent (CO₂ eq)] [450 ppm carbon dioxide equivalent or lower].

(b) For this purpose, the Parties should collectively reduce global emissions by at least [50] [71–81] [85] [more than 85] [at least 95] per cent below 1990 levels by 2050.

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

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

Option 6

on the basis of

Option 6.1

historical responsibility and capacity and national circumstances.

Option 6.2

emissions debt.

Option 6.3

an equitable allocation of the global atmospheric resources.

Option 6.4

economic and technological feasibility.

19. Alternatives to paragraph 18:

Option 1

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

Option 2

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 stabilizing 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 by which global GHG emissions peak by [X] and then global GHG emissions reduce by [X] per cent by [X] on [X] levels.

20. Emission pathways towards the long-term global goal for emission reduction 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] [in 2015 for developed country Parties and in 2025 for developing country Parties] and decrease thereafter [, and the annual maximum reduction rate should be up to 4–5 per cent between 2015 and 2020].

21. [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 reduce their 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 [2017] [2020], through

domestic and international efforts [with further reductions to be achieved through policies and measures that promote sustainable lifestyles];

- (b) [should transform their economies over the coming decades in order to collectively reduce their greenhouse gas emissions] [in the range of 75–85] [by at least 85] [by at least 90] [by 80–95] [by more than 95] per cent by 2050 compared to 1990 levels.

22. 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] [an input for] the consideration of fulfilment by Annex I Parties of their commitments to provide financing, technology and compensation to developing countries for mitigating and adapting to climate change.

23.

Option 1

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, [should] [could] realistically change their emission patterns by :

- (a) [Significantly deviating from the baseline by 2020] [Deviating in the order of 15–30 per cent below the baseline by 2020];
- (b) And reducing by 25 per cent from 2000 levels by 2050.

Option 2

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 levels by 2020, respecting the principle of common but differentiated responsibilities and respective capabilities, supported and enabled by technology, financing and capacity-building.

Process of reviewing overall progress towards the ultimate objective of the Convention and actions related to mitigation, adaptation and means of implementation

24.

Option 1

Consistent with the provisions of the Convention, in particular Article 7.2(a) and Article 4.2 (a) and 4.2 (b):

a) 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 [as well as relevant technical, social and economic information,] [and taking account of observed impacts and efforts made to adapt to climate change with avoidance of damage to SIDS and LDCs being a primary benchmark for the assessment] [, bearing in mind the changes in 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 light of the findings of the latest assessment report of the IPCC.

b) The long-term global goal for emission reductions shall be updated to reflect progress in scientific knowledge. To allow for these updates, the 2 °C goal shall be broken down into partial targets: initially, a 0.2 °C temperature increase per decade over ten decades. Every ten years, the partial target shall be evaluated, with a view to possibly redefining it, taking into account advances in scientific knowledge.

Alternative to subparagraph (b):

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 Fifth Assessment Report of the IPCC and other relevant scientific information. The Conference of the 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 adjustment of strategies as actual outcomes and impacts in developing countries, in particular LDCs and 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 developing countries, in particular LDCs and SIDS, must be one of the key benchmarks for assessing the adequacy of our long-term goal.

Option 2

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 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 in 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 amendments to Annex B (commitments by developed country Parties) and Annex C (actions by developing country Parties). 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 in circumstances of the Parties.

Annex

Issues under consideration in other contact groups or subgroups

Issues under consideration in the contact group on adaptation

1. The adverse effects of climate change will be felt most acutely [in vulnerable countries [as stated in paragraph 19 of the preamble to the Convention]] [in developing countries, 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] [and SIDS and LDCs] [and by those segments of the population that are already in vulnerable situations, owing to factors such as geography, poverty, gender, age, indigenous or minority status and disability].
2. Adaptation actions include those necessary to restore the resilience of ecosystems and their productivity to enable sustainable economic development.
3. The serious adverse effects of climate change, notably those on crop [food] production systems, fisheries and food security, on poverty reduction, water resources, human health and welfare, including housing and infrastructure, on the composition, resilience and productivity of natural and managed ecosystems, including marine and coastal ecosystems, on the operation of socio-economic systems and on transboundary migration levels, as well as insufficient access to a global atmospheric resource and the related historical ecological debt generated by the cumulative GHG emissions, are [becoming] a major obstacle to the attainment of the Millennium Development Goals.
4. Necessitating a shared vision for actively promoting sustainable community-based ecosystem management, conservation and restoration activities, where appropriate to support adaptation.
5. Noting that special attention should be given to the urgent and immediate adaptation needs of [all developing countries, [particularly]] [the most vulnerable countries], which is the most important issue for these countries. Those Parties whose national circumstances reflect the least capability and the most vulnerability to the adverse effects of climate change should be prioritized for support in their efforts to adapt to the adverse effects of climate change. Developing country Parties lacking sufficient capacity to respond to the challenges of climate change require access to resources in a timely, sustained and cooperative manner.
6. Emphasizing that it is fundamental that [Annex I countries] [developed country Parties and other developed Parties included in Annex II of the Convention] comply fully with the provisions as set out in Articles 4.3, 4.4 and 4.5 of the Convention in [supporting] [assisting] [enabling] all developing country Parties, particularly the most vulnerable, in undertaking adaptation measures and enhanced nationally appropriate mitigation actions (NAMAs), in a measurable, reportable and verifiable manner, through the provision of technology cooperation and transfer, capacity-building, financial resources and compensation. It is also particularly important that the provision of financial resources, particularly by developed countries, is adequate, predictable, stable, sufficient and timely to address the full costs of adaptation in developing countries

Issues under consideration in the contact group on mitigation

7. All Annex I Parties also agree to present 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 individual targets of Annex I Parties 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.

Issues under consideration in the contact group on financing

8. Emphasizing that it is fundamental that [Annex I countries] [developed country Parties and other developed Parties included in Annex II of the Convention] comply fully with the provisions as set out in Articles 4.3, 4.4 and 4.5 of the Convention in [supporting] [assisting] [enabling] all developing country Parties, particularly the most vulnerable, in undertaking adaptation measures and enhanced nationally

appropriate mitigation actions (NAMAs), in a measurable, reportable and verifiable manner, through the provision of technology cooperation and transfer, capacity-building, financial resources and compensation. It is also particularly important that the provision of financial resources, particularly by developed countries, is adequate, predictable, stable, sufficient and timely to address the full costs of adaptation in developing countries.

9. In order to fulfill this shared vision, Parties have agreed to establish a 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.

10. 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 mechanism and a facilitative mechanism, drawn up to facilitate the design, adoption and carrying out of public policies, as the prevailing instrument to which market rules and related dynamics should be subordinate, in order to assure the full, effective and sustained implementation of the Convention.

11. 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 in developing countries; (c) technology needs assessments (TNAs) for adaptation and mitigation under the NAMAs and the NAPAs or national communications 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.

12. 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 five 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 countries. The

secretariat will provide technical and administrative support, including a new centre for information exchange.

Issues under consideration in the contact group on technology

13. Further recognizing that to achieve the ultimate objective of the Convention, the world needs drastic action and global cooperation in research, development, demonstration, diffusion and transfer of technologies for adaptation and mitigation; building on Articles 4.1(c) and 4.5 of the Convention, Parties commit to implementing effective mechanisms for technology development and transfer and for proactively evaluating and addressing barriers to technology transfer.

Content of non-paper no. 43 (6 November 2009)

1. Recalling the Bali Action Plan (decision 1/CP.13) adopted by the Conference of the Parties at its thirteenth session, and recognizing the need for long-term cooperative action among all Parties to address implementation gaps and enable the full, effective and sustained implementation of the Convention now, up to and beyond 2012 in order to achieve its ultimate objective.
2. Further recalling that long-term cooperative action, including a long-term global goal for emission reductions, shall be guided by the ultimate objective of the Convention and implemented in accordance with its principles and provisions, in particular Articles 3, paragraphs 1, 2, 3 and 5, and Article 4, paragraphs 3, 6, 7, 8, 9 and 10, and including its preamble, in particular paragraphs 20 and 21; and further considering equity, and the Rio principles, including the precautionary principle and the polluter pays principle, as well as state responsibility.
3. Acknowledging the important role of the Kyoto Protocol in contributing to the ultimate objective of the Convention.
4. Emphasising that the shared vision for long-term cooperative action is based on science and responds to the urgency of addressing climate change. The findings contained in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and more recent scientific knowledge confirms that warming of the climate system, as a consequence of human activity, is unequivocal; current per-capita emissions in developed countries remain relatively high compared with those in developing countries; and negative impacts of climate change are already evident and widespread, in particular in vulnerable regions of the world.
5. Noting that scientific evidence also shows that the global costs of mitigation and adaptation to the adverse effects of 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, thereby reducing the risk of crossing tipping points that could result in irreversible climate change.
6. Recognizing that early and urgent undertaking to accelerate and enhance the implementation of the Convention by all Parties, on the basis of equity and according to their common but differentiated responsibilities and respective capabilities, is necessary. Deep cuts in GHG emissions are urgently required to prevent dangerous interference with the climate system.
7. Recognizing further that owing to their historical responsibility for the accumulation of greenhouse gas emissions in the atmosphere and their disproportionate historical use of the shared atmospheric space, developed country Parties must lead the effort to build a low-emission society that ensures continued growth and sustainable development and strengthens capacity to adapt to the impacts of climate change; in particular, developed country Parties must show leadership by taking on ambitious economy-wide quantified emission limitation and reduction commitments or actions and in providing new and additional financial resources to developing country Parties. Delay by developed country Parties and other Parties included in Annex I in implementing their commitments to reduce emissions will increase their climate debt to the developing country Parties and the need for, and cost of, adaptation.
8. Acknowledging that developing countries are already contributing to a global mitigation effort in accordance with the Convention. Developing country Parties could enhance mitigation action if developed country Parties make even deeper cuts in their own domestic emissions and provide adequate means of implementation. National circumstances, including mitigation potential, environmental, social and economic conditions and other relevant factors as well as the constant evolution of scientific knowledge relating to climate change shall further be taken into account.

9. Realizing that harmonizing sustainable development while addressing climate change and demands for a more equitable utilization of the global atmospheric resource necessitate a paradigm shift that adjusts global economic growth patterns towards a sustainable climate-resilient development, based on innovative technologies and more sustainable production and consumption, while ensuring a just transition of the workforce which creates decent work and quality jobs, and seeking the active participation of all stakeholders. Responses to climate change shall be implemented in such a way as to minimize adverse effects, including social and economic impacts on other Parties, especially developing country Parties. Those developing country Parties that were and are low-emission economies need sufficient financial incentives and appropriate technology transfer to keep avoiding greenhouse gas (GHG) emissions in their path to sustainable development.

10. The shared vision is a comprehensive global approach to enhance the full, effective and sustained implementation of the Convention through long-term cooperative action now, up to and beyond 2012.

11. The shared vision for long-term cooperative action shall take fully into account the first and overriding priorities of developing country Parties, which are economic and social development and poverty eradication. It shall be pursued through enhanced action by all Parties to address climate change in accordance with their common but differentiated responsibilities and respective capabilities. It shall also recognize the important role of food production systems in mitigation and adaptation efforts, as well as the equitable development needs of present and future generations, and the survival of all nations, particularly those vulnerable to the adverse effects of climate change. The resolution of the UN Human Rights Council (HRC/10/4) on human rights and climate change as well as the rights of Mother Earth shall be noted.

12. The shared vision for long-term cooperative action guides short-, medium- and long-term action on climate change and integrates the four building blocks of the Bali Action Plan in a comprehensive, balanced and fair manner. It gives equal weight to adaptation and mitigation and strengthens the cross-cutting role of technology, financing and capacity-building as means of implementation to enable and support mitigation and adaptation actions of developing country Parties.

Alternative to paragraphs 1 – 12:

Alternative 1:

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, which 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 Article 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 Article 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 emission 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 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.

Alternative 2:

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

Recognizing, in the 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],

13. The shared vision for long-term cooperative action includes:

(a) A shared vision on adaptation:

Place holder ...

(b) A shared vision on mitigation:

Place holder ...

(c) A shared vision on the provision of financial resources and investment:

Place holder ...

(d) A shared vision on technology development and transfer:

Place holder ...

(e) A shared vision on capacity-building:

Place holder ...

14. A long-term aspirational and ambitious global goal for emission reductions, as part of the shared vision for long-term cooperative action, is based on the best available scientific knowledge and supported by medium-term goals for emission reductions in order to achieve the ultimate objective of the Convention.

15. The long-term global goal and related medium-term goals are determined in accordance with the principles and provisions of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, considering historical responsibilities and an equitable allocation of the global atmospheric resource.

16. The realization of the long-term global goal is the responsibility of all Parties, led by developed country Parties and other Parties included in Annex I. The extent to which developing country Parties will be able to contribute to the achievement of the long-term global goal will depend on the effective implementation by developed country Parties and other developed country Parties included in Annex II 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.

17. The long-term global goal for emission reductions is determined as

Option 1

- (a) a global temperature increase limited to [lower than] [1.5 °C] [2 °C] above the pre-industrial level;
- (b) a stabilization of GHG concentrations in the atmosphere at [well below 350] [400] [not more than 450] [450] ppm carbon dioxide equivalent (CO₂ eq).

Option 2

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

18. Achieving the long-term global goal requires reversing the trend of increasing global greenhouse gas emissions. To this end, global GHG emissions shall peak [by 2015] [by 2020 at the latest] [in 2015 for developed country Parties and other Parties included in Annex I and in 2025 for developing country Parties] and decline thereafter.

19. For this purpose, Parties should collectively reduce global emissions by at least [50] [85] [95] per cent from 1990 levels by 2050.

20. Developed country Parties and other Parties included in Annex I, as a group, shall reduce their GHG emissions:

- (a) By at least [25–40] [40] [45] per cent from 1990 levels by 2020;
- (b) By [75–85] [at least 85] [more than 95] per cent from 1990 levels by 2050.

21.

Option 1

The GHG emissions of developing country Parties, as a group, shall significantly deviate from the baseline by 2020.

Option 2

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 levels by 2020, respecting the principle of common but differentiated responsibilities and respective capabilities, supported and enabled by technology, financing and capacity-building.

22. In order to enable the fulfilment of the long-term global goal on emission reductions, Parties agree on:

- (a) *Place holder for a goal for adaptation*
- (b) *Place holder for a goal for finance*
- (c) *Place holder for a goal for technology transfer and development*
- (d) *Place holder for a goal for capacity-building*

23.

Option 1

Consistent with the provisions of the Convention, in particular its Article 7.2(a) and Article 4.2(a) and 4.2(b), Parties shall periodically review the implementation and overall progress towards the ultimate objective of the Convention, in the light of the best available scientific knowledge and taking into account efforts made on mitigation and adaptation, observed impacts of climate change and the precautionary principle, with avoidance of damage to LDCs and SIDS being a primary benchmark for the assessment. The review shall be comprehensive and include an evaluation and possible update of the long-term global goal for emission reductions. The first comprehensive review shall take place in [2016].

Option 2

The CMP¹ shall undertake regular reviews of the Protocol, including the consideration of commitments of the Parties for subsequent periods, in the light of the best available scientific information, bearing in mind the changes in circumstances of the Parties in accordance with criteria, including economic development stages, capabilities and shares of GHGs in the world. Based on this review, the CMP shall take appropriate actions, including the adoption of amendments to annexes to this Protocol which contain commitments made by developed countries Parties and actions to be taken by developing country Parties.

¹ The CMP here indicates the Conference of the Parties serving as the meeting of the Parties to the Draft Protocol to the Convention proposed by Japan (FCCC//CP/2009/3).

Content of non-paper no. 37 (4 November 2009)

15.1 The shared vision is a comprehensive global approach to enhance the full, effective and sustained implementation of the Convention through long-term cooperative action now, up to and beyond 2012 and address all implementation gaps, in order to achieve the ultimate objective of the Convention contained in its Article 2, pursued in accordance with, and guided by, the provisions and principles of the Convention.

15.2 This approach shall be based on science and respond to the urgency of addressing climate change. It shall respect the right to, and promotion of, sustainable development, recognize vulnerability and ensure the survival of all nations.

15.3 It shall be pursued through enhanced action by all Parties to address climate change in accordance with their common but differentiated responsibilities and respective capabilities. It shall be led by developed country Parties in modifying longer-term emission trends and providing new and additional financial resources to developing country Parties. It shall be implemented in such a way as to minimize adverse effects, including social and economic impacts on other Parties, especially developing country Parties.

15.4 It guides short-, medium- and long-term action on climate change and integrates the four building blocks of the Bali Action Plan in a comprehensive, balanced and fair manner. It gives equal weight to adaptation and mitigation and strengthens the cross-cutting role of technology, financing and capacity-building as means of implementation to enable and support mitigation and adaptation actions of developing country Parties.

16. The comprehensive global approach on long-term cooperative action includes:

(a) A shared vision on adaption:

Place holder ...

(b) A shared vision on mitigation:

Place holder ...

(c) A shared vision on the provision of financial resources and investment:

Place holder ...

(d) A shared vision on technology development and transfer:

Place holder ...

(e) A shared vision on capacity-building:

Place holder ...

(f) A shared vision on a long-term global goal on emission reductions and related medium-term goals:

Content of non-paper no. 38 (5 November 2009)

17.1 A long-term aspirational and ambitious global goal for emission reductions, as part of the shared vision for long-term cooperative action, is based on the best available scientific knowledge and supported by medium-term goals for emission reductions in order to achieve the ultimate objective of the Convention.

17.2 The long-term global goal and related medium-term goals are determined in accordance with the principles and provisions of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, considering historical responsibilities and an equitable allocation of the global atmospheric resource.

17.3 The realization of the long-term global goal is the responsibility of all Parties, led by developed country Parties. The extent to which developing country Parties will be able to contribute to the achievement of the long-term global goal 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.

17.4 In order to enable the fulfilment of the long-term global goal on emission reductions, Parties agree on the following goals for adaptation, finance, technology and capacity-building:

- (a) *Place holder for a goal for adaptation*
- (b) *Place holder for a goal for finance*
- (c) *Place holder for a goal for technology transfer and development*
- (d) *Place holder for a goal for capacity-building*

18. The long-term global goal for emission reductions is determined as

Option 1

- (a) a global temperature increase limited to [lower than] [1.5 °C] [2 °C] above the pre-industrial level;
- (b) a stabilization of GHG concentrations in the atmosphere at [well below 350] [400] [not more than 450] [450] ppm carbon dioxide equivalent (CO₂ eq).

Option 2

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

19. Achieving the long-term global goal requires reversing the trend of increasing global greenhouse gas emissions. To this end, global GHG emissions shall peak [by 2015] [by 2020 at the latest] [in 2015 for developed country Parties and in 2025 for developing country Parties] and decline thereafter.

20. For this purpose, the Parties should collectively reduce global emissions by at least [50] [85] [95] per cent from 1990 levels by 2050.

21. Developed country Parties and other developed Parties included in Annex I, as a group, shall reduce their GHG emissions:

- (a) By at least [25–40] [40] [45] per cent from 1990 levels by 2020;
- (b) By [75–85] [at least 85] [more than 95] per cent from 1990 levels by 2050.

22.

Option 1

The GHG emissions of developing country Parties, as a group, shall significantly deviate from the baseline by 2020.

Option 2

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 levels by 2020, respecting the principle of common but differentiated responsibilities and respective capabilities, supported and enabled by technology, financing and capacity-building.

23.

Option 1

Consistent with the provisions of the Convention, in particular its Article 7.2(a) and Article 4.2 (a) and 4.2 (b), Parties shall periodically review the implementation and overall progress towards the ultimate objective of the Convention, in the light of the best available scientific knowledge and taking into account efforts made on mitigation and adaptation, observed impacts of climate change and the precautionary principle, with avoidance of damage to LDCs and SIDS being a primary benchmark for the assessment. The review shall be comprehensive and include an evaluation and possible update of the long-term global goal for emission reductions. The first comprehensive review shall take place in [2016].

Option 2

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 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 in 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 amendments to Annex B (commitments by developed country Parties) and Annex C (actions by developing country Parties). 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 in circumstances of the Parties.

II. ENHANCED ACTION ON ADAPTATION AND ITS ASSOCIATED MEANS OF IMPLEMENTATION*

This non-paper includes the content of:	Page
1. Non-paper No. 31 (20 October 2009): Revised streamlined text on adaptation.....	34
2. Non-paper No. 41 (05 November 2009): Draft text.....	54

* As tabled by the co-chairs on 6 November 2009 (non-paper no. 53).

Content of non-paper No. 31 (20 October 2009)

[The Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as “the Convention”,

PP.1 Being guided by Articles 2, 3.2, 3.3, 4.1, 4.3, 4.4 and 4.7 of the Convention, and the Bali Action Plan adopted as decision 1/CP.13 by the Conference of Parties (COP),

PP.2 Recognizing existing commitments and agreements under Principle 21 of the Stockholm Declaration, the Monterrey Consensus, the Paris Declaration on Aid Effectiveness, 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,

PP.3 Acknowledging the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change,

PP.4 Emphasizing the urgency and immediacy of the climate change problem,

PP.5 Acknowledging the need to accelerate action to address the adverse effects of climate change and the adverse impact of response measures,

PP.6 Recognizing that climate change, arising from the historical cumulative GHG emissions of developed countries, poses a serious threat to the social and economic development of all Parties and constitutes an additional burden on all developing country Parties, especially those that are particularly vulnerable, in reducing poverty, developing strategies to address social vulnerabilities, attaining sustainable development and achieving the United Nations Millennium Development Goals,

PP.7 Further recognizing that adaptation is also an additional burden on developing countries, and that those particularly vulnerable to the adverse impacts of climate change and to the adverse impact of response measures will suffer disproportionately,

PP.8 Noting that environmental, economic and social conditions and levels of development differ among Parties, which will lead to different prioritizations of adaptation activities,

PP.9 Recognizing that adaptation occurs at local, regional and national levels, and is an inherent part of development planning and implementation,

PP.10 Noting that adaptation efforts and funds, and mitigation efforts, should be given equal consideration,

PP.11 Recognizing that early and ambitious emission reductions by developed country Parties, and deep cuts in global emissions, will be required to achieve the ultimate objective of the Convention, decrease the effort and funding needed for adaptation, and reduce damage to areas beyond national jurisdictions,

PP.12 Also recognizing that poor mitigation commitments and actions will impose a higher demand on adaptation measures which will require additional funding,

PP.13 Further recognizing the value of leveraging the work of existing organizations and institutions already involved in addressing climate-related risks and opportunities,

A. Definitions, objectives, [guiding principles,] scope and roles and responsibilities

Definitions¹

1. Adaptation [shall] [should] encompass action to reduce the vulnerability and build the resilience of ecological and social systems and economic sectors to present and future adverse effects of climate

¹ Sub-headings have been introduced solely to enhance the readability of the document.

change [and the impact of the implementation of response measures] in order to minimize the threats to life, human health, livelihoods, food security, assets, amenities, ecosystems and sustainable development.

2. Taking into account different national circumstances, levels of risk and exposure to climate change, “particularly vulnerable developing countries” are hereby defined as developing country Parties that are particularly vulnerable to the adverse effects of climate change [and/or to the impact of the implementation of response measures], and least able to adapt, including:

- (a) Least developed countries (LDCs), small island developing States (SIDS) and countries in Africa affected by drought, desertification and floods;
- (b) Those identified in the nineteenth [and twentieth] paragraph[s] of the preamble to the Convention [and in its Article 4.8];
- (c) Countries in Asia; archipelagic countries; countries with unique biodiversity, tropical and mountainous glaciers, and other fragile ecosystems, including terrestrial, highland and other ecosystems such as estuaries, coastal wetlands, mangroves, coral reefs, seagrass beds and sand dunes; countries with populations in mountainous regions with rapidly disappearing glaciers; economically vulnerable countries; [countries with areas of high urban atmospheric pollution] and countries with vulnerable urban populations.

Objectives

3. Adaptation requires urgent and immediate, short-, medium- and long-term action, to be implemented through enhanced international cooperation. To this end, a comprehensive adaptation [framework] [programme] is hereby established, with the objectives of:

- (a) Reducing vulnerability and building resilience in all countries to present and future adverse effects of climate change [and to the impact of the implementation of response measures];
- (b) Enabling and supporting the implementation of adaptation action at local, subnational, national, regional and global levels through finance, technology and capacity-building;
- (c) Mobilizing and providing access to means of implementation, including finance, technology and capacity-building, for all developing countries, especially those that are particularly vulnerable;
- (d) Enhancing cooperation among Parties and intergovernmental, non-governmental and regional organizations that are implementing adaptation and related activities, in order to encourage synergy and ensure coherence across adaptation action and under the Convention.

Guiding principles

4. The implementation of enhanced action on adaptation, including the implementation of the adaptation [framework] [programme], [shall] [should]:

- (a) Ensure consistency with, and adherence to, the principles of the Convention and commitments thereunder;
- (b) Adhere to the polluter pays principle;
- (c) Follow a country-driven approach to adaptation;
- (d) [Take climate change considerations into account, to the extent feasible, in relevant social, economic and environmental policies and actions] [Integrate adaptation actions into sectoral and national planning];

- (e) Be based on, and guided and informed by the best available science and traditional knowledge, as appropriate;
- (f) Involve all relevant stakeholders through a participatory approach to ensure ownership and inclusiveness.

Scope

5. The scope of implementation of the adaptation [framework] [programme] covers the life cycle of adaptation, from vulnerability assessments to planning to implementation, at all levels and on all timescales. The adaptation [framework] [programme] should distinguish between, and balance the need for:

- (a) Adaptation action to short-term climate shocks and adaptation action to long-term shifts in the climate;
- (b) Adaptation action that is integrated into national development and sectoral activities and stand-alone adaptation action that is additional to ongoing development.

6. In the implementation of the adaptation [framework] [programme] as laid out in subsequent sections, including in the provision of means of implementation, priority should be given to the following:

- (a) [All] [Particularly vulnerable] developing countries;
- (b) Particularly vulnerable sectors;
- (c) Particularly vulnerable people, groups and communities;
- (d) Particularly vulnerable ecosystems.

Roles and responsibilities

7. Recognizing that adaptation is a challenge shared by all Parties, and taking into account their common but differentiated responsibilities and respective capabilities:

- (a) All Parties [shall] [should] undertake actions at all levels, including strengthening enabling environments, sharing of data, information and knowledge, and protecting and sustainably managing natural resources and ecosystems, and the goods and services they provide, to facilitate adaptation;
- (b) Developed country Parties [shall] [should] support developing country Parties, especially those that are particularly vulnerable, in their adaptation action, through the provision of means of implementation, including finance, technology and capacity-building;
- (c) Developing country Parties [shall] [should] identify their adaptation priorities and elaborate on these in their adaptation plans referred to in paragraph 9 below, as well as in their national and sectoral development policies, programmes and plans, and other relevant documents and strategies, as appropriate;
- (d) The Convention process [shall] [should]:
 - (i) Facilitate the provision and sharing of knowledge, expertise, information, experience and scientific and technical aspects of adaptation;
 - (ii) Facilitate the matching of adaptation needs prioritized at national level with financial and technological support provided by developed country Parties;
 - (iii) Play a catalytic role in mobilizing actions of relevant stakeholders, and increase synergies and coherence with relevant institutions and frameworks.

B. Implementation of adaptation action to climate change

Planning and preparing for the implementation of adaptation action

8. All Parties [shall] [should] [may] implement activities, including those related to building capacity, sharing knowledge and strengthening enabling environments (policy, legislative and institutional), that are needed to enable, support, enhance and incentivize the implementation of adaptation actions, projects and programmes.²
9. [Particularly vulnerable] [developing country] [all] Parties [shall] [should] [may] formulate and periodically review and update national, and where appropriate regional, adaptation plans as a means of:
- (a) Assessing current and potential impacts of climate change [and/or the impact of the implementation of response measures];
 - (b) Identifying, costing and prioritizing their country-specific urgent and immediate, short-, medium- and long-term adaptation needs, including needs related to risk management, reduction and sharing;
 - (c) Developing adaptation strategies, programmes and projects.³

Implementation of adaptation action

10. To enhance adaptation action at national level, all Parties, in line with a country-driven approach and taking into account local and national adaptation plans, as well as gender and ecosystem considerations, [shall] [should] [may] implement specific programmes, projects, activities, strategies and measures, including:⁴
- (a) In the short-term:
 - (i) Action identified in NAPAs and other relevant plans and strategies;
 - (ii) Undertaking sound impact, vulnerability and adaptation assessments, to include costs and benefits, at all appropriate levels, using a range of decision-making tools and methodologies;
 - (iii) Assessing, reducing, managing and sharing urgent and immediate, short-, medium- and long-term risks associated with climate change, including through, inter alia, early warning systems, incorporation of risk management and disaster risk reduction, insurance-related activities [, implementation of the Hyogo Framework for Action] [, and activities addressing loss and damage from the adverse effects of climate change, such as those arising from extreme weather events and gradual changes];
 - (iv) Enhancing, supporting and promoting traditional adaptation methods that have been implemented successfully in the past;⁵
 - (b) In the medium-term:
 - (i) Action identified in poverty reduction strategies, national communications, technology needs assessments, integrated climate territorial plans and other relevant strategies, including rural development strategies;

² A list of possible activities is included in annex I.

³ Detailed proposed objectives and modalities are included in annex II.

⁴ Two proposals were made that action related to technology transfer and capacity-building, which is currently included in section C, be included in section B.

⁵ One proposal suggested that this sub-paragraph be moved to section A on principles.

- (ii) Action to build resilience and enhance adaptive capacity to climate variability and change in economic development activities and institutions, including through economic diversification;

(c) In the long-term: action identified in national sustainable development strategies.

11. To enhance adaptation action at regional level, all Parties [shall] [should] [may] implement specific programmes, projects, activities, strategies and measures, including coordinated adaptation action where appropriate, especially between countries with shared natural resources, aimed at enhancing collective adaptation action without compromising the sovereignty of countries.

12. To enhance adaptation action at international level, all Parties [shall] [should] [may] implement specific programmes, projects, activities, strategies and measures, including:

- (a) Enhancing the scope of activities undertaken under the Nairobi work programme, building upon its outcomes and lessons learned, with a view to promoting understanding of impacts, vulnerability and adaptation to climate change, and developing it into a hub of knowledge and information sharing and capacity-building;⁶
- (b) Establishing a three-year cooperative work programme to provide a bridge between short-term action and medium- and long-term action, with a view to:
 - (i) Catalysing rapid learning about adaptation good practice by supporting enhanced implementation of projects, programmes and policies in vulnerable regions, sectors, communities and ecosystems within all developing countries;
 - (ii) Supporting the implementation of NAPAs and their preparation where appropriate;
 - (iii) Strengthening observation systems, creating databases for climate data, and undertaking downscaling and targeted capacity-building for long-term planning;
 - (iv) Encouraging projects related to microinsurance and global risk pooling;
- (c) Activities related to national, regional and international migration and displacement or planned relocation of persons affected by climate change, while acknowledging the need to identify modalities of inter-state cooperation to respond to the needs of affected populations who either cross an international frontier as a result of, or find themselves abroad and are unable to return owing to, the effects of climate change;
- (d) [Action identified in decisions 5/CP.7 and 1/CP.10].
- (e) [Action to minimize adverse social, environmental and economic impacts on developing countries identified in Article 4.8 and 4.9 of the Convention;]⁷

C. Means of implementation

Activities to be supported by means of implementation

13. The provision of means of implementation for developing countries, primarily financial resources, technology transfer, and capacity-building, is a commitment under the Convention in accordance with its relevant articles that must be urgently fulfilled by developed country Parties. In accordance with the relevant Convention Articles and COP decisions, developing country Parties,⁸

⁶ One proposal suggested that this paragraph be considered by the contact group on enhanced action on capacity-building.

⁷ One proposal suggested that this paragraph be moved to section A.

⁸ [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).]

especially those that are particularly vulnerable [Parties with economies in transition] [and other Annex I country Parties with special circumstances] [shall] [should] be provided with financial resources from the Convention Adaptation Fund and with technology and capacity-building to support:

- (a) Planning for and implementation of urgent and immediate, short-, medium- and long-term adaptation action at national, regional and international level, including priorities identified in NAPAs and national adaptation plans as well as activities related to knowledge and data sharing; research and systematic observation; disaster risk reduction and to promoting enabling environments as elaborated in section B above;
- (b) The International Mechanism to Address Loss and Damage Risks as elaborated in section D below;
- (c) Institutional arrangements at national, regional and international level and under the Convention as elaborated in section E below;
- (d) [Assessing delivery of means of implementation for adaptation] [Monitoring and review of adaptation action and support] as elaborated in section F below.

*Finance*⁹

14. The provision of financial support [shall] [should] be guided by the following:¹⁰
- (a) Financial support [shall] [must] be substantially scaled-up, new, adequate, predictable, sustainable, stable, timely, sufficient, commensurate, country and demand driven and additional to, and separate from, resources provided by developed country Parties to meet their official development assistance (ODA) targets;
 - (b) Access to financial support [shall] [must] be simplified and expeditious, allowing for direct access by developing country Parties, and not be dependent on the completion of national adaptation plans;
 - (c) Financial support [shall] [should] be provided to all developing country Parties, especially those that are particularly vulnerable:¹¹
 - (i) Based on mandatory contributions from developed country Parties and other developed Parties included in Annex I to the Convention [as payment of their adaptation debt];
 - (ii) As grants [and concessional loans] based on entitlements to receive regular, continuous instalments;
 - (iii) [Through a programmatic approach and for project-based, stand-alone adaptation action going beyond the integration of adaptation into sustainable development plans;]
 - (iv) To [meet] [assist in meeting] the agreed full costs [and agreed full incremental costs] of adaptation action incurred by such Parties, without requiring co-financing;

⁹ Former paragraphs 22, on the scale of funding for adaptation, and 23, on the sources of funding for adaptation, have been transferred to the contact group on enhanced action on the provision of financial resources and investment in line with the understanding reached in Bangkok. Textual changes proposed by Parties regarding those two paragraphs are highlighted in the appendix to this paper and those amended paragraphs can also be found in non-paper no. 34, annex 12.

¹⁰ Several proposals were made for this paragraph or aspects of it to be considered as part of the discussions on finance.

¹¹ Several proposals were made to add specific country groups.

- (d) Financial support should be provided through the enhanced financial architecture and be under the authority and guidance of, and fully accountable to, the COP;
- (e) [In accordance with commitments of Parties and guidance provided by the COP, complementarity and coherence between adaptation funding provided under the Convention and bilateral and multilateral adaptation funding provided outside the Convention [shall] [should] be ensured;]
- (f) Of the adaptation funding available:
 - (i) [Seventy] [xx] per cent should be earmarked for LDCs, SIDS and countries in Africa affected by drought, desertification and floods;
 - (ii) [Thirty] [xx] per cent should be earmarked for disaster reduction and preparedness.

*Technology*¹²

15. In furthering the objective of the adaptation [framework] [programme] and the implementation of adaptation action, developed country Parties, in partnership with developing country Parties, [shall] [should] support, inter alia, research and development, deployment, diffusion and transfer of and access to appropriate technologies for adaptation, especially in particularly vulnerable developing countries, including related knowledge, expertise, capacity-building and strengthening of enabling environments to ensure the successful adoption of such technologies.

