

A DEVELOPMENT-ORIENTED APPROACH IN MAKING “MEASURABLE, REPORTABLE AND VERIFIABLE” OPERATIONAL

SYNOPSIS

This Analytical Note looks at how MRV metrics and modalities in relation to paragraphs 1(b)(i) and (ii) of the UNFCCC Bali Action Plan (BAP) can be made operational in ways that reflect the primary sustainable development concerns and perspectives of developing country Parties to the UNFCCC. It suggests that such metrics and modalities have to take into account existing modalities with a view towards further enhancing the effective implementation of the UNFCCC by all Parties.

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EXECUTIVE SUMMARY

Introduction

Making MRV operational under paragraphs 1(b)(i) and (ii) of the BAP with respect to developed country Parties will require enhancements in existing MRV modalities under the UNFCCC. For developed country Parties, this would mean enhancing existing modalities in relation to Art. 4.1(j), 12.1, 12.2, 12.3 and 12.5 with respect to national communication developed country Parties and Kyoto Protocol Arts. 5 and 7 in relation to reporting requirements for developed country Parties which are Parties to the Kyoto Protocol. With respect to developing country Parties, putting in place operational MRV modalities pursuant to paragraph 1(b)(ii) of the BAP would mean creating such MRV modalities consistent with the provisions of UNFCCC Arts. 4.1(j), 12.1 and 12.5.

Differing Objects in BAP Paragraph 1(b)(i) and (ii)

The phrase “measurable, reportable and verifiable” (or MRV) which appears in paragraphs 1(b)(i) and (ii) of the BAP provides the parameters under which the mitigation actions by Parties should be undertaken. With respect to the formulation of the language for paragraphs 1(b)(i) and (ii) it is important to note that the object for MRV modalities under paragraph 1(b)(i) is different from that under paragraph 1(b)(ii). When paragraphs 1(b)(i) and (ii) are read consistently with the objective of the Bali Action Plan and the provisions of the UNFCCC (in particular UNFCCC Arts. 4.3, 4.5 and 4.7), MRV under these paragraphs of the BAP have different objects, as follows:

Table 1: MRV Under the BAP

<u>Paragraph</u>	<u>What is Subject to MRV under the BAP</u>	
	<u>Developed country Parties</u>	<u>Developing country Parties</u>
1(b)(i)	<p><u>Nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives</u>, by all developed country Parties</p> <p><u>Comparability of efforts</u> among developed country Parties in complying with nationally appropriate mitigation commitments or actions</p>	
1(b)(ii)	<p>Provision by developed country Parties of <u>financing, technology and capacity-building</u> to support and enable nationally appropriate mitigation actions by developing country Parties in the context of sustainable development</p>	<p><u>Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development</u> that are supported and enabled by technology, financing and capacity-building from developed country Parties</p>

Developed Country Parties' Mitigation Commitments and Actions in Paragraph 1(b)(i)

Measurement

Developed country Parties' mitigation efforts are gauged against the extent to which they are demonstrably taking the lead in modifying longer-term trends through emission reductions to stabilize atmospheric greenhouse gas concentrations to specific levels within a timeframe that allows natural ecosystem adaptation, ensures continued food production, and enables sustainable development. How developed country Parties are "taking the lead" towards meeting the objective of the UNFCCC, compliance with paragraph 1(b)(i) could be measured qualitatively and quantitatively through:

Qualitative	Quantitative
<ul style="list-style-type: none"> - Existence of mandatory emission limitation and reduction commitments - Existence of commitments to achieve emission reductions primarily through domestic actions 	<ul style="list-style-type: none"> - New and deeper quantified emission limitations and reductions targets for all developed country Parties that significantly below the 1990 level specified in UNFCCC Art. 4.2(a) and (b) and, for Kyoto Protocol Parties, below their national targets under the Kyoto Protocol - Quantitative benchmark for domestic emission limitation or reductions - Quantitative periodic progression in emission limitation or reductions - Quantified economic costs and impacts on developing country Parties

Reporting

Existing reporting processes under the Convention (for all developed country Parties) as well as the Protocol (for those that are Parties to the Protocol) should be further enhanced and strengthened (including in terms of reporting requirements), by requiring annual submissions of NCCs and more detailed information.

Verification

Existing verification modalities with respect to developed country Parties' mitigation commitments and actions (through the SBI and the COP) should be further enhanced by, inter alia, having a more robust compliance mechanism that can penalize non-compliant developed country Parties; establishing verification modalities with respect to the quantified economic costs and effects of developed country Parties' emission reduction policies, measures and actions on developing country Parties; and more frequent (e.g. annual) verification.

Comparability of Efforts

Measurement

In order to comply with the BAP objective of enhancing the implementation of the Convention to better achieve the UNFCCC Art. 2 ultimate objective, all developed

country Parties should further enhance their existing mitigation-related obligations in a comparable way. Ensuring such comparability could be done qualitatively and quantitatively as follows:

Qualitative	Quantitative
<ul style="list-style-type: none"> - All developed country Parties should undertake quantified emission limitations and reduction commitments that have the same legally and operationally mandatory or binding character - All developed country Parties should have binding policy commitments to achieve emission reductions primarily through domestic actions - All developed country Parties should have binding commitments to provide such information as may be needed to determine comparability of efforts and actions, using reporting modalities and formats required for NCCs 	<ul style="list-style-type: none"> - Developed country Parties that are not Parties to the Kyoto Protocol should have quantified emission limitations and reduction targets expressed in: (i) comparable percentage reductions with similar base years and timeframes; and (ii) the corresponding figure in tons of CO₂ equivalent to be reduced or avoided, whether in national aggregate or per capita terms – these figures should be comparable to those that are Parties to the Protocol, taking into account: historical responsibility for accumulated greenhouse gas emissions, their national circumstances, level of development and capacity to cope with climate change. Such targets must, as a minimum, aim to reduce developed country GHG emissions below the baseline of 1990 levels set in UNFCCC Art. 4.2(a) and (b) - All developed country Parties should have quantified emission limitation and reduction targets that would significantly lead to the achievement of their specific mitigation-related obligations under the UNFCCC (including going below the 1990 baseline in UNFCCC Art. 4.2(a) and (b)) and the meeting of the UNFCCC’s ultimate objective in Art. 2 - All developed country Parties should have quantified targets for domestically-achieved emission reductions that are similar in extent and are consistent with their binding commitment to ensure the primacy of domestic actions over the use of Kyoto Protocol flexibility mechanisms in achieving emission reduction targets

Reporting and Verification

Reporting with respect to comparability of efforts should be enhanced in terms of being more frequent – i.e. completed annually with a more frequent reporting period for developed country Parties’ NCCs; and providing information with respect to the implementation of mitigation commitments and actions undertaken in sufficient depth, detail, and specificity to allow for cross-country comparability among developed country Parties. Verification could be done by the COP through the SBI establishing a technical panel on comparability.

MRV Financing, Technology and Capacity Building

Taking into account the application of UNFCCC Art. 4.7, the extent to which developing country Parties undertake and implement MRV NAMAs pursuant to paragraph 1(b)(ii) of the BAP will depend on the extent to which developed country Parties support and enable such NAMAs through MRV financing, technology and capacity-building. In

implementing paragraph 1(b)(ii), the following points deriving from the balance contained the paragraph must be illustrated:

- developing country Parties are not expected to undertake MRV NAMAs in the absence of the corresponding MRV finance, technology and capacity-building must first be provided or committed by developed country Parties
- developing country Parties' unilateral (e.g. self-funded) mitigation actions undertaken without MRV finance, technology or capacity-building support from developed country Parties would not be subject to MRV under paragraph 1(b)(ii)
- developing country Parties need not MRV under paragraph 1(b)(ii) their mitigation actions that may be supported by finance, technology or capacity-building measures from developed country Parties which are not MRVed or which are provided outside of the MRV framework under paragraph 1(b)(ii)
- developing country Parties' mitigation actions that are supported or enabled by finance, technology or capacity-building provided by other developing country Parties would not be subject to MRV under paragraph 1(b)(ii)
- finance, technology or capacity-building provided by developing country Parties to other such Parties to support or enable mitigation actions would not be subject to MRV under paragraph 1(b)(ii)

Measurement

Financing

Paragraph 1(b)(ii) MRV financing must be "new and additional" to existing flows of financing - including official development assistance (ODA) - from developed to developing countries. Furthermore, it should flow through the UNFCCC's Art. 11 financial mechanism and be subject to the guidance and accountability of the COP. UNFCCC Art. 4.3 requires, inter alia, that the "agreed full incremental costs" to be borne by developing country Parties in connection with the implementation of measures needed to implement their obligations under UNFCCC Art. 4.1 shall be covered by the corresponding financing to be provided by developed country Parties. This then should be the starting basis for measurement. Since there is no current global figure on "agreed full incremental costs" that need to be financed by developed country Parties under Art. 4.3, alternative figures need to function as the basis for measuring, under paragraph 1(b)(ii) of the BAP, the enhanced compliance by developed country Parties with their Art. 4.3 obligation. In an update of its 2007 report on investment and financial flows to address climate change, the UNFCCC secretariat's estimated annual cost requirements to fund adaptation, mitigation and technology transfer for developing countries is US\$262.15 billion - US\$615.65 billion annually by 2030. Hence, MRV finance from developed country Parties under paragraph 1(b)(ii) should amount to at least US\$ 615.65 billion per year (if the UNFCCC estimate is used as the basis) or at least US\$ 557.64 billion per year (if the G-77 and China proposal is used as the basis). In fact, these suggested benchmark figures might even be too low given the scale of financing needs of developing country Parties in relation to climate adaptation, mitigation and to support the shift to low-carbon development pathways.

The UNFCCC's financial mechanism is the most logical mechanism through which developed country Parties should channel their treaty-obligated financing. This would require financing to be subject to the guidance and accountability of the COP, in accordance with the provisions of Art. 11. This will ensure accountability to the UNFCCC Parties with respect to the proper use of the financing to meet the objective of the UNFCCC, and will also allow the COP and the Parties to compare and verify the extent to which developed country Parties are complying with their financing obligations. Hence, only UNFCCC-channeled financing would be the only type of climate financing coming from developed country Parties that can be MRVed under paragraph 1(b)(ii) and then counted as developed country Parties' fulfillment of their climate financing treaty obligations. That is, financing from developed country Parties that do not go through the UNFCCC's financial mechanism cannot be counted as compliance with their UNFCCC financing commitments and with the balance in paragraph 1(b)(ii). Finally, developed country Parties' treaty obligation in UNFCCC Art. 4.3 is mandatory as reflected in the form of mandatory assessments of financial contributions to the UNFCCC's financial mechanism from developed country Parties. Such mandatory assessed annual contributions from developed country Parties, and compliance with such assessments, would then be the quantified annual benchmarks against which developed country Party compliance with the climate financing treaty obligation under UNFCCC Art. 4.3 and with paragraph 1(b)(ii) of the BAP can be MRVed.

Technology Transfer

Read together, both UNFCCC Art. 4.5 and Decision 4/CP.7 indicate that the benchmark for measurement with respect to technology transfer should be the extent to which "meaningful and effective actions" – e.g. actions that are practical, results-oriented, and produce actual technology transfer – are undertaken by developed country Parties to implement Art. 4.5. Furthermore, in the context of implementing paragraph 1(b)(ii) of the BAP, such actions should be measured according to the extent to which they "support and enable" developing country Parties in undertaking NAMAs in the context of sustainable development. Indicators to serve as metrics would hence be both qualitative and quantitative, in relation to technology transfer policy measures, actions, and financing.

Capacity Building

In the context of implementing paragraph 1(b)(ii) with respect to capacity building, the key MRV benchmark by which developed country Parties' actions to support capacity-building under paragraph 1(b)(ii) of the BAP should be gauged would be the extent to which developing country Parties provide financial and other support (including technical and information access) for the conduct of capacity building in developing country Parties under the Capacity Building Framework for developing countries under Decision 2/CP.7, especially with respect to the development by developing country Parties of their NAMAs in the context of sustainable development. This would mean that specific indicators with respect to the provision of support for capacity-building as a supporting and enabling measure under paragraph 1(b)(ii) would have to be developed using both qualitative and quantitative benchmarks – e.g. policy measures, actions, and financing.

Reporting of MRV Financing, Technology and Capacity Building

Under UNFCCC Art. 12.3, developed country Parties are required to “incorporate [in their NCCs] details of measures taken in accordance with” Art. 4.3 (provision of new and additional financial resources), Art. 4.4 (assistance to meet the costs of adaptation), and Art. 4.5 (promotion, facilitation and financing of the transfer of, or access to, environmentally sound technologies and know-how). This reporting requirement would then form the basis by which the provision of financing, technology and capacity-building by developed country Parties under paragraph 1(b)(ii) of the BAP would be reported. Improvements in the reporting format of NCCs from developed country Parties need to be made within the context of implementing paragraph 1(b)(ii) of the BAP. Current reporting by developed country Parties with respect to their implementation of their Art. 4.3, 4.4 and 4.5 commitments on financing and technology transfer leave much to be desired, often being very vague or too general to be of much value in terms of being able to accurately measure the extent of compliance. Hence, developed country Parties’ reporting in their NCCs with respect to the provision of financing, technology transfer and capacity-building pursuant to paragraph 1(b)(ii) must be made more regular and frequent (e.g. annually) and be more detailed and specific in terms of information content.

Verification of MRV Financing, Technology and Capacity Building

Verification of the provision of MRV financing, technology and capacity building by developed country Parties would be done by a to-be-created executive body under the COP’s guidance and authority to operate a special fund under the UNFCCC financial mechanism. This fund would be the depositary for assessed contributions from developed country Parties and would be the source for MRV financing for MRV technology and capacity building, as well as directly financing MRV NAMAs by developing country Parties.

MRV Nationally Appropriate Mitigation Actions in the Context of Sustainable Development of Developing Country Parties

Under paragraph 1(b)(ii), “enhanced national/international action on mitigation of climate change” by developing country Parties are supposed to be in the form of MRV NAMAs “in the context of sustainable development” that are “supported and enabled” by MRV financing, technology and capacity building. As pointed out earlier in this paper, a plain text reading of paragraph 1(b)(ii) clearly indicates that only those NAMAs that are supported and enabled by MRV financing, technology and capacity building can be subject to MRV – that is, the adoption and implementation of MRV NAMAs by developing country Parties in the context of sustainable development under paragraph 1(b)(ii) are conditional on the prior provision of MRV financing, technology and capacity building by developed country Parties.

Measurement

Developing country NAMAs that can be MRVed under paragraph 1(b)(ii) of the BAP cannot be made subject to or be linked to specific quantified emission limitations or reduction targets, since the development conditions and the achievement of sustainable development objectives will vary among countries. At the same time, mitigation actions by developing country Parties that may be undertaken pursuant to paragraph 1(b)(ii) should be able to address simultaneously the achievement of climate mitigation and

adaptation and sustainable development objectives. What this means therefore is that the essential metric for measurement of MRV NAMAs in the context of sustainable development that developing country Parties are supposed to undertake under paragraph 1(b)(ii) must be primarily qualitative and focused on the adoption and implementation of specific mitigation actions (e.g. projects or activities) that support sustainable development objectives, rather than be quantitative and focused on measuring the achievement of any nationally-specific quantified emission reductions or limitations targets. The mitigation actions of developing country Parties are distinct from the mitigation commitments (and the actions taken pursuant to such commitments) of developed country Parties, in keeping with the principle of common but differentiated responsibilities under the UNFCCC.

What could be MRVed with respect to developing country Parties' NAMAs under paragraph 1(b)(ii) could be the extent to which such Parties are implementing such NAMAs. But for such developing country Party NAMAs to be subject to MRV, there must be a direct correspondence or association between the provision of MRV financing, technology and capacity building by developed country Parties and the NAMA that is being adopted and implemented by a developing country Party. Furthermore, because of the qualitative nature of the metric for developing country Parties' MRV NAMAs in the context of sustainable development under paragraph 1(b)(ii), it would be voluntary and discretionary on the part of each developing country Party to determine exactly which NAMAs would be most appropriate for it to adopt and implement, taking into account its sustainable development objectives, capacity and national circumstances.

