CAN-International welcomes the opportunity to provide inputs to the discussions moving towards a post 2012 agreement. CAN is a coalition of more than 400 environmental and development non-governmental organizations in 85 countries worldwide, committed to limiting human-induced climate change to ecologically sustainable levels.

Introduction
To prevent dangerous anthropogenic climate change, CAN believes that global average temperature increases must be kept as far below 2°C as possible, compared with preindustrial levels. For this to be achieved, global emissions will need to peak within the next 10 years and begin to decline thereafter. A delay in action will require much greater rates of emission reductions later to achieve the same stabilization, at significantly higher cost, and may make lower stabilization levels impossible to achieve. Developed country Parties must “take the lead in combating climate change and the adverse effects thereof” and therefore will need to reduce their emissions significantly: at least at the top end of the 25-40% reduction range (by 2020 from 1990 levels). A large majority of the effort must be made domestically, as a massive shift is required in the unsustainable and inequitable consumption patterns of developed countries and to lay the ground for the much deeper cuts (of at least 80%) required by 2050. To achieve this, developed countries will need to put in place effective policies, covering all relevant sources and sectors, to ensure that they do their fair share to avoid dangerous climate change.

Reporting
It is imperative that the methodologies agreed for each aspect of the post 2012 agreement, the policies and measures, the relevant sources and sectors, must serve to ensure the environmental integrity of the global effort to avoid dangerous climate change, in line with the imperative of limiting temperature increases as much as possible: ie in line with the below-2°C target. This implies that not only must the methodologies selected to monitor actions be rigorous, but that they must also be compatible with the need to measure, report and verify the means by which developed countries achieve their quantified emissions limitation and reduction obligations (QELROs) in a manner that is transparent, consistent, comparable, complete and accurate, as required by the Annex I national communications guidelines. Good quality reporting data is also necessary for developed countries to demonstrate their respective progress in reducing their emissions, in their annual compilation and accounting of emissions inventories. Good quality monitoring and reporting forms the
basis of emissions trading and serves to guarantee the environmental integrity of emissions unit.

**Kyoto Mechanisms and Sectoral Approaches**

CAN has called for a review of the Kyoto mechanisms as part of the work of the Article 9 review in Poznan, and looks forward to the proposal of substantive improvements in these mechanisms for the post 2012 period. Work done under the AWG on methodological issues must therefore link closely with proposals and recommendations emerging from the Article 9 review. It may therefore be appropriate to convene a joint workshop between the Article 9 review and the AWG to look at new options for mechanisms post 2012 (including ways to improve the existing mechanisms), which includes discussion of not only the mitigation potentials of each option, but also relevant methodological issues and their implications for the environmental integrity and social sustainability of each proposal.

For the Kyoto mechanisms, assessment of additionality is a key concern and CAN supports exploring methodologies that can be used to set a rigorous baseline as well as that require rigorous accounting. For new approaches, particularly policy-based crediting, finding a methodology to ensure additionality is also an issue that will need to be adequately assessed and addressed.

For sectoral approaches, CAN is keen that methodological discussion address the feasibility of monitoring, reporting and verification within each sector. Being able to adequately demonstrate additionality is a key concern here also.

In general, CAN is keen that all approaches are capable of being monitored, reported and verified and therefore good methodologies must be designed to minimize uncertainties and to maximize sustainability.

**Land Use, Land-Use Change and Forestry**

CAN has called for a review of the LULUCF modalities for Annex I which would include identifying any improvements that are needed to the reporting, accounting, monitoring and verification system of LULUCF activities and enhancing the effectiveness of the LULUCF sector in contributing to climate change mitigation. Addressing emissions from LULUCF in developed countries is important in order to limit warming below 2°C. We propose that three principles guide this review, and also guide the AWG’s work on identifying ways to enhance the effectiveness of LULUCF and its contribution to sustainable development:

1. LULUCF rules must support stringent climate protection goals and must not create a substitute for reductions in industrial greenhouse gas emissions.
2. LULUCF rules must contribute to the conservation of biodiversity, the sustainable use of resources and resolution of other environmental concerns.
3. LULUCF rules must fully recognize the rights of indigenous peoples and local communities, particularly to the land that they utilize.

There are two important framing issues to be considered in relation to a review of the LULUCF sector:
a) The role and limitations of the use of LULUCF accounted emission and removal units to limit warming to below 2°C. One of the key issues with respect to the setting of emission targets is the need to understand the scale of likely credits from LULUCF activities, to understand how much of this is additional to what would otherwise have occurred and to quantify the effects of these factors in setting targets for industrial emissions. Failure to do so could lead to emissions targets being set so that it is not feasible to meet stringent climate protection goals.

b) The implications of the use of these accounting units for the stability and effectiveness of the international post 2012 regime.

There are several outstanding issues to be considered for the post-2012 LULUCF options. First, in conducting a review, there is considerable scope to learn from the experiences of the first commitment period to improve the way in which greenhouse gas emissions and removals are accounted from LULUCF (now AFOLU) activities. Any relevant outputs from the Article 9 review should be considered in the negotiation of new emission reduction commitments for Annex 1 countries. One major lesson of the first commitment period is that Annex 1 LULUCF rules should be negotiated in parallel rather than after the Annex 1 targets are set. A review of all of the existing provisions of the Marrakesh Accords, and reporting requirements and methodologies relating to Articles 3.3, 3.4 and 3.7 should be undertaken as part of the review of LULUCF provisions.