Capacity-building

16. In furthering the objective of the adaptation [framework] [programme] and the implementation of adaptation action, developed country Parties, in partnership with developing country Parties, [shall] [should] support capacity-building, inter alia, for:

- (a) Operational planning of adaptation, including capacity for detailed project design, costing of adaptation action, increasing adaptive capacity and implementation of adaptation actions;
- (b) Systematic observation, data collection and archiving, analysis, modelling and dissemination, including the use of climatic information and model outputs in national and sectoral planning;
- (c) Improved disaster risk reduction and emergency response capabilities, including early warning systems and governance structures that encourage efficient use and coordination of local, national, regional and international resources;
- (d) Analysing institutional vulnerabilities in developing countries in order to build and strengthen national institutional capacities in specialized areas, such as modelling, adaptation planning and implementation;
- (e) Education, training and public awareness, in line with Article 6 of the Convention.

D. [Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance: International Mechanism to Address Loss and Damage Risks]¹³

17. An international mechanism to address the unavoidable loss and damage from the adverse effects of climate change [and the impact of the implementation of response measures] is hereby established.

¹² Several proposals were made that discussions on technology and capacity-building be moved into the respective group discussions.

¹³ Several proposals were made that paragraphs in this section be moved to section B, C or E.

18. The purpose of the international mechanism shall be: to support developing country Parties, especially those that are particularly vulnerable, in building resilience by addressing the risks associated with climate-related extreme weather events; and to provide compensation and rehabilitation for loss and damage resulting from climate-related slow-onset events, including sea level rise, increasing temperatures and ocean acidification.
19. The international mechanism shall consist of the following components:
- (a) An International Insurance Facility to address risks associated with climate-related extreme weather events incorporating measures to reduce, manage and prevent risk;
 - (b) A Compensation and Rehabilitation component for climate-related slow onset events.
20. The international mechanism shall be funded through the financial mechanism of the Convention.
21. The international mechanism shall be subject to the authority and guidance of the COP and be supervised by an executive board as established in section E below.
22. The COP shall elaborate modalities and procedures for the international mechanism, consistent with the principles and objectives of the Convention.
23. Participation under the international mechanism, including in the components mentioned above, may involve private and/or public entities, and shall be subject to whatever guidance may be provided by the executive board of the mechanism.
24. As provided by Article 7.2(a) of the Convention, the COP shall periodically review the operation of the international mechanism. Such reviews shall be coordinated with other pertinent reviews under the Convention. The first review should take place no later than 2015 and must be informed by the experiences and observations of Parties, the findings of the Fifth Assessment Report of the IPCC and other relevant scientific information.]

E. Institutional arrangements

Institutional arrangements under the Convention

25. Taking into account the objectives and principles underlying the implementation of the adaptation [framework] [programme], the objectives of institutional arrangements under the Convention shall be:
- (a) To support and promote the implementation of the adaptation [framework] [programme] in all countries, particularly developing country Parties, at the most appropriate level, recognizing the important roles of state and regional governments;
 - (b) To guide and coordinate adaptation actions at the international and regional levels in support of country-driven priorities, including cooperative action by all Parties and by relevant international, regional and national organizations and institutions;
 - (c) To ensure the provision of financial resources, technology and capacity-building by developed country Parties;
 - (d) To continue to work cooperatively with other organizations on the broad range of initiatives required to address adaptation;
 - (e) To ensure that a coherent and coordinated effort is made to support developing country Parties in building their resilience to the impacts of climate change and avoiding climate change related disasters.

26. In order to support the implementation of the adaptation [framework] [programme], [existing institutional arrangements and expertise under the Convention [shall][should] be enhanced to the extent possible, and] the new institutional arrangements mentioned below [shall][should] be established under the Convention.¹⁴ Any institutional arrangements under the Convention shall operate under the authority and guidance of, and be fully accountable to, the COP, and shall have an equitable and geographically balanced representation of [all] Parties with a majority of non-Annex I Parties¹⁵ within a transparent and efficient system of governance.¹⁶

Option 1

An adaptation committee to provide guidance, expertise and assistance to developing country Parties in the identification and prioritization of adaptation actions and in matching those actions with financial and technological support provided by developed countries. The committee shall comprise the following:

- (a) [A Facilitative Branch responsible for assessing ongoing work and promoting understanding of the scientific and methodological basis of adaptation. The Branch shall interact with Parties, agencies and international institutions engaged in adaptation; analyse existing work and identify best practices; identify gaps and enhance action to respond to those gaps; and monitor compliance by Parties of their commitments to support adaptation;]
- (b) A Technical Advisory Branch for advising on technical matters arising from the work of the adaptation committee and supporting the International Mechanism referred to in section D above;
- (c) [A Clearing House and Information Dissemination Branch responsible for disseminating information generated by the Facilitative and Technical Advisory branches to users at the national level.]

Option 2

A Subsidiary Body for Adaptation, the function of which is to enhance urgent action on adaptation, focusing on the provision of financial resources and technical support to enable and support adaptation actions in developing countries. The Subsidiary Body shall, inter alia, provide technical advice; enhance technology development and transfer; and plan, organize, coordinate, monitor and evaluate international actions on adaptation to climate change, including on the means of implementation.

Option 3¹⁷

An expert [group][body] on adaptation under the [Subsidiary Body for Adaptation] [adaptation committee] to:

- (a) Enhance the implementation of adaptation action by monitoring adaptation needs of developing countries, including needs for finance, technology and capacity-building; overseeing the creation of the necessary funds and insurance mechanisms; and ensuring the effectiveness of funds allocated to adaptation;

¹⁴ Note that despite being presented as options, the institutional arrangements presented here are not intended to be mutually exclusive. The detailed proposed functions of these arrangements are contained in annex III.

¹⁵ The composition of the Adaptation Fund Board was highlighted as a model.

¹⁶ One proposal referred to a Convention Adaptation Fund, which is being discussed by the contact group on enhanced action on the provision of financial resources and investment.

¹⁷ One proposal was made that options 3, 4 and 5 be discussed by the contact group on enhanced action on the provision of financial resources and investment.

- (b) Develop guidance for formulating national adaptation strategies, and provide relevant support for particularly vulnerable developing countries.

Option 4

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

Option 5

A [facilitative] mechanism under the Convention to:

Option 5.1

Design and implement a new work programme on adaptation;

Option 5.2

Enhance and support the implementation of adaptation action by monitoring the level of adaptation of developing countries; assessing capacity-building; overseeing the creation of the necessary funds and insurance mechanisms; and ensuring the effectiveness of funds allocated to adaptation;

Option 5.3

Enable and support the creation of partnerships among Parties or companies and research institutions of developed and developing countries for developing and transferring technologies for adaptation and implementing adaptation activities;

Option 6¹⁸

A Financial and Technology Mechanism on Adaptation to ensure the implementation of commitments for the provision of financial resources and to address all aspects of cooperation on technology research, development, diffusion, and transfer. An Executive Body on Finance and Technology for Adaptation (EBFTA) shall be established under the mechanism to govern an Adaptation Fund, also to be created under the Convention. The EBFTA shall be supported by four technical panels on:

- (a) Research and development;
- (b) Capacity-building;
- (c) Transfer of technologies for adaptation;
- (d) Observation systems and information management.

Option 7

An Executive Board to supervise the International Mechanism referred to in section D above. The Board shall be supported by a technical advisory group established under the Technical Advisory Branch of the Adaptation Committee. The group shall provide advice and guidance on existing and innovative approaches to risk management, risk transfer and risk sharing, including insurance, and recommend appropriate financial compensation payments to the Board once identified and verified climate risk factor thresholds have been exceeded.

Institutional arrangements at national level

¹⁸ One proposal was made to establish an Executive Body on Technology; however, no additional details on its proposed functions or form were provided and it has therefore not been included in this list.

27.

Option 1

All Parties should promote the efforts of national coordinating mechanisms, entities and focal points through utilizing existing capacities and expertise at national and, where relevant, the regional levels, and through cooperation between developed country Parties and developing countries in efforts to enhance the capacities of such institutions.

Option 2

Parties [should] [may] designate a national focal point for adaptation, with specific arrangements to be decided by each Party, to enable the effective implementation of the adaptation [framework] [programme], in particular the development and implementation of national adaptation plans. Particularly vulnerable developing countries shall be provided with financial and technical assistance to support the work of the national adaptation focal points.

Option 3

National coordinating [bodies] [entities] [centres and networks] should be established, or enhanced where they already 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.

Institutional arrangements at regional level

28. Regional [adaptation] centres, including virtual centres, networks, organizations, initiatives and coordinating [bodies] [entities],¹⁹ should be strengthened to the extent possible and, where necessary, established in developing country regions [under the authority of the Subsidiary Body for Adaptation] to facilitate action on adaptation. Regional centres should be designated by the countries they serve and be guided by and complement national adaptation action and priorities. Parties could use them as a source of guidance, information and expertise. Regional centres should operate with a view to:²⁰

- (a) Facilitating sharing of knowledge and information between regions and centres at all levels;
- (b) Organizing and delivering information between the Convention process and national focal points;
- (c) Providing technical support, backstopping and capacity-building;
- (d) Enhancing the implementation of adaptation action, particularly at the regional level through cross-border projects and programmes, where appropriate;
- (e) Facilitating development, diffusion and transfer of technologies for adaptation.

Institutional arrangements at international level

29. [An international adaptation centre should be established to share site-specific adaptation experiences and lessons learned, and to coordinate, facilitate and assess national and regional adaptation programmes and actions under the guidance of the COP.]

F. [Assessing delivery of means of implementation for adaptation] [Monitoring and review of adaptation action and support]

30. In order to ensure transparency, mutual accountability and robust governance, and to facilitate sharing of experiences and information on support delivered [and action implemented], all Parties, with

¹⁹ The proposed functions for the various proposed concepts do not differ hence they are not separated.

²⁰ More detailed proposed functions of regional centres are contained in annex IV.

additional financial and technical support provided to developing country Parties, should monitor, review and report on:

- (a) [Adaptation action at national, regional and international level;]
- (b) Adaptation action supported by means of implementation provided under the adaptation [framework] [programme];
- (c) Support provided and received;
- (d) Progress, experiences and lessons learned from measures taken to adapt to climate change [and to the impact of the implementation of response measures].

31. To the extent possible, Parties should use existing national and other relevant monitoring and evaluation systems as well as reporting mechanisms under the Convention such as national communications.

32. [The COP] [A [mechanism][system] for monitoring, reporting [verification] [review]] [A compliance mechanism] [The Adaptation Committee] [shall] [should]:

- (a) Monitor, review and assess, on an annual basis and in a consistent, measurable, reportable and verifiable manner, the delivery of means of implementation, including finance, technology and capacity-building by developed country Parties, including the details of measures taken in accordance with Article 4, paragraphs 3, 4 and 5, of the Convention, in order to ensure compliance of developed country Parties with their commitments under the Convention;
- (b) Maintain a global overview of adaptation actions, including of those that have trans-boundary implications, and of progress, best practices and trends relating to adaptation support including funding needs, available resources and identified insufficiencies and discrepancies between support pledged and received, based on information provided by Parties in their national communications and national adaptation plans, and by reports from other relevant organizations, as appropriate, with a view to recommending what further action may be needed.]

Annex I**Activities to plan and prepare for the implementation of adaptation action (paragraph 8)**

- (a) Promote the integration of adaptation concerns into national, subnational, and sectoral sustainable development; public policies, tools and strategies; programmes and priorities; planning processes and poverty reduction plans, at the local, national, regional and international levels and across sectors, developing national adaptation plans as appropriate, and reviewing and reporting on these activities;
- (b) Integrate sustainable development into economic diversification strategies;
- (c) Provide incentives to adaptation through, inter alia, regulatory policies, legislative changes, removal of barriers, well-functioning markets that provide a foundation for increased flows of investment, involving women as active participants, and other supportive approaches;
- (d) Minimize incentives that encourage maladaptation and unsustainable land uses, and reduce negative economic incentives (e.g. tax breaks) for vulnerable activities;
- (e) 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);
- (f) Support the supply and availability of climate information (including through research and systematic observation), tools, methods and models, particularly in the most vulnerable countries;
- (g) [Engage in] [Enhance] education and training programmes, research and public awareness-raising, including public and stakeholders education and continued outreach;
- (h) Share knowledge, information, data and experience among public and private stakeholders, including through appropriate arenas and fora, and utilizing the services of relevant institutions at local, national, regional and international levels, consistent with international agreements;
- (i) Enhance or develop the needed information and knowledge base (both biophysical and socio-economic), 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;
- (j) Integrate 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;
- (k) Improve knowledge of the socio-economic aspects of climate change and promote the integration of socio-economic information into impact and vulnerability assessments;
- (l) Exchange experiences and opportunities relating to the development and dissemination of measures, methodologies and tools aimed at increasing economic resilience;
- (m) Exchange experiences and lessons learned in economic diversification, including ways to develop institutional capacity, and improve understanding of how economic diversification can be integrated into sustainable development plans, especially those that promote sustainable economic growth and eradication of poverty;

- (n) 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;
- (o) Educating stakeholders at all levels about adaptation options and the benefits of reducing vulnerability to climate-related risks;
- (p) Using meteorological, earth-observation and socio-economic information, and local and indigenous knowledge to best coordinate disaster planning and response;
- (q) Establishing systems of accountability such as institutional checks and balances and open administrative systems. Establishing the rule of law through means and processes for enforcement;
- (r) Improving 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;
- (s) Improving availability and application of climate and environmental information, including but not limited to remote sensing, and decision-making tools;
- (t) Clarifying and securing land tenure and planning – i.e. allocation, ownership and control over lands and resources;
- (u) Strengthening environmental and natural resources management and enforcement.

Annex II**Objectives and modalities of national adaptation plans, programmes and activities (paragraph 9)**

- (a) [Catalyse] [Support] actions in and across different sectors, promoting efficient and effective use of the financial resources for adaptation provided by developed country Parties under the Convention;
- (b) Indicate areas of immediate action and support in terms of means of implementation;
- (c) Develop plans in a flexible fashion such that they can be updated on the basis of new information and learning;
- (d) Inform domestic action and the [provision] [allocation] of increased international financial support, possibly forming a component of a country's sustainable development plan and low-emission development strategies;
- (e) Be used to report on the effectiveness of adaptation actions in meeting stated objectives;
- (f) [Include] [Enable] regional assessments of vulnerability and impacts of adaptation actions and measures undertaken between countries and in the context of shared and transboundary resources;
- (g) Take into account land degradation;
- (h) Be consistent with, or incorporate elements of, national risk management plans and disaster risk reduction;
- (i) Systematically integrate risk reduction measures in national, subnational and sectoral development planning and programming;
- (j) Include [at least] [inter alia]:
 - (i) Vulnerability assessments;
 - (ii) Prioritization of actions;
 - (iii) Financial needs assessments;
 - (iv) Capacity-building and response strategies;
 - (v) Means for integrating adaptation actions into [thematic areas] [sectoral] and national planning;
 - (vi) Identification of specific projects and programmes;
 - (vii) Identification of means to incentivize the implementation of adaptation actions;
 - (viii) Ways to enable climate-resilient development and reduce vulnerability;
 - (ix) Disaster risk reduction, management strategies, preparedness and extreme weather forecast contingency plans;
 - (x) Means to diversify the economy as an adaptation strategy;
 - (xi) Strengthened risk observation, risk analysis and risk information dissemination;
 - (xii) Early warning systems;
 - (xiii) Emergency response and recovery;
 - (xiv) Risk transfer mechanisms, including insurance.

Annex III**Possible tasks of institutional arrangements (paragraph 26)¹**

- (a) Developing broad guidance for developing national adaptation strategies, and providing support for particularly vulnerable countries, and those least able to adapt, in developing these strategies;
- (b) Strengthening, consolidating and enhancing the sharing of information, knowledge, experience and good practices, at local, national, regional and international levels, consistent with relevant international agreements, through creating [arenas][platforms] and by creating forums where different public and private stakeholders can discuss concrete challenges, recognizing the role of national focal points;
- (c) Disseminating information through regional centres;
- (d) Assisting particularly vulnerable developing countries, to, inter alia, develop guidelines for undertaking vulnerability and adaptation assessments, the preparation of national adaptation plans, and integrating adaptation actions into sectoral and national planning; and identifying sources of funding and technical assistance to support specific adaptation actions;
- (e) Encouraging [international organizations and institutions to support (through their programmes on, inter alia, financial cooperation, capacity-building and institution-strengthening mechanisms)] the integration of adaptation into local, national and regional development plans, including funding for adaptation activities, strategies, programmes, and priorities;
- (f) Providing advice and technical support to Parties;
- (g) Designing and implementing a new work programme on adaptation;
- (h) Enhancing scientific monitoring activities to develop ways and means to adapt to the effects of climate change on the ocean;
- (i) Enabling and supporting 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;
- (j) Achieving accessibility, affordability, appropriateness and adaptability of the technologies required by developing countries for enhanced action on mitigation and adaptation;
- (k) Developing non-exclusive and additional mechanisms for the transfer of adaptation technologies;
- (l) Achieving adequacy and predictability of funds for technology transfer;
- (m) Achieving removal of barriers for technology development and transfer;
- (n) Supporting the development and enhancement of endogenous capacities and technologies of developing country Parties;
- (o) Overseeing [the level of adaptation][adaptation needs] of developing countries, assessing capacity-building needs including finance, technology and capacity-building;
- (p) Enabling direct access to funding by the recipients, and ensuring the provision of new and additional, adequate and predictable financing resources for technology transfer;

¹ This list incorporates tasks associated with different proposed institutional arrangements.

- (q) Receiving and evaluating financial support applications from developing countries for implementation of adaptation projects, programmes and actions;
- (r) Planning, organizing, coordinating, monitoring and evaluating international actions on adaptation to climate change, including on the means of implementation;
- (s) Monitoring 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;
- (t) Overseeing the creation of the necessary funds and insurance mechanisms, and 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;
- (u) Achieving provision of full costs and full incremental costs, as per Article 4.3 of the Convention;
- (v) Ensuring the full, effective, and sustained implementation of the Convention, related to the 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.

Annex IV**Detailed functions of centres (paragraph 28)**

- (a) [Facilitating][Assisting] the development and implementation of national adaptation [action[s]] [plans] in all vulnerable developing country Parties, through promoting research, knowledge sharing, training, capacity-building and the voluntary development, diffusion and transfer of adaptation technology, consistent with relevant international agreements;
- (b) Facilitating the implementation of adaptation actions, capacity-building, knowledge sharing, technology development, diffusion and transfer;
- (c) [Assisting and raising funds for] [Financing the planning] Planning, designing, implementing, monitoring and evaluating adaptation activities, and facilitating informed decision-making at all levels, including the national and regional levels, especially between countries with shared natural resources, taking gender considerations into account;
- (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;
- (e) Exchanging lessons learned and best practices, and, based on the best scientific evidence available, enhancing the assessment of the vulnerability of oceans and coasts to the effects of climate change in order to facilitate the implementation of adaptation measures;
- (f) Contributing to the effectiveness of actions implemented by the relevant bodies established to enhance action on technology transfer;
- (g) 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;
- (h) Collecting, analysing and disseminating information on past and current practical adaptation actions and measures, including projects, short- and long-term strategies, and local and indigenous knowledge;
- (i) Enhancing the capacity of national-level interdisciplinary resource groups that include representatives from universities, scientific research institutions, government, industry and NGOs;
- (j) Developing a training programme that allows urban planners to integrate climate risk management into long-term development planning;
- (k) Generating and sharing knowledge, and enabling transformation of this knowledge into action;
- (l) Strengthening institutions and aiding in development of knowledge platform to enable sharing of research, expertise and data;
- (m) Engaging science and policy communities in dialogues to promote effective decision-making related to environment and development issues;

- (n) Seeking opportunities and partnerships to build capacity for the use of vulnerability and adaptation assessment methods and tools through new education programmes and advanced study institutions;
- (o) Studying 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 storms, especially sand storms.) as well as risks to human health;
- (p) Assisting with the formulation and dissemination of guidance for the development of national adaptation plans;
- (q) Providing guidance to the financial mechanism on appropriate criteria for approval and disbursement of financing for adaptation;
- (r) Provide feedback to the Adaptation Committee on gaps at the national and regional levels that need to be addressed.

Appendix**Paragraphs to be taken up by the contact group on enhanced action on the provision of financial resources and investment (Non-paper No. 34, annex 12)**

1. The scale of financial flows to support adaptation in developing countries must be [at least USD 67 billion] [within a minimum range of USD 50–86 billion] [in the range of USD 70–140 billion] [at least [0.5] [0.7] [1.5] per cent of the GDP of [developed country Parties] [Annex I Parties] in line with their commitments in Article 4.3] per year [by 2020] [from 2012] and be regularly updated in the light of new emerging science, financial estimates and the degree of emission reductions achieved.
2. Sources of financial support for [adaptation] [the Convention Adaptation Fund] [shall] [may] include:
 - (a) Assessed contributions from developed country Parties and other developed Parties included in Annex II to the Convention, taking into account [their adaptation debt and] the need for MRV;
 - (b) Auctioning of assigned amounts and/or emission allowances from developed country Parties;
 - (c) [Levies on carbon dioxide emissions from Annex I Parties in a position to do so;]
 - (d) [Taxes on carbon-intensive products and services from Annex I Parties;]
 - (e) [[Levies on] [Shares of proceeds from measures to limit or reduce emissions from] international aviation, in the order of USD 4–5 per international airline ticket, and maritime transport;]
 - (f) [Shares of proceeds on [the clean development mechanism (CDM), and extension of shares of proceeds to joint implementation and emissions trading] [the flexibility mechanism];]
 - (g) Levies on international transactions among Annex I Parties;
 - (h) Fines for non-compliance of Annex I Parties and with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties);
 - (i) [Additional ODA] [ODA additional to ODA targets] [provided through bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention)];
 - (j) Provision of resources in accordance with Article 11.5 of the Convention;
 - (k) A levy of 2 per cent on capital transfers between entities in Annex I Parties to be collected by the Annex I Party concerned and remitted in full to the Convention Adaptation Fund.

Content of non-paper no. 41 (5 November 2009)*

[Parties,

PP.1 Being guided by Articles 2, 3.2, 3.3, 4.1, 4.3, 4.4, 4.7, 4.8, 4.9 and 4.10 of the Convention, and the Bali Action Plan adopted as decision 1/CP.13 by the Conference of Parties (COP),

PP.2 Acknowledging the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change and the need to accelerate action on adaptation,

PP.3 Noting that [environmental,] economic and social conditions and levels of development differ among Parties[, which will lead to differences in the prioritization of adaptation activities],

PP.4 Recognizing that adaptation is an additional burden on developing countries, and that those particularly vulnerable will suffer disproportionately,

1. Adaptation is a challenge shared by all countries; it encompasses urgent and immediate, short-, medium- and long-term action at national, regional and international levels, ranging from assessments, planning to implementation, in order to reduce vulnerability, minimize loss and damage and build the resilience of ecological and social systems and economic sectors to present and future adverse effects of climate change [and the impact of the implementation of response measures].

2. International cooperation shall be enhanced, and to this end a comprehensive adaptation [framework] [programme] is hereby established:

- (a) To guide and facilitate the implementation of adaptation actions in all countries and at all levels, including through enhanced knowledge and information sharing;
- (b) To support the implementation of adaptation actions in developing countries including through facilitating, mobilizing and providing access to means of implementation, including finance, technology and capacity-building, for developing country Parties;
- (c) To catalyse action and enhance cooperation among Parties and intergovernmental, non-governmental and regional organizations on adaptation with a view to encouraging synergy and ensuring coherence.

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

- (a) Ensure consistency with, and adherence to, the principles of the Convention and commitments thereunder, including the precautionary principle and the principle of common but differentiated responsibilities and respective capabilities;
- (b) [Adhere to the polluter pays principle [considering historical emissions];]
- (c) Follow a country-driven approach to adaptation;
- (d) Be based on and guided by the best available science and traditional knowledge, as appropriate;
- (e) Involve all relevant stakeholders at all levels through a participatory and gender-sensitive approach to ensure ownership and inclusiveness.

4. Taking into account national circumstances and priorities, all Parties in order to enhance their adaptation actions at national and regional levels, where appropriate, [shall] [should] [may] undertake, inter alia:

* This text reflects amendments to paragraph 2 (a) and (b) of non-paper 41 (version of 5 November 2009 @ 16:30) and the inclusion of a final closing bracket at the end of annex IV as proposed by the co-chairs and agreed by the contact group.

- (a) Planning for and implementation of urgent and immediate, short-, medium- and long-term adaptation action at national and regional levels, building upon existing planning efforts, including the formulation and implementation of national adaptation plans for Parties that wish to do so, including least developed countries (LDCs);
- (b) Action identified in national adaptation programmes of action (NAPAs) of LDCs, [poverty reduction strategies,] national communications, technology needs assessments, national sustainable development strategies and other relevant plans and strategies;
- (c) Impact, vulnerability and adaptation assessments, including assessment of costs and benefits of adaptation options and of socio-economic adaptive capacity;
- (d) Disaster risk assessment, management, reduction and sharing [building upon the Hyogo Framework for Action];
- (e) Research and development, deployment, diffusion and transfer of and access to appropriate technologies for adaptation, including related knowledge, expertise, capacity-building and strengthening of enabling environments to ensure the successful adoption of such technologies;
- (f) Research and systematic observation;
- (g) Building resilience of ecological and social systems and economic sectors, including through administrative and legislative actions, integrating adaptation actions into [sectoral and] national planning, economic diversification, the protection and sustainable management of natural resources and the goods and services they provide;
- (h) Building capacity for, inter alia, operational planning and implementation of adaptation; data collection and archiving, analysis, modeling, and dissemination, including the use of climatic information and model outputs;
- (i) Education, training and public awareness;
- (j) [Action identified in decisions 5/CP.7 and 1/CP.10;]
- (k) Strengthening enabling [environments] [activities], national and regional institutional capacities and arrangements, including, inter alia, coordinating mechanisms, entities and focal points, to enable adaptation planning and implementation, and the effective delivery of means of implementation.

5. Developed country Parties, in accordance with their commitments under the Convention [and in honoring their adaptation debt], [shall] [should] support developing country Parties in their adaptation action, including activities included in paragraph 4 above, through the provision of means of implementation, including finance, technology and capacity-building.¹

6. Substantially scaled-up, adequate and predictable financial support, originating from public sources [and separate from and additional to official development assistance,] [shall] [should] be provided to all developing country Parties² [and EITs] in the form of grants to [meet] [assist in meeting] the agreed full costs of adaptation action incurred by such Parties through simplified and direct access to, and following a programmatic approach, while allowing for project-based adaptation, where necessary.

¹ Placeholder for references to outcomes of discussions on finance, technology and capacity-building.

² [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).]

7. In the provision of support, priority should be given to:
 - (a) Particularly vulnerable developing country Parties, especially LDCs and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods as well as the needs of those identified in the paragraph[s] nineteen [and twenty] of the preamble to the Convention [and in its Article 4.8];
 - (b) [Particularly vulnerable sectors, people, groups, communities and ecosystems].
8. The COP requests the SBI and the SBSTA, as appropriate, to develop guidance and support modalities for the activities contained in paragraph 4(a) above building upon lessons learned from the NAPA and other relevant adaptation planning and implementation processes, taking into account the elements contained in Annex I, and to provide it with recommendations, with a view to taking a decision at its sixteenth session.
9. [To support developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, in addressing the unavoidable loss and damage resulting from these adverse effects [and the impact of the implementation of response measures] an international mechanism is hereby established with the following components:
 - (a) An international insurance facility to address risks associated with climate-related extreme weather events that incorporates measures to reduce, manage and prevent risk;
 - (b) A compensation and rehabilitation component for climate-related slow onset events.]
10. [The COP requests the SBI and the SBSTA, as appropriate, to develop implementation modalities and arrangements for the international mechanism, taking into account the elements contained in annex II, and to provide the COP with recommendations to enable it to take a decision at its sixteenth session.]
11. Regional centres should be strengthened to the extent possible and, where necessary, established in developing country regions to facilitate and coordinate action on adaptation, building upon and complementing national adaptation action, especially between countries with shared natural resources, where appropriate.
12. The COP requests the SBI and the SBSTA, as appropriate, to develop modalities for strengthening and, where necessary, establishing, regional centres for adaptation and to consider the need for an international centre for adaptation, taking into account the elements contained in annex III, and to provide the COP with recommendations to enable to take a decision at its sixteenth session.
13. All Parties [shall] [should] jointly undertake action under the Convention to enhance adaptation at the international level, including through:
 - (a) Enhancing the scope of activities undertaken under the Nairobi work programme on impacts, vulnerability and adaptation to climate change, building upon its outcomes and lessons learned with a view to developing it into a hub of knowledge and information sharing and capacity-building to assist all countries, in particular developing country Parties;
 - (b) Activities related to migration and displacement or planned relocation of persons affected by climate change, while acknowledging the need to identify modalities of inter-state cooperation to respond to the needs of affected populations who either cross an international frontier as a result of, or find themselves abroad and are unable to return owing to, the effects of climate change.

14. Institutional arrangements under the Convention [shall] [should] enhance the implementation of the adaptation [framework] [programme], including through promoting exchange of knowledge, information, lessons learned and best practices undertaken by Parties and relevant organizations and stakeholders; providing guidance, expertise and assistance in planning and implementing adaptation action at all levels; ensuring the provision of means of implementation, including finance, technology and capacity-building, to developing country Parties and providing a forum to engage broad range of stakeholders, relevant organizations and networks in adaptation action.

15. To this end:

Option 1

Existing institutional arrangements and expertise under the Convention [shall] [should] be enhanced. The COP requests the SBI and the SBSTA, as appropriate, to develop modalities for enhancing existing arrangements, and to provide it with recommendations with a view to taking a decision at its sixteenth session.

Option 2

[An adaptation committee] [a subsidiary body for adaptation] under the Convention is hereby established and existing institutional arrangements and expertise [shall] [should] be enhanced to the extent possible. Considering that any institutional arrangements under the Convention should operate under the authority and guidance of, and be fully accountable to, the COP, and should have an equitable and geographically balanced representation of Parties within a transparent and efficient system of governance, the COP requests the SBI to consider terms of reference for [an adaptation committee] [a subsidiary body for adaptation], including establishing any additional expert groups and sub-elements, taking into account the elements contained in annex IV, to enable the COP to take a decision at its sixteenth session.³

16. All Parties should monitor, review and report on support provided and received and are encouraged to provide information on progress, experiences and lessons learned from adaptation action, with a view to ensuring transparency, mutual accountability and robust governance. To this end, developing country Parties [shall] [should] be provided with additional financial and technical support. To the extent possible, Parties should use existing national and other relevant monitoring and evaluation systems as well as reporting mechanisms under the Convention such as national communications.

17. The COP through the institutional arrangements elaborated in paragraph 15 above [shall] [should]:

- (a) Maintain a global overview of national, regional and international adaptation action;
- (b) Monitor, review and assess the provision of means of implementation by developed country Parties, including the details of measures taken in accordance with Article 4, paragraphs 3, 4 and 5, of the Convention in line with Article 12 paragraph 3;
- (c) Identify insufficiencies and discrepancies between support pledged and received with a view to recommending what further action may be needed.

18. The COP requests the SBI and the SBSTA, as appropriate, to develop modalities for the provisions contained in paragraph 17 above, including for non-compliance with commitments for the provision of means of implementation, and any additional arrangements necessary to implement those provisions with a view to taking a decision at its sixteenth session.

³ The composition of the Adaptation Fund Board was highlighted as a model.

Annex I**National adaptation plans****Indicative objectives and functions**

- (a) To [catalyse] [support] actions in and across different sectors, including agriculture and food security, water resources, health, ecosystems, coastal zones;
- (b) Promoting efficient and effective use of the financial resources for adaptation provided by developed country Parties under the Convention;
- (c) To indicate areas of immediate action and support in terms of means of implementation;
- (d) To develop plans in a flexible fashion such that they can be updated to reflect new information and learning;
- (e) To inform domestic action and the [provision] [allocation] of increased international financial support, possibly forming a component of a country's sustainable development plan and low-emission development strategies;
- (f) To be used to report on the effectiveness of adaptation actions in meeting stated objectives;
- (g) To [include] [enable] regional assessments of vulnerability and impacts of adaptation actions and measures undertaken between countries [and in the context of shared and transboundary resources];
- (h) To be consistent with, or incorporate elements of, national risk management plans and disaster risk reduction strategies;
- (i) To systematically integrate risk reduction measures in national, subnational and sectoral development planning and programming.

Indicative elements

- (a) Vulnerability and financial needs assessments;
- (b) Identification and prioritization of specific projects, programmes and means to incentivize the implementation of adaptation actions;
- (c) Means for integrating adaptation actions into [thematic, sectoral and] national planning;
- (d) Capacity-building and response strategies;
- (e) Ways and means to enable climate-resilient development, reduce vulnerability and diversify the economy as an adaptation strategy;
- (f) Enhanced risk observation, risk analysis and risk information dissemination;
- (g) Disaster risk reduction, management strategies, preparedness and extreme weather forecast contingency plans, including early warning systems and emergency response and recovery;
- (h) Risk transfer mechanisms, including insurance.

Annex II**International mechanism to address risks of loss and damage**

1. The international mechanism shall be funded through the financial mechanism of the Convention.
2. The international mechanism shall be subject to the authority and guidance of the COP [and be supervised by an executive board. The Board shall be supported by a technical advisory group established under the Technical Advisory Branch of the Adaptation Committee. The group shall provide advice and guidance on existing and innovative approaches to risk management, risk transfer and risk sharing, including insurance, and recommend appropriate financial compensation payments to the Board once identified and verified climate risk factor thresholds have been exceeded].
3. Participation under the international mechanism, including in its components, may involve private and/or public entities, and shall be subject to whatever guidance may be provided by the executive board of the mechanism.
4. As provided by Article 7.2(a) of the Convention, the COP shall periodically review the operation of the international mechanism. Such reviews shall be coordinated with other pertinent reviews under the Convention. The first review should take place no later than 2015 and must be informed by the experiences and observations of Parties, the findings of the Fifth Assessment Report of the IPCC and other relevant scientific information.

Annex III**Centres for adaptation****Indicative functions for regional centres**

- (a) Facilitating and supporting planning for, and implementation, monitoring and evaluating of national adaptation action, through promoting research, knowledge sharing, training, capacity-building and development, diffusion and transfer of adaptation technology;
- (b) Engaging science and policy communities in dialogues with a view to promoting informed decision-making at all levels, especially between countries with shared natural resources, taking gender considerations into account;
- (c) Assisting Parties in building 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) Generating and sharing knowledge; exchanging lessons learned and best practices; collecting, analysing and disseminating information on past and current practical adaptation actions and measures, including projects, short- and long-term strategies, and local and indigenous knowledge;
- (e) Enhancing impact, vulnerability and adaptation assessments based on the best scientific evidence available, including studying the stresses generated by climate change and variability, and estimation of past, current and future climate-related risks as well as risks to human health, oceans and coasts;
- (f) Coordinating and disseminating free and timely dissemination of information related to systematic observation and regional impacts and response modelling;
- (g) Enhancing capacity of stakeholders at the national level through targeted training and education programmes and institutions;
- (h) Providing guidance to the financial mechanism on appropriate criteria for approval and disbursement of financing for adaptation;

[Indicative functions for an international centre

- (a) Share site-specific adaptation experiences and lessons learned;
- (b) Coordinate, facilitate and assess national and regional adaptation programmes and actions under the guidance of the COP.]