Reporting

The existing NCC modalities for developing country Parties could be enhanced for purposes of effectively implementing paragraph 1(b)(ii) of the BAP with respect to the reporting of MRV NAMAs by developing country Parties by, inter alia:

- increasing the frequency of reporting of MRV NAMAs independent of the submission of NCCs under UNFCCC Art. 12.1, but subject to the provision by the GEF of the "agreed full cost" for such reporting consistent with UNFCCC Art. 4.3. In this way, developing country Parties could provide more regularly periodic reports to the SBI consistent with the SBI's mandate under UNFCCC Art. 10.2 to assess "the overall aggregated effect of the steps taken by the Parties in the light of the latest scientific assessments concerning climate change."
- developing a non-binding MRV NAMA registration system run by the UNFCCC secretariat to which developing country Parties could voluntarily submit and register information of possible NAMAs (including estimated mitigation effects and estimated financing, technology and capacity building requirements) pursuant to paragraph 1(b)(ii) of the BAP, including information on the nature and scope of specific MRV NAMAs for which the country is seeking MRV financing, technology and capacity building.
- institutional modalities to be established by the executive body for the UNFCCC's financial mechanism for the verification of MRV financing, technology and capacity building, in order to match voluntarily registered MRV NAMAs that are planned or proposed by developed country Parties with the appropriate funding window in the special fund containing MRV financial contributions from developed country Parties

Verification

Given that the adoption and implementation of MRV NAMAs are voluntary national actions by developing country Parties, the verification of the extent to which these MRV NAMAs are implemented and have their planned effect should first be pursued by national entities through nationally determined procedures. These procedures may be based, as appropriate given the national circumstances and practices of the developing country Party concerned, on international guidelines or practices or frameworks for verification that may be developed by the COP.

The SBI should then periodically report to the COP the results of its review and verification of the annual reports of developing country Parties with respect to their voluntarily registered MRV NAMAs, with appropriate recommendations. The COP is legally mandated under UNFCCC Art. 7 to be the final review and verification body with respect to the implementation of the UNFCCC by the Parties. With respect to developing country Parties' MRV NAMAs as reported by them, the COP's focus should focus on assessing the "overall aggregated effect" in relation to GHG mitigation of such MRV NAMAs undertaken by developing country Parties.

In assessing the "overall aggregated effect" on GHG mitigation of developing country Parties' MRV NAMAs taken pursuant to paragraph 1(b)(ii) of the BAP, the COP should also take into account the reports of the executive body for the UNFCCC's financial mechanism relating to its verification of the provision of MRV financing, technology and capacity building by developed country Parties to support the adoption and implementation of MRV NAMAs by developing country Parties.

A DEVELOPMENT-ORIENTED APPROACH IN MAKING “MEASURABLE, REPORTABLE, AND VERIFIABLE” OPERATIONAL

I. INTRODUCTION

1. In a previous Analytical Note, the South Centre suggested that the modalities for the “measurable, reportable, and verifiable” (MRV) conditions under operative paragraph 1(b)(i) and (ii) of the Bali Action Plan should be the existing MRV modalities with respect to mitigation commitments, financing, technology transfer, and capacity-building under the Convention. There is no need to reinvent the MRV wheel in the context of the intergovernmental processes under the Ad hoc Working Group on Long Term Cooperative Action under the Convention (AWG-LCA). Such MRV modalities already exist under the Convention and the Kyoto Protocol and the focus should therefore be on using and further strengthening such modalities.¹
2. This paper builds on the previous Analytical Note and outlines some practical approaches for enhancing such existing MRV modalities, consistent with the principles and provisions of the UN Framework Convention on Climate Change (UNFCCC) and the relevant decisions of the Conference of the Parties (COP).
3. Paragraph 1(b) of the Bali Action Plan (Decision 1/CP.13, or BAP) states that “enhanced national/international action on mitigation of climate change” would include consideration of, inter alia:

For developed country Parties:

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

For developing country Parties:

“(ii) Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner;”

4. The phrase “measurable, reportable and verifiable” (or MRV) which appears in paragraphs 1(b)(i) and (ii) of the BAP provides the parameters under which the mitigation actions by Parties should be undertaken. What is important to note with respect to the formulation of the language for paragraphs 1(b)(i) and (ii) is that the object for MRV modalities under paragraph 1(b)(i) is different from that under paragraph 1(b)(ii). When paragraphs 1(b)(i) and (ii) are read consistently

¹ See South Centre, “Measurable, Reportable, and Verifiable”: Using the UNFCCC’s Existing MRV Mechanisms in the Context of the Ad Hoc Working Group on Long Term Cooperative Action under the Convention, SC/GGDP/AN/ENV/2, May 2008.

with the objective of the Bali Action Plan and the provisions of the UNFCCC (in particular UNFCCC Arts. 4.3, 4.5 and 4.7), MRV under these paragraphs of the BAP have different objects, as follows:

Table 1: MRV Under the BAP

<u>Paragraph</u>	<u>What is Subject to MRV under the BAP</u>	
	<u>Developed country Parties</u>	<u>Developing country Parties</u>
1(b)(i)	<p><u>Nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives</u>, by all developed country Parties</p> <p><u>Comparability of efforts</u> among developed country Parties in compliance with nationally appropriate mitigation commitments or actions</p>	
1(b)(ii)	<p>Provision by developed country Parties of <u>financing, technology and capacity-building</u> to support and enable nationally appropriate mitigation actions by developing country Parties in the context of sustainable development</p>	<p><u>Nationally appropriate mitigation actions by developing country Parties in the context of sustainable development</u> that are supported and enabled by technology, financing and capacity-building from developed country Parties</p>

5. Making MRV operational under paragraphs 1(b)(i) and (ii) of the BAP with respect to developed country Parties will require enhancements in existing MRV modalities under the UNFCCC. These modalities include, in particular, those that are relevant to effecting compliance with UNFCCC Arts. 4.1(j), 12.1, 12.2, 12.3 and 12.5 in relation to national communications from Annex I Parties and Kyoto Protocol Arts. 5 and 7 in relation to reporting requirements for Annex I Parties which are Parties to the Kyoto Protocol.
6. With respect to developing country Parties, putting in place operational MRV modalities pursuant to paragraph 1(b)(ii) of the BAP would mean establishing such MRV modalities consistent with the provisions of UNFCCC Arts. 4.1(j), 12.1 and 12.5.

II. MRV FOR DEVELOPED COUNTRY PARTIES UNDER PARAGRAPHS 1(B)(I) AND (II)

A. *Nationally Appropriate Mitigation Commitments or Actions*

1. Measurement

7. Under the Convention, Art. 4.1(a) in relation to Art. 7.2(d) with respect to the development of comparable methodologies for the preparation of inventories of

greenhouse emissions by sources and removals by sinks and the evaluation of measures to limit emissions and enhance removals, as well as the decisions taken by the COP with respect to such methodologies, already provide the AWG-LCA with an existing mechanism under which mitigation commitments and actions of developed country Parties that may be agreed upon under the AWG-LCA can be made “measurable.”

Metrics

8. Developed country Parties’ “nationally appropriate mitigation commitments or actions, including quantified emission limitation and reduction objectives,” must be measured with a view towards showing the extent to which the policies or measures undertaken to comply with their treaty obligations under the UNFCCC, especially with respect to:
 - their specific commitment in Art. 4.2(a) to demonstrate that they are “taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention”; and
 - their specific commitment in Art. 4.2(b) to return “individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol.” For those Annex I Parties which are Parties to the Kyoto Protocol, this would also include their compliance with their binding emission reductions targets under the Protocol.
9. Furthermore, measuring the extent of developed country Parties’ compliance with their treaty commitments above must include measuring the extent to which such compliance promotes the achievement of the UNFCCC’s ultimate objective in Art. 2.²
10. In short, developed country Parties’ mitigation efforts are gauged against the extent to which they are demonstrably taking the lead in modifying longer-term trends through emission reductions to stabilize atmospheric greenhouse gas concentrations to specific levels within a timeframe that allows natural ecosystem adaptation, ensures continued food production, and enables sustainable development.³

² UNFCCC Art. 2 reads as follows: “The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient 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.”

³ This in essence is what many developing country Parties have raised in various submissions to the AWG-LCA. See e.g. Argentina, Colombia, Indonesia, and Philippines in FCCC/AWGLCA/2008/MISC.1; Pakistan in FCCC/AWGLCA/2008/MISC.1/Add.1; Argentina, Brazil, China, and Panama (on behalf of Costa Rica, El Salvador, Honduras, Nicaragua) in FCCC/AWGLCA/2008/MISC.5; and AOSIS, and Chile in FCCC/AWGLCA/2008/MISC.5/Add.2.

11. The implementation of BAP paragraph 1(b)(ii) must contribute to the achievement of the overall objective of the BAP as expressed in its first preambular paragraph and paragraph 1, i.e. to “urgently enhance implementation of the Convention in order to achieve its ultimate objective in full accordance with its principles and commitments” and “enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012.” In turn, meeting such BAP objectives must contribute towards meeting the ultimate objective of the UNFCCC.
12. In this regard, new methodologies for calculating and defining developed countries’ new mitigation commitments under paragraph 1(b)(i) of the BAP should be developed. Some developing countries have suggested, for example, that methodologies for arriving at new quantified emission limitation and reduction commitments for developed countries need to be based on principles that reflect historical responsibility and promote equity. Such suggestions include, for example, incorporating developed countries’ historical responsibility for global temperature increases; evaluating “accumulative per capita emissions” as part of a carbon budget; and ensuring the welfare associated with developing countries’ current development paths.
13. This means that developed countries’ new mitigation commitments under paragraph 1(b)(i) of the BAP⁴, to be consistent with Art. 4.2(a) and (b) and Art. 2 of the Convention, should be arrived at using methodologies that reflect the following elements:
 - The contribution of developed countries to current levels of atmospheric GHG concentrations (including through historical and current levels of emission);
 - The need for developed countries to accept and implement mitigation commitments that avoid dangerous anthropogenic interference with the climate system;
 - The need for developed countries to undertake early action to ensure stabilization within an appropriate time-frame;
 - The need for emissions per capita in developing countries to grow;
 - The need for support for economic and social development and poverty eradication in developing countries; and
 - The need for developed countries to provide financing and technology consistent with their UNFCCC obligations, in particular Arts. 4.3, 4.4, 4.5 and 4.7.
14. In addition to the elements above, the factors that need to be taken into account in defining developed countries’ new mitigation commitments, include:

⁴ Such commitments should, for those which are Parties to the Kyoto Protocol, should also be reflected in their new commitments for the second commitment period under the Kyoto Protocol which is being negotiated in the AWG-KP.

- *Recent scientific information:* Recent scientific studies suggest that the world may already be committed to a warming of 2.4°C. This means that even deeper GHG emissions cuts may be required of developed countries as the global carbon budget shrinks even more. Such deeper emissions cuts may have to go beyond 100 percent of the 1990 base year, entailing “negative emissions” from developed countries. Furthermore, to address the commensurate higher risk of climate impacts, greater flows of financing and technology from developed to developing countries under the UNFCCC need to be made to improve developing countries’ adaptation efforts;
- *Consumption rather than production of emissions:* The impact of consumer demand in developed countries for goods produced by developing countries also needs to be factored in as a key driver for increased GHG emissions in some developing countries associated with the production of such goods. These “embedded” emissions in developing country goods exported to and consumed in developed countries need to be incorporated into the overall emission levels of developed countries to calculate the extent that developed countries will need to mitigate;
- *Population growth in developing countries:* The need for developing countries to ensure sufficient economic and social development and growth patterns to be able to cope with growing populations must be fully recognized. Developing countries’ populations are estimated by the United Nations to grow by almost half by 2050 (from around 5.3 billion in 2005 to 7.9 billion in 2050⁵). This means, unavoidably, that developing countries’ GHG emissions will also need to grow if they are to secure adequate economic and social development. With a limited global carbon budget, developed countries (whose populations will remain stable up to 2050 at around 1.25 billion) will need to make even deeper emissions reductions to be able to provide developing countries with the additional emissions budgets. However, at the same time, the growth of emissions in developing countries could be lowered if their economic development could be generated using low carbon technologies, which will require developed countries, consistent with the UNFCCC, to provide greatly increased flows of financing to acquire such technology and undertake actual transfers of such low carbon technology to developing countries.

15. To demonstrate how developed country Parties are “taking the lead” towards meeting the objective of the UNFCCC, compliance with paragraph 1(b)(i) could be measured qualitatively and quantitatively as follows:

Qualitative

- **Existence of mandatory emission limitation and reduction commitments** – the legal character of developed country Parties’ mitigation commitments or actions

⁵ See <http://esa.un.org/unpp/p2k0data.asp>

must be that of a binding and mandatory character.⁶ This would mean a continuation of the existing mandatory character of the mitigation commitments for such Parties under Art. 4.2(a) and (b) as well as under the Kyoto Protocol for those that are also Parties to the Protocol. This could mean, for example, that such commitments are made and undertaken in the context of the second commitment period under the Art. 3.9 process of the Kyoto Protocol by those that are Parties to the Protocol. These obligations under paragraph 1(b)(i) of the Bali Action Plan for developed countries that are not Kyoto Protocol Parties should be referenced to and be comparable with the level of mitigation obligations assumed by developed countries that are parties to the Kyoto Protocol in relation to the Kyoto Protocol's second and subsequent commitment periods. For developed country Parties that are not Parties to the Protocol such as the United States, comparable binding obligations could, for example, be generated through a unilateral declaration under international law. For such unilateral declarations to create legal obligations for the declaring State, it should:⁷

- be done formally and publicly, orally or in writing;
- it should express the intent to be bound and produce obligations under international law;
- it must clearly and specify state the obligations to which the State will be bound;
- it must be made by an authority vested with the authority to do so (e.g. head of State, head of Government, or foreign ministers); and
- it must not conflict with a peremptory norm of general international law (a *jus cogens* norm).

The COP, as part of the outcome from the AWG-LCA process, could decide to invite Annex I Parties which are not KP Parties to unilaterally declare to the COP their intention to enhance their implementation of Art. 4.2(a) and (b) by undertaking binding emission reduction commitments and implementing such commitments through appropriate domestic policies and measures. At the same time, to prevent developed countries that are currently KP parties from effectively abandoning the KP by not ratifying the amendments to the KP relating to the second and subsequent commitment periods, the COP should also decide that the ability to avail of the flexibility mechanisms under the KP will not be made available to those that are not parties to the KP's second and subsequent

⁶ See e.g. Pakistan in FCCC/AWGLCA/2008/MISC.1/Add.1; AOSIS in FCCC/AWGLCA/2008/MISC.5/Add.2; Argentina in FCCC/AWGLCA/2008/MISC.5. See also China, FCCC/AWGLCA/2009/MISC.1

⁷ For such a unilateral declaration to have binding legal effect on the declaratory Party and for other Parties to be able to rely on the binding nature of such a declaration under international legal effects, the declaration should be consistent with the "Guiding Principles applicable to unilateral declarations of States capable of creating legal obligations" adopted by the UN General Assembly's International Law Commission in 2006. The Guiding Principles were reported by the ILC to the 61st session of the UN General Assembly (see Report of the International Law Commission, 58th Session, UN Doc. No. A/61/10 (2006)), which then took note of such Guiding Principles and commended their dissemination (see UN General Assembly Resolution No. A/RES/61/34, 18 December 2006, para. 3. For the text of these Guiding Principles, see http://untreaty.un.org/ilc/texts/instruments/english/draft%20articles/9_9_2006.pdf. These guidelines are based in part on the 1933 decision of the Permanent Court of International Justice in the case of Norway vs. Denmark and the 1974 Nuclear Test Cases decided by the International Court of Justice.

commitment periods; that they will, in any case, need to have mitigation commitments under paragraph 1(b)(i) of the BAP at levels comparable or equivalent to what would have been their KP targets under the second and subsequent commitment periods; and that they will, in any case, be MRVed with respect to their compliance of their paragraph 1(b)(i) of the BAP commitments.