Annex IV**[Adaptation committee] [Subsidiary body for adaptation] under the Convention****Indicative detailed functions**

- (a) Providing advice and technical support to Parties, including developing broad guidance for undertaking vulnerability and adaptation assessments, developing national adaptation plans and strategies, integrating adaptation actions into [sectoral] and national planning and identifying sources of adaptation;
- (b) Strengthening, consolidating and enhancing the sharing of information, knowledge, experience and good practices, at local, national, regional and international levels, consistent with relevant international agreements, through creating forums where different public and private stakeholders can discuss concrete challenges;
- (c) Encouraging regional and international organizations and institutions to enhance adaptation action, including through funding adaptation activities, strategies, programmes and priorities and integrating adaptation into local, national and regional development plans;
- (d) Enabling and supporting the creation of partnerships between a range of stakeholders in developing and developed country Parties with a view to enhancing the development and transfer of technologies for adaptation and implementation of adaptation action;
- (e) Supporting the development and enhancement of endogenous capacities; facilitating removal of barriers and enhancing accessibility, affordability, appropriateness and adaptability of technologies for adaptation;
- (f) Assessing adaptation needs of developing country Parties, including needs related to finance, technology and capacity-building;
- (g) Receiving and evaluating financial support applications from developing country Parties for implementation of adaptation projects, programmes and actions;
- (h) Planning, organizing, coordinating, monitoring and evaluating international actions on adaptation to climate change, including on the means of implementation;
- (i) Monitoring compliance with commitments and pledges made by developed country Parties, and other Parties who voluntarily elect to do so, to provide means of implementation;

Indicative expert groups and sub-elements

- (a) [A Facilitative Branch responsible for assessing ongoing work and promoting understanding of the scientific and methodological basis of adaptation. The Branch shall interact with Parties, agencies and international institutions engaged in adaptation; analyse existing work and identify best practices; identify gaps and enhance action to respond to those gaps; and monitor compliance by Parties of their commitments to support adaptation;]
- (b) A Technical Advisory Branch for advising on technical matters;
- (c) [A Clearing House and Information Dissemination Branch responsible for disseminating information generated by the Facilitative and Technical Advisory branches to users at the national level.]
- (d) An expert [group][body] on adaptation under the [Subsidiary Body for Adaptation] [adaptation committee]

III. ENHANCED ACTION ON MITIGATION AND ITS ASSOCIATED MEANS OF IMPLEMENTATION

The structural proposals listed in the text box below, paragraphs 1-55 on page 63-69, as well as annexes I-III on pages 70-73 reflect the content of non-paper no. 28, as tabled by the chair on 9 October 2009.

Structural proposals:

1) Sections A and B of the 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) Subsection on actions by developing countries
3. A section on measurement, reporting, and verification
4. A section on a reviewing mechanism
5. A section on compliance.

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 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 in 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 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 seven sections as follows:

1. Objective and principles (if needed)
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

3) *A new section on joint fulfillment*

4) *A new section on LULUCF*

Right to development

1. Recognizing that the right to development is a basic human right that is undeprivable.
2. Recalling that economic and social development and poverty eradication are the first and overriding priorities of the developing countries.
3. 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.

Objective, ambition, vulnerability and urgency to act

4. 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 stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.
5. 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 the least developed countries.
6. 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.

Relationship between mitigation and adaptation

7. Noting that mitigation and adaptation efforts should be given equal consideration.
8. 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.

Enhanced action on mitigation: what is common and what is different

9. Recognizing that largest share of greenhouse gas in the atmosphere are originated from developed countries.
10. All Parties [should/shall] contribute towards the ultimate objective of the Convention, 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.
11. Given their historical responsibility and development level and based on the principle of equality, developed country Parties shall have deeper cuts in their GHG emissions so as to ensure adequate spaces for developing countries to achieve their goals of substantive development and eradication of poverty. 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.
12. Provisions of the Conventions reflected a distinct Developed and Developing Countries' obligations on actions on mitigation based on the principle of common but differentiated responsibilities and respective capabilities, with developed countries should take the lead on such actions.

13. 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.

14. 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.

Mitigation goals (including those relating to emissions, GHG concentrations and temperature rise)

15. 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 be reduced by more than 85 per cent below 1990 levels by 2050.

16. 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.

17. 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 °C above the pre-industrial level.

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

19. Parties shall further collectively reduce global emissions by 50–85 per cent by 2050 compared with the 2000 level. These collective obligations should be adjusted in accordance with best available scientific information, including the Fifth Assessment Report of the IPCC.

20. The ultimate objective of the Convention [shall] be achieved through a long-term global goal for emissions reductions with a view to stabilizing atmospheric concentrations of greenhouse gases at [xxx ppm] by 20xx so as to reduce the probability of a rise in 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 to 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.

21. 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 450 ppm CO₂ eq 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.

Frameworks for mitigation action

Policies and measures

22. Each Party shall, to the extent practicable, in implementing relevant Articles of this Protocol:¹

- (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 the 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, carbon dioxide sequestration technologies and 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.

¹ In this context, "this protocol" refers to a draft Protocol to the Convention proposed by Japan (FCCC/CP/2009/3).

23. 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.

24. 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 Protocol² may take further action, as appropriate, to promote the implementation of the provisions of this paragraph based on the information provided by affected Parties.

25. 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 emission pathway to 2050 (as specified in para. 62 (alternative) and in para. 74, Option 3.2 (alternative),);
- (c) Mitigation action is subject to measurement, reporting and verification, as reflected in an appropriate Appendix (*see annex I*).

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

26. 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.

27. A low carbon strategy comprises the following:

- (a) A scenario or set of scenarios that outlines a long-term, low-emission pathway.
 - (i) For developed countries, the pathway shall reflect long-term net emission reductions of at least [80] percent by 2050.
 - (ii) For developing countries whose national circumstances reflect greater responsibility or capability, the pathway shall reflect long-term net emission reductions consistent with the level of ambition needed to contribute to the objective of the Convention.
- (b) A characterization of the policies, measures or programmes that could be undertaken to achieve the pathway described in paragraph (a).

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

² In this context, “this protocol” refers to a draft Protocol to the Convention proposed by Japan (FCCC/CP/2009/3).

29. *Placeholder paragraph recognizing the common obligations of all Parties under Article 4 and other relevant articles of the Convention.*

National schedules

30. Each Party shall (Least Developed Countries at their discretion):
- (a) Maintain a national schedule
 - (b) Meet and/or implement the nationally appropriate mitigation commitments and/or actions registered in its national schedule;
 - (c) Measure and report on the outcomes of these commitments and/or actions.
31. Each Party would be required to register in its national schedule:
- (a) A national emissions pathway to 2050;
 - (b) Quantifiable nationally appropriate mitigation commitments and/or actions for the agreed commitment period.
32. 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 sector 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.
33. 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.
34. The minimum expectations with regard to the commitments and actions that Parties would register in their national schedules would be:
- (a) For all developed country Parties, an economy-wide quantified emission limitation or reduction commitment;
 - (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.

35. 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.

36. National schedules will be negotiated in parallel to the Agreement. Draft schedules will be publicly available as early as possible with the aim of enhancing the transparency of the process of negotiation.

37. National schedules shall be annexed (in Annex A) to this Agreement and shall form an integral part thereof.

Enhancement and modification of national schedules

38. Annex A (National Schedules) may only be amended once every [two] years from the commencement of the commitment period.

39. During a commitment period, a Party may amend its national schedule to register additional nationally appropriate mitigation commitments or actions which enhance its overall mitigation outcome.

40. Proposed enhancements shall be circulated by the Secretariat six months prior to the meeting of the Supreme Body at which the amendments are proposed for adoption. Should there be no objection in writing by a Party during this time, the nationally appropriate mitigation commitment or action shall be recorded in a Party's national schedule. It shall enter into force for all Parties six months after it is communicated to them by the Depository, except for those Parties that have notified their non-acceptance of the amendment.

41. During a commitment period, a Party may amend its national schedule to modify or replace an existing action provided the overall mitigation outcome is maintained or enhanced by the modification or replacement. [NOTE: Provisions to be inserted would limit modification, where necessary, for the purpose of maintaining the integrity of the international carbon market and its mechanisms.]

42. Proposed modifications or replacements shall be circulated by the Secretariat six months prior to the meeting of the Supreme Body at which the amendments are proposed for adoption.

43. The Supreme Body shall consider any modification or replacement, or, where an objection has been raised, an enhancement. The Supreme Body may determine modalities and procedures for assessment of the information supporting proposed amendments and their registration in National Schedules.

44. If adopted by the meeting of the Supreme Body, the amendment shall enter into force for all Parties six months after it is communicated to them by the Depository, except for those Parties that have notified their non-acceptance of the amendment.

45. All countries shall prepare Low Emission Development Strategies. Low Emission Development Strategies will be nationally-driven and represent the aims and objectives of individual Parties in accordance with national circumstances and capacities. Low Emission Development Strategies should contain high-level strategic objectives on climate change, including those relating to low-emission planning and climate resilient development. Low Emission Development Strategies should assist countries to identify broad adaptation and mitigation objectives and prioritise their efforts.

46. In accordance with Article X [Facilitative Platform], a Party shall record in its National Schedule supported mitigation actions that are measurable, reportable and verifiable in quantitative terms.

47. Guided by Article 3, in accordance with Article 4, paragraph 1, and Article 4, paragraph 3, and with a view to enhancing the implementation of Article 12 of the Convention, all Parties shall:

- (a) Develop, regularly update and submit for review and verification according to agreed frequencies, rules and guidelines, national inventories of anthropogenic emissions by sources and removals by sinks of all gases not controlled by the Montreal Protocol based on, inter alia, agreed UNFCCC Reporting Guidelines;

- (b) Formulate, regularly update, implement and submit for review according to agreed frequencies, rules and guidelines, low carbon growth plans which shall include:
 - (i) A long-term national greenhouse gas emissions limitation or reduction pathway to 2050; and
 - (ii) Ongoing and planned mitigation efforts;
- (c) Inscribe nationally appropriate mitigation actions and/or commitments into national schedules subject to the measurement, reporting and verification provisions of this Agreement.

Measurement, Reporting and Verification

*MRV for the developed country Parties and those developing country Parties which have GHG emission intensity targets.*³

48. Each developed country Party, and each developing country Party that has its GHG emission intensity targets, shall have a national system for the estimation of anthropogenic emissions by sources and removals by sinks of GHGs. Guidelines for the national systems shall be decided upon by the CMP.⁴

49. Methodologies for estimating anthropogenic emissions by sources and removals by sinks of GHGs and the global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of GHGs shall be those accepted by the IPCC and decided upon by the CMP. The CMP shall regularly review and, as appropriate, revise such methodologies and global warming potentials.

50. Each developed country Party, and each developing country Party that has its GHG emission intensity targets, shall incorporate the necessary supplementary information, including sectoral information, in its annual inventory, as well as in its national communication, and shall submit them at regular intervals for the purpose of demonstrating compliance. The CMP shall adopt and review periodically guidelines for the preparation of the information.

51. The information submitted by any developed country Party, or by any developing country Party that has its GHG emission intensity targets, shall be reviewed by expert review teams. The CMP shall adopt and review periodically guidelines for this review. The information required for submission shall be reviewed.

52. The review process shall provide a thorough and comprehensive technical assessment of all aspects of the implementation by a Party to this Protocol.

53. The CMP shall consider (a) the information submitted by Parties and the reports of the expert reviews and (b) those questions of implementation listed by the secretariat and questions raised by Parties, and shall take decisions on any matter required for the implementation of this Protocol.

Review of national action plans

54. The national action plan submitted by each developing country Party shall be reviewed by the CMP. The CMP shall adopt and review periodically guidelines for such review.

Compliance

55. The CMP shall approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol. Any procedures and mechanisms of non-compliance entailing binding consequences shall be adopted by means of an amendment to this Protocol.

³ For the entire paragraphs, see paragraphs 188 to 210 of Annex III. B. of FCCC/AWGLCA/2009/INF.2.

⁴ The CMP of this paper indicates the Conference of the Parties serving as the meeting of the Parties to the Draft Protocol to the Convention proposed by Japan (FCCC/CP/2009/3).

Annex I**Appendix (referred to in paragraph 25 (c))**

1. With respect to financial resources, Article 4.3 of the Convention applies to the reporting requirements and capacity needs described in this Appendix.
2. Each Party shall maintain the capacity to implement the MRV provisions of this Agreement by establishing and maintaining [specific institutional arrangements devoted to MRV][a national MRV unit].
3. Recalling Article 4.1(a) and Article 12 of the Convention, all Parties shall provide the inventories referred to in Article 12.1 of the Convention on an annual basis, except that least developed country Parties may provide such inventories at their discretion.
4. Recalling Article 4.1 (b) and Article 12 of the Convention, with respect to the actions inscribed in Appendix 1/schedule, Parties shall report on:
 - (a) The status of the implementation of their actions, including for developed countries economy-wide quantitative emission reduction/removals;
 - (b) The emission reductions achieved, including any significant changes from estimates;
 - (c) The aggregate effect of actions in terms of emission reductions achieved;
 - (d) The methodologies used and key assumptions made in determining such reductions;
 - (e) The use, in any, of international offsets or international emissions trading mechanisms;
 - (f) For its supported actions, the sources and amounts of support and the enabling environment provided by the reporting Party; and
 - (g) The support provided to developing countries with respect to their actions inscribed in Appendix 1/schedules.
5. The frequency of reporting described in paragraph 4 above will be established as follows:
 - (a) Developed country Parties and those Parties with greater than [X] per cent of world emissions report every [2][3] years; and
 - (b) Other countries report every [6] years, except LDCs may report at their discretion.
6. Recalling Article 4.1 (b) and Article 1.2 of the Convention, Parties shall report their low carbon strategy. Parties shall initially report, by [2012], on the elements of the strategy [described in Article X] and provide a supporting description of methodologies and key assumptions. Parties shall report any updates to the strategy in subsequent national communications.
7. National inventories and the information reported under paragraph 4 will be subject to regular independent review by an expert panel. Such a review will be triggered by a Party's communication of the information described under paragraph 4. Following the communication of such information, the expert panel shall:
 - (a) With respect to a Party's inventories, conduct a review in accordance with the existing process for technical reviews of Annex I inventories under the Convention, as set forth in relevant decisions of the Conference of the Parties;
 - (b) With respect to mitigation actions inscribed in Appendix 1/schedule, conduct an assessment of a Party's implementation of its actions, as reported by the Party; to determine to what extent the Party has undertaken the inscribed actions, including an assessment of the emission reductions achieved; and

- (c) With respect to inventories and actions, identify as appropriate any financial, technological, or capacity needs that may enhance implementation.
8. In conducting its work, the expert panel may also:
 - (a) Seek clarifications from the Party concerned;
 - (b) Conduct in-country visits as necessary at the invitation of the Party concerned; and
 - (c) Seek and receive information from other Parties, stakeholders or other sources as relevant to the Party concerned.
9. No later than [10] months following the communication of information described under paragraph 4, the expert panel shall prepare a report comprising its assessment for consideration by the SBI. Prior to finalization of the report, the Party concerned shall have the opportunity for review and comment.
10. No later than [15] months following the communication of information described under paragraph 4, the SBI shall conduct an in-session review of the Party. During a country review session, the SBI shall have before it all information submitted under this [Appendix] by the Party concerned as well as the report of the expert panel. The country review session shall consist of the following elements:
 - (a) Brief presentations by the Party concerned and the expert panel; and
 - (b) Interactive dialogue between the Party concerned and the SBI.
11. During the [2] week period following a country review session, any Party may submit in writing, through the Secretariat, additional questions, including any questions of implementation, to the Party concerned, which shall endeavor to respond in writing to those questions, through the secretariat, within [2] months.
12. Where a Party raises a question of implementation to the Party concerned regarding the fulfillment of its actions inscribed in Appendix 1/schedule, the Party concerned shall reply in writing within [3] months. During that time, the Party raising the question and the Party concerned may engage in bilateral or other consultations, as needed.
13. At its next session following a country review, the SBI shall adopt a country review report consisting of the following elements:
 - (a) A summary of the proceedings of the review session, including the expert panel report;
 - (b) A record of written questions submitted by Parties and the responses provided by the Party concerned;
 - (c) A listing and brief description of any questions of implementation raised by Parties and any responses by the Party concerned.
14. The Party concerned may, within [2] months of the release of the country review report, submit to the Secretariat any final observations it wishes to make or actions it wishes to take. Any such comment shall be made publicly available by the Secretariat as an addendum to the country review report.
15. The SBI shall forward country review reports annually to the Conference of the Parties for its consideration.

Annex II

Annex A (referred to in paragraph 37)

National schedules of mitigation commitments and/or actions¹

National schedule for [name of country]

National pathway²

Emissions pathway	
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Quantifiable³ Mitigation Commitments and/or Actions for the Commitment Period 2013-20YY

Mitigation Commitments

Name/brief description of commitment	Emission outcomes expected	Baseline/reference case	Unilateral/supported

Mitigation Actions⁴

Name/brief description of action	Emission outcomes expected	Baseline/reference case	Unilateral/supported

¹ National Schedules are proposed as one part of the broader post-2012 climate change architecture. A Registry may identify developing country Party actions seeking support. The Facilitative Platform could monitor and report on financial flows and facilitate the coordination of climate finance.

² National pathway is non-binding.

³ Only commitments and actions with direct and quantifiable emissions outcomes will be included in national schedules.

⁴ If a Party assumes an economy wide mitigation commitment, mitigation actions are included in schedules for transparency purposes only.

Annex III**Background table**

New para.	Corresponding para. in annex III to FCCC/AWGLCA/2009/INF. 2	Party	Rationale for reordering and/or consolidation
1-3	2-4	China	Related to right to development
4	8 (first sentence)	Singapore	Related to objectives, ambition, vulnerability and urgency to act
5-6	12-13	AOSIS	
7-8	10-11	Colombia, Costa Rica	Related to relationship between mitigation and adaptation
9	1	China	Related to what is common and what is different
10	8 (second sentence)	Singapore	
11	5	China	
12	6	Indonesia	
13 (a-b)	7 (a-b)	African Group	
14 (a-d)	9 (a-d)	Australia	
15	14	AOSIS	
16	15	Colombia, Costa Rica	All paragraphs address mitigation goals
17-19	16-18	Norway	
20	19	Singapore	
21	20	Australia	
22-24	1-3 of Annex III A (1 (b) (i))	Japan	
25-26	21-22	USA	
27	NA	USA	Paragraph announced by the USA at the subgroup meeting
28-29	23-24	USA	
30-35	25-30	Australia	
36-44	NA	Australia	Paragraphs introduced by Australia to replace placeholder 35 of non-paper no. 16, in the place of their proposal contained in INF.1/Add.1, Annex III
45-46	NA	Australia	Paragraphs introduced to replace placeholder paragraph 38 of non-paper no. 16
47	NA	Canada	Consolidated paragraph introduced by Canada to replace paragraphs 36, 37, 39, 40, 41
48-55	NA	Japan	Introduced by Japan to replace paragraphs 42-64 of non-paper no. 16
Annex I	NA	USA	Introduced by the USA
Annex II	Page 76, Annex III A (1 (b) (i)) of INF.2 (new version)	Australia	Moved on request by Australia and replaced with a new version

III. A. Nationally appropriate mitigation commitments or actions by developed country Parties*

(paragraph 1 (b) (i) of the Bali Action Plan)

[1. Nationally appropriate mitigation commitments or actions by developed countries

1. To enhance the implementation of mitigation commitments under Article 4.2(a) and (b) of the Convention, [[all] developed country Parties included in Annex I to the Convention] [Annex I Parties that are not Parties to the Kyoto Protocol], [with the exception of those Annex I countries which have special circumstances recognized] [while recognizing special circumstances for some Annex I Parties as provided for] by COP decisions,¹ shall

- (a) Adopt [internationally] [legally binding] nationally appropriate mitigation commitments or actions, [including][expressed as] economy-wide quantified emission reduction [or limitation] [commitments] [objectives], such commitments or actions [shall] [should] be measurable, reportable and verifiable;
- (b) In establishing such commitments or actions,
 - (i) use commitments under the Kyoto Protocol as [a] [the] reference;
 - (ii) reflect historical [, current and future] responsibility for climate change[, national circumstances and respective capabilities];
 - (iii) ensure [consistency] [comparability] with an ambitious long-term emission reduction target;
 - (iv) adopt policies and measures in pursuit of economy-wide quantified emission reduction commitments; and
- (c) 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 and form, and in compliance requirements.

Mitigation commitments or actions

2. The enhanced mitigation commitments or actions by developed country Parties[, whether or not they are Parties to the Kyoto Protocol,] [Annex I Parties that are not Parties to the Kyoto Protocol] [shall] [should] lead to a collective reduction of their GHG emissions by [at least [40][45]] [in the order of 30] [at least XX] [XX-YY] per cent in the year 2020 compared to the [1990] [base year] [XXXX] level, and by [at least [90][95][XX]] [XX-YY] [more than 95] [more than XX per cent] below their [base year] [XXXX] levels by 2050.

3. The quantified emission limitation and reduction objectives of [developed country Parties] [Annex I Parties that are not Parties to the Kyoto Protocol] [shall] [should] be formulated as a percentage of reduction [or limitation] compared to [1990], [XXXX] or another base year adopted under the Convention. [Developed countries, including all Annex I Parties [and countries that voluntarily want to take on binding economy-wide quantified emission [limitation] or reduction commitments]] [Annex I Parties to the Convention that are not Parties to the Kyoto Protocol] shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases [listed in

* As tabled by the facilitator on 6 November 2009 (non-paper no. 50).

¹ Such decisions, including decision 26/CP.7, should be taken into account when the terms “Annex I countries ” or “developed country Parties” are used in this non-paper.

Annex Y] do not exceed their assigned amounts for the period from [2013] [XXXX] until [2017][2020][YYYY], calculated pursuant to their quantified emission reduction commitments and in accordance with relevant provisions of [this instrument]. The agreed quantified emission [limitation and] reduction objectives[, including their implementation schedules,] are inscribed in [the Annex] [Annex B].

4. Annex I Parties that are not Parties to the Kyoto Protocol shall ensure that aggregate anthropogenic carbon dioxide equivalent emissions do not exceed their assigned amounts, calculated to reflect the full extent of their emissions debt, taking into account:

- (a) The 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;
- (d) The share of global emissions required by developing countries in order to meet their social and economic development needs.

5. [Developed country Parties which have not taken commitments prescribed in Article 3 of the Kyoto Protocol] [Annex I Parties to the Convention that are not Parties to 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. Quantified emission [limitation and] reduction [objectives] [commitments] for [developed country] [Annex I] Parties shall be those inscribed in Annex B to the Kyoto Protocol as amended, and quantified emission [limitation and] reduction [objectives] [commitments] for those [developed country] [Annex I] Parties that are not Parties to the Kyoto Protocol shall be as contained in the annex[to the current instrument]. Parties that undertake such actions or commitments shall ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of greenhouse gases do not exceed their agreed targets inscribed in the Annex for the assessment period 2013–2017.

6.² 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 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 of FCCC/AWGLCA/2009/INF.1) 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.

7. Each developed country Party shall establish, maintain and implement the contents of a national schedule, which shall include a long-term national emissions pathway and, as a minimum, an economy-wide quantified emission limitation or reduction commitment. Each national schedule may also include details of the policies and measures that underpin a Party's economy-wide quantified emission limitation or reduction commitment.³

8. In quantifying absolute emission reduction [or limitation] objectives, [developed country] [Annex I] Parties shall focus on those sectors, sources and gases that contribute most to total GHG

² This paragraph should be read in conjunction with Annex III of the document FCCC/AWGLCA/2009/INF.2, in particular paragraphs 25-28.

³ This paragraph should be read in conjunction with Annex III of the document FCCC/AWGLCA/2009/INF.2.

emissions and facilitate the transition towards low-carbon economies in order to achieve sustainable development. Nationally appropriate mitigation actions or commitments of Annex I Parties should include formulation, adoption and implementation of comparable sustainability norms as listed in Appendix 2. Such norms should include legal restraints and deterrent penalties for violation of adopted norms.

[National circumstances and] comparability of efforts

9. The efforts of [developed country] [Annex I] Parties to reduce [or limit] their GHG emissions [shall] [should] be comparable and take into account their [historical responsibility] [their national circumstances] [and respective capabilities] as well as relevant COP decisions, including decision 14/CP.7. The comparability of efforts [shall] [should] be ensured through

- (a) adoption of commitments of the [same] [similar] [comparable] nature and scope;
- (b) comparable magnitude of emission [limitation or] reduction objectives[, using tonnes of CO₂ eq as a unit of comparability];
- (c) use of the same provisions for third party review of annual emissions inventories and any supplemental information required;
- (d) the extent to which [developed country] [Annex I] Parties address their emissions debt;
- (e) use of the [same] [similar] [comparable] MRV and compliance provisions[, including base year definition, consistent with Article 4.6 of the Convention and decision 9/CP.2, and implementation timeframe].

10. Ensuring comparability of efforts in a transparent manner among mitigation efforts of [developed country] [Annex I] Parties will require the establishment of specific indicators in order to compare compliance with commitments and define which national circumstances are taken into consideration. To that end, the factors listed in Appendix 3 [shall] [should] be taken into account.

11. An objective, consistent, transparent, thorough and comprehensive technical assessment of the comparability of efforts among [developed country] [Annex I] Parties shall be [facilitated][made] by a technical panel on comparability [established under the COP] [including members from Annex I and non-Annex I Parties as well as representative of the secretariat]. The panel shall assess the information provided by [developed country] [Annex I] Parties in their annual national communications [and other data available from international organizations] and report its findings to the COP [and the CMP] for further action. If the report indicates questions relating to comparability, the COP shall refer the matter to a compliance committee for attention.

12. 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.

Achieving quantified emission [limitation or] reduction objectives

13. In achieving their quantified emission [limitation or] reduction objectives, [developed country Parties] [Annex I Parties that are not Parties to the Kyoto Protocol] [shall][should]:

- (a) Adopt national policies and take corresponding measures for the urgent mitigation of climate change, by limiting their anthropogenic emissions of greenhouse gases and protecting and enhancing their greenhouse gas sinks and reservoirs;
- (b) Ensure that these policies and measures will demonstrate that [developed countries] [Annex I Parties] are taking the lead in modifying longer term trends in anthropogenic emissions consistent with the objective of the Convention;

- (c) 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 also Parties to the Kyoto Protocol.

LULUCF:

14. 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.

15. The [COP] [Supreme body of this Agreement] shall decide prior to the commencement of the commitment period from [XXX] [2013] to [20XX] upon modalities, rules and guidelines for accounting the LULUCF category of Annex B, taking into account relevant rules and procedures developed under the Kyoto Protocol.

Alternative to para 15: The modalities and procedures for enabling Parties to account for anthropogenic greenhouse gas emissions and removals from the land sector for the commitment period 2013 to [20XX] shall be as agreed in Decision X/CMP.X

Alternative to paras. 14, 15: The rules of the Kyoto Protocol regarding land use, land-use change and forestry will apply to Annex I Parties that are not Parties to the Kyoto Protocol.

Mechanisms:

16. [Developed country] [Annex I] 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.

17. [Developed country] [Annex I] Parties shall achieve their quantified emission reduction [or limitation] objectives

Option 1: exclusively through domestic action [and not through flexible market mechanisms];

Option 2: [primarily through domestic emission reductions efforts;] [through a combination of domestic emission reductions efforts and [flexible] [carbon market] mechanisms, with the use of mechanisms being supplemental to domestic action;] [a maximum of [X] [10] per cent of commitments may be achieved through the use of [flexible] [carbon market] mechanisms, including offsets;]

Option 3: through domestic action and the use of market-based mechanisms.

Joint fulfillment:

18. Any Parties included in Annex I to the Convention that have reached an agreement to fulfill their respective commitments 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 (of the Draft Protocol) do not exceed their assigned amounts inscribed in Annex B (of the Draft Protocol).⁴

Other issues relating to “mitigation commitments or actions”

19. Consideration of commitments or actions by [developed country Parties] [Annex I Parties that are not Parties to the Kyoto Protocol] [requires close coordination with the discussions under] [shall be consistent with the outcome of] the AWG-KP.

2. [Measurement, reporting and verification of commitments or actions]

20. The current system for reporting and review of national communications and national GHG inventories under the Convention, with its independent review structure, provides [a] [the] basis for the

⁴ For the entire paragraphs, see the Draft Protocol to the Convention proposed by Japan (FCCC/CP/2009/3, Article 3, paragraph 1 (b)).

measurement, reporting and verification of mitigation commitments or actions by developed country Parties. In the implementation of measurement, reporting and verification, [relevant] provisions of Articles 5, 7 and 8 of the Kyoto Protocol and related decisions [shall] [should] be applied [to be applied to all Annex I Parties]. These provisions [shall] [should] be further strengthened. Measurement, reporting and verification shall apply to the progress and results of implementation actions as well as to the quantified emission reduction commitments. The COP shall review and define the principles, modalities, rules and guidelines for measurement, reporting and verification, including those relating to quantified emission [limitation and] reduction commitments.

21. Measurement, reporting and verification shall include an assessment of costs and adverse impacts of the mitigation actions, policies and measures, in particular impacts on the developing countries specified in Article 4.8 (h), as well as an assessment of efforts to eliminate such adverse impacts.

3. [[Compliance with] [Review of] quantified emission [limitation and] reduction [objectives]]
[commitments or obligations]]

22. [A compliance system] [an international compliance mechanism] [shall] [should] be built on the existing mechanisms and address issues of non-compliance flowing from the measurement, reporting and verification process. Such a [system] [mechanism] should be established under the Convention and enable comparing efforts among developed countries mitigation actions and ensure effective compliance.

23. To ensure compliance under the Convention, Article 13 of the Convention should be operationalized through the adoption of decision 10/CP.4 on the multilateral consultative process, and the annex to that decision which contains the terms of reference for the process.

24. [Compliance with] [Review of] quantified emission [limitation and] reduction [objectives][commitments] [and financial commitments for adaptation and technology transfer] undertaken by [developed country Parties] [Annex I Parties] [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, [taking into account experiences gained from relevant international agreements].]

[Option 2: use the compliance procedures applied to Parties to the Kyoto Protocol under section XV of the annex to decision 24/CP.7 which are relevant to quantified emission [limitation or] reduction commitments; these procedures shall be applied equally to all Annex I Parties, whether or not they are Parties to the Kyoto Protocol. Such compliance procedures may be enhanced.]

[Option 3: be undertaken within a [new compliance system [under the COP] [under the new agreement]] [review process].]

25. The monitoring and assessment of compliance [shall][should]

[Option 1: utilize procedures and mechanisms to address cases of non-compliance determined by the principle that they should be designed to facilitate compliance in the future.]

[Option 2: 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 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] [taking into account experiences gained from relevant international agreements].]

26. Commitments or actions undertaken by Parties identified in paragraph 5 above shall be subject to compliance provisions and shall be guided by the compliance procedures developed pursuant to Article 18 of the Kyoto Protocol. Parties undertaking commitments or actions under paragraph 5 above shall not use these commitments to fulfill obligations established under the Kyoto Protocol.

Annex (placeholder in relation to paragraphs 3)

Annex Y (placeholder in relation to paragraphs 3)

Annex B (in relation to paragraph 3)

Party	Quantified emission limitation or reduction commitment in the commitment period 2013–20xx				
	Assigned amount (Gg-CO ₂ e)	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
B	xxx	xxx	xxx	xxx	xxx
...

Annex (in relation to paragraph 5)

Annex I	
Party	Quantified emission limitation or reduction commitment for assessment period 2013–2017 compared with 1990 base year

Appendix 1 (placeholder in relation to paragraph 6)

Appendix 2 (in relation to paragraph 8)

Sustainability Norms

These norms comprising where appropriate, of legal restraints and deterrent penalties should include the following norms, at minimum including legal restraints and deterrent penalties:

- Food production and processing methods;
- Packaging of goods;
- Personal road transportation;
- Buildings, including materials of construction, and energy and water consumption;
- Recycling and reuse of materials, appliances and components, including industrial, commercial, and household wastes and discards;
- Energy consumption of household appliances.
- Violation of norms relating to:
 - Hyper-emissions intensive lifestyles involving use of low fuel efficiency road vehicles;

- Personal aircraft and watercraft;
- Use of emissions intensive building materials; and
- High levels of energy and water consumption in living spaces.”

Appendix 3 (in relation to paragraph 10)

- (a) [Historical responsibility for [both] [emissions] [as well as] [and] [global temperature increase]] [Share of absolute greenhouse gas emissions];
- (b) National [and regional] development priorities;
- (c) Natural and geographical characteristics[;][and] resource endowment;
- (d) Extent of transition to a market economy;
- (e) Position on the human development index;
- (f) Degree of access to flexibility mechanisms;
- (g) Technological, financial and institutional capacities;
- (h) The historical and current per-capita emissions originating in developed countries;
- (i) Domestic mitigation potential [and mitigation costs, aggregate [and marginal] economic costs, domestic achievement of emission reduction and per capita effort;]
- (j) [[Trends in] [GHG] emissions [per capita][,][and carbon intensity] [[per unit of gross domestic product (GDP)], [per energy unit][and population trends]]] [Population trends];
- (k) [Relative][Absolute] size of the economy, [and relative] ability to pay [, and economic and technological capacity];
- (l) Availability of low-emission⁵ energy supply options and opportunities for fuel switching;
- (m) [Sector-specific circumstances and sectoral energy efficiency and [GHG][carbon] intensity] [covering all sectors and all GHG emissions];
- (n) Responsibility of Annex I Parties, individually and jointly, for current atmospheric concentrations of greenhouse gases;
- (o) The share of global emissions required by developing countries in order to meet their social and economic development needs;
- (p) Definitions, modalities, rules and guidelines for the treatment of land use, land-use change and forestry;
- (q) Methodologies used to calculate reduction potentials and to set quantified national GHG emission reduction targets should allow the setting of equitable burden sharing which is measurable, reportable and verifiable;
- (r) The extent of international assistance provided by the World Bank or the IBRD;
- (s) QELRCs and mitigation actions [shall][should] be comprehensive in addressing all greenhouse gases, sources and sinks for which technical information is available and where its inclusion is appropriate from a viewpoint of effective implementation;

⁵ 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.

- (t) [A metric based on global warming potential [shall][should] be used.] [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 (IPCC) in its Fourth Assessment Report and based on the effects of the greenhouse gases over a 100-year time horizon. Any revision to a global warming potential by the IPCC subsequent to the Fourth Assessment Report, or revisions of the approach to calculate carbon dioxide equivalence, shall apply only to commitments relating to any commitment period adopted subsequent to that revision.]

Alternative to t: The global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of greenhouse gases will be those defined in the second assessment report of the IPCC, until the SBSTA concludes its consideration of this matter and, if appropriate, recommends a draft decision adopting global temperature potentials as a common metric.

]

III. B. Nationally appropriate mitigation actions by developing country Parties^{*}

(paragraph 1 (b) (ii) of the Bali Action Plan)

I. Principles, objectives and nature of nationally appropriate mitigation actions

1. To enhance the 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 Article 4.3, 4.4 and 4.5, in accordance with Article 4.7 of the Convention.
2. Abide by the principles of the Convention embodied in its Article 3, in particular the right to sustainable development enunciated in Article 3.4 and recognize that nationally appropriate mitigation actions by developing country Parties are taken in the context of sustainable development.
3. Nationally appropriate mitigation actions (NAMAs) by developing country Parties, as defined in the Bali Action Plan (decision 1/CP.13), 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 their legal nature and should not constitute binding obligations or targets for developing country Parties, or be used as a basis for differentiating between them.
4. The NAMAs by developing country Parties shall be different for different groups of countries, depending on the level of development of their economies [, particularly in the case of the least developed countries (LDCs) and small island developing States (SIDS,)] and on their respective capacities and specific national circumstances [, including limited opportunities that may be available for using alternative energy sources].
5. NAMAs by developing country Parties are voluntary and the extent [level] of mitigation [actions] [effort] will [depend on] [be commensurate with] [be contingent on] the effective provision of financial, technical and capacity-building support as embodied in Article 4.7 of the Convention.
6. Recalling Article 4.1 (b) of the Convention, NAMAs by developing country Parties should evolve over time as their respective national circumstances, economic development and respective capabilities change. The Conference of the Parties should review the circumstances of each Party periodically based on objective criteria.
7. The NAMAs by developing country Parties shall be formulated consistent with the levels of ambition needed to contribute to meeting the ultimate objective of the Convention.
8. To enhance the implementation of Article 12.4 of the Convention, developing country Parties may, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that will be needed to implement such projects, along with, if possible, an estimate of all incremental costs, of the reduction in emissions and increments in removals of GHGs, as well as estimates of the consequent benefits.
9. Parties' ability to reduce greenhouse gas emissions is affected by their access to alternative energy options; to this effect, pursuant to Article 4.10 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 disadvantage in this regard.
10. International recognition should be given to developing country Parties that are undertaking mitigation actions domestically based on their own resources.

^{*} As tabled by the facilitator on 6 November 2009 (non-paper no. 51).

Option to paragraph 10

Recognition should also be given to the unilateral NAMAs that continue to be taken without being supported and enabled by technology, financing and capacity-building from developed country Parties.

II. Definition and scope of nationally appropriate mitigation actions

11. Nationally appropriate mitigation actions by developing country Parties are those voluntary actions determined and formulated at the national level, in the context of sustainable development, and enabled and supported through finance, technology and capacity-building from developed country Parties, in a measurable, reportable and verifiable manner.

Option to paragraph 11

Nationally appropriate mitigation actions by developing country Parties may include a range of actions, [for international recognition or support] which should be voluntary, conform with national development priorities, sustainable development agenda and poverty eradication, and be determined and formulated at the national level. They may consist of:

- (a) Actions enabled and supported by finance, technology and capacity-building from developed country Parties and other developed country Parties included in Annex II to the Convention;

Option to paragraph (a)

Actions enabled and supported by finance, technology and capacity-building;

- (b) Actions that are [unilateral] [domestically-funded] by developing country Parties;
- (c) Actions that are undertaken over and above those identified in subparagraph 11 (a) and (b) above based on emission reduction targets which may be eligible for emissions trading schemes. The Conference of the Parties will develop the modalities and guidelines for participation in international emissions trading.

Option 1 to paragraph (c)

Actions that are financed via carbon market mechanisms.

Option 2 to paragraph (c)

Actions pursued with the intention of generating credits to participate in carbon market(s)

12. NAMAs by developing countries shall aim to reduce greenhouse gas emissions.

Option 1 to paragraph 12

NAMAs by developing countries [shall aim to] [must] reduce greenhouse gas emissions and should result in aggregate substantial deviation from the baseline by 2020 and by 2050 which should be measurable, verifiable and reportable if enabled and supported by appropriate funding, technology transfer and capacity-building from developed country Parties

Option 2 to paragraph 12

NAMAs by developing countries shall aim to reduce greenhouse gas emissions and should result in substantial deviation from the baseline of the order of 15-30 per cent which should be measurable, verifiable and reportable.

13. Developing country Parties, [may] [shall] develop [and submit] low-emission [high growth sustainable] development plans and strategies [by 2012] and report them in their national communications]. Least developed countries and small island developing States may develop and submit such low-emission [high growth sustainable] development plans and strategies at their own discretion.

14. NAMAs should not generate offsets for developed country Parties.

III. Support and enabling activities for nationally appropriate mitigation actions by developing country Parties

A. Support for nationally appropriate mitigation actions

15. The development of low-emission [high growth] development strategies, the implementation of new mitigation actions and the strengthening of existing mitigation actions by developing country Parties shall, as appropriate, be supported by financing, technology and capacity-building.

16. Developed country Parties, including those included in Annex II to the Convention, shall provide new and additional financial resources and technology and institutional capacity-building support for NAMAs in accordance with Articles 4.3, 4.5, 4.7 and 11.5 of the Convention, over and above financial resources that have been provided to enable developing country Parties to implement their commitments under Article 4.1 of the Convention. Implementation of NAMAs shall be supported on the basis of agreed full incremental costs.

17. Support for NAMAs shall be mobilized from a range of sources and shall be provided through the financial mechanism under the Convention and through other multilateral, regional and bilateral funding sources, as appropriate.

18. Support provided through the registry should not be channelled solely to actions that achieve direct emission reductions. Support should be provided according to type of action.

19. The provision of support for NAMAs shall be guided by the following principles:

- (a) Be underpinned by the principles of equity and common but differentiated responsibilities;
- (b) Enable cost-effectiveness so as to ensure global benefits at the lowest possible cost;
- (c) Enable direct access to funding by the recipients and ensure the provision of new and additional, adequate and predictable financing resources for technology transfer;
- (d) Ensure recipient country involvement during the stages of identification, definition and implementation, making it truly demand-driven;
- (e) Ensure that support is based on the needs identified by developing country Parties;
- (f) Ensure that specific support is being provided for specific actions;
- (g) Support the development and enhancement of endogenous capacities and technologies of developing country Parties;
- (h) Ensure that the funds are spread evenly, ensuring equity, a fair distribution of benefits and an even spread across all economic sectors;
- (i) Provide incentives by linking supporting measures in technology and finance and capacity-building with efforts in measurement, reporting and verification.

B. Enabling activities for nationally appropriate mitigation actions

20. Enabling activities, such as preparation and elaboration of low-emission development plans and strategies and planning and elaboration of NAMAs, and related capacity-building, carried out by developing country Parties shall be supported on the basis of the agreed full costs.

21. Developing country Parties should establish a national coordinating body funded by the proposed financial and technology mechanism to build national institutional capacity and specific capacity related to NAMAs.

22. A low-emission [high growth sustainable] development strategy shall contain:
- (a) A long-term strategy for low greenhouse gas emissions development, up to 2050, including the emission pathway envisaged to be achieved through the implementation of a low-emission [high growth sustainable] development strategy;
 - (b) A description of all nationally appropriate mitigation actions that the Party has implemented or is planning to implement. This description shall:
 - (i) Indicate [unilateral] [domestically funded] NAMAs that are to be financed and implemented domestically;
 - (ii) Identify barriers to the implementation of domestically funded action, including identifying technology needs and barriers to technology deployment and diffusion, whose removal needs support;
 - (iii) Indicate action that, due to incremental costs, requires support, in the form of financing, technology or capacity-building for implementation;
 - (iv) Specify, when relevant, the type of support in terms of finance, capacity-building and technology it considers most appropriate to enable the implementation of the NAMA and when financial support is sought, an estimate of the amount of support required;
 - (v) Specify when the use of a sectoral crediting mechanism or sectoral trading mechanism is proposed and the associated reference levels;
 - (vi) Include measurement, reporting and verification;
 - (vii) Provide an estimate, including methodology used, of the projected emission reductions as a result of the implementation of NAMA, or a set of NAMAs, over the lifetime of the NAMA(s).

Option to paragraph 22

(Options relating to low emission [high growth sustainable] development strategies contained in paragraph 45 of non-paper 28 or its successor.)

23. (Capacity-building activities may include the activities listed in non-paper 26, paragraph 30 (a) to (i)).
24. (Other options contained in paragraph 48 to paragraph 55 of non-paper 28 or its successor).

IV. Mechanism to [register] [record] and facilitate implementation of nationally appropriate mitigation actions by developing country Parties

Option 1

25. A mechanism to register and facilitate the implementation of NAMAs by developing country Parties (hereinafter referred to as the mechanism/registry/register) shall be established at the secretariat under the authority of the COP to enhance the implementation of relevant provisions of the Convention. It shall:

- (a) Pre-register indicative NAMAs seeking support;
- (b) Register voluntarily their unilateral NAMAS;

Option to paragraph 25 (b)

Developing countries may communicate their mitigation actions funded by domestic resources through national communications, on a voluntary basis;

- (c) Voluntarily submit proposals on indicative actions to a technical panel for technical analysis;
- (d) Developed countries to post information on sources and type of support available, such as types of actions that a developed country would like to support, area of expertise of developed countries, agencies that should be contacted;
- (e) Provide a platform for matching action and support for those NAMAs requiring support;
- (f) Register supported NAMAs and corresponding support in the [mechanism/registry/register] [national communications] [national schedule];
- (g) Register voluntarily [unilateral][domestically-funded] NAMAs in the [mechanism/registry/register] [national communications] [national schedule];
- (h) Register finance, technology transfer and capacity-building support;
- (i) Updating information on action and support in the [mechanism/registry/register] [national communication] [national schedule] for supported NAMAs and information on action for [unilateral][domestically-funded] NAMAs.

Option 2

The life cycle of unilateral NAMAs may consist of the following steps:

- (a) Registering voluntarily unilateral NAMAs in the [registry][national communications][national schedule];
- (b) Implementing registered NAMAs;
- (c) Measuring, reporting and verifying of supported action and support;
- (d) Updating information on action and support in the [registry][national communication][national schedule].

Option 3

26. The coordinating mechanism:

- (a) Shall include a register, which shall contain the following:
 - (i) NAMAs proposed in the context of Low-emissions [high growth sustainable] Development Plans and Strategies, including domestically funded NAMAs, NAMAs seeking support and NAMAs seeking support via a carbon market mechanism;
 - (ii) NAMAs that have undergone the technical analysis;
 - (iii) NAMAs for which support has been confirmed;
 - (iv) The information on the implementation of measured, reported and verified NAMAs;
 - (v) The information on measured, reported and verified support;
- (b) Shall be supported by a technical panel to conduct technical analysis of all proposed NAMAs;
- (c) Shall facilitate the matching of NAMAs seeking support with support through the financial mechanism, bilateral and multilateral sources, domestic funding and through the carbon market;

- (d) Shall continuously update the information in the register.

Option 4

27. Each Party shall establish, maintain and implement the contents of a national schedule to be contained in appendix 1 (annex III, paragraph 21 of document FCCC/AWGLCA/2009/INF.2), which shall include a long-term national emissions pathway, and nationally appropriate mitigation commitments and/or actions that are measurable, reportable and verifiable in quantitative terms. Commitments and actions registered in national schedules may be taken unilaterally, with the intention of accessing the carbon market and/or enabled by previously agreed support. LDCs are invited to establish a national schedule at their discretion.¹

28. 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 capabilities change, with respect to developing country Parties whose national circumstances reflect greater responsibility or capability;²

- (a) For each such Party, its national schedule contained in appendix 1 includes nationally appropriate mitigation actions in the 2020/[] timeframe that are quantified (e.g. reduction from business as usual) and are consistent with the levels of ambition needed to contribute to meeting the objective of the Convention;
- (b) Each such Party shall formulate and submit a low-emission [high growth sustainable] development strategy for long-term net emission reductions by 2050, consistent with the levels of ambition needed to contribute to meeting the objective of the Convention;
- (c) Appendix 1 shall include date(s) by which each Party will commit to the type of action referred to in annex III A, (alternative to paragraph 28 of document FCCC/AWGLCA/2009/INF.2).

29. Other developing country Parties should implement nationally appropriate mitigation actions [, enabled and supported by finance, technology and capacity-building by developed country Parties] and develop low-emission [high growth sustainable] development strategies, consistent with their capacity.

30. Developing country Parties referred to in annex 1³ [should have] [shall achieve] [‘a no-lose target’] [sectoral] and economy-wide GHG emission intensity targets (GHG emissions per GDP) in a measurable way], with a view to substantially limiting the growth of GHG emissions in those developing countries that contribute substantially to global emissions of GHGs.

31. Developing country Parties may submit proposals for support of their nationally appropriate mitigation actions through (arrangements to be elaborated through work underway in the finance contact group).

32. Actions that have received support under paragraph 31 above will be recorded in a Party’s schedule as contained in Appendix 1.

¹ This paragraph should be read in conjunction with the proposal on national schedules contained in non-paper number 28.

² The proposing Party intends this paragraph to be read in conjunction with document FCCC/AWGLCA/2009/INF.2, annex III, paragraph 21.

³ Non-paper 26, annex I.

V. Option 1: Measurement, reporting and verification of support from developed countries for nationally appropriate mitigation actions by developing countries and measurement, reporting and verification of nationally appropriate mitigation actions by developing countries

Option 2: Measurement, reporting and verification of support for nationally appropriate mitigation actions by developing countries and measurement, reporting and verification of nationally appropriate mitigation actions by developing countries

33. An international institutional framework shall be established for measuring, reporting and verifying NAMAs and support provided by developed country Parties.

34. Measurement, reporting and verification of NAMAs and their desired outcomes shall apply only to actions that have been enabled and supported by measurable, reportable and verifiable finance and technology by Annex II Parties through the proposed financial mechanism.

Option to paragraph 34

NAMAs will be measured, reported and verified.

35. Guidelines for measurement, reporting and verification of actions by developing country Parties shall be established and approved by the COP.

36. Developing country Parties:

- (a) Shall develop and submit every X years, internationally reviewed national communications based on the existing expert review system;
- (b) Submit annual national emission inventories based on the inventory reporting guidelines.

37. Least developed countries and small island developing States may develop and submit emission inventories at their own discretion.

[Supported NAMAs]

38. NAMAs shall be measured at the national level in accordance with guidelines to be decided on by the COP, building on, inter alia, existing IPCC guidelines and involving regional centres and national experts.

39. NAMAs shall be reported to the Convention [in the national communication] [in the registry] [coordinating mechanism] in accordance with reporting guidelines and frequency of submissions to be decided upon by the COP, taking into account the principles of transparency, accuracy, consistency, comparability and completeness, and shall address, inter alia, achieved emission reductions.

40. NAMAs shall be verified at the national level. 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, domestic verification may also be confirmed by an international verification process, with due respect paid to the protection of confidential information.

Option to paragraph 40

NAMAs will be technically reviewed by the COP based on international guidelines and modalities to be decided by the COP.

41. Measurement and reporting of NAMAs and their achieved outcomes:

- (a) Shall indicate how implementation of NAMAs affects GHG trajectories at a national and/or sectoral level or the national baseline.

[Unilateral][Domestically-funded NAMAs]

42. [Unilateral][Domestically-funded] NAMAs [may] [shall] be reported in [national communications] [registry][coordinating mechanism][national schedules].

43. [Unilateral][Domestically-funded] NAMAs:

- (a) Shall be measured and reported by the host Party in accordance with the established guidelines;
- (b) Shall be reviewed by the Conference of the Parties.

Option to paragraph 43

[Unilateral][Domestically-funded] NAMAs shall not be subject to measurement, reporting and verification requirements.

NAMAs financed through a carbon market

44. NAMAs that are financed through a carbon market and their outcome in terms of emission reductions shall be verified, together with the corresponding support as measured and reported by [national level] institutions accredited by the COP in accordance with the same multilaterally agreed guidelines.

Option to paragraphs 33 to 44 above

45. (Other options contained in paragraphs 48-55 and Annex I of non-paper 28 or its successor).

46. Developed country Parties shall measure, report on NAMAs and have support for NAMAs verified in accordance with international guidelines, 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.]

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

48. The support shall be verified under the registry in terms of contributions by developed [and developing] country Parties taking into consideration their responsibilities and respective capacities.

Option 1 to paragraph 48

The support shall be verified using international guidelines, reported in the international registry under the Convention and updated annually.

Option 2 to paragraph 48

The support shall be verified within the existing in-depth review of national communications from Annex I Parties.

Option 3 to paragraph 48

The provision of financial resources, transfer of technology and other forms of support by developed [and developing] countries taking into consideration their respective capacities] shall be verified by the Verification Group of the finance and technology mechanism(s) of the Convention in terms of contributions by developed [and developing] country Parties within their respective capacities.

49. Financial resources provided by 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 completion, of the associated NAMA.

III. 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 countries¹
(paragraph 1 (b) (iii) of the Bali Action Plan)

This non-paper contains draft text on paragraphs 5–16 and revisions to paragraph 4 (e) and (f) as proposed by the facilitator of the sub-group on mitigation under paragraph 1 (b) (iii), taking into account the ideas, proposals and views expressed by Parties at informal consultations of the sub-group from 3–4 November 2009. Text in sub-sections 1 (paragraphs 1–4), 4 and 5 remains unchanged and is as presented in non-paper 18. All text in italics is included for informative purposes only, and is not intended to be part of this proposal by the facilitator.

[1. Objectives, scope and guiding principles

Objectives and scope

1. [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 to current levels.]
2. Developing country Parties should contribute to enhanced mitigation actions in the [forestry sector] [land use, land-use change and forestry sector] [agriculture, forestry and land use sector], and the following activities [shall][should]

Option 1

include [reducing emissions from deforestation and forest degradation [, maintaining existing carbon stocks and enhancing removals] [or increasing forest cover through afforestation and reforestation], [while promoting][enhancement of carbon stocks through [sustainable forest [and land] management] [sustainable management of forests].]

Option 2

be included:

- [(a) Reduction in deforestation rates;
 - (b) Reduction in forest degradation;
 - (c) Stabilization of forest cover (and thereby forest carbon stocks);
 - (d) Conservation and maintenance of forest carbon stocks through sustainable management of forests;
 - (e) Enhancement of forest carbon stocks through conservation and sustainable management of forests, and/or increase in forest cover through afforestation and reforestation.]
3. Actions to be undertaken by Parties referred to in paragraph 2 above shall:

General principles

- (a) Contribute to the objective set out in Article 2 of the Convention;
- (b) Be country driven and voluntary;

¹ As tabled by the facilitator on 5 November 2009 (non-paper no. 39).

- (c) Be undertaken in accordance with countries' capabilities and national circumstances and respect sovereignty;
- (d) Be consistent with national sustainable development goals;
- (e) [Facilitate sustainable development, reduce poverty and respond to climate change in developing country Parties, rather than be a way to help developed country Parties to fulfil their commitments to reduce emissions;]
- (f) Promote broad country participation;
- (g) Be consistent with the adaptation needs of the country;

Specific principles

- (h) [Be integrated into nationally appropriate mitigation actions;] [Be developed within the context of a low GHG emission strategy;]
- (i) Be subject to equitable, adequate, predictable and sustainable financing and technology support, including support for capacity-building;
- (j) Be results-based;
- (k) [Support developing countries in reorganizing the forestry sector, thus implementing low-carbon economies and taking part in the global effort to stabilize and reduce GHG concentrations in the atmosphere and developed country Parties to help meet their ambitious quantified emissions reduction targets;]
- (l) Promote [sustainable forest management] [sustainable management of forests].

Principles - safeguards

4. When undertaking actions referred to in paragraph 2 above Parties shall:
- (a) Ensure that non-permanence is addressed;
 - (b) Ensure that necessary actions are taken to [avoid leakage][reduce leakage as much as possible];
 - (c) [Promote] transparent forest governance structures and accessible support mechanisms, taking into account national legislation and sovereignty;
 - (d) Ensure that the actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;
 - (e) In accordance with relevant international agreements[, such as the United Nations Declaration on the Rights of Indigenous Peoples,] and taking into account national circumstances and legislation, respect the knowledge and rights of indigenous peoples[, including their free, prior and informed consent,] and members of local communities and promote the full and effective participation of all relevant stakeholders in actions referred to in paragraphs 2 and 5 above;
 - (f) [Promote] actions that are consistent with the conservation of biological diversity [, and do not provide incentives for conversion of natural forests][, including safeguards on the conversion of natural forests] and enhance other social and environmental benefits[, including [environmental] [ecosystem] services], complementary to the aims and objectives of relevant international conventions and agreements.

5. Developing country Parties aiming to undertake actions referred to in paragraph 2 above shall develop:

- (a) A national [action plan] [strategy] [or subnational strategies] [, as part of their low-carbon emission strategies,] in accordance with national circumstances;
- (b) National reference emission levels and/or national reference levels in accordance with their national circumstances and respective capabilities;
- (c) A robust and transparent national monitoring and reporting system for emissions and removals in the forestry sector [in accordance with national circumstances and capabilities] [,with the establishment of subnational accounting as an optional interim measure].

When developing a national [action plan] [strategy] [or subnational strategies], as referred to in sub-paragraph (a) above, Parties [shall][should] take into account the guidelines and modalities to be adopted by the COP on this matter.

6. [While implementing the national [action plan] [strategy] Parties [should][shall] address, inter alia, drivers of deforestation, land tenure issues, forest governance and means of ensuring the full and effective participation of indigenous peoples and local communities.]²

7. Actions to be undertaken by Parties referred to in paragraph 2 above [should] [shall] be implemented in phases, beginning with the development of national [action plans] [strategies], policies and measures and capacity-building (*phase 1*), followed by the implementation of national policies and measures, and [action plans] [strategies] that could involve further capacity-building and technology transfer (*phase 2*), and finally evolving into results-based actions that are measured, reported and verified in accordance with guidance referred to in paragraphs 12 to 15 below (*phase 3*). The implementation of these phases, including the choice of a starting phase, shall depend on the specific national circumstances, capacities and capabilities of each developing country Party.

2. Means of implementation

8. The implementation of the activities referred to in paragraph 2 above, which involve the development of national [action plans] [strategies], policies and measures, capacity-building, implementation of national policies and measures and [action plans] [strategies] [including activities to be implemented up to 2012], shall be financially supported through

Option 1

[a window of the relevant financial mechanism established under the Convention] [, which [shall][should] be funded through contributions from [developed country Parties], [market-linked revenues], [innovative funding sources, including auctioning of national emissions trading allowances or of assigned amount units at international level, and penalties or fines for non-compliance of developed country Parties with their emission reduction and financial resources commitments]. These funds shall be [new and additional to ODA,] [complementary to GEF, and bilateral and multilateral funding].]

Option 2

[existing funds and institutions, including multilateral, bilateral and domestic arrangements].

9. [Financial support for actions referred to in paragraph 8 above may involve incentives for performance using simplified reporting requirements in combination with conservative estimates of emission reductions.]

² (Taking into account the need for sustainable livelihoods of indigenous peoples and local communities and their interdependence on forests in most countries, reflected in the United Nations Declaration on the Rights of Indigenous Peoples and the United Nations Earth Day.)

10. Acknowledging that the need for financial support will vary by country and over time, and depending on national circumstances as countries progress in the implementation of [nationally appropriate mitigation] actions in relation to activities referred to in paragraph 2 above].

11. The results-based actions referred to in paragraphs 7 above, including early actions, [should][shall][be supported by] [should be financed by]]

[Option 1

the use of public funds, through one or more of the following approaches:

- (a) Specialized REDD-plus funds or funding windows established under the COP, including one or more of:
 - (i) Trust funds for community forestry accounts;
 - (ii) Forest reserve fund for conservation and sustainable forest management;
- (b) A Convention adaptation fund to support conservation and [sustainable management of forests][sustainable forest management].]

[Option 2

A [flexible] combination of market approaches and funds, depending on host countries' preferences for actions referred to in paragraph 2 above, such as:

- (a) A fund [additional to ODA] for [conservation, enhancement of carbon stocks, sustainable management of forests, reducing emissions from deforestation and forest degradation] [, stabilization of forest cover, conservation and maintenance of carbon stocks through sustainable forest management] [, reducing emissions through sustainable land management practices, including forest conservation, sustainable forest management, the avoidance of deforestation, afforestation and sustainable agriculture;] [,capacity-building, technology transfer, policy implementation, etc;]
- (b) [Allocation of assigned amount units from the respective allocations to relevant Parties]
- (c) A market-based mechanism for [supporting enhancement of carbon stocks through sustainable forest management, reduced emissions from deforestation and forest degradation] [, certified emission reductions to contribute to compliance with part of the countries' quantified emission limitation and reduction commitments under the Convention].]

See footnote below³

3. [Measurement, reporting and verification of actions] [Measurement and monitoring system]

12. [When establishing national reference emission levels [and][or] national reference levels, Parties shall take into account the guidance provided in decision X/CP.15 (SBSTA decision⁴) and any relevant decisions to be adopted by the COP.

(Elements for consideration in the SBSTA draft decision: [the application of a correction factor to reflect] national circumstances [,historically low deforestation and forest degradation, developmental divergence, and respective capabilities and capacities], developing country Parties that are requesting support shall follow the guidance decided by the [COP] [Meeting of the Parties to this Agreement at its first session] to be adopted at its [xx] session on how to establish the levels[, including ways to address

³ To consider moving paragraphs 8 and 11 above to text being considered by the contact group on enhanced action on the provision of financial resources and investment.

Access to support referred to in paragraph 11 above does not limit access to support for activities under paragraph 8.

⁴ Refer to document FCCC/SBSTA/2009/3, Annex I.

[domestic] leakage] [if applying sub-national approaches] [for demonstration activities] [and the development of guidance in monitoring and reporting with the full effective engagement of indigenous people and local communities.]])

13. When implementing actions referred to in paragraph 2 above, [, under the [NAMA registry,] [, on the basis of national [action plans][strategies] referred to in paragraph 5 above,], Parties [shall] [should] measure, report and verify emission reductions [and removals of greenhouse gases] and changes in forest carbon stocks in accordance with methodological guidance developed [or to be further developed] by the SBSTA, including any decisions and/or guidance to be adopted by the COP on this matter, [and be consistent with the overall approaches to measurement, reporting and verification of nationally appropriate mitigation actions by developing countries Parties described in paragraph xx (*in section on MRV of NAMAs*)] [and recognizing the need for higher-tier levels of measurement, reporting and verification for activities supported by markets].

14. Parties [shall] [should] measure and report greenhouse gas emission reductions and removals and changes in forest carbon stocks in relation to the national reference emission levels or reference levels established for actions referred to in paragraph 2 above, in accordance with any reporting guidelines that will be developed by the SBSTA [, and record the information under the NAMA registry].

15. Verification of reported greenhouse gas emission reductions and removals and changes in forest carbon stocks in relation to the national reference emission levels or reference levels established for actions referred to in paragraph 2 above shall be carried out in accordance with guidelines to be [agreed] [decided] by the COP.

16. In the measurement, reporting and verification of actions referred to in paragraph 2 above, Parties, in applying guidelines and methodological guidance referred to in paragraphs 12–15 above, [shall] [should] make use of the existing institutional arrangements to the extent possible.

4. Measurement, reporting and verification of support

17.

Option 1

[Means for measuring, reporting and verification of support by Parties shall be undertaken in accordance with general provisions regarding the reporting, measuring and verifying of NAMAs.]

Option 2

[[Developed country] Parties, when providing support to actions referred to in paragraph 2 above 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 [to be entered in the NAMA registry].]

18. [Measurement, reporting and verification of support provided [by developed country Parties to developing country Parties] for actions referred to in paragraph 2 above [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 referred to in paragraph 13 above].]

5. Institutional arrangements

Guiding framework

19. Institutional arrangements,

Option 1

[to support actions referred to in paragraph 2 above, taking into account the principles referred to in paragraphs 3 and 4 above, shall operate under the authority and guidance of, and be fully accountable to, the COP.]

Option 2

[to support actions referred to in paragraph 2 above, as part of the institutional framework proposed to support nationally appropriate mitigation actions in developing countries, taking into account the principles referred to in paragraphs 3 and 4 above, shall operate under the authority and guidance of, and be fully accountable to, the COP.]

Parties shall be represented in an equitable and balanced manner in these institutional arrangements and they shall operate in a fully transparent, efficient, effective mode[, and using existing institutional arrangements to the extent possible].

20. The institutional arrangements [shall] [should] support financial arrangements for and implementation of actions referred to in paragraph 2 above, through:

Finance

- (a) Providing adequate, predictable and sustainable financial resources;
- (b) Providing coherence and coordination between various sources of financing;
- (c) [Developing and applying guidance and criteria] [Advising] on actions that can be funded and by determining from which source;

Coordination of activities

- (d) Coordination of activities by internationally accredited agencies, including ongoing activities;

MRV

- (e) Supporting and assisting regional and national capacity-building in developing country Parties on monitoring, reporting and verification of these actions.
- (f) Applying guidelines, procedures and methodologies decided by the COP [, including making use of the existing institutional arrangements to the extent possible,] in the monitoring, reporting and verification of these actions;

Institutions

21. Referring to the functions identified in paragraph 18 (a)–(c) above, the COP [shall] [should]:

- (a) Develop the necessary arrangements identified in paragraphs 7 and 9 above (*Means of implementation*)
- (b) Establish [a board] to manage financial arrangements;
- (c) Establish an expert group or a committee supported by a technical panel/ technical panels to advise the specialized funds or funding windows;

22. Referring to the functions identified in paragraph 18 (e)–(f) above, the COP [shall] [should] establish [facilitate the establishment of] the following institutions:

- (a) Regional REDD centres for capacity-building of MRV functions;
- (b) [An expert review team] [A measurement, reporting and verification technical panel] for the verification of actions[, in the case of sub-national scale activities by an independent body];
- (c) [A technical panel comprised of experts from developed and developing countries, represented in a balanced and equitable manner, for measurement, reporting and verification of support actions.
- (d) An entity or group of entities or bodies designated by the COP [to verify and certify the emission reductions [or removals] achieved] [to assess the emissions and removals].

[Alternative to section C in document FCCC/AWGLCA/2009/INF.1:

A. OBJECT AND PURPOSE

x.1 to x.6 (original text from FCCC/AWGLCA/2009/INF.1)

B. DEFINITIONS

x.7 (original text from FCCC/AWGLCA/2009/INF.1)

C. SCOPE

x.8 to x.9 (original text from FCCC/AWGLCA/2009/INF.1)

D. PRINCIPLES AND GUIDELINES

x.10 to x.11 (original text from FCCC/AWGLCA/2009/INF.1)

E. MEASUREMENT, REPORTING AND VERIFICATION (MRV)

x.12 to x.15 (original text from FCCC/AWGLCA/2009/INF.1)

F. REFERENCE LEVELS

x.16 to x.21 (original text from FCCC/AWGLCA/2009/INF.1)

G. PARTICIPATION

x.22 to x.25 (original text from FCCC/AWGLCA/2009/INF.1)

H. MODALITIES AND PROCEDURES

x.26 to x.37 (original text from FCCC/AWGLCA/2009/INF.1)

I. INSTITUTIONAL FRAMEWORK

x.38 (original text from FCCC/AWGLCA/2009/INF.1)

Annex A to E (original text from FCCC/AWGLCA/2009/INF.1)

]

III. D. Cooperative sectoral approaches and sector-specific actions* **(paragraph 1 (b) (iv) of the Bali Action Plan)**

*[What cooperative sectoral approaches and sector-specific actions (CSAs) should do]*¹

1. [[Cooperative sectoral approaches and sector-specific actions [shall][should][enhance the][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 Montreal Protocol, applicable to all relevant sectors, including, but not limited to, the energy, transport, industry, agriculture, forestry, health, tourism and waste management sectors;]
 - (b) [The provision of information on available technologies, and strengthening 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 for the implementation of NAMAs;]
 - (c) [Actions that cover the whole scope of technologies for both adaptation and mitigation, including those that control, reduce and prevent emissions, and 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.]]
2. [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.]
3. [[Cooperative sectoral approaches and sector-specific actions should:]
 - (a) [Be applied at the national level [only];]
 - (b) [[Be tailored to][Take into account] national sector-specific needs and priorities and [consider] social and economic conditions and other relevant factors.]]
4. [Global sectoral approaches should address emissions that cannot be attributed to any particular economy.]
5. *[What they should do for all Parties]:*
 - (a) [The implementation of cooperative sectoral approaches and sector-specific actions should [be of voluntary nature][should not be imposed by one Party on another] and [complement and support national commitments of all Parties under Article 4.1;]]
 - (b) [Be used in the definition, analysis and implementation of mitigation actions in developed and developing countries and may also be used as instruments for both market and non-market mechanism;]
 - (c) [Bottom-up sectoral analysis may be used as a tool for analysing mitigation potential and informing national mitigation efforts, based on recent scientific findings and existing knowledge, taking into account the capabilities of each sector using a common methodology to determine sectoral baselines of Parties;]

* As tabled by the facilitator on 6 November 2009 (non-paper no. 49).

¹ The headings in italics are used to indicate structure but will be removed from the text.

- (d) [Contribute to the enhancement of Parties' [measurable, reportable and verifiable] actions in order to ensure environmental integrity;]
 - (e) [[Assist in fostering][Foster private- and public-sector][national initiatives in R&D, capacity-building and [technological] [technology] cooperation.]]
6. *[What they should not do]:*
- (a) [Cooperative sectoral approaches and sector-specific actions should not be used to circumvent or undermine the differentiation made in the Convention between Annex I Parties and non-Annex I Parties or to modify their respective commitments and obligations;]
 - (b) [The implementation of cooperative sectoral approaches should [not replace the national targets of developed country Parties [or lead to [new commitments for developing country Parties, [transnational or national emission reduction targets,]] arbitrary or unjustifiable discrimination or disguised restrictions on international trade[, or the application of global uniform and equal standards for Parties]]];]
 - (c) [Cooperative sectoral approaches 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;]
 - (d) [Sectoral approaches and sector-specific actions should be cooperative and not imposed by one Party or some Parties on other Parties;]
 - (e) [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.]
7. *[What they should do for developed country Parties]:*
- [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.]
8. *[What they should do for developing country Parties]:*
- (a) [[[Facilitate][Assist] [as appropriate] in [achieving] [obtaining] [the levels of] financing and technology transfer] [and know-how] [necessary to address climate change] in a measurable, reportable and verifiable manner;]
 - (b) [Facilitate the identification of best practices and best available technologies for each sector through cross-border analysis and promote [the exchange of information and] the transfer of those best practices and best available technologies [from developed country Parties through analysing reduction potentials and setting indicators];]
 - (c) [For developing country Parties, domestic sectoral efforts may be one option in the toolbox for national mitigation actions.]
9. [Actions by developing countries to control their GHG 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.]
10. [[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.]]

11. [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.]