- **Existence of commitments to achieve emission reductions primarily through domestic actions** – there must be an explicit policy statement by developed country Parties that emissions reductions must be achieved primarily through domestic reductions and that the use of flexibility mechanisms under the Kyoto Protocol to obtain reductions credits from actions financed or undertaken in other countries is purely supplementary. Such a policy statement could be further quantified in terms of commitments with respect to the predominant and primary share that domestically-sourced reductions should have in the overall emissions reductions mix for each individual developed Party;⁸

Quantitative

- **New and deeper quantified emission limitations and reductions targets for all developed country Parties** – the mandatory emission reduction commitments must be reflected in new and deeper emission reduction targets over and above the Kyoto Protocol’s first commitment period targets (for those that are Parties to the Protocol) and the Art. 4.2(b) target (for those that are not Protocol Parties) and which are subject to specific timetables.⁹ Such new quantitative targets should lead to emission reductions deeper than those suggested by the Intergovernmental Panel on Climate Change (IPCC) in its Fourth Assessment

⁸ Paragraph 1 of Decision 2/CMP.1 stressed that “the use of the mechanisms [i.e. JI, CDM, and emissions trading under Arts. 6, 12 and 17 of the Kyoto Protocol] shall be supplemental to domestic action and that domestic action shall thus constitute a significant element of the effort made by each Party included in Annex I to meet its quantified emission limitation and reduction commitments.” Art. 31(1) of the 1969 Vienna Convention on the Law of Treaties states that “a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.” In interpreting the terms of a treaty, Art. 3(2)(a) of the Vienna Convention also states that, together with the context, “any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions” shall be taken into account. Thus, the word “supplemental” is a derivative of the word “supplement”, whose ordinary meaning as defined by the Oxford English Dictionary is that it is a “thing added to something else to enhance or complete it.” The ordinary meaning of the word “significant” according to the Oxford English Dictionary is “extensive or important enough to merit attention.” In essence, then, the Kyoto Protocol’s supplementary mechanisms for compliance (e.g. JI, CDM and emissions trading) should simply “enhance or complete” Annex I Parties’ domestic emission reduction actions rather than substitute for such actions. They are not supposed to be “significant” – i.e. “extensive or important” – elements in how Annex I Parties meet their Kyoto Protocol targets. That is, JI, CDM and emissions trading are seen under the Kyoto Protocol as non-extensive enhancements or add-ons to the domestic actions of Annex I Parties.

⁹ See, e.g., proposals from Argentina and Philippines in FCCC/AWGLCA/2008/MISC.1; India in FCCC/AWGLCA/2008/MISC.5/Add.1. See also Saudi Arabia, China, in FCCC/AWGLCA/2009/MISC.1

Report.¹⁰ These new overall targets with their overall timeframes could be as follows:¹¹

Table 2:
Overall Minimum
Quantitative Emission Limitation and Reduction Targets
for Developed Country Parties¹²

Overall Timeframe	Overall Minimum Targets
Now and up to 2020	>25-40% below 1990 levels
2020-2050	>40-95% below 1990 levels
Post-2050	>100% below 1990 levels

The overall percentage reduction targets for developed country Parties should also be translated into the corresponding figure in tons of CO₂ equivalent to be reduced or avoided. Finally, per-country allocations of the overall reduction targets (in terms of both percentages and CO₂ tonnage (aggregate or per capita)) could be made using allocation criteria that takes into account, inter alia, historical responsibility for accumulated greenhouse gases in the atmosphere, national circumstances, capacity to cope with climate change, and other criteria as agreed upon by the COP for developed country Parties.

However, recent scientific reports indicate that GHG atmospheric concentrations since pre-industrial levels up to 2005 has now “committed the world to a warming of 2.4°C (1.4°C to 4.3°C) above the preindustrial surface temperatures ... even if GHG concentrations are held fixed at their 2005 concentration levels but without any other anthropogenic forcing such as the cooling effect of aerosols. ... even the most aggressive CO₂ mitigation steps as envisioned now can only limit further additions to the committed warming, but not reduce the already committed GHGs warming of 2.4°C.”¹³ (see Figure 1 below). Of this warming, 0.6°C is estimated by the IPCC to have already occurred, and “about 90% or more of the rest of the committed warming of 1.8°C will unfold during the 21st century.”¹⁴ This means that much of the associated climate impacts due to the committed warming will occur in this century and the next, with many

¹⁰ See e.g. Bolivia’s proposal in FCCC/AWGLCA/2008/MISC.5/Add.2.

¹¹ See e.g. proposals from Brazil, Bangladesh and LDCs, in FCCC/AWGLCA/2008/MISC.1; China, Panama (on behalf of Costa Rica, El Salvador, Honduras, Nicaragua) in FCCC/AWGLCA/2008/MISC.5; India in FCCC/AWGLCA/2008/MISC.5/Add.1; AOSIS, Pakistan, in FCCC/AWGLCA/2008/MISC.5/Add.2; AOSIS, in FCCC/KP/AWG/2009/MISC.1/Add.1

¹² Given recent scientific assessments of climate change and the other factors pointed out in paragraph 14 of this paper above, it seems clear that the ranges summarized by the IPCC (e.g. of 25-40% of 1990 levels by 2020) upon which these suggested overall minimum targets are based are inadequate as mid-term emission reduction targets for developed countries. Deeper cuts need to be made by developed countries over and above these suggested minimums in order to avoid dangerous anthropogenic interference with the climate system and ensure adequate atmospheric development space for developing countries.

¹³ V. Ramanathan and Y. Feng, On avoiding dangerous anthropogenic interference with the climate system: Formidable challenges ahead, 105:38 PNAS (23 September 2008), p. 14245.

¹⁴ Id.

climate tipping points occurring as global temperatures increase beyond 2°C above pre-industrial levels, and will be essentially irreversible.¹⁵

Essentially, given the historical responsibility of developed country Parties as recognized in the UNFCCC and in scientific assessments for almost three-fourths of historical GHG emissions and their share of more than half of current GHG emissions, developed country Parties clearly need to undertake steep and rapid emission reductions that should be more than the overall minimum mitigation targets for developed country Parties described above (possibly even leading to “negative emissions”¹⁶) – especially for the period between now and 2050 – in order to limit the committed warming to the lower end of the range rather than the upper end. Such actions would help mitigate to some extent the climate adaptation impacts and costs that developing country Parties will have to bear as a result of the committed warming.

Figure 1: Committed Warming

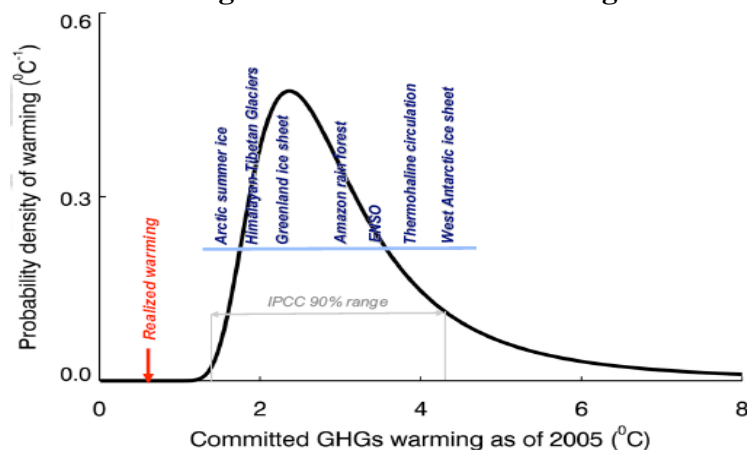


Fig. 1. Probability distribution for the committed warming by GHGs between 1750 and 2005. The normalized distribution is calculated from the probability density function given by Roe and Baker (7), and the mean and standard deviation of the uncertainties associated with feedback processes are fitted for Sanderson *et al.* (8). Shown are the climate-tipping elements and the temperature threshold range that initiates the tipping. Except those for the HKHT glaciers, the rest of the elements and the temperature thresholds are taken from ref. 6. ENSO, El Niño—Southern Oscillation.

Source: V. Ramanathan and Y. Feng, On avoiding dangerous anthropogenic interference with the climate system: Formidable challenges ahead, 105:38 PNAS (23 September 2008), p. 14245

- **Quantitative benchmark for domestic emission limitation or reductions** – e.g. at least 95 percent of committed emission reductions to be achieved domestically in developed country Parties

¹⁵ See e.g. S. Solomon *et al.*, Irreversible climate change due to carbon dioxide emissions, 106:6 PNAS 1704-1709 (10 February 2009); T. Lenton *et al.*, Tipping elements in the Earth’s climate system, 105:6 PNAS 1786-1793 (12 February 2008).

¹⁶ This concept implies going beyond 100 percent emission reductions below 1990 levels by essentially transforming economies to be carbon-negative (and not simply carbon-neutral) – e.g. undertaking actions to create and expand carbon sinks in addition to eliminating carbon emissions, combined with actions to provide financing and technology to developing country Parties for the latter to effect deeper and more rapid emission reductions. For more on this, see e.g. Third World Network, Shared Vision and Burden Sharing in the “Global Goal”, at <http://unfccc.int/resource/docs/2008/smsn/ngo/039.pdf>.

- **Quantitative periodic progression in emission limitation or reductions** - this should show the extent to which targets with respect to both overall emission reductions and domestically-achieved emission reductions are being met through the policies and measures being undertaken by developed country Parties. Time-bound or periodic emission reduction targets that contribute to the achievement of the overall target should be established to serve as the standard for measuring progress.
- **Quantified economic costs and impacts on developing country Parties** - the economic costs and impacts (quantified in financial terms) of the actions, policies and measures undertaken by developed country Parties to comply with their emission reduction commitments and meet their targets should also be measured, especially on developing country Parties.¹⁷

2. Reporting

16. The “reportable” criterion is covered by Art. 4.1(j) of the Convention which requires all Parties to “communicate to the Conference of the Parties information related to implementation, in accordance with Article 12” forms the basis for the commitments by Parties to submit their national country communications (NCCs) under Article 12.
17. All UNFCCC Parties are, under Art. 12.1, required to communicate - i.e. to report - to the COP information on: (i) their national inventory of greenhouse gas emissions and removals, (ii) a general description of steps taken or envisaged to implement the Convention, and (iii) any other information that the Party considers to be relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication. Furthermore, under Art. 12.2, Annex I Parties are required to communicate - i.e. to report: (i) a “detailed description of the policies and measures” that they have individually adopted to implement their mitigation commitments under Art. 4.2(a) and (b); and (ii) a “specific estimate of the effects” that their mitigation policies and measures “will have on anthropogenic emissions by its sources and removals by its sinks of greenhouse gases.”
18. Under the Kyoto Protocol, for Annex I Parties which are Parties to the Kyoto Protocol, KP Arts. 5 and 7 (and the CMP decisions thereunder) address national systems and methodologies for the preparation of greenhouse gas inventories and the reporting of information. KP Art. 7 requires Annex I Parties to submit regular full national communications on the action they are taking to implement the Protocol. These will be merged with national communication submitted under the Convention. KP Art. 8.1 and 2 will put in place modalities for the review of the information submitted by Annex I Parties under KP Art. 7 by expert review teams “pursuant to the relevant decisions of the COP and in accordance with guidelines adopted for the purpose by the CMP”, thereby ensuring consistency of the manner in which MRV under the Convention is reflected in the KP. Furthermore, under KP Art. 8.3, such review process by the

¹⁷ See e.g. Saudi Arabia in FCCC/AWGLCA/2008/MISC.5/Add.2

expert review teams “shall provide a thorough and comprehensive technical assessment of all aspects of the implementation by a Party of this Protocol”, which would assess “the implementation of the commitments of the Party” and identify “any potential problems in, and factors influencing, the fulfillment of commitments.” KP Art. 10(f) also requires all Parties to the Protocol to “include in their national communications information on programmes and activities undertaken pursuant to” KP Art. 10.¹⁸

19. The NCCs of developed country Parties should at least conform to the revised reporting guidelines for the preparation of national communications.¹⁹ Additionally, a number of decisions and conclusions should be taken into account by Annex I Parties when preparing national communications.²⁰

20. Furthermore, existing reporting processes under the Convention (for all developed country Parties) as well as the Protocol (for those Parties to the Protocol) should be further enhanced and strengthened (including in terms of reporting requirements) by:²¹

- Requiring the submission of NCCs by developed country Parties to be done annually
- Having NCCs of developed country Parties that are not Parties to the Kyoto Protocol essentially follow the methodologies, modalities and formats required for information to be provided by Parties to the Protocol
- NCCs of developed country Parties should report and provide detailed information and assessments of the economic and environmental costs and effects of the implementation of mitigation commitments on developing countries, pursuant to Art. 12.1(b) and so as to give full consideration of the effects of such actions on developing countries consistent with Art. 4.8, 4.9 and 4.10.

3. Verification

21. The “verifiable” criterion is covered by Art. 4.2(b), under which the COP is required to review the detailed information provided by Annex I Parties with respect to their policies and measures on the mitigation of climate change taken under Art. 4.2(a) and the resulting projected anthropogenic emissions by sources

¹⁸ This article of the Protocol contains common commitments by all Parties under the KP.

¹⁹ See UNFCCC, Review of the implementation of commitments and other provisions of the Convention: UNFCCC guidelines on reporting and review (FCCC/CP/1999/7, 16 February 2000), at <http://unfccc.int/resource/docs/cop5/07.pdf>.

²⁰ For a listing of these decisions and conclusions, see South Centre, “Measurable, Reportable, and Verifiable”: Using the UNFCCC’s Existing MRV Mechanisms in the Context of the Ad Hoc Working Group on Long Term Cooperative Action under the Convention, SC/GGDP/AN/ENV/2, May 2008, para. 16. See also http://unfccc.int/national_reports/annex_i_national_communications/fourth_national_communications/items/3360.php.

²¹ See e.g. Bangladesh in FCCC/AWGLCA/2008/MISC.1; South Africa in FCCC/AWGLCA/2008/MISC.1/Add.1 and Add.2; China in FCCC/AWGLCA/2008/MISC.5/Add.2

and removals by sinks of greenhouse gases. The COP review of such detailed information is to take place in accordance with Article 7.

22. Furthermore, Art. 4.2(d) provides the COP with the mandate to conduct periodic reviews and the scientific, technical and economic verification of the extent to which – i.e. the adequacy of – the mitigation actions of Annex I Parties are meeting the objective of the Convention. Additionally, Art. 10.2 mandates the Subsidiary Body for Implementation (SBI), “under the guidance” of the COP, to undertake both measurement and verification functions with respect to:

- Assessing “the overall aggregated effect of the steps taken by the Parties in the light of the latest scientific assessments concerning climate change” considering the information provided by all Parties under Art. 12.1 – i.e. information on their national inventory of greenhouse gas emissions and removals, a general description of steps taken or envisaged to implement the Convention, and any other information that the Party considers relevant;
- Assisting the COP in carrying out the reviews required under Art. 4.2(d) to assess the adequacy of the level, extent, effects, and impacts of implementation by Annex I Parties of their mitigation commitments under Art. 4.2(a) and (b) to meet the objective of the Convention, on the basis of information provided by Annex I Parties under Art. 12.2 – i.e. information with respect to their implementation of Art. 4.2(a) and (b) and their estimate of the effects of their implementation measures on anthropogenic emissions and removals.