Agriculture

12. All Parties [, reaffirming the objective, principles and provisions of the Convention and taking into account] [specifically taking into account Article 2, Article 3, paragraph 5, and Article 4, paragraph 1 (c), of the Convention, and] their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, [and that adaptation is of paramount importance to ensure food security,] [shall] [make efforts to enhance mitigation] [in the agriculture sector]:

- (a) Keep[ing] in mind the need to improve the efficiency and productivity of agricultural production systems [when considering mitigation in agriculture], in a sustainable manner, [taking into account the relationship of agriculture [to][and] food security [and to adaptation], the linkages between mitigation and adaptation, the interests of small and marginal farmers and [indigenous and] traditional knowledge and practices];
- (b) [[Including] [by] promoting and cooperating] [promote and cooperate] in the research, development, application and diffusion, including transfer, of technologies, practices and processes [[and methodologies] that could contribute to enhance mitigation and adaptation] in the agriculture sector;
- (c) [Ensuring that cooperative sectoral approaches in the agriculture sector should not result in the creation of international performance standards for the sector or any other measure that may adversely affect sustainable development and result in barriers to or distortion of, the international trade system of goods and products of the agriculture sector;]
- (d) [Ensuring that cooperative sectoral approaches in the agriculture sector shall not lead to carbon offsets or approaches that adversely impact forest land].

13. In this respect, requests the SBSTA, at its thirty-second session, to establish a programme of work [to facilitate] [mitigation in the agriculture sector[, considering the links to adaptation]] [on agriculture] [to enhance [the full, effective and sustained] implementation of article 4.1(c)], and invites Parties to submit their views on the [content [and scope] of the] work programme.

*International bunker fuels***Option 1**

[The Conference of the Parties....

14. Agrees to pursue the limitation and 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.

15. Encourages the International Civil Aviation Organization and the International Maritime Organization to continue, without delay, their activities for the development of policy approaches and measures to limit and reduce greenhouse gas emissions, and specifically:

- (a) To establish sufficiently ambitious mid-term and long-term global goals for the limitation and reduction of greenhouse gas emissions from aviation and marine bunker fuels, respectively, to be achieved through the application of their policy approaches and measures;
- (b) To report to the Conference of the Parties, at its seventeenth session, and to its subsidiary bodies as appropriate, and at regular intervals thereafter, on relevant activities, policy approaches and measures established and under development, emission estimates and achievements in this respect.]

Option 2

16. [[Taking into account the interests of developing countries,][All Parties][Developed country Parties][Parties][Annex I Parties] shall pursue the 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.]

Option 3²

17. [In addressing emissions from international aviation and the maritime transport sector, the International Civil Aviation Organization and the International Maritime Organization shall be guided by the relevant provisions and principles of the Convention, in particular the principles of equity, common but differentiated responsibilities, and promotion of a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, in particular developing country Parties. The adoption of measures that could convert in disguised restrictions on international trade should be prevented, and the special economic and social conditions of developing countries should be taken into account.

18. Noting that emissions from aviation and maritime transport can not be attributed to a particular economy, any measures taken by developed country Parties through ICAO and IMO to reduce emissions from these sectors shall be taken on the basis of mutual consent of all Parties involved. In this regard, such measures should not constitute discrimination or disguised restriction on international trade.]

Option 4

19. [Parties shall take the necessary action to reduce emissions of GHGs not controlled by the Montreal Protocol from aviation and marine bunker fuels.

20. Global reduction targets for such emissions from aviation and marine bunker fuels shall be set as equal to 10 per cent and 20 per cent, respectively, below 2005 levels by 2020. Units from existing and potential new flexibility mechanisms may contribute towards achieving these targets.

² This option should replace the entire section on international bunker fuels.

21. Parties shall work through the International Civil Aviation Organization and the International Maritime Organization to enable effective global agreements to achieve these targets to be approved by 2011. Such global 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.]

Option 5

22. [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].

23. The Parties should commence negotiations on two global sectoral agreements to address, international aviation and maritime transport emissions, respectively, in 2010 with a view to concluding by COP 17 in 2011, taking into account work already carried out by ICAO and IMO.]

Option 6³

24. [All Parties reaffirming the objective, principles and provisions of the Convention and specifically taking into account Article 2, Article 3, paragraph 5, Article 4, paragraph 1(c) of the Convention, their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall promote and cooperate in the research, development, application and diffusion, including transfer, of technologies, practices, processes and methodologies in international aviation and maritime transport.]

Option 7 - Delete the entire section on international bunker fuels.

25. [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 in 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 common but differentiated responsibilities and capabilities.]

26. [[Revenue from the implementation of such policy instruments [shall][should] be made available to support climate change adaptation and mitigation (NAMA) in developing countries. Furthermore traffic on routes to and from SIDS and LDCs should be exempt.] [One option to raise revenue is to implement a market-based levy on emissions from international maritime transport which differentiates between responsibilities [and capabilities] of developed and developing countries. Such levy would apply globally.⁴]]

27. [Pending agreement in these organizations on an approach to addressing GHG emissions from these sectors, involvement of developing countries in unilateral regional schemes for these sectors should remain voluntary.]

³ This option should replace the entire section on international bunker fuels.

⁴ A detailed proposal for innovative financing through the International Maritime Emission Reduction Scheme was submitted and is available at http://unfccc.int/files/meetings/ad_hoc_working_groups/lca/application/pdf/awglcafinancenigeria051109.pdf.

III. E. Various approaches to enhance the cost-effectiveness of, and to promote, mitigation actions¹

(paragraph 1 (b) (v) of the Bali Action Plan)

[Principles and objectives

1. [Actions by developing countries in the context of sustainable development and the eradication of poverty must be supported and enabled by technology, financing through public sources and capacity-building:

(a) As a general principle, the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) must respect the mandate of the Bali Action Plan, with a view to ensuring the full implementation of the Convention. Proposals should reflect the mandate by clearly advancing the full effective and sustained implementation of the principles and provisions of the Convention, for example by respecting the balance of responsibilities between Annex I and non-Annex I Parties;

(b) In order to respect the mandate of the AWG-LCA the discussions on the Kyoto Protocol mechanisms must take place under the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP);

(c) Governments must ensure the full implementation of the Convention, in an equitable manner and respecting the principle of common but differentiated responsibilities. This principle must be reflected in the text, ensuring the balance between different types of mitigation approaches which developing country Parties may voluntarily choose from at their discretion.]

2. The Parties, to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, will enhance national/international action on mitigation of climate change, including, inter alia, the consideration of various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing country Parties.

3. [*Recognizing* that the Convention has no provisions for the generation and/or trade of carbon credit units.]

4. *Taking into account*, in accordance with Article 3, paragraph 3, of the Convention, that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost[, be comprehensive in addressing all sources of greenhouse gases and comprise all economic sectors];

5. *Recognizing* that these approaches should be related to the provisions under Article 4, paragraph 3, of the Convention regarding the fact that Annex II Parties shall provide new and additional financial resources to meet the agreed full incremental costs of implementing measures that are covered by Article 4, paragraph 1, of the Convention.

Option 1 (paragraph 6):

6. Market-based approaches should:

- (a) Ensure that participation by Parties is on a voluntary basis;
- (b) Ensure a net global mitigation benefit;

¹ As tabled by the facilitator on 6 November 2009 (non-paper no. 42).

- (c) Ensure environmental integrity, additionality of mitigation actions and the prevention of the double-counting of emission reductions;
- (d) Promote the development of a strong, transparent, integrated and well-regulated carbon market and the engagement of the private sector;
- (e) Promote incentives for the use of higher-cost mitigation opportunities;
- (f) Promote the availability of a range of scale in supported activities and ensure that mitigation actions are country-driven;
- (g) Provide incentives for investment, technology transfer and the realization of other co-benefits;
- (h) Promote fair and equitable distribution of activities across regions and the availability of upfront financing;
- (i) Ensure simplicity of administration and implementation;

Option 2 (paragraphs 7–8):

7. Various approaches shall ensure:

- (a) Participation by Parties on a voluntary basis, without any direct or indirect penalty or discrimination for non participation in any particular approach, aligned with Article 3, paragraph 5, of the Convention;
- (b) Additionality of mitigation actions;
- (c) Full and effective global mitigation benefit contributing to the ultimate objective of the Convention;
- (d) Environmental integrity and accountability;
- (e) Incentives for investment and technology transfer, in addition to a comprehensive technology mechanism;
- (f) Fair and equitable distribution of activities across regions;
- (g) Upfront financing;
- (h) Promotion of co-benefits, particularly those that:
 - (i) Respect and promote local sustainable communities;
 - (ii) Fully respect the rights of Indigenous Peoples and local communities;
 - (iii) Ensure local communities have the right to participate in the design, implementation and monitoring of such mechanisms that impact them, including procedural rights of redress;
- (i) Technology that is in accordance with the objectives, provisions and principles of the Convention, and which is nationally and locally appropriate;
- (j) Administration and implementation systems that are equipped to ensure the achievement of (a) to (i) above;
- (k) That mitigation actions are country-driven.

8. New market mechanisms shall not qualify as support for implementation for nationally appropriate mitigation actions (NAMAs) by developing country Parties, observing that finance required for NAMAs by developing country Parties shall be new and additional in accordance with Article 4, paragraphs 3 and 7, and Article 11 of the Convention.

I. Market-based approaches

A. General provisions

9. [In adherence to the Bali Action Plan mandate and recognizing that existing market mechanisms exist under the Kyoto Protocol, there is no need to develop new mechanisms.] [Parties [shall][should] cooperate to enhance the cost-effectiveness of, and to promote, mitigation actions through the use of market-based approaches that engage private-sector participation and promote the flow of funding to developing country Parties to catalyze mitigation actions, with a view to establishing a global carbon market through the progressive implementation of instruments based on market-based approaches.]

10. [Market-based approaches include:

(a) [Existing mechanisms under the Kyoto Protocol, namely, joint implementation (JI), the clean development mechanism (CDM) and international emissions trading;]

(b) [New mechanisms established hereunder.]]

11. [Parties shall ensure that market-based approaches provide finance, technology and capacity-building for the implementation of NAMAs by developing country Parties that is complementary to agreed levels of support from public sources.]

12. The mechanisms envisaged below do not intend to replace existing mechanisms under the Kyoto Protocol.

13. Consistent with a no-lose scenario, developing country Parties shall strive through voluntary actions to achieve a level of emissions of [X] per cent below business-as-usual projections, beyond which any additional actions can generate units that may be transferred to developed country Parties as offsets.

14. The [supreme body] shall at its [X] session define modalities and procedures which prevent double-counting between different forms of support.

Eligibility criteria

15. Developed country Parties [including those which are not Parties to the Kyoto Protocol] may [participate in existing and new mechanisms] [trade units with Parties to the Kyoto Protocol] subject to:

(a) [The submission of the most recently required national inventory] [The measurement, reporting and verification of emissions by sources and removals by sinks];

(b) [The establishment of assigned amount pursuant to a binding national cap for [developed country] [Annex I] Parties] [The issuance of units];

(c) [The approval of the system of trading with Parties to the Kyoto Protocol by the Conference of the Parties serving as the meeting of the Parties (CMP) to the Kyoto Protocol;]

(d) [No units generated by reducing emissions from deforestation and forest degradation being used or converted into other units;]

(e) Further criteria as may be defined by the [supreme body].

16. [[Developing country Parties] [Economically more advanced developing country Parties] [Developing country Parties that undertake tier III NAMAs] may [participate in [NAMA] [sectoral] mechanisms] [participate in existing and new mechanisms] [trade units with Parties to the Kyoto Protocol] subject to:

(a) The 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 guidelines to be adopted;

(b) [The submission of the most recently required national inventory] [The measurement, reporting and verification of emissions by sources and removals by sinks];

- (c) The establishment of a national registry;
- (d) The [issuance of units];
- (e) [The approval of the system of trading with Parties to the Kyoto Protocol by the CMP to the Kyoto Protocol;]
- (f) [No units generated by reducing emissions from deforestation and forest degradation being used or converted into other units;]
- (g) Further criteria as may be defined by the [supreme body].]

17. A Party participating in any new market mechanism may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer and/or acquisition of units issued in relation to that mechanism.

[B. Existing mechanisms

18. [The Parties shall, by [20xx], revise guidelines for the implementation of JI, including for improving its effectiveness and efficiency by extending its timing, guaranteeing its environmental integrity and preparing for new participants.]
19. [The CDM as defined by Article 12 of the Kyoto Protocol shall continue to assist developed country Parties in achieving compliance with part of their QELRCs and assist developing country Parties in achieving sustainable development.]
20. The [supreme body] shall make decisions necessary to enable the applicability of the clean development mechanism hereunder.
21. [The Parties shall, by [20xx], revise the modalities and procedures for the CDM in order to ensure a more equal geographical distribution of projects, sustainable development and environmental integrity, including by establishing:
- (a) Benchmarks for baseline setting and determination of additionality for specific project types;
 - (b) Discount factors for application to issuance of CERs for specific 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.]
22. Developed country Parties may participate in emissions trading for the purpose of fulfilling their QELRCs.
23. The [supreme body] shall, at its [X] session or as soon as is practicable thereafter, decide upon guidelines for the implementation of paragraph 22 above, including for verification and reporting, taking into account the characteristics of the scheme.]

[C. [NAMA] [Sectoral] mechanisms

24. The purposes of the [NAMA] [sectoral] mechanisms shall be:
- (a) To assist developing country Parties in undertaking NAMAs that produce a net mitigation benefit to the atmosphere;
 - (b) To promote cost-effective global mitigation through the use of markets;
 - (c) To assist developed country Parties in meeting their QELRCs;
 - (d) [To assist developing country Parties in achieving sustainable development.]

Nature of reference levels

25. Developing country Parties may participate in [NAMA] [sectoral] mechanisms on the basis of a quantified crediting [or trading] reference level.
26. The reference level shall:
- (a) Cover one or more [measurable, reportable and verifiable NAMAs] [sectors];
 - (b) Cover all emissions [and removals] within the [NAMA] [sector] boundary;
 - (c) Be set in absolute [or intensity] terms;
 - (d) [Equal projected emissions to be achieved by unilateral and supported NAMAs over the relevant period] [[Take into account the projected level of emission reductions or removals to be achieved by unilateral and supported NAMAs over the relevant period and] be established at a level significantly below projected emissions [or above projected removals] of greenhouse gases within the boundary, taking into account national circumstances and respective capabilities [and the most efficient techniques, procedures, substitutes and alternative production processes]].

*Establishment of reference levels*Option 1 (paragraph 27):

27. The reference level shall:
- (a) [Be proposed by the participating developing country Party];
 - (b) Be established in accordance with rules, procedures, modalities and guidance adopted by the [supreme body];
 - (c) Be approved by the [supreme body].

Option 2 (paragraphs 28–32)

28. A developing country Party shall submit to [an independent body]:
- (a) Data on anthropogenic greenhouse gas emissions [and removals] for the relevant sectors;
 - (b) A business-as-usual projection of greenhouse gas emissions [and removals] for the sectors established according to methodologies adopted by the [supreme body];
 - (c) Information on pre-existing and planned unilateral and supported policies and measures in the relevant sector(s);
 - (d) Any other information as decided by the [supreme body];

Option 2.1 (paragraphs 28(e) and 29):

- (e) A proposed crediting [or trading] reference level included in a low carbon growth plan.
29. In accordance with guidelines adopted by the [supreme body], the [independent body] shall assess the information submitted under paragraph 28 (a)–(e) above and take a decision on the reference level.

Option 2.2 (paragraphs 30–32):

30. In accordance with guidelines adopted by the [supreme body], the [independent body] shall assess the information submitted under paragraph 28 (a)–(d) above.
31. Following assessment by the [independent body], the Party shall submit a reference level in the form of an emissions level to the [supreme body] for decision.

32. Once approved by the [supreme body], the Party shall inscribe the reference level in its national schedule or propose an amendment to its national schedule in accordance with [provision on enhancement of schedules].

[NAMA][Sectoral] crediting mechanism

33. A [NAMA][sectoral] crediting mechanism is hereby defined.

34. The [NAMA][sectoral] crediting mechanism shall be subject to the authority and guidance of the [supreme body] and supervised by [a dedicated body] [the CDM Executive Board].

35. Units shall be issued for measured, reported and verified reductions [or removals] beyond a crediting reference level.

36. If, during a crediting period, a participating developing country Party's actual emissions within the relevant boundary exceed the crediting reference level [or actual removals within the relevant boundary are below the crediting reference level], no units shall be issued to that Party.]

[Sectoral trading mechanism

37. A sectoral trading mechanism is hereby defined.

38. The sectoral trading mechanism shall be subject to the authority of the [supreme body] and shall be supervised by [a dedicated body].

39. Units shall be issued at the start of each trading period and the amount of such units shall be calculated in accordance with that Party's trading reference level.

40. At the end of each trading period, a participating developing country Party shall retire a number of eligible units equal to its actual net emissions within the sector boundary during the trading period.

41. Any use of units acquired by developing country Parties for the purpose of meeting a trading reference level shall be supplemental to domestic actions.]

[NAMA crediting and trading mechanism

42. A NAMA crediting and trading mechanism is hereby defined.

43. The mechanism shall function under the guidance of, and be accountable to, the [supreme body] and shall be supervised by a body to be established or appointed by the [supreme body].

44. For each developing country Party that elects to participate on the basis of a crediting reference level:

(a) Units shall be issued for measured, reported and verified reductions or removals beyond a crediting reference level;

(b) If, during a crediting period, a participating developing country Party's actual emissions within the relevant boundary exceed the crediting reference level or actual removals within the relevant boundary are below the crediting reference level, no units shall be issued to that Party.

45. For each developing country Party that elects to participate on the basis of a trading reference level:

(a) Units shall be issued at the start of each trading period and the amount of such units shall be calculated in accordance with that Party's trading reference level;

(b) At the end of each trading period, a participating developing country Party shall retire a number of eligible units equal to its actual net emissions within the sector boundary during the trading period.

46. Any use of units acquired by developing country Parties for the purpose of meeting a trading reference level shall be supplemental to domestic actions.]

Modalities and procedures to be developed

47. The [supreme body] shall define modalities and procedures for the implementation of the new mechanisms at its [X] session, including:

- (a) Requirements for the measurement, reporting and verification of emissions in a conservative and independent manner;
- (b) Guidelines for issuance and accounting of units;
- (c) [Eligibility criteria for participation in the [NAMA] [sectoral] mechanisms;]
- (d) [Eligible [NAMAs] [sectors] under the [NAMA] [sectoral] mechanisms;]
- (e) Requirements for determination of [NAMA][sectoral] boundaries and the treatment and minimization of potential leakage;
- (f) The duration of [crediting] [trading] periods and the carry-over of units between periods;
- (g) Procedures and mechanisms, including facilitative measures, in the event that a participating developing country Party does not achieve a reference level;
- (h) Preventing double-counting of emission reductions [or removals] between any of the mechanisms;
- (i) Further institutional arrangements.]

D. Other mechanisms*[Mechanism for carbon dioxide capture and storage]*

48. A mechanism for storing [carbon dioxide or other] greenhouse gases in geological formations is hereby defined. The mechanism shall be subject to the authority and guidance of the [supreme body].

49. The [supreme body] shall define the modalities and procedures for the functioning of this mechanism at its [X] session.]

E. Use of units

50. Parties eligible to participate in new market mechanisms may transfer, acquire or carry over units issued in relation to those mechanisms subject to guidance agreed by the [supreme body].

Option 1 (paragraph 51):

51. Units issued under market-based approaches shall be fully fungible and shall be eligible for use by Parties in meeting their commitments.

Option 2 (paragraphs 52 to 54):

52. The accounting of units shall be subject to the following:

- (a) NAMA generated units shall be used to meet QELRCs;
- (b) Any emission reduction units (ERUs), certified emission reductions (CERs), assigned amount units (AAUs) or removal units (RMUs), which a Party acquires from another Party in accordance with the provisions of JI or international emissions trading, shall be added to the assigned amount for the acquiring Party;
- (c) Any ERUs, CERs, AAUs or RMUs, which a Party transfers to another Party in accordance with the provisions of JI or international emissions trading, shall be subtracted from the assigned amount for the transferring Party;
- (d) Any CERs, which a Party acquires from another Party in accordance with the provisions of the CDM, shall be added to the assigned amount for the acquiring Party.

53. Units generated from market-based approaches shall be available to Parties to meet their QELRCs.

54. Units issued under market-based approaches shall be fully fungible.

F. Transitional provisions

55. The [supreme body] shall at its [X] session define modalities and procedures which:

(a) Provide for an orderly transition between market-based approaches where one approach ceases to be applicable due to the application of another approach;

(b) Ensure units issued from CDM project activities registered before [20xx] shall continue to be issued [until 20xx];

(c) Exclude new CDM project activities in sectors for which a reference level is defined.

II. Non-market-based approaches

Opportunities for rapid, near-term climate mitigation

56. [[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 tropospheric ozone[and black carbon (soot)], promoting the phase-down of hydrofluorocarbons (HFCs) and biosequestration.]

57. [In order to contribute to the reduction of [HFC] [greenhouse gas] emissions and [to pursue] the ultimate objective of the Convention, Parties [agree on] [shall pursue, working through the Montreal Protocol,] the adoption of appropriate measures [under the Montreal Protocol] to progressively reduce production and consumption of [HFCs] [greenhouse gases], and of provisions on adequate reporting to the [Convention] on the reductions achieved. Such measures shall neither exclude HFCs from the scope of the Convention or any instruments related thereto nor affect existing commitments undertaken by Parties thereunder. Financial resources made available for the implementation of such measures, including resources made available through the Multilateral Fund or any other instruments deemed appropriate by Parties, shall be [accounted for] [recognized as contributing to obligations] under the [Convention].]

[Use of technological means

58. Bearing in mind the concept of common but differentiated responsibilities, Parties shall strive to use technological means to mitigate the effects of climate change. The IPCC shall be [a] [the] reference body for technical aspects of selecting and utilizing such mitigation methods. To help Parties implement technological means, they should make use of the Expert Group on Technology Transfer already existing under the Convention.]

Support for implementation in developing country Parties

59. Parties shall establish a framework for assisting developing country Parties to implement, on a voluntary basis, domestic or regional cap-and-trade systems for legal entities and/or carbon taxes, including through the recognition of units and emission reductions generated through such measures.

Supported actions to promote mitigation in developing country Parties

60. Parties recall that the Bali Action Plan mandates consideration of various approaches, including but not limited to market mechanisms.

61. Support is required to enhance the extent of NAMAs by developing country Parties.

62. Support is required for national coordinating bodies which will enhance existing capacity in developing country Parties. These bodies will, inter alia, identify NAMAs and estimate the resources required.
63. Developing country Parties shall register indicative NAMAs for which they seek international support. The register shall initially contain a list of indicative mitigation actions proposed and support needed to implement the NAMA.
64. The support provided shall be measured by developed country Parties and shall:
- (a) Indicate the allocation and transfer of finance for means of implementation granted over and above Official Development Assistance in units of an agreed common currency;
 - (b) Measure the technology transfer, including development, application and diffusion, in units established according to indicators being developed under the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice, and the agreed full incremental costs for technology transferred to developing country Parties shall be reported in units of an agreed common currency;
 - (c) Measure the support for capacity-building according to indicators developed by the SBI and in units to be established in the review of the capacity-building framework.
65. 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 greenhouse gas inventories.
66. Developed country Parties shall report on the measurement of support in their national communications under Article 12, paragraph 3, of the Convention, and support shall be updated in the registry on an annual basis.
67. NAMAs supported with public funding from developed country Parties shall be verified together with the support as measured and reported, through modalities and procedures to be established under the Convention and according to multilaterally agreed guidelines.
68. For supported actions, developed country Parties including those in Annex II shall provide new and additional financial resources to meet the agreed full costs of verification undertaken by developing country Parties.
69. The [supreme body] shall verify the measurable, reportable and verifiable progress of developed country Parties toward their commitments to support developing country Parties, on the basis of their annual report in their national communications. Such verification shall include the direct financial transfers and indirect contributions through quantifiable technology and capacity-building support provided. Modalities and procedures for this verification shall be adopted at its next session.
70. On an annual basis, the register shall be updated to reflect the status of implementation of action and its support.

Taxation

71. As part of the various approaches to enhance the cost-effectiveness and promote mitigation actions, developed country Parties shall restructure their taxation regime so as to reflect the greenhouse gas content of the various energy resources.

Changes in consumption patterns

72. Bearing in mind different circumstances of developed and developing country Parties, the developed country Parties and other developed Parties included in Annex II shall undertake policies and measures to substantially modify consumption patterns in all relevant sectors in order to demonstrate that developed country Parties are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention and sufficient to achieve an aggregate reduction of

anthropogenic carbon dioxide equivalent emissions from domestic sources of greenhouse gases of more than [X] below 1990 levels by 2017, under the Kyoto Protocol. The Subsidiary Body on Implementation shall review the implementation of these policies and measures and their effects and report to the Conference of Parties at its sixteenth session.

Removing barriers associated with intellectual property

73. With the objective of promoting mitigation actions, including through improving their cost-effectiveness, the Parties shall ensure that intellectual property rights and agreements shall not be interpreted or implemented in a manner that limits or prevents any Party from taking any measures to promote mitigation of climate change. The Parties agree to undertake a range of measures including:

- (a) Creation of global pools for goods and technologies to promote mitigation of climate change;
- (b) Use of the full flexibilities contained in the Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement, including compulsory licensing;
- (c) Differential pricing between developed and developing country Parties;
- (d) Reviewing all existing relevant intellectual property rights regulations in order to provide certain information to remove the barriers and constraints affecting environmentally sound technologies;
- (e) Promoting innovative intellectual property rights sharing arrangements for joint development of environmentally sound technologies;
- (f) Limited/reduced time patents on climate-friendly technologies.

74. The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to ensure that intellectual property rights are interpreted and applied in a manner that promotes, and ensures the cost-effectiveness, of mitigation actions in developing country Parties.

Enhancing endogenous capacities and technologies in developing country Parties

75. With the objective of promoting mitigation actions, and in fulfilment of Article 4.3 of the Convention, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties through a program of action in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors, to transfer relevant scientific, technological, technical, socio-economic and other information, knowledge, know-how, practices, processes and technologies relevant to mitigating climate change to developing country Parties.

Education

76. The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance efforts by and in developing country Parties in the fields of education, training and public awareness related to climate change.]

III. F. Economic and social consequences of response measures* (paragraph 1 (b) (vi) of the Bali Action Plan)

1. [Parties reaffirm the importance of the objective, principles and provisions of the Convention. In particular Article 2, Article 3, paragraphs 1, 2, 3, 4 and 5, Article 4, paragraphs 3, 7, 8, 9 and 10, as well as the Bali Action Plan, adopted as decision 1/CP.13 by the Conference of the Parties (COP).
2. [Parties recognize that economic and social consequences may result from response measures taken by any Party.]
3. [[Recognizing the broad nature of the impacts of response measures, particularly on developing country Parties,] Parties acknowledge that negative economic and social consequences of response measures can adversely affect all Parties[, especially developing country Parties, and in particular those whose economies are dependent on fossil fuel production, use and exportation, tourism and the exportation of agricultural and energy intensive products, and trade dependent on international transport.]]
4. [Parties affirm that sustainable development is essential for adopting measures to address climate change and that there is a need to ensure that response measures do not undermine the achievement of economic and social development, taking into account the special needs of developing countries and the consequences for women and children.]
5. [Parties recognize that action on the adverse effects of climate change is a priority, and that response measures in this regard may result in negative economic and social consequences for Parties, in particular developing country Parties as referred to in paragraph 2 above. [In light of this, efforts to reduce or avoid the adverse impacts of the implementation of response measures should be consistent with the need for action to address climate change.]] [Parties recognize that the efforts to reduce or avoid negative impacts of response measures should not constrain or hinder progress in addressing climate change.]]
6. [Parties affirm that responses to climate change should be coordinated with social and economic development in an integrated manner, with a view to avoiding adverse impacts on the latter, taking fully into account the legitimate priority needs of developing country Parties for the achievement of sustained economic growth and the eradication of poverty.]
7. [Parties recognize the importance of avoiding and minimizing negative impacts of response measures on social and economic sectors, promoting a gradual and just transition in the most affected sectors, the creation of decent work and quality jobs, and contributing to building new capacities for both production- and service-related jobs.]
8. [Developed country Parties shall strive to implement policies and measures to respond to climate change in such a way as to avoid negative social and economic consequences for developing country Parties, taking fully into account Article 3 of the Convention. In order to assist developing country Parties in addressing negative social and economic consequences, developed country Parties shall provide financial resources, including for access to and development and transfer of technology, at agreed full incremental costs in accordance with Article 4, paragraphs 3, 5 and 7, of the Convention.]
9. [Parties agree to cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change. Measures taken to

* As tabled by the facilitator on 6 November 2009 (non-paper no. 44).

combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.]

Alternative 1

[Developed country Parties shall not resort to any form of unilateral measures, including fiscal and non-fiscal border measures against goods and services imported from other Parties, in particular from developing country Parties, on grounds of stabilization and mitigation of climate change. Such measures would violate the principles and provisions of the Convention, including, in particular, those related to the principle of common but differentiated responsibilities (Article 3, paragraph 1), to trade and climate change (Article 3, paragraph 5), and to the relationship between mitigation actions of developing countries and the provision of financial resources and technologies by developed countries (Article 4, paragraph 3 and 7)]

Alternative 2

[In relation to the economic and social consequences of response measures, Parties shall take into account the principles of the Convention.]

10. [Parties decide that action relating to response measures should be institutionalized in a structured manner, in accordance with Article 4.1 (g) and (h) of the Convention recognizing the needs of developing country Parties identified in Article 4, paragraphs 8, 9 and 10. [A permanent forum][other institutional arrangements] will be established by the Conference of the Parties (COP) to undertake activities including identifying [vulnerability to] negative economic and social consequences of response measures, sharing information, promoting and cooperating on issues relating to response strategies and minimizing negative consequences, in particular in developing country Parties.]

Alternative 1

[Parties decide that information on action relating to response measures should be considered in a structured manner and that, for this purpose, Parties should cooperate fully to enhance understanding of economic and social consequences of response measures, taking into account the need for information from those affected, and evidence of actual impacts, and of [both positive and] negative effects.]

11. [Parties agreed to consider how existing channels, such as national communications [as reviewed] under the SBI, could serve as a platform for discussions on the information provided by Parties.]

12. [Parties agree to adopt the modalities for the operationalization of the forum by COP 16, taking into account elements contained in the annex and other relevant information.]

13. [Placeholder for other issues to be discussed –

(a) [Emphasizing 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.]

(b) [Developed country Parties shall provide compensation for damage to African and LDC economies, and for lost opportunities, resources, lives, land and dignity, as many people in African and LDC countries will become environmental refugees, in the context of environmental justice of environmental, social and economic losses arising from the implementation of climate change response measures.]]

[Annex¹

Institutional Arrangements (e.g. a forum on response measures)

Possible questions to be asked to further shape options

1. Mandate (From where?, BAP, Articles 4.1 (g) and (h), 4.10, 3.5, etc.)
2. Nature (Executive/advisory; coordination/consultative, etc.)
3. Scope (What? (TOR), How? How long?, etc.)
4. Functions (Non-paper of LCA Chair, table 7, page 10 (see also Non-paper 32, paras. 11-12))
 - Information / knowledge-sharing, networking
 - Coordination
 - Consultative / advisory
 - Evaluation, assessment and/or screening
 - Facilitation
 - Capacity-building support
 - Reporting
 - Technical advice and/or support
 - Implementation
5. Financing (How much? How assessed? Where from?, etc.)
6. Support (What? How?, etc.)
7. Composition (Who?, etc.)
8. Meetings (How often?, etc.)
9. Reporting (Who? Who to? How often?, etc.)
10. Evaluation (How? Criteria?, etc.)
11. Any other matters]

¹ This annex was prepared by the facilitator and has not been discussed during the seventh session of the AWG-LCA.

IV. ENHANCED ACTION ON THE PROVISION OF FINANCIAL RESOURCES AND INVESTMENT*

This non-paper contains draft text for negotiation on (1) paragraph 10, section 4, and related paragraphs 18, 26, 27 and 35 in section 6 of non-paper 34, which were re-ordered and enhanced, and (2) paragraphs 15, 16, 19, 24, 25, 28, 32, 34, 36, 38, 39, 40 and 41 in section 6 of non-paper 34, which is based on informal consultations and submissions to the contact group on enhanced action on provision of financial resources and investments held on 2 – 6 November 2009.

This draft negotiating text replaces the paragraphs of non-paper 34 mentioned above. Non-paper 34 is included in the annex on page 121, and the sections and paragraphs that were not discussed at the resumed seventh session of the AWG-LCA have the same status as the draft negotiating text in this non-paper.

[Generation][Provision] of financial resources¹

[Public finance][International public Finance][Assessed contribution]

1. [The main source of funding will be new and additional financial resources provided by developed country Parties and other developed Parties included in Annex II, over and above the financing provided through institutions outside the framework of the financial mechanism of the Convention and over and above the goal of 0.7 percent of the GDP of the developed country Parties as ODA. The major source of financing will be the public sector.]
2. [All Parties may provide and developing countries may avail themselves of financial resources related to the implementation of the Convention through bilateral, regional and other multilateral channels.]
3. [All Parties, in accordance with their respective capabilities, shall implement and periodically report on policies and instruments to mobilize public and private financial resources, and improve enabling environments for investment in support of measures to mitigate and adapt to climate change outlined in Article 4.1 of the Convention.]
4. [Both public and private finance should play a major role in the implementation of this Agreement. Public finance should support enhanced action on adaptation and capacity-building. Private funding, channelled via appropriate policy frameworks, should be the main source of necessary investment for mitigation.]
5. [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.]

Option 1

Alternative 1: An assessed contribution from developed country Parties and other developed Parties included in Annex II [, based on historical climate debt, including historical emission debt and adaptation debt,] amounting to at least [[0.5--1] [0.8] [1.5] [2], per cent of gross national product] initially set at [0.5-1 per cent of GDP].

* As tabled by the co-chairs on 6 November 2009 (non-paper no. 54).

¹ The text on sources of finance as presented in annex XII of non-paper 34 has not been considered in preparing this section.

Alternative 2: An assessed contribution from developed country Parties over and above current ODA amounting to (expressed as a percentage of the GDP of all Annex I Parties): 1.5 per cent per annum for adaptation, 2 per cent per annum for supporting the NAMAs of developing country Parties; 1 per cent per annum for technology transfer and deployment; and 1 per cent per annum for capacity development in developing countries, especially those listed in paragraph 1 (c) (i) of the Bali Action Plan.

Alternative 3: [Assessed] contributions by all Parties except LDCs, [based on a contribution formula developed by the COP, updated on a regular basis] reflecting capacity to pay and responsibility for emissions.

Alternative 4: Assessed contributions by developed country Parties and other developed Parties in Annex II, based on a contribution formula developed by the COP, updated on a regular basis reflecting per-capita capacity to pay and cumulative per-capita responsibility for emissions since 1850.

Alternative 5: Contribution of all Parties except LDCs on the basis of assessed contribution of Annex II Parties and voluntary contribution from other Parties.

Alternative 6: Draw on contributions from all Parties, except LDCs, in accordance with their national circumstances and respective capabilities through multi-year pledges and multi-year replenishments, promoting predictability through each Party's formal indication of the level and source of its expected contribution.

[Innovative sources][Levies and taxes]

6. [The major source of financing will be the public sector in developed country Parties and other developed Parties included in Annex II. Private finance and carbon market finance are additional and supplementary to public-sector financing.

7. Any funding pledged outside the Convention shall not be regarded as a fulfillment of commitments by developed country Parties under Article 4.3 of the Convention and their commitments for measurable, reportable and verifiable means of implementation in terms of paragraph 1(b)(ii) of the Bali Action Plan.]

Option 2²

A mechanism for financing climate change action whereby a certain number [or percentage] of allowances [for developed country Parties] is set aside and monetized through international auctioning. COP shall determine the quantity of allowances [for developed country Parties] to be set aside and auctioned to support adaptation, REDD, capacity-building and other climate change actions.

Option 3

A uniform global levy on CO₂ emissions above a threshold of [1.5] [2.0] tonnes of CO₂ per capita; the LDCs shall be exempt.

Option 4

Alternative 1: [Levies for developed countries on] [Funding from instruments addressing emissions from] international aviation and maritime transport [that could be developed by ICAO and IMO].

Alternative 2: Levies for developed countries on] [Funding from instruments addressing emissions from] [A proportion of any funds generated through policies approaches and measures for] international aviation and maritime transport [that could be developed by ICAO and IMO.]

² Replaces option 2 and 11 of non-paper 34.

Option 5

An international adaptation levy on airfares, except on journeys originating from or destined for LDCs [that could be developed by ICAO].

Option 6

A share of the proceeds of [2] [3-5] per cent on CDM and [2] [4] [8] [10] [12] per cent on [joint implementation and emissions trading] [[market-based mechanisms] under the Kyoto Protocol].

Option 7

A levy of 2 per cent on capital transfers between entities in [Annex I][Annex II] Parties collected by [Annex I] [Annex II] Party governments and remitted in full to the Convention Adaptation Fund.

Option 8

Where appropriate, alternative forms of contributions may be agreed between or among Parties.

[Other sources]

Option 9

Additional contributions by developed country Parties over and above the assessed contributions, contributions from philanthropic organizations[and innovative sources of finance – including implementation of the principle, external debt swap/relief for sustainable development of developing countries, special drawing rights for sustainable development and carbon market finance driven by more ambitious reduction commitments of developed countries.

Option 10

Carbon market finance and private investment leveraged as appropriate by domestic policy frameworks and targeted public funds.

[Compliance sources]

Option 11³

Agreed penalties or fines on non-compliance of [developed country][Annex II] Parties with their commitments to reduce emissions and provide support in the form of financial resources, technology transfer and capacity-building.⁴

[Bring in para. 43, non-paper 34, and additional text related to compliance]

Institutional Arrangements

8. Parties [shall] [agree to] [strengthen] [operationalize] the [an effective] financial mechanism [[under the Convention] to [enhance] [ensure] the [full] implementation [commitments contained in Article 4.3, 4.4, 4.5, [4.6,] 4.8 and 4.9 in the context of Article 4.7] of the Convention [, in accordance with its Article 11, sub-paragraphs 1, 2 and 3;]]

9. [[Under this financial mechanism, the COP shall establish specialized fund/s,⁵ funding windows, and a mechanism to link various funds;][Further, Parties agree that [to establish] the XX fund[s]⁶ [will be established]];

³ Represents Option 8 of paragraph 10 of non-paper 34.

⁴ Some proposals suggest that this option be used to provide funding for adaptation.

⁵ Convention Adaptation Fund; Mitigation fund under the Convention; REDD Fund; The Multilateral Climate Technology Fund to support implementation of the technology mechanism; A multi-window mechanism to address loss and damage including an Insurance Fund ; The Special fund to address impacts of response measures; The Global fund to support a feed-in tariff programme; The Capacity-building Fund; the Technology Risk Facility; the Venture Capital Fund, the Technology Grant programme and other funds as required.

10. [The COP will appoint] [Parties agree [that] [to establish][an]
 [Executive Board as [an][the] operating entity]
 [XX fund[s][will be established]as [an] operating entity[ies]]
 of [this] [the] financial mechanism
 [which shall work under the [authority and] guidance of, and shall be [fully] accountable
 to, the COP, which shall decide on its policies, programme priorities and eligibility
 criteria]
 [pursuant to Article [11][11.1] of the Convention]
11. The [Executive Board][operating entity] specified in paragraph 3 above shall
 [have an equitable and balanced representation of all Parties] [within a transparent
 system of governance]] [in accordance with Article 11.2 of the Convention]
 [be governed by equal representation from Annex I Parties and non-Annex I Parties]
 [be governed by balanced representation of net contributors and net recipients].
11. bis [Parties will agree to a process to develop a governance mechanism]
12. [The COP shall invite] [The fund[s] shall [be administered by [a]][operate with]
 [trustee or trustees selected through a process of open [competitive] bidding]
 [an existing international financial institution[as its trustee]] [on an interim basis;]].]
- [12. bis [The [Board][fund[s]] shall be serviced by a secretariat [of independent and professional
 staff contracted by the Board]. [The COP shall invite [existing international institutions] [institutions
 selected through a process of open [competitive] bidding] to serve as a secretariat on an interim basis;]
12. ter Each of the separate funds may be advised by an expert group or committee, which could
 also be supported by a technical panel or panels addressing specific issues addressed by the fund;
12. quater To ensure transparent and efficient governance, a consultative/advisory group of all
 relevant stakeholders, and an independent assessment panel, may likewise be appointed;
12. quinques The Executive Board of the financial mechanism, with the 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;]
13. [Parties agree to make efficient and effective use of [current][existing] institutions and other
 channels, including bilateral, regional and multilateral channels, in accordance with Article 11.5 [, within
 a robust system of measurement, reporting and verification of financial resources provided through these
 channels]][financial resources provided through such current institutions and channels, including
 bilateral, regional and multilateral channels, to developing country Parties will not count towards
 fulfilment of the commitments of developed countries and other developed Parties included in Annex II
 to the Convention with respect to provision of financial resources under the Convention;]
- [13. bis Parties reaffirm the role of the Global Environmental Facility as an operating entity of
 the financial mechanism under Article 11 of the Convention. The Parties request the GEF to increase its
 efforts with regard to readiness and capacity-building activities.]
- [14. Parties hereby define a high-level body/forum that shall work under the guidance of the COP,
 and which shall, inter alia, provide an overview of international sources of finance, review the balanced

⁶ [World Climate Change Fund or Green Fund] [Global Fund for Climate] [Climate Change Funds, Adaptation Fund, and Green Enabling Environment Funds]

distribution of international public finance across priorities, and encourage synergies with other environmental agreements;

14.bis The high-level body/forum described in paragraph 7 above shall have equitable and balanced representation of all Parties and include all relevant actors;]

[15. The Parties shall establish [X], accountable to the Conference of the Parties, which shall establish policies and operational guidance.

16. [[X] shall take the form of a group drawing on finance experts housed within an appropriate institution.]

17. [X] shall provide regular reports to the COP on its operations and activities.

18. [X] shall provide, upon request, advice to developing countries in matching mitigation [and adaptation] needs with available sources of finance;

19. [[X] shall maintain a [register][public database] of proposed mitigation [and adaptation] actions and sources of finance and report on its contents to the COP on a regular basis;]

20. [[X] shall collect and undertake technical analysis of information on climate finance needs, sources and flows, and prepare regular reports for the COP.]]

[Bring in relevant text on fund modalities from Annex IX of Non-paper 34]

Annex

Content of non-paper no 34 (20 October 2009)^a

1. Preamble

PP.1 *Alternative 1:* 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,

Alternative 2: Renewing the political determination to urgently and substantially scale up the provision of financial resources to support enhanced action on mitigation and adaptation and technology cooperation,

PP.2 *Alternative 1:* Noting the various estimates of financial resources needed to address adaptation⁷ and recognizing the urgency of taking enhanced action on adaptation by all developing country Parties, especially those referred to in [Article 4.8 of the Convention] [paragraph 1(c) (i) of the Bali Action Plan (Decision 13/CP.1)],

Alternative 2: Noting the scale of the financial resources needed to address the adaptation needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially those referred to in [Article 4.8 of the Convention] [paragraph 1 (c) (i) of the Bali Action Plan (Decision 13/CP.1)],

PP.3 *Alternative 1:* Further, noting that adaptation needs are already an urgent necessity, an early and ambitious emission reductions [by developed country Parties] will be required to achieve the ultimate objective of the Convention,

Alternative 2: Delete this paragraph.

PP.4 *Alternative 1:* Highlighting that financial commitments have not been met by developed country Parties and other developed Parties included in Annex II and emphasizing the urgent need for these Parties to honour their commitments in accordance with Article 4, and in particular Articles 4.3, 4.4, and 4.5 of the Convention by providing resources to support adaptation, mitigation and technology transfer,

Alternative 2: Recalling commitments in accordance with Article 4, and in particular Articles 4.3, 4.4 and 4.5, of the Convention,

PP.5 Developed country Parties and other developed Parties included in Annex II shall provide new and additional to ODA, adequate, predictable and sustained level of financial resources, on a grant basis for adaptation and a grant and/or concessional basis for mitigation, including for the transfer of technology, to support enhanced action on mitigation and adaptation in developing countries for enhancing the implementation of Articles 4.1, 4.3, 4.4, 4.5, 4.8, and 4.9, in the context of Article 4.7.

^a As requested by Parties during meetings of contact group on enhanced action on provision of financial resources and investment in Bangkok, this text has been produced by the chair of the contact group in preparation for the resumed seventh session of the AWG-LCA to take place in Barcelona. The production of this text has been informed by discussions during the contact group meetings, informals and submissions by Parties. The chair, in preparing this text, has focused on ensuring that Parties' positions remain adequately reflected. This non-paper supersedes non-paper no.13.

⁷ The United Nations Development Programme estimated that an additional USD 86 billion per year would be needed in 2015, and according to UNFCCC estimates, USD 28–67 billion would be needed in 2030.

2. Objective and scope

1. The objective of the provision of financial resources is to promote equity and justice through further enhancement of the full, effective [, efficient] and sustained implementation of the Convention and the Bali Action Plan, so that the ultimate objective of the Convention can be achieved.
2. The provision of financial resources to developing country Parties for enhancing implementation of the Convention shall be guided by the principles of the Convention and the priorities of developing country Parties. Provision of financial resources to developing countries Parties should take full consideration of their specific needs and special circumstances, which may vary according to their national circumstances, their economic and technical capacity, and the implementation measures undertaken. Financial resources for adaptation shall be allocated to those particularly vulnerable to the adverse impacts of climate change, as identified in [paragraph 1 (c) (i) of the Bali Action Plan] [Article 4.8 of the Convention].
3. To [establish] [enhance] [operationalize], 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[, under the authority and governance of the COP], as mandated under Article 7.2 (h) of the Convention]. The Financial Mechanism shall enable, enhance and support mitigation and adaptation actions by developing country Parties to meet the objective(s) in accordance with Articles [4.3, 4.4 and 4.5] [4.3, 4.4, 4.5, 4.8 and 4.9] of the Convention [including the full cost of adaptation activities, technology transfer and capacity-building].
4. *Alternative 1:* 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. These resources shall be regarded as fulfilment by developed country Parties and other developed Parties included in Annex II of commitments under Article 4.3 of the Convention, and of their obligations to provide measurable, reportable and verifiable financing, as referred to in paragraph 1 (b) (ii) of the Bali Action Plan.

Alternative 2: The developed country Parties, other developed country Parties included in Annex II to the Convention and other Parties, according to agreed eligibility criteria, or those in a position to do so, may also provide, and developing country Parties may avail themselves of, financial resources through bilateral, regional and other multilateral channels in fulfillment of the financial commitments [under the Convention] [in accordance with the relevant provisions of this Agreement].

3. Principles

5. [Chapeau]

Alternative 1: The operationalization of an effective financial mechanism with a view to enhancing the implementation of the Convention shall be guided by the following principles:

Alternative 2: The financial architecture to enhance the coherence and effectiveness of multilateral climate change support [, enabled by this agreement,] should be guided by the following principles:

- (a) Fulfil 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 and be underpinned by the principles of equity and common but differentiated responsibilities;
- (b) [Fair, inclusive, efficient and effective, and] [appropriately] [equitable and geographically] balanced representation of all Parties shall be ensured within a fully transparent system of governance;
- (c) *Alternative 1:* The financial mechanism shall operate and function under the authority, governance and guidance of, and be fully accountable to, the COP, which shall decide on its policies, programme priorities and eligibility criteria, and allocation of resources for

adaptation, mitigation, technology and capacity-building and any other function that may be determined by the COP;

Alternative 2: The financial mechanism shall operate and function under strategic guidance of the Meeting of the Parties to the Copenhagen Agreement;

- (d) *Alternative 1:* Maintain consistency with the policies, programme priorities and eligibility criteria adopted by the decisions of the COP in all activities, including those related to funding, that are relevant to climate change undertaken by institutions outside the framework of the financial mechanism;
- Alternative 2:* Coherence in the global financial architecture of 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, with existing institutions utilized more efficiently;
- (e) Developed country Parties and other Parties included in Annex II of the Convention shall provide new and additional, adequate, predictable and sustainable financial resources and transfer technology to developing country Parties to make full and effective repayment of climate debt, including adaptation debt, taking responsibility for their historical cumulative emissions and current high per capita emission;
- (f) *Alternative 1:* All the developing country Parties are eligible to access the financial resources. Financial resources for adaptation shall be prioritized, especially for developing countries Parties referred to in [paragraph 1 (c) (i) of the Bali Action Plan (decision 13/CP.1)][Article 4.8 of the Convention];
- Alternative 2:* All developing country Parties are eligible to access financial resources, in accordance with the objectives and provisions under this Agreement, with special attention given to the adaptation needs of the most vulnerable countries, especially those identified in paragraph 1 (c) (i) of the Bali Action Plan (decision 13/CP.1), and particularly vulnerable populations, groups and communities by supporting adaptation at local and national levels;
- Alternative 3:* All Parties that meet specified criteria shall be eligible to access the financial resources, with special attention given to the needs of vulnerable countries. The criteria set should be based on: national and regional development priorities; natural and geographical characteristics; resource endowment; relative size of the economy; economic and technological capacity; position on the human development index; and, 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);
- (g) Funds shall be allocated for adaptation, mitigation, technology transfer and capacity building, in a balanced manner giving them equal consideration, with a special emphasis on adaptation, and the shares decided every two years, allocating financial resources based on the decided ratios;
- (h) *Alternative 1:* Enable direct access to funding by the recipients. Access to funds by Parties shall be inversely proportional to their contribution to greenhouse gases in the atmosphere;
- Alternative 2:* Access to financial resources [shall][should] be simplified and improved, including direct access where appropriate, and be provided in expeditious, effective, equitable, and timely manner, ensuring that fiduciary standards of the in-country recipient entities are as effective as the internationally agreed fiduciary standards and eligibility criteria;

- (i) Delivery of financial resources [shall][should] be efficient, goal-oriented and enable a shift from a project-based approach when dealing with proposals for funding to a programmatic approach, where appropriate, to make optimal use of the full range of means of implementation available and to allow for implementation at scale;
- (j) Delivery of financial resources should be country driven and ensure ownership through recipient country involvement during the stages of identification, definition and implementation of activities;
- (k) Financial resources shall be provided for the implementation of concrete actions, and their delivery [shall][should] strive to leverage other forms of financing, including private-sector financing through the carbon market and/or through other measures;
- (l) Financial resources [shall][should] be provided in a variety of forms inter alia, on a grant basis for those identified in paragraph 1 (c) (i) of the Bali Action Plan (Decision 13/CP.1) and full cost of adaptation; and a grant or concessional basis or in the form of guarantees, where appropriate, for mitigation and 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 distortion;
- (m) *Alternative 1:* Financial resources may be provided for funding international, regional or national activities that contribute to the continued fulfilment of Article 4.1 of the Convention;
Alternative 2: Delete this paragraph.
- (n) Mutual accountability, country ownership, alignment, harmonization, focus on results [with a compliance mechanism] and sound financial management[, taking into account the principles of aid effectiveness as set out in the Paris Declaration on Aid Effectiveness], and in accordance with internationally agreed environmental and social standards and safeguard policies;
- (o) Responsiveness to evolving needs and respective roles of public [and private] finance.

4. [Generation][Provision] of financial resources⁸

6. [All Parties, in accordance with their respective capabilities, shall implement and periodically report on policies and instruments to mobilize public and private financial resources, improve enabling environments for investment in support of measures to mitigate and adapt to climate change outlined in Article 4.1 of the Convention.]

7. *Alternative 1:* The main source of funding will be through the implementation of the commitments under Article 4.1, 4.3, 4.4, 4.5, 4.8 and 4.9.

The developed country Parties and other Parties included in Annex II to the Convention shall provide [scaled up], new and additional, over and above ODA, adequate, predictable, timely and stable financial resources.

Alternative 2: Developed country Parties [and other Parties] according to their capability should provide [scaled-up], new and additional, feasible, sustainable, adequate and predictable financial resources for climate-related support to developing countries.

8. *Alternative 1:* The public sector shall be the main source of funds.

⁸ In Bangkok it was agreed that proposals relating to the generation of financial resources should be discussed by the contact group on enhanced action on provision of financial resources and investment. Pursuant to this agreement, the finance contact group should discuss paragraphs 22 and 23 of non-paper no. 8 from the contact group on enhanced action on adaptation and its means of implementation. These paragraphs have been included in annex XIII.

Alternative 2: The public sector shall be the main source of funds, while market mechanisms and other private-sector sources would play a supplementary role in addressing climate change.

Public funds should leverage private investment and provide incentives for additional efforts.

Alternative 3: Both public and private finance should play a major role in the implementation of this Agreement. Public finance should support enhanced action on adaptation and capacity-building. Private funding, channelled via appropriate policy frameworks, should be the main source of necessary investment 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.

9. The generation of financial resources shall be guided by the principles of the Convention, in particular the principles of equity and common but differentiated responsibilities [and respective capabilities, taking into account the ability to pay and greenhouse gas emissions.]

10. New and additional financial resources [, including to the extent of USD 75 to 100 billion per year for adaptation,] [shall][should] be generated through a combination of various sources, including, inter alia:

Option 1

Alternative 1: An assessed contribution from developed country Parties [, based on historical climate debt, including historical emission debt and adaptation debt,] amounting to at least [[0.5–1] [0.8] [1.5] [2] per cent of gross national product] [0.5–1 per cent of GDP].

Alternative 3: An assessed contribution from developed country Parties over and above current ODA amounting to (expressed as a percentage of the GDP of all Annex I Parties): 1.5 per cent per annum for adaptation, 2 per cent per annum for supporting the NAMAs of developing country Parties; 1 per cent per annum for technology transfer and deployment; and 1 per cent per annum for capacity development in developing countries, especially those listed in paragraph 1 (c) (i) of the Bali Action Plan.

Alternative 3: Contributions by all Parties except LDCs, [based on a contribution formula developed by the COP] reflecting capacity to pay and responsibility for emissions.

Option 2⁹

A mechanism for financing climate change actions by monetizing emission allowances through auctioning at international level.¹⁰

Option 3

A uniform global levy on CO₂ emissions above a threshold of [1.5] [2.0] tonnes of CO₂ per capita; the LDCs shall be exempt.

Option 4

[Levies for developed countries on] [Funding from instruments addressing emissions from] international aviation and maritime transport.

Option 5

An international adaptation levy on airfares, except on journeys originating from or destined for LDCs.

Option 6

⁹ Details of the proposal are included in annex XII.

¹⁰ Some proposals suggest that a percentage of these resources be used to provide funding for adaptation.

A share of the proceeds of [2] [3–5] per cent on CDM and [2] [4] [8] [10] [12] per cent on [joint implementation and emissions trading] [market-based mechanisms under the Kyoto Protocol].

Option 7

A levy of 2 per cent on capital transfers between entities in Annex I Parties collected by Annex I Party governments and remitted in full to the Convention Adaptation Fund.

Option 8

Agreed penalties or fines on non-compliance of developed country Parties with their commitments to reduce emissions and provide support in the form of financial resources, technology transfer and capacity-building.¹¹

Option 9

Additional contributions by developed country Parties over and above the assessed contributions, contributions from philanthropic organizations and innovative sources of finance – including implementation of the principle, external debt swap/relief for sustainable development of developing countries, special drawing rights for sustainable development and carbon market finance driven by more ambitious reduction commitments of developed countries.

Option 10

Carbon market finance and private investment leveraged as appropriate by domestic policy frameworks and targeted public funds.

Option 11

A mechanism for financing mitigation actions whereby a certain proportion of the total number of emission allowances under the Copenhagen Agreement is held back in a set-aside reserve.

5. Funding activities (Proposal for additional subheading)¹²

11. The funding shall be used to enhance actions on adaptation, mitigation, and technology development and transfer, as well as related capacity-building.

The financial mechanism shall fund the following:

- (a) The agreed full costs for the preparation of national communications of developing country Parties;
- (b) The agreed full incremental costs incurred by developing country Parties of implementing measures covered by Article 4.1 of the Convention, including for the transfer of technology, for, inter alia, the following:
 - (i) Adaptation in accordance with Article 4.4 and 4.9 of the Convention;
 - (ii) Mitigation;
 - (iii) The deployment and diffusion of low-GHG emitting and environmentally sound technologies (ESTs);
 - (iv) The research and development of technologies;
 - (v) Capacity-building for mitigation and adaptation actions;
 - (vi) The preparation of national action plans and their implementation;
 - (vii) Patents;

¹¹ Some proposals suggest that this option be used to provide funding for adaptation.

¹² In Bangkok, it was agreed that proposals relating to the use of financial resources should be discussed by the respective thematic contact groups.

- (viii) For technical assistance to build the readiness of developing country Parties to access large pool of financing;
- (ix) Any other funding decisions as may be determined by the COP.
- (c) Funding for the development and transfer of technology as a means of implementation shall be used for, inter alia, technology development, deployment and transfer, capacity-building and risk management, including insurance. It will also financially cover the implementation of action programmes developed under the Convention, such as NAPAs and TNAs, and other programmes that may be identified in the financial needs assessment project under the Convention.

6. Institutional arrangements, including fundsInstitutional structure¹³

12. Institutional arrangements for the operation of the financial architecture shall have the following functions, inter alia:

- (a) Assessing the financial resources required for the fulfilment of [this Agreement][the commitments under the Convention];
- (b) Ensuring the effective use of resources, including those generated under paragraphs x;
- (c) Coordinating financial resources, including those generated under paragraphs x for the fulfilment of [this Agreement][the commitments under the Convention];
- (d) Measuring, reporting and verifying/monitoring and reviewing.

13. The institutional arrangements shall be periodically reviewed to assess its fulfilment of these functions.

14. The institutional arrangements for the operationalization of an effective financial mechanism under the COP in accordance with Article 11 of the Convention shall include:

Option 1¹⁴

15. The COP is the supreme decision-making body of the Convention, under whose authority and guidance the mechanism will operate through the establishment of [a fund with specialized funding windows] [specialized funds][a fund for mitigation and a fund for adaptation] with a mechanism to link various funds.

16. The COP shall appoint under its authority an [Executive Board] [Executive Body on Finance and Technology for Adaptation (EBFTA) and an Executive Body on Finance and Technology for Mitigation (EBFTM)] as [the] [an] operating entity of the financial mechanism with balanced and equitable representation of all Parties to manage the financial mechanism.

17. The COP and the Board shall establish [a fund with specialized funding windows] [specialized funds][a fund for mitigation and a fund for adaptation], funding windows under its governance, and a mechanism to link various funds, which include:

- (a) *Alternative 1: Convention Adaptation Fund;*
Alternative 2: Multilateral Adaptation Fund;

¹³ In Bangkok, it was agreed that proposals relating to the institutional arrangements for the provision of financial resources should be discussed by the contact group on enhanced action on provision of financial resources and investment. Pursuant to this agreement, the finance contact group should discuss paragraphs 37–40 of non-paper no. 4 from the contact group on enhanced action on development and transfer of technology (included in annex XIII) and paragraph 6 of non-paper no. 24 from the contact group on enhanced action on capacity-building (included in annex XIV).

¹⁴ Option 1 is a consolidation of the proposals presented in annexes I–VII.

- (b) Mitigation fund under the Convention;
- (c) REDD Fund;
- (d) The Multilateral Climate Technology Fund to support implementation of the technology mechanism;
- (e) The Insurance Fund;
- (f) The Special fund to address impacts of response measures;
- (g) The Global fund to support a feed-in tariff programme;
- (h) The Capacity-building Fund; the Technology Risk Facility; the Venture Capital Fund, the Technology Grant programme and other funds as required.

18. Funds are generated through:

Alternative 1: An assessed contribution from Annex I Parties amounting to at least [0.5–1][1.5] per cent of gross national product.

Alternative 2:

- (a) A levy on international maritime transport and international aviation;
- (b) A share of the proceeds from market-based mechanisms and other trading units;
- (c) Contributions from the Kyoto Protocol Adaptation Fund;
- (d) Additional contributions by Parties over and above assessed contributions;
- (e) Contributions from other sources, including voluntary contributions.

Alternative 3: A combination of alternatives 1 and 2

19. Funds [shall] [would] be administered by a Trustee or Trustees selected through a process of open bidding.

20. Each of the funds shall be advised by an expert group or committee, which [shall] [could] also be supported by a technical panel or panels to address specific issues [, including panels for capacity-building, technology, REDD-plus and market mechanisms].

21. Developing country Parties will establish and/or strengthen national funding and coordinating bodies to address all aspects of the means of implementation.

22. All developing country Parties shall be eligible to access funds, and the mechanism shall enable direct access.

23. Modalities for determining the role of existing funds and entity/ies in the operation of the financial mechanism should be determined by Parties.

Option 2

24. The World Climate Change Fund or Green Fund¹⁵ is hereby established and shall function under the guidance of and be accountable to the COP. The COP shall decide on its policies, programme priorities and eligibility criteria.

25. The COP shall appoint the Governing Body of the Fund, which shall have equal representation from Annex I and non-Annex I Parties.

26. Contributions to the Fund shall be based on a scale of assessment.

¹⁵ The complete proposal is included in annex VIII.

27. All Parties should contribute to the fund, except LDCs. The assessed contributions are mandatory for Annex I Parties and from those non-Annex I Parties that choose to participate.
28. The Fund shall be administered by an existing financial institution.
29. The Fund shall support mitigation activities, and a percentage of contributions to the fund will be provided to the Adaptation Fund of the Kyoto Protocol.
30. All LDCs, and non-Annex I Parties that choose to participate, shall be eligible to access funds. Annex I Parties may access up to 50 per cent of their contribution.
31. The Fund will complement existing funds and entities.

Option 3

32. The Global Fund for Climate¹⁶ is hereby established as an operating entity of the financial mechanism. It shall function under the guidance of and be accountable to the COP, which shall decide on its policies, programme priorities and eligibility criteria.
33. The Fund and the COP shall enter into an agreement pursuant to Article 11.3 of the Convention.
34. The Fund shall be governed by a body with balanced representation of net contributors and net recipients. The process of constituting the body shall be agreed upon by the Parties.
35. All Parties, except LDCs, shall contribute to the Fund in accordance with their national circumstances and respective capabilities through multi-year pledges and multi-year replenishments.
36. An existing multilateral financial institution shall operate the Fund as its trustee.
37. The Fund shall support developing country mitigation and adaptation policies, programmes and projects in a country-driven manner.
38. The Parties reaffirm the role of the Global Environment Facility (GEF) as an operating entity of the financial mechanism under Article 11 of the Convention.

Option 4

39. Make efficient and effective use of current institutions, including the GEF, LDCF, SCCF, multilateral development banks, specialized United Nations institutions and other existing funds, 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].
40. A Facilitative Platform¹⁷ is established under the authority and guidance of the COP. The COP shall establish policies and operational guidance to enable operation of the Platform. The Secretariat of this agreement shall act as the operating entity of the platform on an interim basis to be reviewed by the COP before the [xx] session. The platform shall establish (1) a register of actions on mitigation, adaptation, and capacity building strategies and activities; (2) finance, technical and capacity-building support; (3) monitor and analyze information in the register and report it to COP on a regular basis.
41. The Parties hereby establish an entity for coordination and matching. The entity shall provide technical assistance to developing countries in identifying needs and financial resources, enhancing the quality of developing country finance proposals, and helping to facilitate the matching between needs and financial resources. The entity shall provide regular reports to the COP on its operations and activities.

¹⁶ The complete proposal is included in annex IX.

¹⁷ The complete proposal is included in annex X.

7. [Compliance][Monitoring, reporting and verification]

42. All Annex I, [Annex II] [and Annex B Parties] shall report on an annual basis, all contributions made. 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;

43. A compliance mechanism shall be established to ensure the full implementation of the commitments of Annex I, [Annex II] [and Annex B Parties], for commitments on Articles 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention with reference to their agreed assessed contributions for the provision of financial resources, 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) [The Board of the Multilateral Fund shall undertake] Annually review compliance of [developed country]Annex I [and Annex B][Annex II] Parties with their commitments on the provision of financial resources in a timely and predictable manner[to the Multilateral Fund for Climate Change] and in consonance with the needs identified by the developing country Party and shall make a report to the COP (or the Conference of Parties serving as the assembly of Parties) at its annual meeting;
- (c) 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;
- (d) 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.

Annex I

1. 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.
2. The COP shall appoint a board,¹⁸ which shall function under the authority and guidance of and be accountable to the COP, to manage the financial mechanism and the related facilitative mechanism, funds and bodies, which shall have an equitable and balanced representation of all Parties within a transparent system of governance, to address all aspects of the means of implementation for developing countries, for both adaptation and mitigation.
3. The level of the new funding can be set at 0.5 per cent to 1 per cent of the GNP of Annex I Parties. Quantified commitments by developed country Parties to adequate and predictable funding for mitigation and adaptation.
4. The role and remit of the COP in the modalities and procedures of such a mechanism must be clear, including the setting of operational guidelines, the election of executive board members, approval of final budgets, and audit process or verification.
5. The Board shall be assisted by a dedicated secretariat of professional staff contracted by the Board.
6. The COP and the Board shall establish, manage and supervise current funds, specialized funds and funding windows to fund projects, programmes and actions aimed at mitigation, adaptation and technology transfer that are under its governance, and a mechanism to link various funds. These funds shall include:
 - (a) An Adaptation Fund;
 - (b) A Mitigation Fund;
 - (c) A Multilateral Climate Technology Fund:¹⁹
7. A Multilateral climate technology fund shall be established to support the implementation of the technology mechanism for the provision of technology-related financial resources on a grant or concessional basis to enable the wide diffusion of environmentally sound technologies in developing countries.
8. The fund shall meet the full costs of activities such as technology R&D and demonstration of technology, capacity-building, technology needs assessments, know-how and information, and construction of policy instruments.

Alternative 1:

The fund shall be used to implement the development, deployment, diffusion and transfer of technologies by meeting the agreed full incremental costs of, inter alia, licensing IPRs, and the deployment and diffusion of technologies in developing countries.

Alternative 2:

The fund shall be used as a catalyst to provide stakeholders with incentives to implement the development, deployment, diffusion and transfer of technologies by meeting the full incremental costs of, inter alia, the deployment and diffusion of technologies in developing countries.

- (d) A Capacity-building Fund;

¹⁸ Other formulations proposed are “Executive Body”, “International operating entity” and “governing council”.

¹⁹ Another formulation proposed is “a multilateral technology acquisition fund”.

- (e) A Technology Risk Facility to assist technologies from demonstration to commercial maturity;
 - (f) A Venture Capital Fund for start-up finance;
 - (g) A Technology Grant programme for the research and development of new technologies;
 - (h) A Climate Insurance Fund;
 - (i) Other funds as required.
9. Modalities for determining the role of existing funds and entities for the operation of the mechanism shall be developed.
10. Funds will be administered by a Trustee or Trustees that have been selected through a process of open competitive bidding among reputable pre-qualified institutions.
11. Each of the funds and funding windows shall be:
- (a) Advised by an expert group or committee, which could also be supported by a technical, scientific advisory and monitoring and evaluation panel or panels addressing specific issues identified by the Board;
 - (b) Assisted by a independent specialized thematic assessment unit or panels, comprising experts and specialists, to carry out the relevant assessments for the disbursement of funds to the designated national entities under their respective specialized funding windows. These 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.
12. To ensure transparent and efficient governance, other possible components of the structure shall include representatives of all participant countries, contributors and beneficiaries, grouped in a balanced manner, a consultative/advisory group all relevant stakeholders and an independent assessment panel.
13. 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 sub national and local governments.
14. The coordinating bodies shall be the national focal points for supporting the implementation of climate change projects and programmes that have received technology, finance and capacity-building assistance from developed country Parties in line with those Parties' commitments under Article 4 of the Convention.
15. In achieving its objectives, national coordinating body shall:
- (a) Ensure national ownership of and commitment to NAMAs that are to be registered internationally;
 - (b) Ensure proper assessment of the financial, technological and capacity needs of NAMAs and national adaptation measures;
 - (c) Mobilize, coordinate with and involve existing in-country mechanisms;
 - (d) Facilitate the development of national expertise on adaptation and mitigation;
 - (e) Coordinate climate change funding, technology transfer and capacity-building requirements, including by identifying and prioritizing needs and guiding the preparation of proposals;
 - (f) Harness synergy across thematic activities and facilitate exchange of experience and good practice;

- (g) Identify stakeholders for direct access to financial assistance.
16. The national coordinating bodies shall act as the direct channel of access between developing country Parties and the board, shall approve funding for projects, programmes and actions, subject to the guidelines and procedures established by the specialized thematic assessment units approved by the Executive Board and the COP.
17. The administrative costs of national coordinating bodies established for this purpose shall be covered by international financial resources made available specifically for this purpose. A separate pool of funding to finance national coordinating bodies through an item in the secretariat's budget shall be established.
18. The designated national funding entities could also accept contributions directly, as per guidelines agreed by the COP, from and facilitate linkages with other private or national, regional, sub-regional, international bodies and/or stakeholders that may seek to implement actions relating to mitigation, adaptation and technology transfer and related activities directly.
19. 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.
20. Manage a certification and registry system for receiving, delivery of and deploying financial resources to enable developing country Parties to count financial contributions and technology support from developed country Parties towards compliance of their commitments under Article 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention and under paragraph 1(b) (ii) of decision 1/CP. 13. Financial resources will be made available to support an effective system to measure, report and verify the support provided by developed countries.
21. The Executive Board shall report annually to the COP on matters related to a proposed fund.
22. The Executive Board of the Financial Mechanism, with the 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.
23. 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.
24. 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.

Annex II

1. Institutional arrangements for enhancing the implementation of Article 11 of the Convention, through finance, technology and capacity-building, shall include:
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.
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 relevant articles of the Convention, in order to enable mitigation and adaptation under the relevant paragraphs of decision 1/CP.13.
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.
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) To organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for adaptation, including the enabling means of financing, technology and capacity building;
 - (b) To guide and supervise the disbursement of the Adaptation Fund to be created under the Convention;²⁰
 - (c) To 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) To provide financial and technical support, upon request by developing countries, for the elaboration of national plans for adaptation;
 - (e) To 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) To articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programmes and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.
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 shall comprise 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 ensure transparent and efficient governance.
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) To organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for mitigation, including the enabling means of financing, technology and capacity-building;

²⁰ Further provisions on the Adaptation Fund to be provided by the proponent of the proposal.