23. These existing verification modalities with respect to developed country Parties’ mitigation actions as reported and measured should be further enhanced by, *inter alia*:²²

- having a more robust compliance mechanism built on existing mechanisms (such as the Kyoto Protocol’s Compliance Mechanism) in order to address issues of non-compliance by developed country Parties with their emission reduction commitments and targets. This could include, for example, the imposition of ranges of monetary penalties by developed country Parties payable to a designated fund under the control of the COP for instances when such Parties were unable to comply with their periodic (e.g. annual) emission reduction targets. The monetary penalty could be variable depending on measured and verified the extent of non-compliance in meeting the period targets. A penalty for non-compliance could also be in the form of reducing the extent to which non-compliant Parties are able to use carbon trading or other flexibility mechanisms. Pending the operationalization of such more robust compliance mechanism, developed countries which are Parties to the Kyoto Protocol must continue to be subject to the procedures and mechanisms on compliance adopted by the Kyoto Protocol Parties through Decision 27/CMP.1 with respect to the second commitment period to ensure that there is no reward for failure to meet earlier agreed Kyoto

²² See e.g. proposals from South Africa in FCCC/AWGLCA/2008/MISC.5/Add.2; Bangladesh, Indonesia, LDCs, Micronesia in FCCC/AWGLCA/2008/MISC.1; Saudi Arabia in FCCC/AWGLCA/2008/MISC.5/Add.2. See also China, in FCCC/AWGLCA/2009/MISC.1

targets, and comparable compliance procedures must also be applicable to non-Kyoto Party developed countries.²³

- establishing verification modalities with respect to the quantified economic costs and impacts of developed country Parties' emission reduction policies, measures and actions on developing country Parties
- verification could be done more frequently – e.g. annually during the annual COPs pursuant to the COP's mandate under UNFCCC Art. 4.2(d) and Art. 7 – to determine the progress of developed country Parties in complying with their emission reduction commitments by meeting their targets

B. Comparability of Efforts among Developed Country Parties

1. Measurement

24. To measure whether the mitigation actions and efforts undertaken by developed country Parties are “comparable”, there should be a common benchmark by which such actions and efforts are measured. As pointed out above, all developed country Parties to the UNFCCC have the following common mitigation-related obligations:

- (i) the obligation under Art. 4.2(a) to demonstrate that they are “taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention”; and
- (ii) their specific obligation in Art. 4.2(b) to return “individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol.” For those Annex I Parties which are Parties to the Kyoto Protocol, this would also include their compliance with their binding emission reductions targets under the Protocol.

Metrics

25. In order to comply with the BAP objective of enhancing the implementation of the Convention to better achieve the UNFCCC Art. 2 ultimate objective, all developed country Parties should further enhance their existing mitigation-related obligations in a comparable way. Ensuring such comparability could be done qualitatively and quantitatively as follows:²⁴

²³ See e.g. AOSIS, in FCCC/KP/AWG/2009/MISC.1/Add.1

²⁴ See e.g. the proposals of China, Brazil, in FCCC/AWGLCA/2008/MISC.5; Brazil, India, in the share vision workshop at Poznan; AOSIS, Bolivia, South Africa, in FCCC/AWGLCA/2008/MISC.5/Add.2; India in FCCC/AWGLCA/2008/MISC.5/Add.1. See also Cuba, 5 February 2009; Brazil, 6 February 2009; China, 6 February 2009, in http://unfccc.int/meetings/ad_hoc_working_groups/lca/items/4578.php

Table 3: Comparability of Developed Country Parties' Mitigation Efforts

Comparability Indicator	Comparability Basis
Qualitative	<ul style="list-style-type: none"> • all developed country Parties should undertake quantified emission limitations and reduction commitments with the same operationally mandatory character • All developed country Parties should have commitments to achieve emission reductions primarily through domestic actions • All developed country Parties should have commitments to provide such information as needed to determine comparability of efforts and actions, using reporting modalities and formats required for NCCs
Quantitative	<ul style="list-style-type: none"> • Developed country Parties that are not Parties to the Kyoto Protocol should have quantified emission limitations and reduction targets expressed in: (i) comparable percentage reductions with similar base years (e.g. 1990) and timeframes (e.g. by 2020); and (ii) the corresponding figure in tons of CO₂ equivalent to be reduced or avoided, whether in national aggregate or per capita terms - that are comparable to those which are Parties to the Protocol, taking into account: historical responsibility for accumulated greenhouse gas emissions, their national circumstances, level of development and capacity to cope with climate change. Such targets must, as a minimum, aim to reduce developed country GHG emissions below the baseline of 1990 levels set in UNFCCC Art. 4.2(a) and (b) by 2020 • All developed country Parties should have national quantified emission limitation and reduction targets that would significantly lead to the achievement of their specific mitigation-related obligations under the UNFCCC (including going below the 1990 baseline in UNFCCC Art. 4.2(a) and (b)) and the meeting of the UNFCCC's ultimate objective in Art. 2 • All developed country Parties should have quantified targets for domestically-achieved emission reductions that are comparable in extent and are consistent with their binding commitment to ensure the primacy of domestic actions over the use of Kyoto Protocol flexibility mechanisms in achieving emission reduction targets

2. Reporting

26. To ensure comparability in reporting, all developed country Parties should report their compliance with their emission reduction commitments, and their periodic progress in meeting their emission reduction targets, by submitting the necessary information through compliance with the requirements and modalities for NCCs under UNFCCC Art. 12.1 and 12.2, incorporating the reporting requirements under Art. 5, 7, 8 and 10 of the Kyoto Protocol.
27. Such reporting should also be enhanced in terms of:
- frequency – i.e. done annually consistent with a more frequent reporting period for developed country Parties' NCCs
 - providing information with respect to the implementation of mitigation commitments and actions undertaken in sufficient depth, detail, and specificity as to allow for cross-country comparability among developed country Parties.

3. Verification

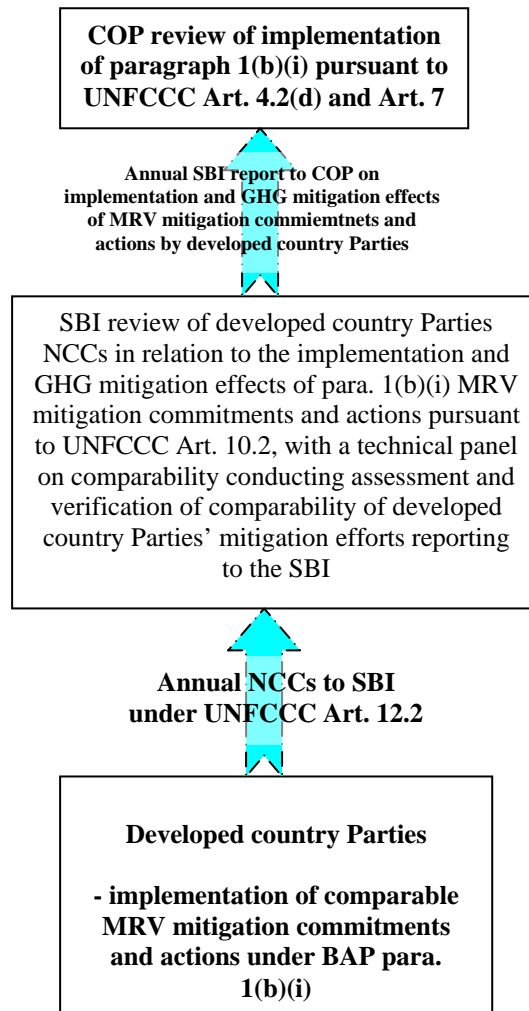
28. Verification of the extent to which developed country Parties' mitigation actions and efforts are comparable with each other has to be made by the COP consistent with the COP's mandate under UNFCCC Art. 4.2(b) and (d). The COP could directly (or else through the SBI in the context of the SBI assisting the COP pursuant to Art. 10.2) establish a "technical panel on comparability."²⁵ This panel could:
- assess the information provided by all developed country Parties in their NCCs in terms of the comparability of the quality and content of the information provided;
 - verify that the mitigation actions and efforts taken are comparable in terms of extent, progress, and impact, taking into account, inter alia, the Parties' respective emission reduction commitments and targets, national circumstances and capacities, historical responsibility for accumulated greenhouse gases, use of domestic emission reduction actions over flexibility mechanisms; and
 - report to the COP with appropriate recommendations for action to be taken by the COP. Such reporting should be done annually so that the COP could also annually verify comparability in the context of its verification of developed country Parties' implementation of their mitigation commitments.
29. Additionally, the procedures and mechanisms on compliance adopted by the Kyoto Protocol Parties through Decision 27/CMP.1 must continue to apply to all developed countries that are Parties to the Kyoto Protocol in the second

²⁵ See e.g. South Africa, in FCCC/AWGLCA/2008/MISC.5/Add.2

commitment period to ensure that there is no reward for failure to meet earlier agreed Kyoto targets. Furthermore, comparable mechanisms for compliance must apply to quantified emission limitation or reduction commitments or objectives taken by any non-Kyoto Annex I Party under the Convention.²⁶

²⁶ See e.g. AOSIS, in FCCC/KP/AWG/2009/MISC.1/Add.1

Figure 2: Institutional Framework for the Verification of Paragraph 1(b)(i) MRV Mitigation Commitments and Actions of Developed Country Parties, including Comparability of Efforts



C. Provision of Financing, Technology and Capacity-Building

30. The provision of financing, technology and capacity-building to support and enable the implementation by developed country Parties of nationally-appropriate mitigation actions (NAMAs) in the context of sustainable development is an essential element in the balance of obligations envisioned in paragraph 1(b)(ii) of the BAP. This BAP mandate envisions three (3) types of support to be provided by developed country Parties and should be subject to MRV:

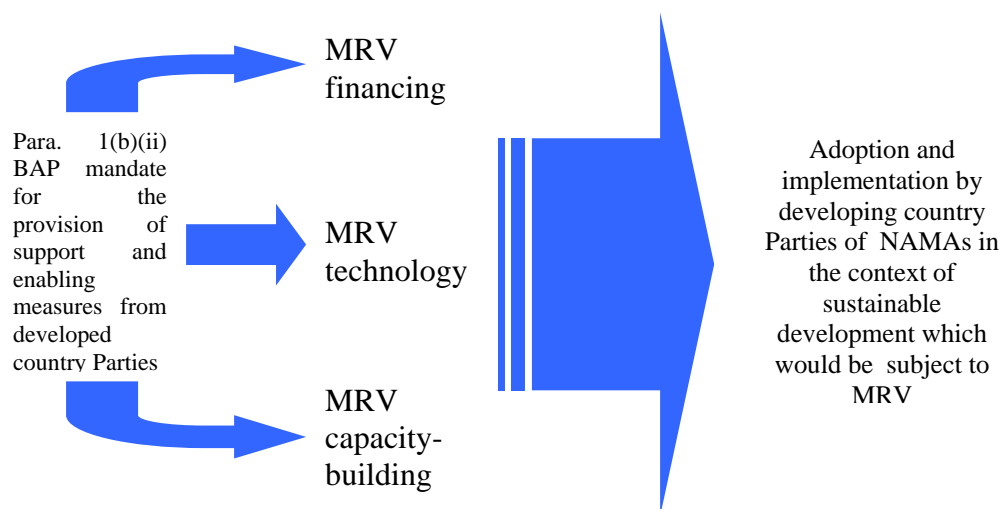
- (i) financing
- (ii) technology
- (iii) capacity-building

31. In essence, BAP paragraph 1(b)(ii) is a reflection of the balance of obligations contained in UNFCCC Art. 4.7, which reads:

7. The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.

32. The balance between the support/enabling measures from developed country Parties that are subject to MRV and the enhancement of nationally-appropriate mitigation actions by developing country Parties under paragraph 1(b)(ii) of the BAP could hence be visualized as follows:

Figure 3: MRV under paragraph 1(b)(ii)



33. Thus, taking into account as well the application of UNFCCC Art. 4.7, the extent to which developing country Parties undertake and implement MRV NAMAs pursuant to paragraph 1(b)(ii) of the BAP will depend on the extent to which developed country Parties support and enable such NAMAs through MRV financing, technology and capacity-building. In implementing paragraph 1(b)(ii), the following points deriving from the balance contained the paragraph need to be reflected:

- developing country Parties are not expected to undertake MRV NAMAs in the absence of the corresponding MRV finance, technology and capacity-building being first provided or committed by developed country Parties
- developing country Parties' unilateral (e.g. self-funded) mitigation actions undertaken without MRV finance, technology or capacity-building support from developed country Parties would not be subject to MRV under paragraph 1(b)(ii)

- developing country Parties need not MRV under paragraph 1(b)(ii) their mitigation actions that may be supported by finance, technology or capacity-building measures from developed country Parties which are not MRVed or which are provided outside of the MRV framework under paragraph 1(b)(ii)
- developing country Parties' mitigation actions supported or enabled by finance, technology or capacity-building provided by other developing country Parties would not be subject to MRV under paragraph 1(b)(ii)
- finance, technology or capacity-building provided by developing country Parties to other such Parties to support or enable mitigation actions would not be subject to MRV under paragraph 1(b)(ii)

1. Measurement

34. Specific metrics will have to be developed to serve as the basis for measuring the extent to which developed country Parties are providing finance, technology and capacity-building to support and enable developing country Parties' MRV NAMAs under paragraph 1(b)(ii) of the BAP.

(a) Finance

Metrics

"Agreed full incremental costs"

35. The starting point for measuring the provision by developed country Parties of MRV financing with respect to paragraph 1(b)(ii) should be Arts. 4.3, 4.4, 4.5, and 4.7 of the UNFCCC. Art. 4.3 requires developed country Parties to provide "new and additional financial resources" to meet agreed full costs" for the NCCs of developing country Parties and "such financial resources, including for the transfer of technology ... to meet the agreed full incremental costs of implementing measures" under UNFCCC Art. 4.1 by developing country Parties (these measures would include measures for mitigation and adaptation, among others). Art. 4.4 requires developed countries to provide support for adaptation in developing countries. Art. 4.5 requires developed countries to effect technology transfer, including financing such transfers, to developing countries. Art. 4.7 conditions the implementation by developed countries of their commitments under Art. 4.1 of the UNFCCC to the extent of implementation by developed countries of their commitments to provide financing and technology.
36. UNFCCC Art. 4.3 requires, inter alia, that the "agreed full incremental costs" to be borne by developing country Parties in connection with the implementation of measures necessary to implement their obligations under UNFCCC Art. 4.1 shall be covered by the corresponding financing to be provided by developed country Parties. This should be the starting basis for measurement.

37. However, no agreement exists among all the UNFCCC Parties on what or how much such “agreed full incremental costs” are in relation to the measures that developing country Parties take to implement their Art. 4.1 commitments. But in the context of the funding provided by the Global Environment Facility (GEF) as an operating entity of the UNFCCC’s financial mechanism, the concept of “agree full incremental costs” in UNFCCC Art. 4.3 is taken by the GEF to mean a “complement [to] regular development assistance, offering developing countries the opportunity to incorporate environmentally-friendly features that address global environmental concerns. For example, if a country invests in a new power plant to promote economic development, the GEF may provide the additional, or incremental, funds needed to buy equipment for reducing the emissions of greenhouse gases. In this way, GEF funds normally cover only a portion of a project’s entire costs.”²⁷

Financial requirements of developing countries – UNFCCC and G77 and China figures

38. Pending a formal agreement by the COP on the methodology for calculating the “agreed full incremental costs” that need to be financed by developed country Parties under Art. 4.3, alternative figures may need to be used to serve as the basis for measuring, under paragraph 1(b)(ii) of the BAP, the enhanced compliance by developed country Parties with their Art. 4.3 obligation.