- (b) To govern a Mitigation Fund to be created under the Convention.²¹
- (c) To coordinate disbursements from the Mitigation Fund according to the needs as indicated in NAMAs submitted by developing countries to the EBFTM;
- (d) To provide financial and technical support, upon request by developing countries, for the elaboration of NAMAs;
- (e) To coordinate disbursements from the Mitigation Fund according to the needs for REDD plus activities as requested by developing countries;
- (f) To provide financial and technical support, upon request by developing countries, for the preparation of REDD plus activities;
- (g) To coordinate with regional development banks concessional loan arrangements for the private sector in developing countries for the implementation of specific mitigation activities;
- (h) To 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) To articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programmes and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.

8. The EBFTM will be supported by five technical panels: research and development; capacity-building; transfer of technologies for mitigation; REDD plus, and market mechanisms. The technical panels shall comprise 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.

9. Technical Panels:

- (a) Both technical panels on Research and Development (TPRDA and TPRDM) shall, inter alia, coordinate multilateral technology research, development and demonstration programs and provide appropriate support to developing country parties through North-South and South-South cooperation schemes, and promote 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 fulfilment of support commitments for capacity building by developed countries. The TPCBs shall create mechanisms for sharing lessons learned and 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, provide advice and recommendations to the Executive Bodies on Finance and Technology on the overall implementation of technology; promote communication and information/knowledge sharing; monitor and assess the performance and progress of technological research, development, demonstration, diffusion, and deployment, using

²¹ Further provisions on the Mitigation Fund to be provided by the proponent of the Proposal.

performance indicators, and report to the COP. In addition, these technical panels shall prepare reviews on existing technologies, including information on estimated costs, 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, modeling, downscaling and dissemination) activities for adaptation in developing countries. The TPOSIM shall also create mechanisms for sharing lessons learned and promoting 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 plus (TPREDD plus) shall, inter alia, determine methodologies for reference levels, support enhancement of REDD plus 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, which are carried out under the market mechanisms. The TPMM will deal with issues such as country-specific sectoral baselines, additionally, 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 responsible for 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.

10. The UNFCCC secretariat shall support and facilitate the activities of the EBFTA, EBFTM and the technical panels.

Annex III

1. A Multilateral Fund for Climate Change is hereby established.
2. Funding for the Multilateral Fund for Climate Change 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; The purpose of the Multilateral Fund for Climate Change is to establish, administer and deploy substantial and predictable sources of funding to support actions prescribed within this agreement.
3. 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.
4. 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.
5. 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).
6. The secretariat of the Convention shall service the Multilateral Fund for Climate Change Fund and its Board.
7. The Multilateral Fund for Climate Change shall have five discrete funding windows:
 - (a) A Mitigation Window;
 - (b) A REDD Window;
 - (c) An Adaptation Window;
 - (d) An Insurance Window;
 - (e) A Technology Window.
8. 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.
9. The Board of the Multilateral Fund for Climate Change shall establish technical advisory panels for each of the funding windows.

10. The purpose of the technical advisory panels shall be to, inter alia:
 - (a) Identify sources of funding;
 - (b) Identify priorities for funding.
11. Provide assistance to recipient countries in developing project proposals and identify appropriate financial support.

Annex IV

1. The Convention Adaptation Fund shall be established to provide new, additional and predictable financial resources to developing countries that are particularly vulnerable to climate change, especially small island developing States and least developed countries, to assist them in meeting the full costs incurred in adapting to the adverse impacts of climate change.
2. The Convention Adaptation Fund shall be financed from:
 - (a) An assessed contribution from each country Parties listed in Annex II of 0.5 per 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 the Parties serving as the meeting of the Parties to the Kyoto Protocol and the Conference of the Parties serving as the assembly of the Parties to this Protocol.
3. The Convention Adaptation Fund shall:
 - (a) Fund the implementation of national and regional adaptation plans and strategies, and concrete adaptation projects and strategies, including those contained in national communications;
 - (b) Fund the implementation of the activities and actions identified by the Adaptation Committee (AC), and all other relevant processes under the Convention;
 - (c) Have a multi-window mechanism to address loss and damage, including solidarity funds, rehabilitation and compensatory components, and insurance mechanisms, including micro insurance [as well as negative impacts from response measures].
4. The Convention Adaptation Fund shall function under and be accountable to the Financial Mechanism under the Convention.
5. It shall be managed by a geographically balanced and representative Governing Board comprising three members from the five United Nations regional groups, two members from small island developing States and two members from the least developed countries.
6. In deciding on its policies and procedures, the Board shall ensure that the Convention Adaptation Fund adheres to the principles of sound financial management and transparency.
7. The Convention Adaptation Fund shall be operationalized no later than the sixteenth session of the Conference of the Parties.

Annex V

A Multilateral Adaptation Fund (MAF) exclusively for countries with low or average per capita incomes. The Multilateral Adaptation Fund consists of a Prevention pillar (national programmes aiming at reducing disaster risks and to make development more climate-resilient) and an Insurance pillar (in cooperation with the insurance industry, the fund insures large risks which cannot otherwise be covered). Funds for MAF shall be raised through a uniform global levy on CO₂ emissions above a threshold of 1.5 [2] tonnes per capita and collected in all participating countries. Each country is entitled to retain a part of the revenue from the levy to finance national climate measures (mitigation and adaptation) through a National Climate Change Fund (NCCF). The poorer the country, the bigger the part retained in the NCCF. The remainder of the proceeds go to the MAF.

Annex VI

A global fund shall be established to support a global feed-in tariff programme, providing guaranteed purchase prices, over and above the retail energy price in developing countries, of energy from renewable sources including wind, solar PV, concentrated solar power, geothermal power, hydropower and other sources, to the producers of such energy in developing countries for a period of 20 years. The Global Fund shall aim at both inducing a shift to renewable energy without compromising development momentum in developing countries, and achieving economies of scale and a sustained reduction in the costs of generating renewable energy.

Annex VII

A special fund shall be established:

- (a) For the economic and social consequences of response measures (para. 1 (b) (vi) of the Bali Action Plan);
- (b) 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).

Annex VIII

1. Pursuant to Article 4 and 11 of the Convention, a World Climate Change Fund or Green Fund is hereby established to scale up mitigation activities worldwide and to support adaptation.
2. The Fund will support projects, programmes and sectoral activities that generate concrete results.
3. All parties should contribute to the Fund, with the exception of the least developed Parties. Contribution from Annex I parties will be mandatory. The contributions will be determined according to a scale of assessment, consistent with the principle of common but differentiated responsibilities and respective capabilities.
4. The contributions could be based on the following principles:
 - (a) Total emissions - polluter pays;
 - (b) Per capita emissions - Equity;
 - (c) Emissions per unit of GDP - Efficiency;
 - (d) Size of economy - Capacity to pay;
5. All participating countries will benefit from the Fund.
 - (a) Annex I Parties may withdraw only up to 50 per cent of their contribution, in order to ensure a net flow of resources to developing countries;
 - (b) Non-Annex I Parties participating in the Fund will have access to resources considerably larger than their own contribution;
 - (c) Disbursements will be effected as non reimbursable grants.
6. The Fund will be governed in a transparent, effective and efficient manner, by a governing body with equal participation of Annex I and non-Annex I Parties, under the oversight of the COP. The Fund will be administered by an existing international financial institution.

Annex IX

1. Recalling Articles 4 and 11 of the Convention, the Parties agree that a Global Fund for Climate will be established which:
 - (a) Has as its purpose the funding of projects, programmes, policies and other activities related to the mitigation of and adaptation to climate change;
 - (c) Supports projects, programmes and activities administered, as appropriate, by the multilateral development banks, domestic institutions in host countries, or by other actors including the private sector and civil society;
 - (d) Takes into account that financing needs of developing countries vary according to their economic capacity;
 - (e) Gives due consideration to creating simplified administrative procedures, in particular to help meet the urgent needs of the least developed and most vulnerable countries;
 - (f) Utilizes a variety of financial products as appropriate to the circumstances;
 - (g) Finances actions informed by, inter alia, the low-carbon growth strategies referred to in Article [X];
 - (h) Integrates its funding, planning and activities with country-driven development strategies and programmes and coordinates with other delivery channels of climate finance;
 - (i) Is governed in a transparent, effective and efficient manner with balanced representation between net contributors and net recipients;
 - (j) Operates with an existing multilateral financial institution as its trustee.
2. The Global Fund for Climate shall be an operating entity of the financial mechanism pursuant to Article 11 of the Convention. In this regard, the Conference of the Parties shall enter into arrangements with the Fund pursuant to Article 11.3 of the Convention.
3. With respect to its capitalization arrangements, the Global Fund for Climate shall:
 - (k) Draw on contributions from all Parties except the least developed country Parties, in accordance with their national circumstances and respective capabilities;
 - (l) Be based on multi-year replenishments and multi-year pledges and accept, where appropriate, alternative forms of contribution as may be agreed between or among Parties;
 - (m) Allow contributions from Parties to be designated for thematic areas;
 - (n) Promote predictability through each Party's formal indication on the level and source of its expected contribution.
4. The Parties reaffirm the role of the Global Environment Facility (GEF) as an operating entity of the financial mechanism under Article 11 of the Convention. The Parties request the GEF to increase its efforts for readiness and capacity-building activities, and technology pilot programmes, as well as on providing financing for activities related to the measurement and reporting requirements specified in [Article X][Appendix X].

Annex X

1. A Facilitative Platform is hereby established under the authority and guidance of the COP. The Secretariat of this Agreement shall act as the operating entity of the platform on an interim basis to be reviewed by the COP before its [xx] session.
2. The COP shall establish policies and operational guidance to enable operation of the Platform.
3. Pursuant to the policies established by and under the guidance of the COP, the Facilitative Platform shall establish a register of:
 - (a) Capacity building strategies and activities to engage in mitigation and adaptation efforts and support required;
 - (b) Mitigation actions [consistent with low emission development strategies], including estimated emissions reduction potential, that could be undertaken with additional support;
 - (c) Adaptation actions [consistent with low emission development strategies] that could be undertaken with additional support;
 - (d) Finance, technical and capacity building support from all sources – public and private, domestic and international.
4. Invite Parties and other entities to submit information to the register in line with paragraph 3 (a) above.
5. Monitor the information in the register; analyse finance and investment flows and trends to identify finance and capacity gaps; and report to the COP on a regular basis.
6. Analyse information and share lessons learned in relation to the development and implementation of strategies and actions, including identifying best practice.
7. A Party shall record in its National Schedule supported mitigation actions that are measurable, reportable and verifiable in quantitative terms.

Annex XI

1. A mechanism for financing climate change actions by monetizing emission allowances through auctioning is hereby established.
2. 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.
3. The auctioning will generate revenue that shall be used to assist developing countries in implementing climate change actions.
4. 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.
5. The scope of this mechanism is to provide financial resources for
 - (a) Adaptation;
 - (b) REDD;
 - (c) Capacity building.
6. The Conference of the Parties shall determine the quantity of allowances to be auctioned at its [sixteenth] session for the period [.....] to support each financial need referred to in paragraph x.
7. 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.
8. The Conference of the Parties shall adopt further principles, modalities, rules and guidelines for the functioning of this financial mechanism at its [sixteenth] session, including adopting procedures for the determination of the quantity to be auctioned for subsequent periods.

Annex XII²²

22. The scale of financial flows to support adaptation in developing countries must be [at least USD 67 billion] [within a minimum range of USD 50–86 billion] [in the range of USD 70–140 billion] [at least [0.5] [0.7] [1.5] per cent of the GDP of [developed country Parties] [Annex I Parties] in line with their commitments in Article 4.3] per year [by 2020] [from 2012] and be regularly updated in the light of new emerging science, financial estimates and the degree of emission reductions achieved.

23. Sources of financial support for [adaptation] [the Convention Adaptation Fund] [shall] [may] include:

- (a) Assessed contributions from developed country Parties and other developed Parties included in Annex II to the Convention, taking into account [their adaptation debt and] the need for MRV;
- (b) Auctioning of assigned amounts and/or emission allowances from developed country Parties;
- (c) [Levies on carbon dioxide emissions from Annex I Parties in a position to do so;]
- (d) [Taxes on carbon-intensive products and services from Annex I Parties;]
- (e) [[Levies on] [Shares of proceeds from measures to limit or reduce emissions from] international aviation, in the order of USD 4–5 per international airline ticket, and maritime transport;
- (f) [Shares of proceeds on [the clean development mechanism (CDM), and extension of shares of proceeds to joint implementation and emissions trading] [the flexibility mechanism];]
- (g) Levies on international transactions among Annex I Parties;
- (h) Fines for non-compliance by Annex I Parties and with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties);
- (i) [Additional ODA] [ODA additional to ODA targets] [provided through bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention)];
- (j) Provision of resources in accordance with Article 11.5 of the Convention;
- (k) A levy of 2 per cent on capital transfers between entities in Annex I Parties to be collected by the Annex I Party concerned and remitted in full to the Convention Adaptation Fund.

²² The text in this annex has been taken from paragraphs 22 and 23 of non-paper no. 8 with amendments from Parties as included in the appendix of non-paper No. 31 from the contact group on enhanced action on adaptation and its means of implementation.

Annex XIII²³

Option 1

37. Establish a Multilateral Climate Technology Fund (MCTF) to provide technology-related financial resources as determined by the Executive Body on Technology. The MCTF shall operate under the Conference of the Parties as part of the enhanced multilateral financial mechanism set up under the Convention. The MCTF shall be financed by assessed contributions from developed country Parties and other developed Parties included in Annex II to the Convention. Financing transfer to the MCTF and 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. Indicative activities eligible for support under the technology mechanism and the MCTF are specified in Annex VII.

Option 2

A technology window, established in the new financial mechanism under the control of the COP, shall support implementation of concrete and practical technology activities.

Option 3

An Adaptation Fund and a Mitigation Fund to be created under the Convention to implement the Financial and Technology Mechanism, which will be governed by the Executive Body on Finance and Technology for Adaptation and for Mitigation as described in paragraph 33 (of non-paper 4).

International renewable energy and energy efficiency bond mechanism

38. An international renewable energy and energy efficiency bond mechanism is hereby established. The purpose of the bond mechanism is to provide developing country Parties with interest loans to finance the development and deployment of renewable energy and energy efficiency technologies. Purchasers of renewable energy and energy efficiency bonds shall be provided with interest payments through funding from the Technology Window of the Multilateral Fund on Climate Change referred to in paragraph 1 above.

39. An international renewable energy and energy efficiency bond commission shall be established to facilitate the issuance of bonds, the issuance of renewable energy and energy efficiency loans and the issuance of interest payments. The international renewable energy and energy efficiency bond commission shall report to the institution described in paragraph 33 (of non-paper 4). The rules, modalities and guidelines for the operation of the international renewable energy and energy efficiency bond mechanism shall be agreed upon by the COP.

40. Each Party, to the extent feasible, shall also develop a system of national renewable energy and energy efficiency bonds to complement the international system.

²³ The text in this annex has been taken from paragraphs 37–40 of non-paper no. 4 from the contact group on enhanced action on development and transfer of technology.

Annex XIV²⁴

6. [Financial and technological support shall be provided in the context of Article 4.9 of the Convention in a transparent, expedited, direct access, sustainable and predictable manner under the overall guidance of the COP through:

Option 1

A dedicated multilateral fund for capacity-building as referred to in paragraph 175, option 6 (of FCCC/AWGLCA/2009/INF.1).

Option 2

A new financial mechanism to support mitigation, adaptation, technology transfer and capacity-building action as referred to in paragraphs 166 and 174, option 1 (of FCCC/AWGLCA/2009/INF.1).

²⁴ The text in this annex has been taken from paragraph 6 of non-paper no. 24 from the contact group on enhanced action on capacity-building.

V. ENHANCED ACTION ON DEVELOPMENT AND TRANSFER OF TECHNOLOGY*

[Recognizing that climate change poses a serious threat to the social and economic development of all developing country Parties, particularly small island developing states and least developed countries,

Confirming the importance of promoting and cooperating on the research, development, demonstration, deployment, transfer and diffusion of new and existing technologies for mitigation and adaptation under the Convention now, up to and beyond 2012, in order to achieve the ultimate objective of the Convention,

Recognizing that all countries, especially developing countries, need access to resources required to achieve sustainable social and economic development and that, in order for developing countries to progress towards that goal, their energy consumption will need to grow taking into account the possibilities for achieving greater energy efficiency and for controlling greenhouse gas emissions in general, including through the application of new technologies on terms which make such an application economically and socially beneficial.

Recognizing that climate change represents an urgent, grave and potentially irreversible threat to human societies and the planet and is thus an emergency,

Stressing the need to ensure that international rights and obligations relating to intellectual property are supportive of and do not run counter to the objectives of the Convention,

Recognizing that early and rapid reduction of emissions requires the transfer of or access to environmentally sound technologies on a massive scale,

Noting that the largest share of historical and current global emissions of greenhouse gases has originated in developed countries,

Stressing that the climate debt of developed countries must be repaid to developing countries, inter alia through deep emission reductions by developed countries, provision of finance, and concrete and effective transfer of technology to meet the agreed full incremental implementation costs,

Recognizing further that developing countries particularly those with insufficient or no manufacturing capacity in environmentally sound technologies will have more difficulties in accessing adaptation and mitigation technologies,

Stressing the need for effective mechanisms and enhanced means for the removal of obstacles to the scaling up of the development and transfer of technology to developing country Parties,

Considering the need to promote and implement technology transfer for adaptation and mitigation, while assuring the principle of social and environmental integrity in technological investments,

Recognizing the circumstances of Parties included in Annex I to the Convention undergoing the process of a transition to a market based economy and other Annex I countries which have special circumstances recognized by Conference of the Parties decisions,

* At the request of Parties, this non-paper (no. 47) has been modified to address corrections and omissions as identified by Parties in the final contact group on enhanced action on development and transfer of technology, held from 15.00-16.30 on Friday, 6 November 2009. In addition to minor editorial corrections, changes were made during that contact group at the request of Parties to paragraphs 2-5, Option 1, 3 (d)bis, Option 2, 4. alt.2; paragraph 12, Option 2; paragraph 14, Option 3, including an additional Annex III.

Options for paragraph 1¹

Option 1 The objective of enhanced action on technology research, development, demonstration, deployment, diffusion and transfer related to adaptation and mitigation is to achieve the full implementation of Article 2, Article 4, paragraphs 1(c), 3, 5, 8 and 9, of the Convention, in the context of Article 4, paragraph 7, of the Convention;

Option 2 The objective of enhanced action on technology development, deployment, transfer, and diffusion is to enable global action on mitigation and adaptation, in the implementation of the Convention. Such action should be country-driven and be based on learning-by-doing practices;

Option 3 The objective of enhanced action on technology development and transfer is to enable the implementation of the mitigation and adaptation provisions of the Convention;

*Options for paragraphs 2 to 5*Option 1

2. The pursuit of this objective shall be guided by the principles and provisions of the Convention, as well as by country drivenness and the best available science, to achieve the following:

- (a) Removal of barriers for technology development and transfer to developing countries;
- (b) Ensuring accessibility, affordability, appropriateness and adaptability of the technologies required by developing country Parties for enhanced action on mitigation and adaptation;
- (c) Provision of agreed full costs and agreed full incremental costs in accordance with Article 4, paragraph 3, of the Convention;
- (d) Ensure adequacy and predictability of funds to developing countries for technology development and transfer, taking into account the important role of public finance in supporting technology outcomes, including research, development and technology transfer needs, demonstration, deployment, diffusion and transfer of technologies to the developing country Parties;
- (e) Support the development and enhancement of endogenous technologies and capacities across the technology life cycle in developing countries;
- (f) Ensure that identification of technology needs is nationally determined, based on national circumstances and priorities;
- (g) Address country specific needs and priorities, particularly the urgent need for the development and transfer of technologies for adaptation in all developing country Parties, in particular the small island developing states and the least developed countries;
- (h) [Address][Recognise] the need for economic diversification to meet the specific needs and concerns of developing countries whose economies are affected by the adverse impacts of response measures;
- (i) Promote incentives for enhanced cooperative action on technology development, deployment, transfer and diffusion for climate change mitigation and adaptation.

3. The Technology Mechanism is hereby established and will operate under the authority and guidance of the Conference of the Parties and be accountable to it. It shall be comprised of:

- (a) An Executive Body on Technology comprised of and supported by a strategic planning committee, technical panels, a verification group and a secretariat, with a technology action plan as a starting point of its work to enable implementation of enhanced action on technology development and transfer;

¹ To assist the reader, references to paragraph numbers are to those used in non-paper no. 36.

- (b) A Multilateral Climate Change Fund operating under the authority and guidance of the Conference of the Parties and accountable to the Conference of the Parties to support a list of activities and costs eligible for support as agreed by the Conference of the Parties;
 - (c) Technology Incentive for Development and Transfer;
 - (d) Technology Capacity Building Programme;
 - (d)bis National and regional technology innovation centres and networks², including centre-to-centre twinning arrangements, with detailed modalities and functions contained in Annex III, that will aim to:
 - (i) accelerate global penetration and development, demonstration, deployment, diffusion and transfer of environmentally safe and sound technologies to support action on mitigation and adaptation by developing country Parties;
 - (ii) enhance cooperative research and development and North-South, South-South, and triangular technology cooperation;
 - (iii) provide technical assistance and training to support developing countries mitigation and adaptation actions, including assisting in the development of rigorous technology development and transfer project proposals and in matching with the most appropriate form of investment support, particularly with a view to leveraging private-sector funding;
 - (iv) develop technology roadmaps, initiate R&D and identify best available technologies and best practices in relevant sectors;
4. The Technology Mechanism will have the following functions:
- (a) Accelerate the development, demonstration, deployment, adoption, diffusion and transfer of environmentally sound technologies from Annex II Parties to developing country Parties, in order to avoid the lock-in effects of technologies that are not environmentally sound, and to promote sustainable development in developing country Parties;
 - (b) Provide access to technology for adaptation at national, subregional 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;
 - (c) Monitor and assess the financial support and performance of development and transfer of environmentally sound technologies in terms of speed, range and size of the technological flow;
 - (d) Removal of barriers for technology development and transfer to developing countries, and enhance the means of facilitating this transfer in order to promote urgent access to advanced environmentally sound technologies;
 - (e) Promote the establishment of and strengthen, as appropriate, national and regional technology innovation centres and networks, including centre-to-centre twinning arrangements, with a view to enhancing cooperative research and development and North-South, South-South, and triangular technology cooperation, to accelerate the development, demonstration, deployment, diffusion and transfer of environmentally safe and sound technologies to support action on mitigation and adaptation by developing country Parties.

² This paragraph is intended to replace paragraphs 4c, 5 and 8 and Annex III and V of non-paper no. 36.

Option 2

2. National policies and actions support technology research, development, demonstration, deployment, diffusion and transfer, drive technology financing, leverage the private sector, build capacity, and create suitable investment conditions. Parties should, 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) Promote scaled-up public and private sector investment in research, development and demonstration for environmentally sound technology areas through enhanced support and strengthened incentives for private-sector participation;
- (c) Enhance enabling environments, including technology-specific policies and measures with adaptation and/or mitigation benefits, that create the conditions conducive to private- and public-sector technology development, deployment, transfer and diffusion including national social, economic, energy and environmental policies and measures, and deployment schemes to address [barriers to] technology development, deployment, diffusion, and transfer of technologies for mitigation and adaptation;
- (d) Provide incentives to mobilize private capital and enhance and/or establish incentives at the national level, through the provision of financial support as appropriate with a view to promoting transfer and diffusion of environmentally sound technologies to developing country Parties;
- (e) Promote and support the development and transfer of innovative climate-friendly technologies including through the formulation and sharing of national technology action plans, that should be integrated into national adaptation and mitigation plans, and where appropriate, build on and include technology needs assessments as established by decision 4/CP.7;
- (f) Scale up technology research, development, and demonstration and to support cooperative research and development programmes and initiatives, including through national technology research innovation centres and networks.

3. International cooperative actions that promote the development and deployment of environmentally sound technologies should be conducted and acknowledged. Parties should, to the extent appropriate, and consistent with their national strategies:

- (a) Participate in international programmes that support the development and use of common performance standards, testing, verification and certification programmes;
- (b) Participate in international partnerships to advance the development, demonstration, deployment, diffusion and transfer of environmentally sound technologies, including through formulation of international technology roadmaps and action plans;
- (c) Establish voluntary technology arrangements and partnerships with intergovernmental organisations, the private-sector, academia, civil society organizations and governments for enhancing cooperative action amongst Parties on adaptation and mitigation by developing countries including cooperative research and development, large-scale demonstration and deployment projects on key technologies for mitigation and adaptation, cooperation on specific sectors or greenhouse gases, and cooperation on climate observation and warning systems for enhancing resilience, consistent with Article 11, paragraph 5 of the Convention;
- (d) Engage in cooperative activities that support nationally-identified capacity-building needs that support technology actions for mitigation and adaptation purposes;

- (d).alt Engage in cooperative activities that support nationally-identified capacity-building needs that support technology actions for mitigation and adaptation purposes including, inter alia:
- (i) analysis, information, training activities and advice on development and implementation of relevant best practices, institutional and regulatory frameworks that promote the development and use of environmentally sound technologies;
 - (ii) advice and support for the development and implementation of national technology actions and plans;
 - (iii) advice and technical assistance to facilitate increased private sector investment, including advice on the establishment of public-private partnerships for promoting environmentally sound technologies;
 - (iv) training, information and workforce development programmes to build capacity, including national technology innovation systems;
- (e) Support cooperation and facilitate participation in technology innovation centres and networks, including through centre-to-centre twinning arrangements with a view to enhancing north-south, south-south and triangular cooperation.

4. The Technology Action Committee is hereby established to replace the Expert Group on Technology Transfer and to advance all Parties' abilities to accelerate the development, deployment, diffusion and transfer of environmentally sound technologies. The Technology Action Committee will seek to enhance actions by strengthening the facilitative role of the UNFCCC to leverage technology activities inside and outside the Convention.

4. alt.1 The Advisory Group for Technology Cooperation is hereby established under the Convention. The Advisory Group for Technology Cooperation comprises three facilities under the form of public-private partnership:

- (a) The Regional Hubs for Technology Transfer provide services such as support for actions for mitigation and adaptation and promoting technology transfer and diffusion to developing country Parties;
- (b) The Sectoral Innovation Centers develop technology roadmaps, initiate research and development and identify best available technologies and best practices in relevant sectors;
- (c) The Executive Coordinating Council coordinates overall activities of the Advisory Group for Technology Cooperation and communicates their activities to the Conference of the Parties.

4. alt.2 Recalling Articles 4, paragraphs 1(c) and 5, of the Convention, Parties agree that a technology mechanism will be established to support and accelerate the global penetration of environmentally sound technologies by enhancing and scaling up technology cooperation through the provision, upon request, of technical assistance and training for developing countries' mitigation and adaptation actions that further the implementation of the Convention through a Climate Technology Centre and Network. The Climate Technology Centre will be operated by full-time staff, in accordance with the Centre's functions; and comprised of and supported by technology experts and practitioners. The Climate Technology Network will be comprised of and supported by technology experts and practitioners.

4. alt.2 bis The Climate Technology Centre will have the following functions:

- (a) Provide technical assistance and consultation, training, and the development and customization of analytical tools, policies and best practices for conducting country-driven planning to support the dissemination of environmentally sound technologies;

- (b) Promote close collaboration on deployment of technologies for climate mitigation and adaptation between governments, industries, and research communities of developed and developing countries;
 - (c) Act as a clearing house to promote the broad exchange and diffusion of information on technologies for mitigation and adaptation;
 - (d) Seek cooperation and coordination with relevant international technology initiatives and organizations and liaise with other bodies under the Convention, as appropriate;
4. alt.2 ter The Climate Technology Network will have the following functions:
- (a) Provide advice and support to Parties and their domestic stakeholders for the identification of needs and implementation of responsive technologies, practices and processes, and opportunities for technology cooperation to support mitigation and adaptation actions that further implementation of the Convention;
 - (b) Provide training, information and workforce development programmes to build and/or strengthen domestic capacity in developing countries to identify technology options, make technology choices, and operate, maintain, and adapt technologies, including through training of trainers and on-the-job technical and vocational training.

Option 3

2. A Technology Action Framework is hereby established to address all aspects of [cooperation among Parties on] technology research, development, demonstration, deployment, diffusion and transfer;

3. The Technology Action Framework shall aim to support Parties to identify and remove possible barriers as identified in their Technology Needs Assessments while ensuring that adequate capacity is developed and maintained in developing countries for this purpose;

4. The Technology Action Framework shall be linked with the Coordinating Mechanism and nationally appropriate mitigation actions and Low Emissions Growth Plans, as well as with national adaptation planning processes. Support for the design and implementation of technology actions shall be facilitated by a Coordinating Mechanism and the Framework for Action on Adaptation to be established under a Copenhagen agreement;

5. The Technology Action Framework³ shall comprise:

- (a) A [Panel][Committee], to fulfil the following functions, inter alia:
 - (i) Gather international Technology Action Plans which shall identify short-, medium-, and long-term action across all stages of the technology development cycle, including research, development, demonstration, diffusion, transfer and the use of existing and new environmentally safe and sound technologies to support action on mitigation and adaptation and to promote sustainable development paths;
 - (ii) Provide guidance on the establishment of networks of centres, referred to in paragraph X with a view to enhancing cooperative research and development and North-South, South-South, and triangular technology cooperation;
 - (iii) Accelerate the global penetration of environmentally safe and sound technologies by enhancing technology cooperation through the provision, upon request, of technical assistance and training to support developing countries mitigation and adaptation actions, including assisting in the development of rigorous technology development and transfer project proposals and in matching with the most appropriate form of investment support, particularly with a view to leveraging private-sector funding;

³ The framework also encompasses paragraphs 6-15.

- (iv) Seek cooperation and coordination with relevant international technology initiatives and organizations;
- (v) Encourage and strengthen collaborative partnership arrangements with national and international public- and private-sector institutions and initiatives;
- (vi) Identify areas of technology cooperation with the private-sector [and make recommendations to the Conference of the Parties for action];
- (vii) Provide guidance and support including technical and policy advice, including on technology needs assessments, technology action plans and low-emission development strategies, to Parties on request and assist the Coordinating Mechanism with the assessment of nationally appropriate mitigation actions and assist other relevant bodies as required;
- (viii) Monitor and assess the progress of the international technology action plans according to global technology objectives. These objectives should guide national and international development towards low carbon and climate resilient economies.

Option 4

2. The Conference of the Parties decides to establish a Technology Body to:
 - (a) Facilitate and promote, through licensing of patented technologies, wide diffusion of existing adaptation and mitigation technologies similar to the scale of information communication technologies to developing countries as a high priority;
 - (b) Stimulate further research and development of these existing adaptation and mitigation technologies and promote and facilitate their wide diffusion;
 - (c) Facilitate cooperative research and development of technology to slow down glacier melting in vulnerable mountainous ecosystems;
 - (d) Stimulate and encourage, through cooperation with private sector, public institutions, academia and research institutions, research and development, demonstration and production of emerging technologies, particularly mitigation technologies and their subsequent diffusion;
 - (e) Promote strengthening of institutional and technical capacity to enable development of adaptation technologies in developing countries;
 - (f) Facilitate and promote access to clean and environmentally sound technologies identified by developing countries;
 - (g) Promote capacity building in developing countries as an integral part of technology development and transfer, including twinning, fellowships and attachments;
 - (h) Cooperate with Parties, private sector and other interested institutions in the implementation Article 4, paragraph 5, of the Convention.
3. The Technology Body will be composed by experts nominated by Parties with equitable and balanced representation of all Parties, taking into account the specific needs and special situations of least developed country Parties;
4. The Technology Body shall also provide policy advice to the Conference of the Parties on implementation of Article 4, paragraph 5, of the Convention;
5. The Technology Body will be assisted by Technology Panel(s) comprising of mitigation and adaptation technology experts, financial and investment and legal experts. The Technology Body shall elaborate on its work programme and developed detailed terms of reference of the Technology Panel and report to the 16th meeting of the Conference of the Parties for its consideration;

Option 5

2. A financing and technology mechanism shall be created to ensure full, effective and sustained implementation of the Convention and which is comprised of an adaptation and mitigation pillar;
3. Parties shall established an Executive Body on Finance and Technology for Adaptation (EBFTA) and an Executive Body on Finance and Technology for Mitigation (EBFTM) under the authority and guidance and accountable to the Conference of the Parties;
4. The executive bodies will decide on the disbursement of the Adaptation Fund and a Mitigation Fund to be created under the Convention;
5. The executive bodies shall be supported by technical panels on research and development, capacity-building, transfer of technologies, observation systems and information management, REDD+, and market mechanism to perform, inter alia, the following functions:
 - (a) Organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for adaptation and mitigation, including the enabling means of financing, technology and capacity-building;
 - (b) Coordinate disbursements from the Adaptation Funds according to the needs as indicated in national plans for adaptation submitted by developing countries, and from the Mitigation Fund according to the needs indicated in nationally appropriate mitigation actions and REDD+ activities as requested by developing countries;
 - (c) Provide financial and technical support, available on request by developing countries, for the preparation of REDD+ activities and for the elaboration of national adaptation plans and nationally appropriate mitigation actions;
 - (d) Manage a registry and certification system for receiving financial resources related to mitigation and adaptation in compliance with the financial commitments of developed country Parties under Article 4, paragraph 3, of the Convention;
 - (e) Coordinate with regional development banks concessional loan arrangements for the private-sector in developing countries for the implementation of specific mitigation activities;
 - (f) Articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programmes and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.