39. In an update of its 2007 report on investment and financial flows to address climate change,²⁸ the UNFCCC secretariat’s estimated annual cost requirements to fund adaptation, mitigation and technology transfer for developing countries were as follows:

Table 3: Estimated Annual Financial Requirements for Adaptation, Mitigation and Technology Transfer for Developing Countries

Adaptation	Mitigation	Technology Transfer
<p>US\$ 27.75-58.25 billion annually in 2030 for developing countries (calculated from the proportion needed in developing countries as indicated in Table 5, FCCC/TP/2008/7, p. 19).</p> <p>The UNFCCC estimate globally for annual adaptation costs is US\$49-171 billion.</p>	<p>US\$52.40 billion annually in 2030 for developing countries (calculated from the proportion needed in developing countries as indicated in Table 4, FCCC/TP/2008/7, p. 18) without including the amount required for investments in technology research, development and deployment of climate technology in developing</p>	<p>US\$6-41 billion annually up to 2030 for deployment of technologies to developing countries (US\$25-163 billion globally). (see Table 17, FCCC/TP/2008/7, p. 57)</p> <p>US\$176-464 billion annually up to 2030 for diffusion and commercial transfer in developing countries (US\$380 billion to US\$1 trillion globally). (see Table 17, FCCC/TP/2008/7, p. 57)</p> <p>For research and development, global cost estimates amount to US\$10-100</p>

²⁷ See UNFCCC, Climate Change Information Sheet 28 – Financing action under the Convention, at http://unfccc.int/essential_background/background_publications_htmlpdf/climate_change_information_kit/items/280.php

²⁸ See UNFCCC, Investment and financial flows to address climate change: an update, FCCC/TP/2008/7, 26 November 2008, at <http://unfccc.int/resource/docs/2008/tp/07.pdf>.

Adaptation	Mitigation	Technology Transfer
	<p>countries. The UNFCCC Secretariat paper seems to assume that all the costs for the technology transfer-related research, development and deployment for climate technology will go solely to developed countries.</p>	<p>billion annually up to 2030, and for <u>technology demonstration</u>, US\$27-36 billion annually up to 2030 globally. (see Table 17, FCCC/TP/2008/7, p. 57)</p> <p>The UNFCCC Secretariat paper did not put any estimates of the costs that need to be financed in developing countries with respect to climate technology research and development, implying that R&D is done <u>only</u> in developed countries. However, for developing countries, support for endogenous R&D is an important and integral component in any technology transfer under the UNFCCC.²⁹</p>
<p>The total UNFCCC estimated annual financial requirements for adaptation, mitigation and technology transfer for developing countries -- which <u>may still be on the low-end</u> in any case due to omissions with respect to technology R&D and demonstration -- would be:</p> <p style="text-align: center;">US\$262.15 billion - US\$615.65 billion annually by 2030</p>		

40. In August 2008, the Group of 77 and China (G-77 and China) proposed, in connection with the operationalization of an effective financial mechanism under the UNFCCC Conference of the Parties (COP)³⁰, that the level of new funding to go into the financial mechanism from developed country Parties “can be set at 0.5% to 1% of the GNP of Annex I Parties” in addition to existing official development assistance (ODA) flows. This is an **initial minimum estimate** from the G-77 and China of the financial resources needed to support adaptation, mitigation, and technology transfer and their means of implementation in developing countries. Based on 2007 GDP figures of Annex I Parties, the G-77 and China proposal would require Annex I Parties **to provide initially (as a minimum) US\$278.82 billion to US\$557.64 billion** to the UNFCCC’s financial mechanism.³¹ This annual figure will vary from year to year depending on the level of GDP for each Annex I Party.³²

41. In the absence of a COP agreement on what constitutes “agreed full incremental costs” under Art. 4.3, and for the purpose of establishing an initial benchmark figure by which developed country Parties’ financing can be measured under paragraph 1(b)(ii) of the BAP in terms of compliance with UNFCCC Art. 4.3, it

²⁹ See G77 and China, in FCCC/AWGLCA/2008/MISC.5, proposing a technology transfer mechanism under which financing should also be provided for technology research and development in developing countries.

³⁰ See G77 and China, FCCC/AWGLCA/2008/MISC.2.

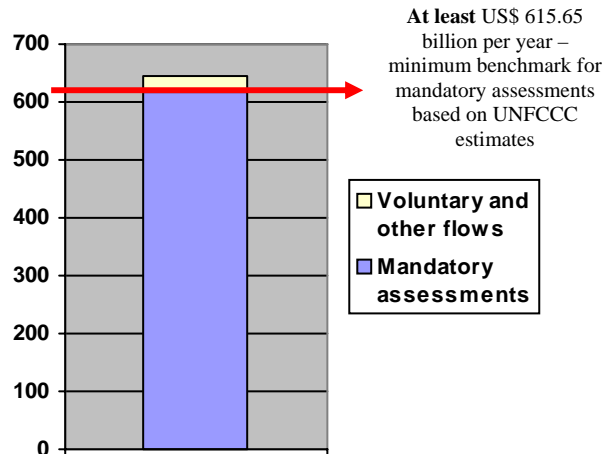
³¹ The UNFCCC Secretariat’s estimate is US\$201-US\$402 billion. See FCCC/TP/2008/7, para. 348. The UNFCCC Secretariat’s basis for calculating this estimate, however, is not explained in their paper.

³² For more discussion on this, see South Centre, Developed Country Climate Financing Initiatives Weaken the UNFCCC, SC/GGDP/AN/ENV/7, January 2009, at http://www.southcentre.org/index.php?option=com_content&task=view&id=909&Itemid=67

would be reasonable to take the global estimates in terms of climate financing requirements identified by the UNFCCC or the G-77 and China above as the basis for the MRV finance measurement benchmark.

42. This would mean that MRV finance from developed country Parties under paragraph 1(b)(ii) should amount to at least US\$ 615.65 billion per year (if the UNFCCC estimate is used as the basis) or at least US\$ 557.64 billion per year (if the G-77 and China proposal is used as the basis). In fact, these suggested benchmark figures might even be too low given the scale of financing needs in developing country Parties in relation to climate adaptation and mitigation and to support the shift by developing country Parties to low-carbon development pathways.

Figure 4:
MRV Financing - Initial Amounts



43. Next, the questions of: (i) which financing would be subject to MRV; and (ii) how such MRV financing is to be provided, become relevant for purposes of measuring the extent to which such financing meets the benchmark figure. These two questions are inter-related.

“New and additional” - not ODA

44. Such financing must be “new and additional” to existing flows of financing – e.g. it must not be part of, or divert from, official development assistance (ODA) flows – from developed to developing countries. Generally, developing country Parties have stressed that any financing from developed country Parties that does not go through the UNFCCC’s financial mechanism cannot be considered a fulfillment of the treaty obligation to provide financing under UNFCCC Art. 4.3.³³ Developed country Parties, on the other hand, prefer to use either their own bilateral channels or other multilateral channels, such as the World Bank, as their vehicles for public sector climate financing flows, and that the climate change-related aspects of their official development assistance (ODA) flows should be considered compliance with their UNFCCC obligations to provide new,

³³ G77 and China, FCCC/AWGLCA/2008/MISC.2. More recently, see also e.g. Malaysia, China, in FCCC/AWGLCA/2009/MISC.1

additional and predictable financing to support developing countries' climate actions.³⁴

45. The result of such preference for non-UNFCCC channels on the part of developed country Parties with respect to climate financing is the weakening of the UNFCCC as the primary institutional vehicle for both financial flows and coordinated policy action on climate change.³⁵ It renders the UNFCCC as an institution – and its Parties – much less effective in achieving the UNFCCC's ultimate objective in Art. 2.

Primacy of the UNFCCC financial mechanism as financing conduit

46. The most logical mechanism through which developed country Parties should channel their treaty-obligated financing is through the UNFCCC's financial mechanism. This would make such financing subject to the guidance and accountability of the COP, in accordance with the provisions of Art. 11. This will ensure accountability to the UNFCCC Parties with respect to the proper use of the financing to meet the objective of the UNFCCC, and will also allow the COP and the Parties to compare and verify the extent to which developed country Parties comply with their financing obligations.
47. Hence, UNFCCC-channeled financing would then be the only type of climate financing coming from developed country Parties that can be MRVed under paragraph 1(b)(ii) and which could then be counted towards the fulfillment by developed country Parties of their climate financing treaty obligations. That is, financing from developed country Parties that do not go through the UNFCCC's financial mechanism cannot be counted as compliance with their UNFCCC financing commitments and with the balance in paragraph 1(b)(ii). Furthermore, it should flow through the UNFCCC's Art. 11 financial mechanism, with such flows to be subject to the guidance of and be accountable to the COP. Various decisions of the COP are important to consider in this regard, including, among others:³⁶

- **Decision 6/CP.13:** Review of the financial mechanism
- **Decision 2/CP.12 :** Review of the financial mechanism
- **Decision 9/CP.10:** Assessment of funding to assist developing countries in fulfilling their commitments under the Convention
- **Decision 5/CP.8:** Review of the financial mechanism
- **Decision 3/CP.4:** Review of the financial mechanism
- **Decision 12/CP.3:** Annex to the Memorandum of Understanding on the determination of funding necessary and available for the implementation of the Convention
- **Decision 11/CP.3:** Review of the financial mechanism

³⁴ See e.g. South Centre, *Developed Country Climate Financing Initiatives Weaken the UNFCCC*, SC/GGDP/AN/ENV/7, January 2009, at http://www.southcentre.org/index.php?option=com_content&task=view&id=909&Itemid=67

³⁵ *Id.*

³⁶ See http://unfccc.int/cooperation_and_support/financial_mechanism/items/3658.php.

- **Decision 13/CP.2:** Memorandum of Understanding between the Conference of the Parties and the Council of the Global Environment Facility: annex on the determination of funding necessary and available for the implementation of the Convention
- **Decision 12/CP.2:** Memorandum of Understanding between the Conference of the Parties and the Council of the Global Environment Facility
- **Decision 9/CP.1:** Maintenance of the interim arrangements referred to in Article 21, paragraph 3, of the Convention

Mandatory financial contributions from developed countries

48. Finally, the treaty obligation of developed country Parties' in UNFCCC Art. 4.3 is mandatory. Hence, the voluntary nature of current climate financing from developed country Parties – often mixed or double-counted as part of their voluntary ODA flows to developing countries – militates against and does not lead to their effective compliance with Art. 4.3.
49. In this respect, developing country Parties have also proposed that the mandatory nature of the treaty obligation in Art. 4.3 should be reflected in the form of mandatory assessments of financial contributions to the UNFCCC's financial mechanism from developed country Parties.³⁷ These contributions should be new and additional to existing ODA flows, and should not be counted as part of ODA flows.
50. The total amount of mandatory annual financial contributions from developed country Parties should be equal at least to the annual benchmark amount estimated for developing countries suggested (see paragraph 39 above) – at least US\$ 615.65 billion per year (if the UNFCCC estimate is used as the basis) or at least US\$ 557.64 billion per year (if the G-77 and China proposal is used as the basis). The total amount can then be allocated to each developed country Party based on a formula that should, at the minimum, take into account and reflect:
- (i) the Party's share of historical GHG emissions since 1750;
 - (ii) the Party's share of current (i.e. present year) GHG emissions;
 - (iii) the Party's share of global GDP; and
 - (iv) the Party's share of global population.
51. Such mandatory assessed annual contributions from developed country Parties, and compliance with such assessments, would then be the quantified annual benchmarks against which developed country Party compliance with the climate financing treaty obligation under UNFCCC Art. 4.3 and with paragraph 1(b)(ii) of the BAP can be MRVed. Other financing – e.g. concessionary financing from international institutions, carbon market-sourced financing, and other voluntary financing flows – can then come in on top of the mandatory assessed contributions from developed country Parties.

³⁷ See G77 and China, FCCC/AWGLCA/2008/MISC.2; Brazil, South Africa in FCCC/AWGLCA/2008/MISC.5; AOSIS, in FCCC/AWGLCA/2008/MISC.5/Add.2; see also Brazil, 6 February 2009 at http://unfccc.int/meetings/ad_hoc_working_groups/lca/items/4578.php

(b) Technology

52. UNFCCC Art. 4.5 provides the basis by which the provision of MRV technology under paragraph 1(b)(ii) of the BAP can be measured. Art. 4.5 basically requires developed country Parties to:
- promote, facilitate and finance the transfer of, or access to, environmentally sound technologies and know-how
 - support the development and enhancement of endogenous capacities and technologies in developing countries.
53. The COP has over the years discussed the issue of the implementation of Art. 4.5, with various decisions that specify the actions to be undertaken by Parties, the secretariat, and the subsidiary bodies. Of particular importance is Decision 4/CP.7³⁸ which established a framework for “meaningful and effective actions to enhance the implementation” of Art. 4.5 of the UNFCCC “by increasing and improving the transfer of and access to environmentally sound technologies (ESTs) and know-how.”

Metrics

54. Read together, both Art. 4.5 and Decision 4/CP.7 indicate that the benchmark for measurement with respect to technology transfer should be the extent to which “meaningful and effective actions” – e.g. actions that are practical, result-oriented, and produce actual technology transfer – are undertaken by developed country Parties to implement Art. 4.5.³⁹ Furthermore, in the context of implementing paragraph 1(b)(ii) of the BAP, such actions should be measured according to the extent to which they “support and enable” developing country Parties in undertaking NAMAs in the context of sustainable development.
55. In this regard, some indicators to serve as qualitative and quantitative benchmarks for measurement of technology transfers pursuant to paragraph 1(b)(ii) of the BAP could include, inter alia:⁴⁰

³⁸ See <http://unfccc.int/resource/docs/cop7/13a01.pdf#page=22> for the text of this decision.

³⁹ See e.g. the recommendations of the UNFCCC’s Expert Group on Technology Transfer at <http://unfccc.int/resource/docs/2006/sbsta/eng/inf04.pdf> stressing that “future work in this area should evolve to a more practical and results-oriented level by promoting actions in specific sectors and regions”

⁴⁰ In this regard, the framework adopted by the COP in Decision 4/CP.7’s annex would be useful to consider. See also the G7-77 and China proposal on a technology transfer mechanism for examples of activities and costs eligible for support from the proposed technology mechanism, at FCCC/AWGLCA/2008/MISC.5. See also, e.g. Third World Network, Some Key Points on Climate Change, Access to Technology, and Intellectual Property Rights, at <http://unfccc.int/resource/docs/2008/smsn/ngo/037.pdf>.

Table 4:

Technology Transfer Measurement Indicators and Timeframes: MRV Measures and Actions by Developed Country Parties		
Measurement Indicator	Measures and Actions	Timeframes
Technology Transfer Policy Measures	<ul style="list-style-type: none"> Establishment of policy measures by each developed country Party to provide positive incentives – such as, but not limited to, preferential government procurement, transparent and efficient approval procedures for technology transfer projects, improved access to publicly-funded technologies – in order to support the development and diffusion of technologies to developing country Parties 	No later than 2012
	<ul style="list-style-type: none"> Establishment of facilitative policy measures by each developed country Party to transfer publicly-owned technologies to developing country Parties 	No later than 2012
	<ul style="list-style-type: none"> Explicit policy undertaking by each developed country Party to respect and recognize the exercise by developing country Parties of the full range of policy flexibilities in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO) in relation to the intellectual property rights that may be associated with various climate technologies, including an undertaking to consider policy measures and actions taken by developed country Parties which are WTO Members to implement their UNFCCC commitments as being inconsistent with WTO rules 	No later than 2010
	<ul style="list-style-type: none"> Explicit policy measures to relax relevant intellectual property rights regimes (including but not limited to patent, copyright, and industrial designs) relevant to climate technologies to be transferred to developed country Parties, to enable recipients to reverse engineer, copy, adapt, and innovate on the transferred technologies with a view to developing endogenous technologies 	No later than 2011
	<ul style="list-style-type: none"> Explicit policy commitment not to patent or to place in the public domain those technologies whose research and development costs were partially or fully funded by governments 	No later than 2011
	<ul style="list-style-type: none"> Removal of technology export bans in climate-related technologies and products 	No later than 2011
Technology Transfer Actions	<ul style="list-style-type: none"> Specific actions in each developed country Party to promote, facilitate and implement activities along the entire technology cycle to enable the accelerated adoption of environmentally sound technologies and support the endogenous innovation and development of such technologies in developing country Parties 	Commencing in 2010

Technology Transfer Measurement Indicators and Timeframes: MRV Measures and Actions by Developed Country Parties		
Measurement Indicator	Measures and Actions	Timeframes
Technology Transfer Actions	<ul style="list-style-type: none"> • Development of direct transfer modalities on a reduced or no-cost basis for adaptation technologies to address the adverse effects of climate change 	No later than 2011
	<ul style="list-style-type: none"> • Development of direct transfer modalities on a reduced or no-cost basis for technologies to address the adverse impact of response measures 	No later than 2011
Technology Transfer Financing	<ul style="list-style-type: none"> • All financing for technology transfer to be coursed through a mechanism subject to the authority and guidance of the COP 	No later than 2012
	<ul style="list-style-type: none"> • All developing country Parties to be supported with financing from developed country Parties to cover the full costs in undertaking and concluding country-specific technology needs assessments 	No later than 2010
	<ul style="list-style-type: none"> • Support for research, development, manufacture, commercialization, deployment and diffusion of technologies for adaptation and mitigation in accordance with Decision 1/CP.13 	Commencing in 2010
	<ul style="list-style-type: none"> • Finance the removal of infrastructural barriers to the large-scale transfer of technologies to developing country Parties for adaptation (e.g. domestic infrastructure constraints that limit technology absorption, adaptation and innovation capacity) 	Commencing in 2011 but no later than 2015
	<ul style="list-style-type: none"> • Finance the removal of infrastructural barriers to the large-scale transfer of technologies to developing country Parties for reducing the adverse effect of response measures (e.g. domestic infrastructure constraints that limit technology absorption, adaptation and innovation capacity) 	Commencing in 2011 but no later than 2015
	<ul style="list-style-type: none"> • Support for capacity-building to manage and generate technological change, enhance absorptive capacity, create enabling conditions in developing countries, inter alia, costs of: <ul style="list-style-type: none"> - Research, development and demonstration of new technologies; - Enhancing human and institutional capacity; - Guarantees on foreign direct investment for environmentally sound technologies 	Commencing in 2010 but no later than 2012
	<ul style="list-style-type: none"> • Financing the commercialization of new and emerging technologies, inter alia: <ul style="list-style-type: none"> - Venture capital, with public investment leveraging private capital markets for emerging technologies; 	Commencing in 2010 but no later than 2012

Technology Transfer Measurement Indicators and Timeframes: MRV Measures and Actions by Developed Country Parties		
Measurement Indicator	Measures and Actions	Timeframes
Technology Transfer Financing	<ul style="list-style-type: none"> - Research, development, and demonstration of new technologies, financed by venture capital and other sources; - Joint technology development 	Commencing in 2012 but no later than 2015
	<ul style="list-style-type: none"> • Financing the creation of manufacturing facilities for EST, including low-GHG emission technologies, in developing countries, including, inter alia, the costs of: <ul style="list-style-type: none"> - Compulsory licensing, costs associated with patents, designs, and royalties; - Conversion of existing manufacturing facilities or of establishing new facilities; - Research and development activities, including joint research, development, design, and demonstration; - Technology adaptation and innovation for local conditions; - Retraining and dissemination of know-how; - Operation; and - Monitoring and verification 	
	<ul style="list-style-type: none"> • Financing the procurement of low-GHG emission technologies, including software and hardware, by developing countries, including, inter alia: <ul style="list-style-type: none"> - Cost of premature modification or of replacement of existing equipment, as well as the cost of new equipment; - Cost of retraining and dissemination of know-how; - Cost of technical assistance for the design, installation, and stable operation of the technology; - Cost of fuel and other operational costs; - Cost of technologies for fuel switching; - Cost of monitoring and verification 	Commencing in 2012 but no later than 2015
	<ul style="list-style-type: none"> • Fiscal incentives (including tax exemptions, subsidies, export credits or guarantees) to promote and support the transfer of technologies held or patented by corporations in developed countries to developing countries, especially with respect to technologies appropriate to developing country conditions 	Commencing in 2012 but no later than 2015

(c) Capacity-Building

56. Capacity building to assist developing country Parties to respond to climate change is embedded in the UNFCCC, especially with respect to technology transfer, national communication and funding. The SBI is charged with providing advice on “ways and means of supporting endogenous capacity building in

developing countries.”⁴¹ The Kyoto Protocol commits Parties to cooperate in and promote “...the strengthening of national capacity building...”⁴²

57. The Capacity Building Framework for developing countries was adopted by the COP in Decision 2/CP.7. As expressed in the decision, the goals of this framework are to: (i) “guide capacity-building activities related to the implementation of the Convention and effective participation in the Kyoto Protocol process”; and (ii) “to assist developing countries to implement the Convention and to effectively participate in the Kyoto Protocol process.”⁴³ Capacity-building under the framework took many forms,⁴⁴ and support for capacity-building was “given through technical support, through funding for activities and projects, and through improving availability and access to data and tools.”⁴⁵
58. The ultimate objective of capacity-building is also clearly expressed in the decision – i.e. essentially to improve the ability and capacity of developing countries to implement the UNFCCC and to participate effectively in the Kyoto Protocol process.⁴⁶ ⁴⁷ In addition, the specific context for technology transfer under paragraph 1(b)(ii) as a supporting and enabling measure for developing country Parties’ NAMAs in the context of sustainable development must also be taken into account.
59. Decision 2/CP.7 states that the Capacity Building Framework for developing countries is “guided by” the various provisions of the UNFCCC relating to the provision of financing and technology to developing country Parties by developed country Parties as part of the balance of obligations under the UNFCCC.⁴⁸

Metrics

60. Hence, in the context of implementing paragraph 1(b)(ii) with respect to capacity building, the key MRV benchmark by which developed country Parties’ act to support capacity-building under paragraph 1(b)(ii) of the BAP should be gauged against the extent to which developing country Parties provide financial and

⁴¹ UNFCCC Art. 9.

⁴² KP Art. 10(e).

⁴³ Decision 2/CP.7, paras. 2 and 3.

⁴⁴ See e.g. UNFCCC, Synthesis report on the implementation of the framework for capacity-building in developing countries, FCCC/SBI/2007/25, 23 October 2007, para. 13.

⁴⁵ *Id.*, para. 14.

⁴⁶ *Id.*, annex, para. 14, stating as follows: “Capacity building should assist developing countries to build, develop, strengthen, enhance, and improve their capabilities to achieve the objective of the Convention through the implementation of the provisions of the Convention and the preparation for their effective participation in the Kyoto Protocol process.”

⁴⁷ In addressing the identified capacity building needs above of developing countries consistent with Decision 2/CP.7, some indicators relevant to each particular need were developed by the UNFCCC secretariat based on work already done by the UNDP and GEF. See UNFCCC, Range and effectiveness of capacity-building activities in developing countries aimed at implementing decision 2/CP.7, FCCC/SBI/2004/9, 14 May 2004, annex III, at <http://unfccc.int/resource/docs/2004/sbi/09.pdf>

⁴⁸ See *id.*, annex, para. 2.

other support (including technical and information access) for the conduct of capacity building in developing country Parties under the Capacity Building Framework for developing countries under Decision 2/CP.7,⁴⁹ especially with respect to the development by developing country Parties of their NAMAs in the context of sustainable development. This would mean that specific indicators with respect to the provision of support for capacity-building as a supporting and enabling measure under paragraph 1(b)(ii) would have to be developed, for example:

Table 5:

Capacity-Building Measurement Indicators and Timeframes: MRV Measures and Actions by Developed Country Parties		
Measurement Indicator	Measures and Actions	Timeframes
Capacity-Building Policy Measures	<ul style="list-style-type: none"> • Explicit policy commitment to provide new and additional (non-ODA) financial and other support through the UNFCCC financial mechanism for the enhanced implementation of the Capacity Building Framework for developing countries 	No later than 2011
Capacity-Building Actions	<ul style="list-style-type: none"> • Improvement in the quantity and quality of bilateral capacity-building activities and projects supported by developed country Parties in developing country Parties 	Commencing in 2011
Capacity-Building Financing	<ul style="list-style-type: none"> • Provision of financing through the UNFCCC financial mechanism to support capacity-building actions in developing country Parties directly commensurate to the financial costs to meet the capacity-building needs expressed by developing country Parties 	Commencing in 2011

2. Reporting

61. Under UNFCCC Art. 12.3, developed country Parties are required to “incorporate [in their NCCs] details of measures taken in accordance with” Art. 4.3 (provision of new and additional financial resources), Art. 4.4 (assistance to meet the costs of adaptation), and Art. 4.5 (promotion, facilitation and financing of the transfer of, or access to, environmentally sound technologies and know-how). This reporting requirement would then form the basis under which the provision of financing, technology and capacity-building by developed country Parties under paragraph 1(b)(ii) of the BAP would be reported.

⁴⁹ It should be noted that the implementation of the Capacity Building Framework for developing countries has already been reviewed by the COP. The results of this first comprehensive review by the COP of the Capacity Building Framework for developing countries as contained in Decision 2/CP.10 acknowledged some progress in a range of priority areas identified in the frameworks. However, the COP also noted significant gaps that still remained to be filled and that access to financial resources remained an issue to be addressed, and re-affirmed the capacity building framework contained in Decision 2/CP.7 (as well as Decision 3/CP.7 with respect to economies in transition). The COP also decided on a time frame and process for a second comprehensive review of the implementation of the capacity building framework in developing countries, which was initiated by the SBI in June 2008 and is intended to be completed at COP 15 in December 2009.

62. To implement paragraph 1(b)(ii), NCCs from developed country Parties must contain information that reports the extent of such Parties' compliance in providing financing, technology and capacity-building support to developing country Parties to enable the latter to undertake NAMAs in the context of sustainable development.
63. Improvements in the reporting format of NCCs from developed country Parties need to be made in the context of paragraph 1(b)(ii) of the BAP. Current reports by developed country Parties with respect to their implementation of their Art. 4.3, 4.4 and 4.5 commitments on financing and technology transfer leave much to be desired, often being very vague or too general to be of much value in terms of ability to accurately measure the extent of compliance. With respect to financing, for example, the UNFCCC secretariat has pointed out that "[o]wing to gaps and inconsistencies in reporting approaches in the third and fourth national communications from Annex II [developed country] Parties, it is difficult to reach specific funding figures."⁵⁰
64. Hence, developed country Parties' reporting in their NCCs with respect to the provision of financing, technology transfer and capacity-building pursuant to paragraph 1(b)(ii) must be:⁵¹
- regular and more frequent – e.g. annually in order to be consistent with the suggested annual frequency of reporting for developed country Parties' compliance with their new mitigation commitments under paragraph 1(b)(i)
 - improved and enhanced in terms of both the methodology for arriving at the information to be reported and the information content – e.g. containing specific information regarding the provision of financing, technology and capacity-building support that directly and accurately relates and responds to the measurement benchmarks for each particular type of support.

3. Verification

65. On financing, Art. 11.4 requires the COP to undertake a review of the financial mechanism every four years. Reviews of the financial mechanism (including the operations of its operating entity or entities) are undertaken based on guidelines adopted by the COP. These include the initial guidelines laid out in the Annex to Decision 3/CP.4 and additional guidelines indicated in paragraph 6 of Decision 2/CP.12 and in Decision 6/CP.13.
66. On technology transfer, the SBI pursuant to paragraph 3(c) of Decision 13/CP.3 is mandated to assist the COP in assessing and reviewing the extent to which developed country Parties have put or are putting in place concrete actions and policy approaches that effectively and meaningfully implement Art. 4.5 of the Convention with respect to technology transfer.

⁵⁰ UNFCCC, Investment and Financial Flows to Address Climate Change (200), para. 674.

⁵¹ See e.g. proposals from South Africa in FCCC/AWGLCA/2008/MISC.5/Add.2; Saudi Arabia in FCCC/AWGLCA/2008/MISC.1; Brazil, G77 and China, South Africa in FCCC/AWGLCA/2008/MISC.5.

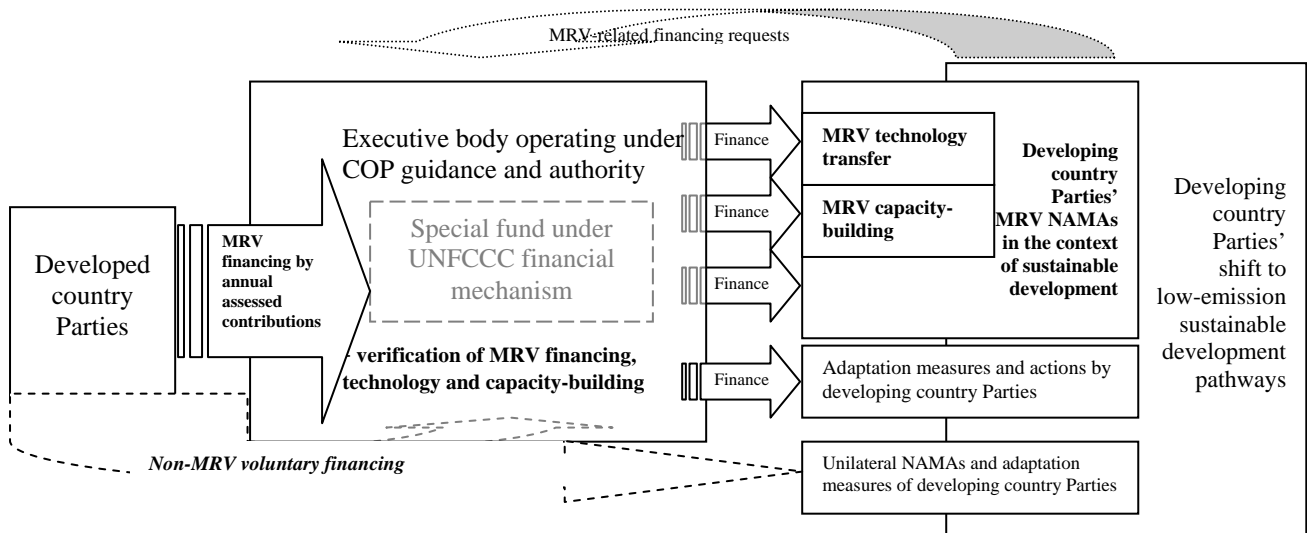
67. On capacity-building, it is the COP (with assistance from the SBI) that undertakes the review with respect to the implementation of the Capacity Building Framework under Decision 2/CP.7. As pointed out above, the second comprehensive review of such implementation is expected to be concluded at COP 15 in December 2009.
68. However, enhancements with respect to the COP-based review and verification mechanisms and modalities pointed to above will need to be made in relation to the MRV provision by developed country Parties of financing, technology transfer and capacity building as supporting and enabling measures under paragraph 1(b)(ii) for developing country Parties' NAMAs in the context of sustainable development. In this regard, enhanced institutional approaches need to be made with respect to:
- (i) the UNFCCC's financial mechanism; and
 - (ii) the technology transfer mechanism and modalities.
69. In this connection, the G-77 and China have made proposals for enhancements to both the UNFCCC financial mechanism and the technology transfer mechanism.⁵² These proposals could serve as the foundation for building more robust verification and compliance modalities under the authority and guidance of the COP with respect to the provision of MRV financing, technology and capacity building pursuant to paragraph 1(b)(ii).
70. In particular, the following key elements could help establish improved verification and compliance modalities with respect to MRV financing, technology and capacity building from developed country Parties:
- establishment of a smaller executive body, composed of COP-elected representatives from Parties, with a balanced and equitable representation, operating under the authority and guidance of, and be accountable to, the COP for the conduct of MRV activities with respect to financing, technology and capacity building under paragraph 1(b)(ii)
 - establishment by such executive body, serving in this instance as an operating entity for the UNFCCC financial mechanism under Art. 11.1 to 11.4, of a special fund with various funding windows. This special fund would be administered by a trustee or trustees selected through open bidding, and would serve as the conduits through which MRV financing to