5.bis The technical panels shall comprise government representatives elected by the Conference of the Parties with balanced regional representation, who are experts on matters related to each of the technical panels, and be open to input from other experts;

Options for paragraph 6

Option 1 [[Developed country Parties [and other developed country Parties included in Annex II to the Convention]] are encouraged to provide appropriate financial and technical support through bilateral and multilateral channels to developing country Parties to scale up technology research, development and demonstration and to support cooperative research and development programmes and initiatives;]

Option 2 Developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to developing country Parties to meet the agreed full costs and agreed full incremental costs of implementing measures as contained in Article 4, paragraph 1 (c), and for enhancing the implementation of Article 4, paragraph 5, of the Convention;

Options for paragraph 7

Option 1 A fast track technology capacity building programme to support action on mitigation and adaptation by developing countries shall be [further] elaborated [by the [technology body], referred to in paragraph 4 (a) above, taking into account the elements contained in Annex I, for consideration by the Conference of the Parties at its XX session]. Support for implementation of actions to address developing countries' capacity building needs in relation to technologies relevant for adaptation and mitigation shall be based on existing or new needs assessments incorporated where appropriate in low emission growth plans and/or adaptation actions/programmes building on the Capacity Building Framework. Such support shall be facilitated by the Coordinating Mechanism and/or the Framework for Action on Adaptation or any other relevant channels;

Option 2 A Technology Capacity building programme shall be further elaborated to manage and generate technological change, and enhance absorptive capacity in developing countries, including:

- (a) Research, development and demonstration of new technologies;
- (b) Enhancing human and institutional capacity;

Options for paragraph 8

Option 1 [A technology development and transfer [facility][service][Climate Technology Centre][Advisory Group for Technology Cooperation] is hereby established to accelerate the global penetration of environmentally safe and sound technologies by enhancing technology cooperation through the provision, upon request, of technical assistance and training to support developing countries mitigation and adaptation actions, including assisting in the development of rigorous technology development and transfer project proposals and in matching with the most appropriate form of investment support, particularly with a view to leveraging private-sector funding;]

Option 2 Establish a technology leveraging service which would provide an interactive project development and facilitation service for actions identified through national mitigation and adaptation planning processes;

9. [The [technology body] is requested to identify appropriate actions to address barriers to technology development and transfer encountered by developing countries Parties, including those related to intellectual property rights, to enable action on mitigation and adaptation;]

9 bis. Specific measures shall be established to remove barriers to development and transfer of technologies from the developed country Parties that have commitments under the Convention to transfer environmentally sound technologies to developing country Parties arising from intellectual property rights (IPR) protection, including:

- (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) 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;

10. [The [technology body] is requested to develop and implement, as part of its programme of work and through a country driven process mediated through the recipient governments, practical and concrete actions that address specific needs of developing countries on the development and transfer of technologies for adaptation, taking into account the indicative list of priorities contained in Annex II;]

[10.bis Any international agreement on intellectual property shall not 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 enhancement of endogenous capacities and

technologies of developing countries and transfer of, and access to, environmentally sound technologies and know-how;

10.ter Specific and urgent measures shall be taken and mechanisms developed to remove barriers to development and transfer of technologies arising from intellectual property rights protection, in particular:

- (a) Creation of a Global Technology IPR Pool for Climate Change that promotes and ensures access to intellectual property protected technologies and associated know-how to developing countries on non-exclusive royalty free terms;
- (b) Take steps to ensure sharing of publicly funded technologies and related know-how, including by making the technologies and know-how available in the public domain in a manner that promotes transfer of and/or access to environmentally sound technology and know-how to developing countries on royalty free terms;

10.quat All necessary steps shall be immediately taken in all relevant forums to exclude from IPR protection and revoke existing IPR protection in developing countries and least developed countries on environmentally sound technologies to adapt to and mitigate climate change, including those developed through funding by governments or international agencies and those involving use of genetic resources that are used for adaptation and mitigation of climate change;

10.quin Developing countries have the right to make use of the full flexibilities contained in the Trade Related Aspects of Intellectual Property Rights (TRIPS) agreement, including compulsory licensing;]

Options for paragraph 12⁴

Option 1 [Developed country Parties are encouraged to:

- (a) Double expenditure on research, development and demonstration of technologies for mitigation and adaptation by 2012 and quadruple expenditure on research, development and demonstration of technologies for mitigation and adaptation by 2020;
- (b) Enhance national policies and incentives to stimulate increased investment by the private sector in research, development and demonstration of new technologies for mitigation and adaptation;
- (c) Enhance national policies and incentives to promote the transfer and diffusion of the environmentally safe and sound technologies to developing countries;]
- (d) [[Developed country Parties] [and other developed country Parties included in Annex II to the Convention]], in a position to do so, are encouraged to provide appropriate financial and technical support through bilateral and multilateral channels to developing country Parties to scale up technology research, development and demonstration and to support cooperative research and development programmes and initiatives.]

Option 2 [Activities eligible for support from the technology mechanism[, which shall be primarily determined by country driven processes and defined through technology action plans, nationally appropriate mitigation actions and national adaptation plans,][, as determined through country-driven processes, including nationally appropriate mitigation actions and national action plans,] include, inter alia:][Activities eligible for support shall be determined by a country driven process and defined through national appropriate mitigation actions and national adaptation plans. Indicative activities eligible for support will include, but not be limited to:]

Sub Option 1

- (a) Promotion, facilitation and implementation of activities along the entire technology cycle to enable the accelerated adoption of environmentally sound technologies;

⁴ Note that it was agreed to delete paragraph 11 from non-paper no. 36.

- (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 environmentally sound technologies, including low-greenhouse gas 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;
 - (vii) Monitoring and verification.
- (h) Procurement of low-greenhouse gas 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.
- (i) Actions related to developing and transferring win-win environmentally safe and sound technologies and know-how that have a great potential to reduce greenhouse gas

emissions substantively and simultaneously address the adverse impacts of climate change and the adverse impacts of response measures in developing country Parties;

Sub Option 2

- (a) Cooperative research, development and demonstration programmes to providing opportunities for participation by [developing country Parties][all Parties];
- (b) Deployment and diffusion of environmentally safe and sound technologies and know-how that have a great potential to reduce greenhouse gas emissions substantively and simultaneously address the adverse impacts of climate change and the adverse impacts of response measures in developing country Parties;
- (c) Incentives to engage the private sector;
- (d) Incremental costs of soft and hard technologies for implementation of adaptation and mitigation actions;
- (e) Climate change observation systems and related information management;
- (f) Purchasing of licenses and other intellectual property rights issues;
- (g) Technology innovation centres;
- (h) Actions on deployment of technologies;
- (i) Capacity building actions including technical training and training for technology action planning in the context of actions on mitigation and adaptation;
- (j) Development and implementation of national technology plans for mitigation and adaptation;
- (k) Support for the enabling environments, in the context of the implementation of national adaptation and mitigation plans.

13. [All Parties are encouraged to:

- (a) Promote and support the development and transfer of innovative climate-friendly technologies including through the formulation and sharing of national technology action plans, that [shall][should] be integrated into national adaptation and mitigation planning and processes, and where appropriate, build on and include technology needs assessments as established by decision 4/CP.7;
- (b) Implement actions, consistent with relevant national social, economic, energy and environmental policies, that establish conditions which promote the development, deployment and diffusion of environmentally safe and sound technologies;
- (c) Promote greater public and private sector investment in research, development and demonstration for targeted environmentally sound technology areas through enhanced support and strengthened incentives for private-sector participation;
- (d) Consistent with international obligations, enhance enabling environments, including technology-specific policies and measures with both adaptation and mitigation benefits, that create the conditions conducive to private- and public-sector technology development, deployment, transfer and diffusion. Policies and measures [shall][should] include national social, economic, energy and environmental policies, and deployment schemes to address barriers to technology development, deployment, diffusion, and transfer of technologies for mitigation and adaptation;
- (e) Participate, to the extent possible, in international programmes that support the development and use of common performance standards, testing, verification and certification programmes;

- (f) Participate in international partnerships to advance the development, demonstration, deployment, diffusion and transfer of environmentally safe and sound technologies;
- (g) Establish voluntary technology [agreements][arrangements] and partnerships with intergovernmental organisations, the private-sector, academia, civil society organizations and local and sub-national governments for enhancing cooperative action amongst Parties on adaptation and mitigation by developing countries. Those [agreements][arrangements] could include cooperative research and development, large-scale demonstration and deployment projects on key technologies for mitigation and adaptation, cooperation on specific sectors or greenhouse gases, and cooperation on climate observation and warning systems for enhancing resilience, consistent with Article 11, paragraph 5 of the Convention. Parties [shall][should] report in their national communications on the voluntary technology [agreements][arrangements] and the related financial support of such [agreements][arrangements] and partnerships;
- (h) Engage the private business and financial sectors by providing incentives to mobilize private capital and enhance and/or establish incentives at the national level, through the provision of financial support as appropriate, such as concessional loans and risk guarantees, tax exemption and subsidies for the owners of patented technologies, with a view to promoting transfer and diffusion of environmentally safe and sound technologies to developing country Parties;]

Options for paragraph 14

Option 1. [Developing country Parties shall be provided with the necessary and immediate financial and capacity building support to prepare national technology action plans, including through the support of the technology development and transfer [facility][service][Climate Technology Centre and Network] and technology innovation centres, and will be assisted to implement the actions identified within these plans, for enhancing the implementation of Article 4, paragraph 1(c) and 5, of the Convention;]

Option 2. Activities eligible for international support shall be primarily identified and determined through country-driven planning and processes. These activities shall include those that facilitate development, deployment, diffusion and transfer of environmentally sound technologies to address mitigation and adaptation needs, including those that address capacity-building needs and readiness functions and activities that leverage public and private investment in technology development, deployment diffusion and transfer;

Option 3. Activities eligible for international support shall be primarily identified and determined through country-driven planning and processes. These activities shall include those that facilitate development, deployment, diffusion and transfer of environmentally sound technologies to address mitigation and adaptation needs, including those that address capacity-building needs and readiness functions;

Options for paragraph 15

Option 1. [The Conference of the Parties shall periodically monitor and assess the effectiveness of the implementation of Articles 4, paragraphs 5 and 1 (c), of the Convention and of the Technology Mechanism referred to in paragraphs 2-5 above.]

Option 2. Technology support, for both mitigation and adaptation, shall be reported in the national communications and shall be subject to the in-depth review of national communications in accordance with updated review guidelines.]

Annex I

Possible Elements of a Technology capacity building programme

1. Analysis, 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.
2. Advice and support for the development and implementation of national technology actions, including for the preparation and implementation of national technology action plans.
3. Advice and technical assistance, to facilitate increased private investment in key greenhouse gas emitting sectors, including advice on the establishment of public–private partnerships for promoting environmentally sound technologies.
4. Advice and support for the identification of policy instruments and infrastructure required for the deployment, diffusion and transfer of identified technological options for the implementation of nationally appropriate mitigation and adaptation actions.
5. Training, information and workforce development programmes to build capacity, including national technology innovation systems, to ensure that all market actors understand the costs, performance and benefits of climate change technologies.

Annex II

Indicative list of priorities for practical and concrete action on technologies for adaptation

1. Strengthen national institutional and personnel capacity of Parties, particular developing country parties, to identify and explore technologies for adaptation including indigenous technologies and further enhance the implementation of outcome the national adaptation programmes of action and technology needs assessments.
2. Strengthen collaboration among and expertise of regional excellence centres in order to provide technological support for adaptation to address regional specific needs.
3. Identify and prompt development and transfer of common technologies for adaptation including early warning and observation technologies.
4. Providing funding opportunities to research and development activities regarding technologies for adaptation in national level.
5. Facilitate the information sharing on technologies for adaptation among parties.
6. Improving the understanding of the role of oceans in climate change and vice versa, and the effects of climate change on marine ecosystems, marine biodiversity and coastal communities, especially in developing countries and small island States, and including marine scientific research and sustained integrated ocean observatory systems.

Annex III

Possible functions of Technology Innovation Centres

Technology Innovation Centres to be operated by full-time Climate Technology Centre staff and comprised of and supported by technology experts and practitioners, to undertake the following functions:

1. Serve as coordinating nodal centres to facilitate and enable:
 - a) The identification of key technological products that have strong sustainable development and climate change benefits along with their projected price and performance targets;
 - b) The development of such products;
 - c) The development of markets for these products, in partnership with appropriate public- and private-sector organizations.
2. Promote joint research and development and technology cooperation activities between developing countries and between developed and developing countries, which may include the sharing of intellectual property rights.
3. Stimulate capacity-building, in particular for endogenous technologies, including by providing cooperative training and development facilities and training opportunities, supported by public-private partnerships, to identify and facilitate the development and transfer of low greenhouse gas emitting technologies, particularly renewable energy and energy efficiency technologies and environmentally sound adaptation technologies.
4. Provide an interactive facilitation service for actions identified through low-emission development strategy, national adaptation programmes of action, technology needs assessments and/or national adaptation planning processes.
5. Provide technical assistance and consultation, training, and the development and customization of analytical tools, policies and best practices for conducting country-driven planning to support the dissemination of environmentally sound technologies;
6. Promote close collaboration on deployment of technologies for climate mitigation and adaptation between governments, industries, and research communities of developed and developing countries;
7. Improve and provide access to information on existing and new technologies and act as a clearinghouse to promote the broad exchange and diffusion of information on technologies for mitigation and adaptation;
8. Seek cooperation and coordination with relevant international technology initiatives and organizations and liaise with other bodies under the Convention, as appropriate.
9. Provide advice and support to Parties and their regional and/or national stakeholders for the identification of needs and implementation of responsive technologies, practices and processes, and opportunities for technology cooperation to support mitigation and adaptation actions that further implementation of the Convention;
10. Provide training, information and workforce development programmes to build and/or strengthen regional and/or national capacity in developing countries to identify technology options, make technology choices, and operate, maintain, and adapt technologies, including through training of trainers and on-the-job technical and vocational training.
11. Stimulate the establishment of twinning centres agreements between centres in developing and developed country Parties, including South-South-North partnership, as a means of exchanging experiences and promoting joint research and development and technology cooperation activities.

Appendix

Possible functions and structure of proposed institutional arrangements

Option 1 (Executive Body on Technology)

Functions

1. Develop a Technology Action Plan to serve as a starting point for the work of the Executive Body.
2. Accelerate the development, demonstration, deployment, adoption, diffusion and transfer of environmentally sound technologies from Annex II Parties to developing country Parties, in order to avoid the lock-in effects of technologies that are not environmentally sound, and to promote sustainable development in developing country Parties.
3. Provide access to technology for adaptation at national, subregional 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.
4. Remove barriers to technology transfer and enhance the means of facilitating this transfer in order to promote urgent access to advanced environmentally sound technologies while balancing rewards for innovators with the common good of humankind, including, inter alia, jointly-developed technology and sharing of intellectual property rights.
5. Enhance enabling environments to facilitate access to technology, including through financing environments that leverage private-sector financial resources, including policy dialogues and involvement in development, demonstration, deployment, adoption, diffusion and transfer of environmentally sound technologies.
6. Build on existing activities under the Convention and coordinate action by different stakeholders at international, regional and national levels to promote coherence through the integration of ongoing activities related to development and transfer of technologies.
7. Provide the means for the full implementation of Convention commitments on development, deployment, adoption, diffusion and transfer of environmentally sound technologies, and related financing and capacity-building.
8. 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.
9. Monitor and assess the performance of development and transfer of environmentally sound technologies in terms of speed, range and size of the technological flow and provide advice and recommendations on the overall implementation of technology action under the Convention.
10. Provide technical and technology-related financing and policy advice, including on technology needs assessments, technology development plans or low-emission development strategies, to Parties as requested.
11. The Executive Body on Technology shall provide strategic policy direction and inputs into the operation of the national and regional technology innovation centres and networks and coordinate overall activities of these centres and networks and communicate these activities to the Conference of the Parties.

Structure

1. A Strategic Planning Committee to:
 - (a) Develop strategy;
 - (b) Provide regular guidance;
 - (c) Assess and elaborate technology-related matters;
 - (d) Continuously evaluate progress, including financial and technological flows and range and effectiveness of technologies transferred;
 - (e) Develop updates for the Technology Action Plan at regular intervals;
 - (f) Perform any other functions to be assigned to it by the EBT;
 - (g) Capacity-building.
2. Technical Panels to generate and compile current expert information related to, inter alia:
 - (a) Policies and measures;
 - (b) Intellectual property cooperation, sharing and partnership;
 - (c) Sectoral, cross-sectoral and cross-cutting cooperation;
 - (d) Assessment, monitoring and compliance related matters;
 - (e) Dissemination of knowledge;
 - (f) Documenting, scaling up and diffusion of indigenous adaptation technologies which already exist in developing countries.
3. 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][developed countries and other developed country Parties included in Annex II of the Convention] 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.
4. A Secretariat to:
 - (a) Support and facilitate the activities of the Executive Body of Technology;
 - (b) 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.

Option 2 (Technology Executive [Committee][Panel])

Functions

1. Develop and facilitate the implementation of an international Technology Action Plan.
2. Advise other bodies under the Convention, as appropriate, on financing of technology development and transfer, including on the implementation of the Action Plan on Technology and other technology financing arrangements that form part of the Copenhagen agreed outcome.
3. Seek cooperation and coordination with relevant international technology initiatives and organizations, including on financing technology deployment, diffusion and transfer, and advice on issues related to IPR.
4. Encourage and strengthen collaborative partnership arrangements with national and international public- and private-sector institutions and initiatives, and stimulate the establishment of facilitative mechanisms to leverage private-sector financing to help meet developing countries' needs.

5. Identify areas of cooperation and approve procedures and modalities for technology cooperation with the private-sector and make recommendations to the Conference of the Parties for action.
6. Elaborate policy documents, terms of reference, criteria and guidance, and develop special reviews on existing technologies, including maintaining an inventory of existing adaptation technologies in developing countries, including information on their state of development, deployment, diffusion and transfer.
7. Provide guidance and support including technical and technology-related financing and policy advice, including on technology needs assessments, technology action plans and low-emission development strategies, to Parties on request and assist the coordinating mechanism with the assessment of nationally appropriate mitigation actions and other relevant bodies as required.
8. Monitor and assess performance and progress, using performance indicators, and provide advice and recommendations on the overall implementation of technology action under the Convention.

Structure

1. Strengthen cooperation and make efficient use of the current institutional arrangements and establish a Technology Executive [Board][Committee] to advise the Conference of the Parties on technology policy issues. The [Board][Committee] should be serviced by a strengthened professional secretariat and advised by a technology panel, building upon and replacing the Expert Group on Technology Transfer, and comprising experts nominated by Parties. To enhance the involvement of the private sector and relevant international organizations, a consultative group for sectoral technology cooperation is established to assist the technical panel in the provision of advice to the [Board][Committee]. The consultative group is comprised of representatives of national and regional technology innovation centres and sectoral technology cooperation bodies.
2. The consultative group for sectoral technology cooperation will support the Technical Panel to provide advice to the Technology Executive [Committee][Board] on:
 - (a) Options for cooperation and coordination with relevant sectoral, regional and international technology initiatives and organizations, including on financing technology deployment, diffusion and transfer, and advice on issues related to IPR;
 - (b) Opportunities for collaborative public-private partnership arrangements with national and international public- and private-sector institutions and initiatives, and stimulate the establishment of facilitative mechanisms to leverage private-sector financing to help meet developing countries' needs;
 - (c) Identify and promote best practices and best available technologies, through analysing emission reduction potentials and setting indicators, and advise on appropriate ways of promoting the transfer and diffusion of existing best available technologies and those that will be available in the short-term, medium-term and long-term in all relevant sectors.

Elements of the international Technology Action Plan

Option 1

1. Define specific institutional arrangements, policies, actions and funding requirements for all relevant technologies under the following classifications: public domain technologies, [IPR protected] [patented] technologies and know-how, future technologies.
2. Include specific actions and timelines for the first three years, and be reviewed and updated for successive three-year periods in the light of lessons learned.
3. Support the establishment of and/or strengthen existing national and regional technology innovation centres.

4. Accelerate research, development, demonstration, diffusion and transfer of environmentally sound technologies for mitigation and adaptation.
5. Develop an effective strategy that identifies and proposes specific measures to overcome the barriers to technology development and transfer.

Option 2

1. The plan for technology action should build on and enhance coordination and collaboration with relevant international and national efforts and be informed by national technology action plans.
2. The plan for technology action shall be implemented with financial support through the financial mechanism of the Convention and other financial arrangements as part of the Copenhagen agreed outcome, including all the available means to ensure the affordability of technologies, products and related services.
3. Technology action plans shall be informed and supported by comprehensive global technology road maps that provide an overview of what needs to be done to promote wider and more rapid development and deployment of key technologies, and which shall identify:
 - (a) The current state of development of the technology, including technologies for adaptation;
 - (b) Key stakeholders and relevant existing and emerging efforts contributing to the development of the technology;
 - (c) Gaps and barriers to commercial maturity;
 - (d) Opportunities for cooperation between developed and developing country Parties, including their respective private-sectors.
4. Technology action plans and technology road maps should build on and work collaboratively with other relevant international and national efforts and institutions to maximize efficiency of effort and avoid duplication.

Option 3

1. The plan for technology action should build on and enhance coordination and collaboration with relevant international and national efforts and be informed by national technology action plans.
2. The plan for technology action shall be implemented with financial support through the financial mechanism of the Convention and other financial arrangements as part of the Copenhagen agreed outcome, including all the available means to ensure the affordability of technologies, products and related services.
3. The international technology action plan will be based upon a regular assessment of global technology needs for long term action on climate change with the aim of accelerating short-, medium-, and long-term action across all stages of the technology development cycle, including research, development, demonstration, diffusion, transfer and use of existing and new environmentally safe and sound technologies, in order to achieve the ultimate objective of the Convention and support action on mitigation and adaptation and to promote a shift to sustainable development paths. The Plan shall specify actions for an initial period of three years and be regularly updated every successive three years. It will:
 - (a) Assess the steps required to accelerate research, development, demonstration, diffusion and transfer of environmentally sound technologies for mitigation and adaptation, through developing a comprehensive overview of what needs to be done to promote wider and more rapid development and deployment of key technologies, and which shall identify:
 - (i) The current state of development of technologies for mitigation and adaptation;

- (ii) Key stakeholders and relevant existing and emerging efforts contributing to the development of these technology;
 - (iii) Gaps and barriers that prevent technologies from reaching commercial maturity;
 - (iv) Opportunities for cooperation between developed and developing country Parties, including their respective private sectors;
 - (v) Prioritized technologies that should be the focus for specific programmes of action to accelerate the development and transfer of technology.
- (b) Define specific, time-bound actions and associated funding requirements with specific programmes of action developed for each prioritized technology, encompassing:
- (i) Measures to overcome the barriers to technology development and transfer;
 - (ii) Policies and measures to enhance enabling environments;
 - (iii) Capacity-building activities;
 - (iv) Actions to promote cooperative research and development;
 - (v) Measures to address intellectual property rights;
 - (vi) Incentive mechanisms;
 - (vii) Actions to enhance the development and transfer of technologies for adaptation;
 - (viii) The establishment and/or strengthen of existing national and regional technology innovation centres.

Elements of a national Technology Action Plan

1. A national technology needs assessment.
2. Identification of technological options for [specific] [all] [sectors] [greenhouse gases] [priority areas by sector and by technology].
3. Identification and removal of barriers to the development, deployment, diffusion and transfer of [win-win technological options such as carbon dioxide capture and storage, clean fossil fuel and non-energy use of fossil fuel technologies][identified technological options].
4. 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 technology needs assessments and low-emission development strategies, taking into account specific barriers for technology deployment in these sectors.
5. Policy instruments, enabling environments and infrastructure required for the deployment, diffusion and transfer of identified technological options.
6. Identification of capacity-building needs.
7. Opportunities for joint research and development between developing country Parties, and between developed and developing country Parties to be financed by developed country Parties.
8. For the most greenhouse gas intensive sectors, nationally appropriate deployment schemes should be developed, taking into account specific barriers to technology deployment in these sectors.
9. Measures that promote wide diffusion of existing and emerging adaptation technologies in similar climates.
10. Measures to address intellectual property rights.
11. Incentive mechanisms.
12. Voluntary partnerships and agreements.

13. Actions to enhance the development and transfer of technologies for adaptation.
14. The establishment and/or strengthen of existing national and regional technology innovation centres.
15. Within the context of the national adaptation and mitigation planning, identification of actions that, in order to be implemented, require international support.
16. Periodic review of progress to identify areas where international cooperation should be strengthened.

Elements of the Technology Development and Transfer Leveraging [Facility][service]

1. Identify and help facilitate the transfer of low greenhouse gas emitting technologies, particularly renewable energy and energy efficiency technologies.
2. Assist particularly vulnerable developing countries to identify and help facilitate the transfer of appropriate adaptation technologies.
3. Provide an interactive facilitation service for actions identified through low-emission development strategy, technology needs assessments, nationally appropriate mitigation actions, and/or national adaptation planning processes.
4. 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.
5. Assist in the undertaking of nationally appropriate mitigation actions.

Elements of the Climate Technology Centre and Climate Technology Network

1. To be operated by full-time Climate Technology Centre staff and comprised of and supported by technology experts and practitioners, to undertake the following functions:
 - (a) Provide technical assistance and consultation, training, and the development and customization of analytical tools, policies and best practices for conducting country-driven planning to support the dissemination of environmentally sound technologies;
 - (b) Promote close collaboration on deployment of technologies for climate mitigation and adaptation between governments, industries, and research communities of developed and developing countries;
 - (c) Act as a clearinghouse to promote the broad exchange and diffusion of information on technologies for mitigation and adaptation;
 - (d) Seek cooperation and coordination with relevant international technology initiatives and organizations and liaise with other bodies under the Convention, as appropriate.
2. A Climate Technology Network comprised of and supported by technology experts and practitioners that will undertake the following functions on a country-specific basis:
 - (a) Provide advice and support to Parties and their domestic stakeholders for the identification of needs and implementation of responsive technologies, practices and processes, and opportunities for technology cooperation to support mitigation and adaptation actions that further implementation of the Convention;
 - (b) Provide training, information and workforce development programmes to build and/or strengthen domestic capacity in developing countries to identify technology options, make technology choices, and operate, maintain, and adapt technologies, including through training of trainers and on-the-job technical and vocational training.

Possible elements of a technology incentive development and transfer

1. A technology incentive for enhanced cooperative action on technology development, deployment, transfer and diffusion for mitigation and adaptation projects and programmes [shall][should] be established in order to stimulate accelerated diffusion and transfer of existing and new environmentally safe and sound technologies to developing country Parties.
2. For the purpose of meeting its commitments for measurable, reportable and verifiable support for environmentally sound technologies and know-how in accordance with Article 4, paragraph 5, of the Convention, a [an Annex II] Party may transfer to, or acquire from, other Parties, Environmentally Sound Technology Rewards (ESTR) resulting from projects and programmes, including sectoral actions, that accelerate the deployment, diffusion or transfer of environmentally sound technologies for mitigation or adaptation in any sector of the economy, provided that the following conditions are met:
 - (a) Host Parties establish technology targets or objectives;
 - (b) Voluntary participation is approved by each Party involved;
 - (c) Any such project or programme results in measurable, reportable and verifiable reductions of greenhouse gas emissions by sources, storage or capture, enhancement of removals by sinks, or increases in climate resilience that is additional to any that would otherwise occur;
 - (d) The project or programme contributes to the achievement of the technology targets and objectives of the host Party in receipt of that technology;
 - (e) The host Party has allocated ESTRs to the project or programme, proportionate to the volume of emissions reduced or removed or increase in climate resilience;
 - (f) Participants in the ESTR mechanism may involve private and public companies;
 - (g) The acquisition of ESTRs is recognized as a contribution towards the efforts of Parties to meet their commitments under Article 4, paragraph 5, of the Convention.

Functions of Technology Innovation Centres

1. Be coordinating nodal centres to facilitate and enable:
 - (a) The identification of key technological products that have strong sustainable development and climate change benefits along with their projected price and performance targets;
 - (b) The development of such products;
 - (c) The development of markets for these products, in partnership with appropriate public- and private-sector organizations.
2. Promote joint research and development and technology cooperation activities between developing countries and between developed and developing countries, which may include the sharing of intellectual property rights.
3. Promote the deployment, diffusion and transfer of environmentally sound technologies for mitigation and adaptation to developing country Parties.
4. Stimulate capacity-building, in particular for endogenous technologies, including by providing cooperative training and development facilities and training opportunities, supported by public-private partnerships, to develop and deploy renewable energy and energy efficiency technologies and environmentally sound adaptation technologies.
5. Improve access to information on existing and new technologies.

6. Stimulate the establishment of twinning centres agreements between centres in developing and developed country Parties, including South-South-North partnership, as a means of exchanging experiences and promoting joint R&D and technology cooperation activities.

VI. ENHANCED ACTION ON CAPACITY-BUILDING^{*,1}

[Preamble

PP1 *Reaffirming* that capacity-building for developing countries is essential to enable developing country Parties to participate fully in, and to implement effectively their commitments under, the Convention,

PP2 *Recognizing* that capacity-building activities are related to all aspects of the Convention, including research and systematic observation and education, training and public awareness,

PP3 *Being especially guided* by Articles 4.1, 4.3, 4.4, 4.5, 4.7 and 4.8, in the context of Article 3, and Articles 5 and 6 of the Convention,

PP4 *Recalling* the provisions related to capacity-building for developing countries contained in relevant decisions adopted by the Conference of the Parties,

PP5 *Also recalling* the specific relevance of decision 2/CP.7, which contains in its annex the framework for capacity-building in developing countries,

[PP5 bis *Taking into account* that while the scope of capacity-building and correlated needs as contained in the annex to decision 2/CP.7 and the key factors identified in decision 2/CP.10 remain valid, there are emerging capacity needs arising from the outcome agreed at Copenhagen,]

PP6 *Further recalling* the paragraphs on capacity-building of Agenda 21 and the Programme for the Further Implementation of Agenda 21,

PP7 *Being deeply concerned* about the substantial gap between the capacity-building required for developing country Parties to fully contribute to the implementation of the Convention and the resources currently available to meet that need,

PP8 *Recalling* the Bali Action Plan adopted as decision 1/CP.13 by the COP at its thirteenth session,

PP9 *Acknowledging* that capacity-building is cross-cutting in nature and is fundamental to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012,

PP10 *Recognizing* that an agreed outcome resulting from the process launched by the Bali Action Plan will require enhanced action on capacity-building,

PP11 *Emphasizing* the need for a stand-alone section on enhanced action on capacity-building,]

[1. Objective and guiding principles

1. The objective of the enhanced action on capacity-building is to build, develop, strengthen, improve and enhance the capacities and capabilities of developing country Parties to contribute to the achievement of the full, effective and sustained implementation of the Convention.

2. Enhanced action on capacity-building [shall] [should] be guided by the provisions of the Convention and relevant decisions of the Conference of the Parties. Enhanced action on capacity-building [shall] [should] be, inter alia:

(a) A continuous, progressive and iterative process;

* As tabled by the co-chairs on 6 November 2009 (non-paper no. 46)

¹ The submission of the Republic of Belarus regarding countries with economies in transition has not been incorporated in this non-paper. Further consultations will be conducted.

- (b) Country-driven and consistent with national priorities and circumstances;
- (c) Participatory;
- (d) An integral part of enhanced action on the building blocks of the Bali Action Plan.]

[2. Scope of enhanced action on capacity-building

3. Capacity-building actions [shall] [should] be enhanced in order:

To fully implement the framework for capacity-building in developing countries as contained in the annex to decision 2/CP.7;

- (a) To build, develop, strengthen, improve and enhance, as appropriate, the capacity of developing country Parties in areas identified in the agreed outcome of the building blocks of the Bali Action Plan;
- (b) To support developing country Parties in formulating and implementing capacity-building projects, programmes and activities related to all aspects of the Convention;
- (c) To strengthen subnational, national or regional capacities, skills, capabilities and institutions to address emerging capacity-building needs, particularly those related to the enhanced implementation of the Convention.]

3. Implementation of capacity-building action and related institutional arrangements

4. Options for the chapeau

Option 1

[A specific financial mechanism shall be established to enhance action on capacity-building in developing countries within the scope defined in paragraph 3 above, including inter alia:]

Option 2

[Enhanced action on capacity-building should be supported by the operating entity(ies) of the financial mechanism of the Convention, and other bilateral and multilateral channels as appropriate, in partnership with national-level efforts.]

Option 3

[Support for the implementation of enhanced action on capacity-building action should be provided through appropriate means. International cooperation should be enhanced to support and develop the capacity of developing country Parties to address the new requirements arising from agreed Copenhagen outcome and the increased needs resulting from the full, effective and sustained implementation of the Convention, including, inter alia:]

Options for the list of action

Option 1

- (a) [[Empowering] [and] [strengthening] relevant institutions, including focal points and national coordinating bodies and organizations [in order to undertake enhanced] [functions and processes], at various levels [, taking into account the need for stand-alone capacity-building activities at various levels,] and strengthening endogenous capacities, skills and capabilities to contribute to the full, effective and sustained implementation of the Convention;
- (b) [Building, developing, strengthening and enhancing national and/or regional networks of information and knowledge, including local and indigenous knowledge, experiences, information and best practices of developing countries through, [inter alia] South–South and triangular cooperation;]

- (c) [Enhancing systematic observation, research and knowledge management [, including meteorological, hydrological and climatological services] with the aim of strengthening and using data for systematic observation, early warning, national and regional downscaling and modelling, disaster preparedness, vulnerability assessment and other climate services, including risk assessments of climate change impacts on ocean, coastal and terrestrial ecosystem variabilities;]
- (d) Developing tools and methods [to strengthen capacity for modelling and needs assessments related to adaptation, mitigation, capacities, financing and technologies];
- (e) Strengthening climate change communication, education, training and [public awareness] at all levels, including at the local and community levels, taking into account gender issues;
- (f) Encouraging and strengthening participatory and integrated approaches[, including the meaningful participation of various stakeholders,] taking climate change considerations into account to the extent feasible in relevant social, economic and environmental policies and actions;
- (g) Enhancing the capacity to plan, prepare and implement climate change actions, including the integration of such actions into relevant national strategies and plans;
- (h) Enhancing the capacity to monitor and report on climate change action, including for the preparation of national communications;
- (i) Strengthening structural and institutional capacity for economic diversification;
- (j) Supporting any other capacity-building needs in the course of full, effective and sustained implementation of the Convention.]

Option 2

[Action on capacity building should be enhanced in order to strengthen, as appropriate, sub-national, national or regional capacities, skills, capabilities and institutions as appropriate in order to address emerging capacity-building needs in the areas of adaptation, mitigation, and technology as outlined in the post-2012 agreed outcome.]

5. A technical panel on capacity-building shall be established to organize, coordinate, monitor, evaluate and retrofit the implementation of capacity-building activities and the support for adaptation and mitigation and the corresponding financing and technology development and transfer in developing countries. The technical panel may propose and implement mechanisms for sharing lessons learned, promoting South–South and triangular cooperation and disseminating information on successful capacity-building activities in developing countries. The technical panel shall also provide information and assessment on the fulfilment of commitments by developed country Parties to provide capacity-building support.

[4. Provision of financial resources for capacity-building²

6. Financial and technological support shall be provided in the context of Article 4.9 of the Convention in a transparent, expedited, direct access, sustainable and predictable manner under the overall guidance of the COP through

Option 1

a dedicated multilateral fund for capacity-building as referred to in paragraph 175, option 6.³

Option 2

a new financial mechanism to support mitigation, adaptation, technology transfer and capacity-building action as referred to in paragraphs 166 and 174, option 1.⁴

5. [Assessing delivery][Monitoring and review] of [capacity-building support and action][support for capacity-building actions]

7.

Option 1

[Support for capacity-building activities shall be measured through the use of agreed and effective performance 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], 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, country-driven process.]

Option 2

[To facilitate the monitoring and review of commitments under the Copenhagen Agreement, all Parties shall report on progress made in enhancing capacity to address climate change, and on the support provided or received.]

Option 3

[To facilitate the monitoring and reporting of progress on capacity-building under an agreed outcome, Parties should regularly report on enhanced capacity-building using existing mechanisms, including national communications and submissions to the secretariat and others as agreed.]

8. [Provision of capacity-building support to developing country Parties, along with the delivery of financial support and technology transfer, shall be a legally binding obligation of developed country Parties included in Annex II to the Convention, with consequences for non-compliance.]

² At the informal consultations conducted by the AWG-LCA Chair, it was agreed that proposals relating to the provision of financial resources be discussed in the contact group on finance.

³ FCCC/AWGLCA/2009/INF.1.

⁴ As footnote 2 above.