⁵² See G-77 and China, Proposal – Financial Mechanism for Meeting Financial Commitments under the Convention, FCCC/AWGLCA/2008/MISC.2, 35; G-77 and China, A Technology Mechanism under the UNFCCC, FCCC/AWGLCA/2008/MISC.5, p. 6. Some other proposals that reflect developing country perspectives can also be found in, for example, Third World Network, Multilateral Financial Structure for Climate Change: Key Elements, 30 September 2008, at <http://unfccc.int/resource/docs/2008/smsn/ngo/038.pdf>; South Centre, Financing the Global Climate Change Response: Suggestions for a Climate Change Fund, SC/GGDP/AN/ENV/3, May 2008, at http://www.southcentre.org/index.php?option=com_content&task=view&id=648&Itemid=67. On a technology transfer mechanism, it would also be useful to see Third World Network, Possible Elements of an Enhanced Institutional Architecture for Cooperation on Technology Development and Transfer under the UNFCCC, at <http://unfccc.int/resource/docs/2008/smsn/ngo/036.pdf>.

support and enable actions (including on technology transfer, capacity building, and the development and implementation by developing country Parties of NAMAs in the context of sustainable development) as necessary to effectively implement paragraph 1(b)(ii) should be channeled

- the MRV assessed amounts of financial contributions from developed country Parties would be deposited into the special fund. Only such deposits into the special fund would be considered as MRV financing under paragraph 1(b)(ii)
- it will be the executive body, reporting to the COP annually, that will measure and verify whether developed country Parties are providing MRV financing under paragraph 1(b)(ii), and will submit an annual report on the status of such provision of MRV financing by developed country Parties to the COP. The operations of the executive body and its reports will be subject to the review of the COP in accordance with UNFCCC Art. 11.4
- the funds in the special fund would be distributed by the executive body (pursuant to such guidelines as it may adopt subject to the approval of the COP) through various funding windows to developing country Parties applying for MRV financing to support, inter alia:
 - (i) MRV technology transfer by developed country Parties to developing country Parties, especially endogenous technology adaptation, innovation, research, development and diffusion in developing country Parties, in support of the adoption and implementation of MRV NAMAs in the context of sustainable development by developing country Parties;
 - (ii) MRV capacity building in developing country Parties, in support of the adoption and implementation of MRV NAMAs in the context of sustainable development by developing country Parties;
 - (iii) adoption and implementation of enhanced adaptation actions by developing country Parties - including infrastructural and policy development to support the shift to low-carbon development pathways - including in the context of the adoption and implementation of MRV NAMAs in the context of sustainable development by developing country Parties

Figure 5: MRV Financing, Technology and Capacity-Building Institutional Framework



III. MRV FOR DEVELOPING COUNTRY PARTIES UNDER PARAGRAPH 1(B)(II)

A. Nationally Appropriate Mitigation Actions in the Context of Sustainable Development Supported and Enabled by Financing, Technology and Capacity Building

71. Under paragraph 1(b)(ii), “enhanced national/international action on mitigation of climate change” by developing country Parties are supposed to be in the form of MRV NAMAs “in the context of sustainable development” that are “supported and enabled” by MRV financing, technology and capacity building. As pointed out earlier in this paper, a plain text reading of paragraph 1(b)(ii) clearly indicates that only those NAMAs that are supported and enabled by MRV financing, technology and capacity building can be subject to MRV – that is, **the adoption and implementation of MRV NAMAs by developing country Parties in the context of sustainable development under paragraph 1(b)(ii) are conditional on the prior provision of MRV financing, technology and capacity building by developed country Parties.**⁵³ This in essence reflects the balance of obligations contained in UNFCCC Art. 4.7.

1. Measurement

72. The context in which such NAMAs are formulated, adopted and implemented by developing country Parties is extremely important in terms of understanding what such NAMAs are. Such context is clearly identified in paragraph 1(b)(ii) – i.e. “sustainable development.” This reference to “sustainable development” in

⁵³ See e.g. Saudi Arabia in FCCC/AWGLCA/2008/MISC.1; Argentina, G77 and China, Singapore, South Africa in FCCC/AWGLCA/2008/MISC.5; Bolivia, Indonesia, South Africa in FCCC/AWGLCA/2008/MISC.5/Add.2. See also India, in FCCC/AWGLCA/2009/MISC.1, stating that “[t]he NAMAs envisaged in the BAP do not include national actions by developing countries with their own resources and without external support.”

paragraph 1(b)(ii) clearly indicates that, as part of the context, the provisions of the UNFCCC relating to the achievement of sustainable development as an essential component in Parties' actions relating to climate change will need to be taken into account.⁵⁴ These would include, inter alia:

- UNFCCC Art. 2's provision that meeting the UNFCCC's objective should be done "within a timeframe sufficient 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"
- UNFCCC Art. 3.4 states that "The Parties have a right to, and should, promote sustainable development. Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change"
- UNFCCC Art. 4.7's provision that "economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties."

73. In addition, the reference to such developing country Parties' NAMAs as having to be "nationally appropriate" is also significant. This qualifier implies that any mitigation actions that developing country Parties may take under paragraph 1(b)(ii) must be "appropriate" to the national context. When read together with the "sustainable development" context, it is clear that such NAMAs must be appropriate to the development conditions of the developing country Party concerned and, furthermore, be consistent with and promotes the sustainable development objectives of such Party. UNFCCC Art. 4.1(f) also requires developing country Parties to "[t]ake climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies and actions, and employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change."

74. This therefore means that developing country NAMAs that can be MRVed under paragraph 1(b)(ii) of the BAP cannot be made subject to or be linked to specific quantified emission limitations or reduction targets, since the development conditions and the achievement of sustainable development objectives will vary among countries. At the same time, mitigation actions by developing country Parties that may be undertaken pursuant to paragraph 1(b)(ii) should be able to address simultaneously the achievement of climate mitigation and adaptation and sustainable development objectives.

⁵⁴ See e.g. Bangladesh, Brazil, Colombia, LDCs, Pakistan, Philippines, Saudi Arabia, Singapore, in FCCC/AWGLCA/2008/MISC.1; Argentina, China, Saudi Arabia, Singapore, in FCCC/AWGLCA/2008/MISC.5; AOSIS, Algeria et al., G77 and China, in FCCC/AWGLCA/2008/MISC.5/Add.2.

75. Developing country Parties are also subject to provisions of the UNFCCC for undertaking mitigation actions. For example, Art. 4.1(b) requires developing country Parties (as well as developed country Parties), “taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances,” to, inter alia, “[f]ormulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol.”
76. Like developed country Parties, developing country Parties to the UNFCCC are also expected to contribute to the achievement of the UNFCCC’s objective under Art. 2 with respect to the stabilization of GHGs in the atmosphere. In the context of paragraph 1(b)(ii), this could mean that developing country Parties could seek to enhance their mitigation actions, as supported and enabled by the prior provision of MRV financing, technology and capacity building by developed country Parties, by focusing on the adoption and implementation of policies to move to a low-carbon economy and pursue a clean development path.⁵⁵

Metrics

77. What this means therefore is that the essential metric for measurement of MRV NAMAs in the context of sustainable development that developing country Parties are supposed to undertake under paragraph 1(b)(ii) will have to be primarily qualitative. These would focus on the adoption and implementation of specific mitigation actions (e.g. projects or activities) that support sustainable development objectives, including, as appropriate, the effect that these would have on lowering emissions.⁵⁶ The metric would not be quantitative and would not be focused on measuring the achievement of any nationally-specific quantified emission reductions or limitations targets. The mitigation actions of developing country Parties are distinct from the mitigation commitments (and the actions taken pursuant to such commitments) of developed country Parties, in keeping with the principle of common but differentiated responsibilities under the UNFCCC.⁵⁷
78. What could be MRVed with respect to developing country Parties’ NAMAs under paragraph 1(b)(ii) could be **the extent to which such Parties are implementing such NAMAs in their sustainable development context - e.g. that the NAMAs are helping the country: (i) achieve its economic development objectives; and (ii) reduce the rate of the country’s GHG emissions growth.**⁵⁸ Such NAMAs could include, for example, projects or activities (including policy measures as appropriate) that would promote or implement energy efficiency, renewable energy use, or other measures in other areas of the domestic economy, enhance long-term and low-emission economic sustainability, innovation, and

⁵⁵ See e.g. Argentina in FCCC/AWGLCA/2008/MISC.5; AOSIS in FCCC/AWGLCA/2008/MISC.5/Add.2.

⁵⁶ See e.g. Philippines, Singapore in FCCC/AWGLCA/2008/MISC.1; South Africa in FCCC/AWGLCA/2008/MISC.5/Add.2; Brazil, in FCCC/AWGLCA/2009/MISC.1

⁵⁷ See e.g. G77 and China in FCCC/AWGLCA/2008/MISC.5/Add.2.

⁵⁸ See e.g. Brazil, South Africa in FCCC/AWGLCA/2008/MISC.5.

climate adaptation, or spur the use of various strategies to encourage the use of existing and new technologies to address climate mitigation and adaptation needs in developing countries.

79. But as pointed out above, for such developing country Party NAMAs to be subject to MRV, there must be a direct correspondence or association between the provision of MRV financing, technology and capacity building by developed country Parties and the NAMA that is being adopted and implemented by a developing country Party.⁵⁹ This will ensure that the balance of obligations in UNFCCC Art. 4.7 is reflected and concretely implemented, and furthermore ensures that the level of MRV mitigation effort and actions by developing country Parties is commensurate with the level of the MRV support and enabling measures provided by developed country Parties⁶⁰.
80. Furthermore, because of the qualitative nature of the metric for developing country Parties' MRV NAMAs in the context of sustainable development under paragraph 1(b)(ii), it would be voluntary and discretionary on the part of each developing country Party to determine exactly which policy-oriented NAMAs would be most appropriate for it to adopt and implement, taking into account its sustainable development objectives, capacity and national circumstances.⁶¹ This essentially means, therefore, that the determination of MRV NAMAs by developing country Parties will have to be country-driven and on a case-by-case basis based, among others, on national development needs and circumstances as well as the prior provision of MRV financing, technology and capacity building, rather than be made *a priori* as a condition for the receipt of MRV support and enabling measures from developed country Parties.

2. Reporting

81. Under the UNFCCC, developing country Parties – i.e. those considered “non-Annex I” Parties – are also subject to reporting requirements in the form of the submission of NCCs, the first of which should have been submitted within three years of the entry into force of the UNFCCC for that Party, or of the availability of financial resources (except for the least developed countries, who may do so at their discretion). Guidelines for the preparation of initial NCCs from developing country Parties were adopted at COP 2 in Geneva in 1996. COP 5 (Bonn, 1999) established a Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE) in order to improve the process of preparation of such NCCs. At COP 8 (New Delhi, 2002) Parties adopted Decision 17/CP.8 providing for the revised guidelines for the

⁵⁹ See e.g. Brazil, in FCCC/AWGLCA/2009/MISC.1

⁶⁰ See e.g. South Africa in FCCC/AWGLCA/2008/MISC.5/Add.1.

⁶¹ See e.g. Brazil in FCCC/AWGLCA/2008/MISC.1; South Africa in FCCC/AWGLCA/2008/MISC.1/Add.1; Singapore in FCCC/AWGLCA/2008/MISC.2; China, South Africa in FCCC/AWGLCA/2008/MISC.5; AOSIS in FCCC/AWGLCA/2008/MISC.5/Add.2. See also India, China in FCCC/AWGLCA/2009/MISC.1

preparation of developing country Parties' NCCs and decided to continue the mandate of the CGE.⁶²

82. COP 11 took a decision on the submission of second, and where appropriate, third NCCs from developing country Parties.⁶³ The preparation of second and, where appropriate third and initial NCCs will be based on the revised guidelines for NCCs by developing country Parties.
83. The Global Environment Facility (GEF), as an operating entity of the financial mechanism of the Convention, is supposed to provide "new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1"⁶⁴ Consistent with Art. 11.1, the COP adopted decisions providing guidance to the GEF for the provision of these financial resources to developing country Parties. The GEF, for this purpose, acts through its implementing agencies (UNDP, UNEP and the World Bank). Some bilateral and regional UN agencies also provide financial and technical assistance to many developing country Parties in preparing their national communications, mainly in the form of capacity-building activities.
84. The GEF has adopted operational procedures for the expedited financing of national communication from developing country Parties to assist eligible countries to formulate and submit proposals based on COP 8 guidelines.⁶⁵ Under these operational procedures, up to US\$405,000 is made available to each developing country Party for the preparation of its NCC. The GEF also provides an additional US\$15,000 per country for stocktaking exercise and stakeholder consultations in preparation of the project proposals. That such amounts should be determined by the GEF alone is contrary to the obligation to provide "agreed full cost" funding for the preparation of NCCs. This has been one of the most contentious issues under continued negotiations on the matter of developing country NCCs under the Convention.⁶⁶
85. Most developing country Parties have already submitted their initial NCCs. These are compiled and synthesized by the secretariat but are not subject to in-depth review (unlike Annex I national communications). The secretariat has prepared compilation and synthesis reports annually since 1999, to take account

⁶² See <http://unfccc.int/resource/docs/cop8/07a02.pdf#page=2> for the text of Decision 17/CP.8. The secretariat has produced a user manual to facilitate the usage of the new guidelines, available in 3 UN languages (English - http://unfccc.int/resource/userman_nc.pdf, French - http://unfccc.int/resource/userman_nc_fr.pdf, and Spanish - http://unfccc.int/resource/userman_nc_es.pdf).

⁶³ See Decision 8/CP.11.

⁶⁴ Art. 4.3.

⁶⁵ See http://www.gefweb.org/Documents/enabling_activity_projects/documents/GEF-C22-Inf16.pdf for the text of these procedures.

⁶⁶ See e.g. the views of developing countries generally critical of GEF performance on this issue of providing support for the preparation of developing country NCCs under Art. 4.3, such as Saudi Arabia and Uruguay, in FCCC/SBI/2007/MISC.13; Brazil, Jamaica and Paraguay, in FCCC/SBI/2007/MISC.13/Add.1

of new initial communications submitted by Parties.⁶⁷ Also, the secretariat regularly provides a detailed table on the status of the preparation of developing country national communications⁶⁸ and compiles a list of mitigation projects⁶⁹ included in developing country NCCs pursuant to Art. 12.4.

86. The existing NCC modalities for developing country Parties described briefly above could be enhanced for purposes of effectively implementing paragraph 1(b)(ii) of the BAP with respect to the reporting of MRV NAMAs by developing country Parties. Such enhancements could be with respect to:

- increasing the frequency of reporting of MRV NAMAs independently of the submission of NCCs under UNFCCC Art. 12.1, but subject to the provision by the GEF of the “agreed full cost” for such reporting consistent with UNFCCC Art. 4.3. In this regard, developing country Parties could provide more regular periodic reports to the SBI, consistent with the SBI’s mandate under UNFCCC Art. 10.2 to assess “the overall aggregated effect of the steps taken by the Parties in the light of the latest scientific assessments concerning climate change”;
- developing a non-binding MRV NAMA registration system run by the UNFCCC secretariat to which developing country Parties could voluntarily submit and register information of possible NAMAs (including estimated mitigation effects and estimated financing, technology and capacity building requirements) pursuant to paragraph 1(b)(ii) of the BAP. Such information could include the nature and scope of specific MRV NAMAs that are supported and enabled by MRV financing, technology and capacity building, and the results of national verification of the extent of implementation and GHG mitigation effect of the MRV NAMAs that have been implemented.⁷⁰ Furthermore, at the discretion of the developing country Party, information regarding planned or potential MRV NAMAs (including estimated mitigation effects and estimated financing, technology and capacity building requirements) could also be registered. Voluntary registration of planned or potential MRV NAMAs should not imply a commitment by the registering developing country to implement such MRV NAMAs – implementation thereof will depend on the prior receipt by the developing country Party concerned of MRV financing, technology and capacity building;
- institutional modalities established by the executive body for the UNFCCC’s financial mechanism for the verification of MRV financing, technology and capacity building. These modalities will match voluntarily registered MRV NAMAs that are planned or proposed by developing country Parties with the appropriate funding window in the special fund containing MRV financial contributions from developed country Parties.

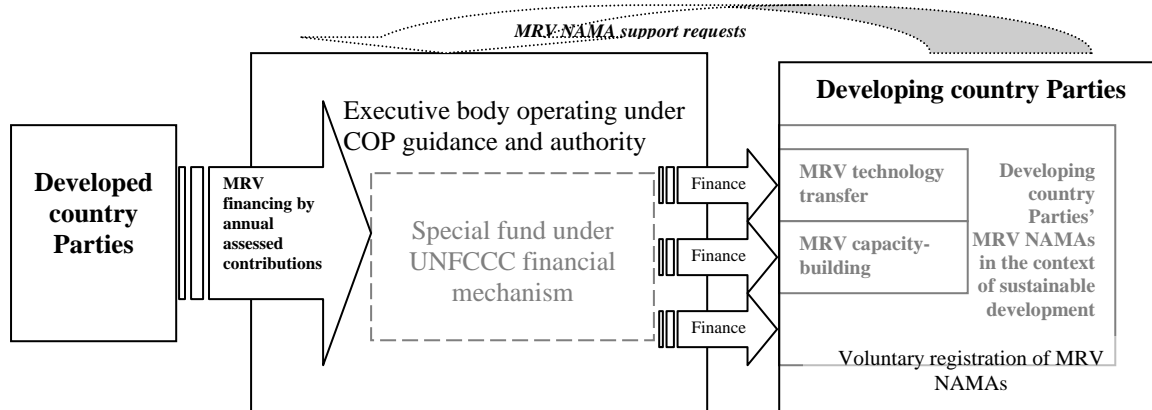
⁶⁷ For these reports, see the UNFCCC website at http://unfccc.int/national_reports/non-annex_i_natcom/compilation_and_synthesis_reports/items/2709.php.

⁶⁸ See the latest report (2005) at <http://unfccc.int/resource/docs/2005/sbi/eng/inf03.pdf>.

⁶⁹ See <http://unfccc.int/resource/docs/2005/sbi/eng/inf08.pdf>.

⁷⁰ See e.g. South Africa, FCCC/AWGLCA/2008/MISC.5; AOSIS, South Africa, FCCC/AWGLCA/2008/MISC.5/Add.2; Saudi Arabia, Brazil, and India, in FCCC/AWGLCA/2009/MISC.1

Figure 6: Matching MRV Financing, Technology and Capacity-Building with MRV NAMAs of Developing Country Parties



3. Verification

87. Given that the adoption and implementation of MRV NAMAs are national actions by developing country Parties, verification of the extent to which these MRV NAMAs are actually being implemented and are having their planned impacts with respect to GHG emission reductions should be done in the first instance by national entities pursuant to procedures determined nationally.⁷¹ These procedures may be based, as appropriate given the national circumstances and practices of the developing country Party concerned, on international guidelines or practices or frameworks for verification that may be developed by the COP.

88. Detailed information on the results of such national verification procedures with respect to the extent of implementation and GHG mitigation effects of MRV NAMAs that are supported by MRV financing, technology and capacity building should then be reported regularly on a periodic basis to the SBI for review pursuant to UNFCCC Art. 10.2(a), with respect to assessing “the overall aggregated effect of the steps taken by the Parties in the light of the latest scientific assessments concerning climate change” in light of the information provided by all Parties (including developing country Parties) under UNFCCC Art. 12.1 – i.e. information on their national inventory of greenhouse gas emissions and removals, a general description of steps taken or envisaged to implement the Convention, and any other information that the Party considers relevant.

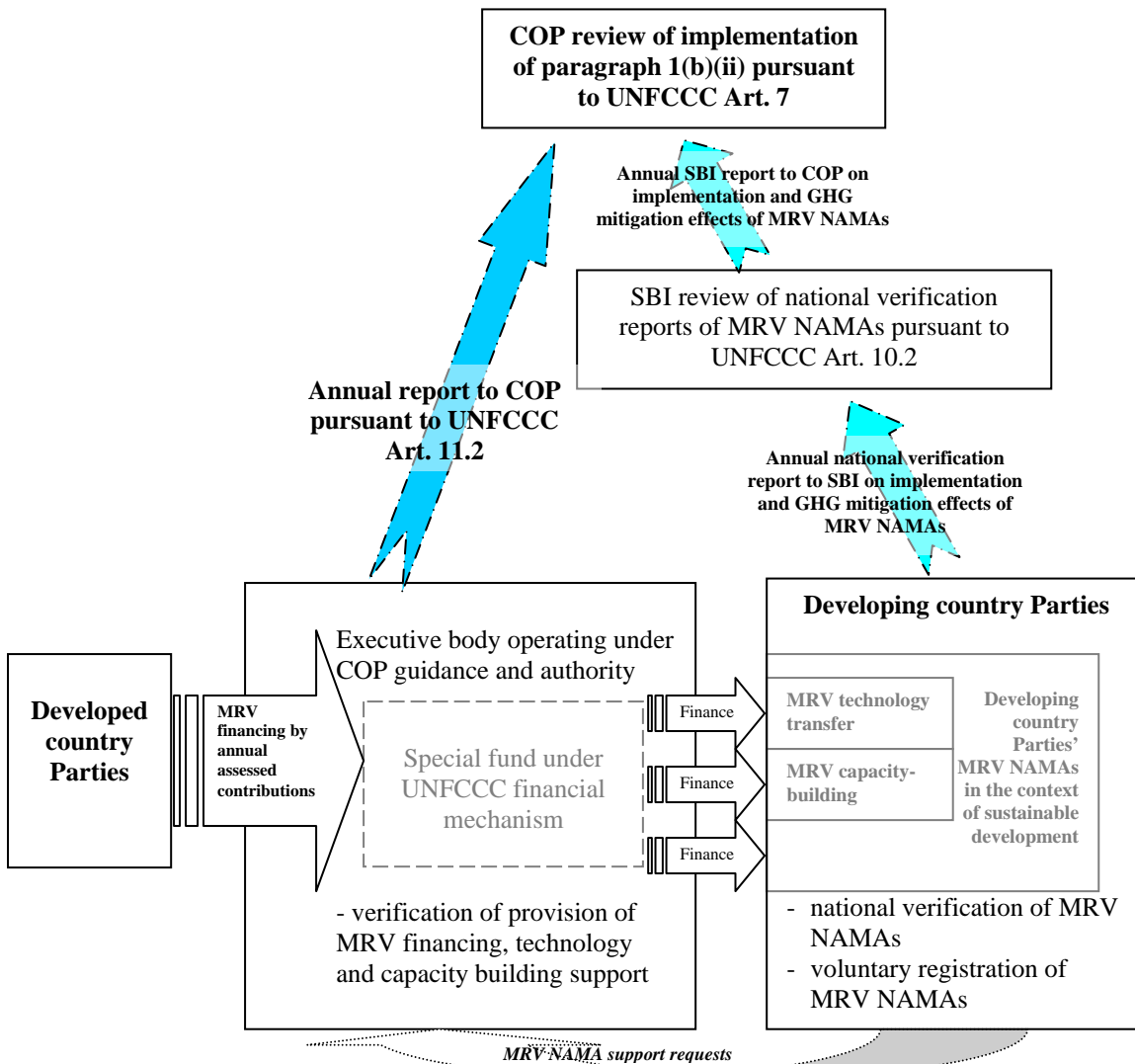
89. The SBI should then report to the COP the results of its review and verification of the reports of developing country Parties with respect to their voluntarily registered MRV NAMAs, with appropriate recommendations. The COP is legally

⁷¹ See e.g. Brazil in FCCC/AWGLCA/2008/MISC.1; South Africa in FCCC/AWGLCA/2008/MISC.5. See also China, 6 February 2009, at http://unfccc.int/meetings/ad_hoc_working_groups/lca/items/4578.php

mandated under UNFCCC Art. 7 to be the final review and verification body with respect to the implementation of the UNFCCC by the Parties. In this regard, with respect to developing country Parties' MRV NAMAs as reported by them, the COP's focus should be on assessing the "overall aggregated effect" in relation to GHG mitigation of such MRV NAMAs undertaken by developing country Parties.

90. In assessing the "overall aggregated effect" on GHG mitigation of developing country Parties' MRV NAMAs taken pursuant to paragraph 1(b)(ii) of the BAP, the COP should also take into account the reports of the executive body for the UNFCCC's financial mechanism relating to its verification of the provision of MRV financing, technology and capacity building by developed country Parties to support the adoption and implementation of MRV NAMAs by developing country Parties.

Figure 7: Institutional Framework for Verification of Paragraph 1(b)(ii) MRV NAMAs of Developing Country Parties and MRV Financing, Technology and Capacity Building Support from Developed Country Parties

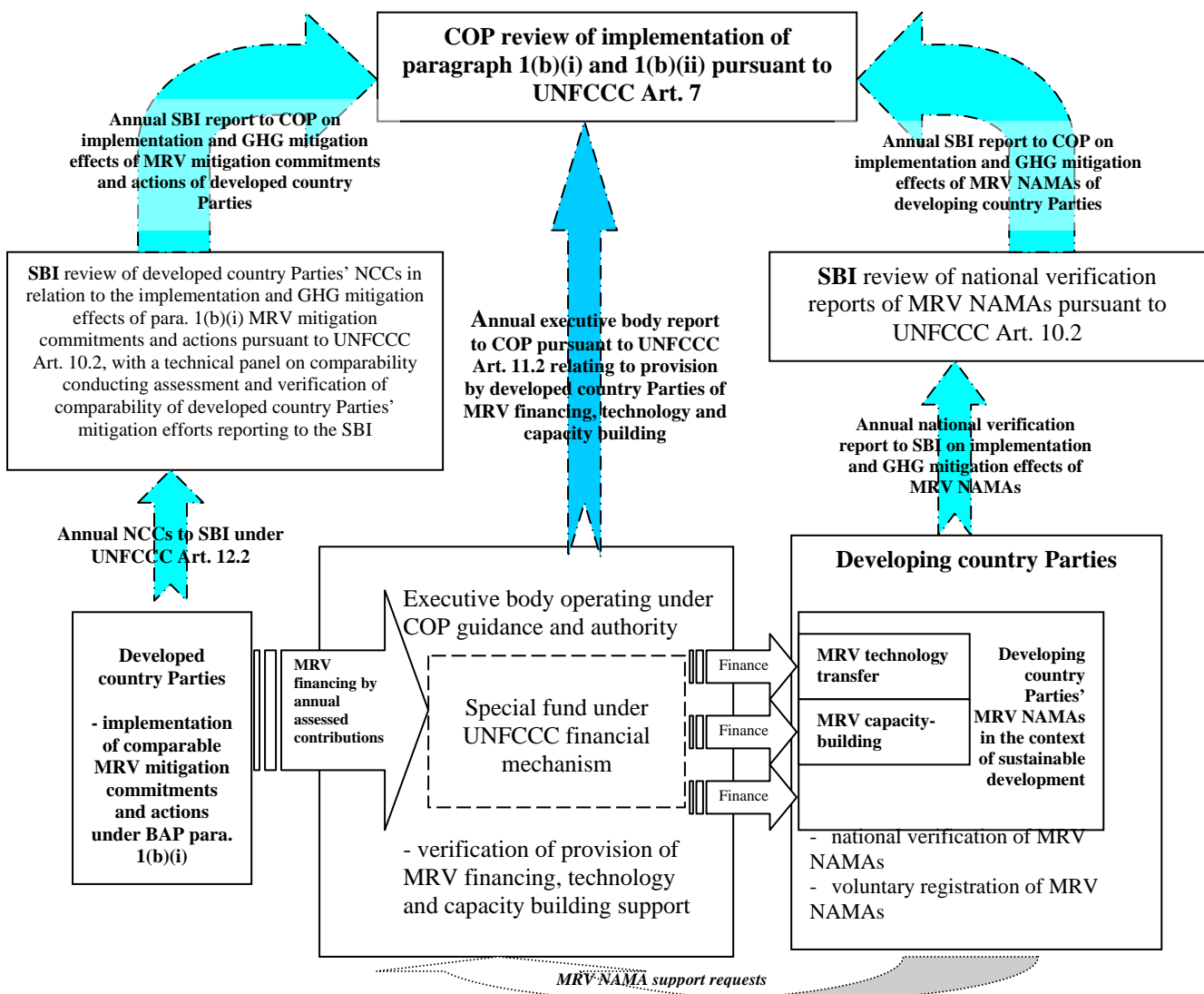


IV. CONCLUSION

91. Implementing paragraph 1(b)(i) and (ii) of the BAP will require different approaches with respect to the metrics for measurement, modalities for reporting and verification, and the institutional frameworks for verification, if such are to be consistent with the principle of common but differentiated responsibilities embedded in the UNFCCC and for them to fully reflect the balance of obligations with respect to financing, technology and capacity building between developed and developing country Parties contained in UNFCCC Art. 4.7.
92. At the same time, given that the main objective of the BAP is to enhance the implementation of the UNFCCC, the foundation for implementing paragraphs 1(b)(i) and (ii) of the BAP has to be the provisions of the UNFCCC. As such, the institutions, modalities, and procedures already existing and developed by the Parties since the UNFCCC's entry into force should be carefully considered and reflected on as appropriate in designing implementation enhancements.
93. On paragraph 1(b)(i), developed country Parties' implementation of their mitigation commitments and actions will have to be gauged according to the extent to which these comply with their treaty obligations to take the lead in modifying longer-term trends with respect to anthropogenic emissions and in achieving the objective of the UNFCCC, taking into account their responsibility for historical emissions. This means that such mitigation commitments and actions must be deeper in terms of emission limitations and reduction targets, undertaken much more rapidly, and be commensurate to the magnitude of such Parties' historical responsibility. Furthermore, such commitments and actions must be comparable among themselves.
94. On paragraph 1(b)(ii), developed country Parties' implementation of their treaty obligations to provide financing, technology and capacity building under the UNFCCC to developing country Parties in relation to the latter's implementation of the UNFCCC must be commensurate to the magnitude of the need for such support and enabling measures in relation to the achievement by developing country Parties of their respective sustainable development (including poverty eradication) objectives. Metrics for measurement must be clearly identifiable in both qualitative and quantitative terms (financing in particular must be adequate and mandatory) and should be commensurate to the sustainable development needs of developing country Parties. The modalities for reporting and verification must afford the COP the ability to clearly assess the extent to which developed country Parties are fulfilling their obligations in these areas. With respect to developing country Parties' adoption and implementation of MRV NAMAs in the context of sustainable development, the metrics for measurement and the modalities for reporting and verification will have to be adapted to the wide range of development conditions and circumstances that exist among developing country Parties. As such, national approaches with respect to the metrics and modalities for MRV NAMAs by developing country Parties, based perhaps on flexible guidelines or principles decided by the COP, would be the best way to ensure such adaptability and appropriateness.

95. Finally, with respect to the final review and assessment of the implementation by Parties of paragraphs 1(b)(i) and (ii) of the BAP, it is clear that under the UNFCCC and the context of the BAP, it will be the COP that will undertake such final review and assessment. (see Figure 8). To address any further questions in relation to the implementation of UNFCCC commitments stemming from the implementation of paragraphs 1(b)(i) and (ii) by Parties arise, the long-stalled multilateral consultative process to deal with such questions should be revived and finally established pursuant to UNFCCC Art. 13.⁷²

Figure 8: Institutional Framework for the Implementation of Paragraph 1(b)(i) and (ii) of the BAP



⁷² The COP has adopted Decision 10/CP.4, contained in FCCC/CP/1998/16/Add.1, at <http://unfccc.int/resource/docs/cop4/16a01.pdf>, establishing the multilateral consultative process (MCP). However, the MCP has not yet been made operational due to continuing disagreements among the Parties on the governance structure for the MCP.

READERSHIP SURVEY QUESTIONNAIRE
South Centre Analytical Note

A DEVELOPMENT-ORIENTED APPROACH IN
MAKING "MEASURABLE, REPORTABLE AND VERIFIABLE" OPERATIONAL

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