Second, the review should include analysis of ways to address the volatility and vulnerability of terrestrial carbon stocks as a consequence of both natural variability and of climate change and its effects, including increased wildfire, heat waves, pest outbreaks and increases in climate variability.

Third, the review should also include analysis of approaches for factoring out natural changes in emissions and removals from the effects of human activities, so that accounting focuses precisely on emissions and removals resulting from direct human activities. Also age class structure, CO₂ fertilization and the effects of climate change are examples of non-additional factors. The effect of non-additional factors in setting targets for overall national emissions targets should be minimized. However, acknowledging uncertainty about the ability of factoring out methodologies to accurately perform this task, CAN advises that Parties use precaution in integrating these approaches into the LULUCF system.

The review should seek changes to the LULUCF rules that would promote enhanced sustainable development and the work of the other Rio Conventions. CAN regards ecosystem conservation as a key component of climate change adaptation, noting that biodiverse systems are generally more resilient to disturbances, including climate disturbances. The current rules that enable natural forest to be cleared and replaced with plantations are not consistent with contributing to sustainability.

Finally, CAN believes it is most important that asymmetric accounting of LULUCF that leads to a bias in favor of sinks should be remedied. Parties should investigate if and how emissions resulting from forest and peat land degradation could be accounted for within the Kyoto Protocol.
CAN has also called for a review of whether harvested wood products (HWP) should be included within the Kyoto accounting system. CAN remains concerned about the implications of including harvested wood products within LULUCF accounting and believes there are a number of outstanding issues:

- The scale of credits that could result from their inclusion and the effects these credits would have on the setting of targets for industrial emissions
- Numerous possibilities for the creation of asymmetric accounting.
- The unintended consequences of incentivising increased harvest and unsustainable logging
- Whether the system could track and exclude HWPs from illegally or unsustainably logged forests
- Whether tracking and verification of carbon stored in HWPs is feasible and the challenge presented by countries using different accounting approaches

Greenhouse Gases, Sources and Sectors

*GHGs*

CAN believes that the list of the gases included in Annex A of the Protocol is incomplete and that additional gases, included in the analysis of the IPCC’s Fourth Assessment Report, should be included in the mitigation obligations for the second commitment period. Annex A needs to include all perfluorinated compounds (at least two species nitrogen trifluoride \( \text{NF}_3 \), trifluoromethyl sulfur pentafluoride \( \text{SF}_5 \text{CF}_3 \) are not included), and all fluorinated ethers and perfluoropolyethers.\(^1\)

At present the global warming potentials (GWPs) are from the IPCC SAR and the AR4 indicates substantial changes. CAN supports an evaluation in the AWG of the GWPs of these greenhouse gases and an eventual decision on this that is in keeping with the Convention’s precautionary approach.

*Sectors*

Key sectors that are explicitly missing from Annex A are international aviation and maritime emissions. Both sectors are fast-growing and significant sources of emissions.

For aviation, since the radiative forcing effects results not only from the greenhouse gas emissions, but also from the contrails and cirrus cloud formation, it is important that a multiplier reflecting the true radiative forcing is included in emissions accounting. The requisite multiplier should be evaluated as part of the work on methodological issues.

A technical workshop on bunker emissions held in 2007 in Oslo\(^2\) concluded that there are no insurmountable methodological or data barriers to an agreement on how to allocate emissions from international aviation to states. Such an agreement should be vigorously pursued, and

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1 Consideration may also need to be given to the inclusion of the hydrocarbons and other compounds listed in the IPCC assessment; however the case for this is not strong at present.

CAN believes the most appropriate allocation method, consistent with other sectors, is to account for emissions according to the point of sale of the fuel. CAN also regards Tuvalu’s proposal, to generate revenue from airfares and maritime freight charges by charging a small fixed percentage of these to finance adaptation work, as meriting further discussion.

Several unique features of maritime transport mean that a sector-specific approach is likely to be the most appropriate way to address emissions from shipping. The proposal by Norway to raise adaptation revenue through a charge on CO2 emitted during international maritime operations also merits further discussion, alongside the paper by Tuvalu.

However, for both aviation and maritime emissions, the questions of methodology are inseparable from the questions of design, and CAN is keen that these questions be discussed together in concert.

CAN also advocates that methodologies for accounting for military emissions that are compatible with national sovereignty and security are also explored.

**In-session Thematic Workshop**

The workshop needs to facilitate Parties understanding of potential improvements to the currently agreed methodologies, and the wider implications of any changes to these.

CAN requests that Working Group 1 of the IPCC be invited to give a presentation on the implications of updating the GWPs of existing Kyoto greenhouse gases, and methodological issues accompanying the inclusion of new gases into the post 2012 regime, in the in-session thematic workshop.

CAN also requests that a portion of the workshop address the following questions:
- Accounting for emissions from bunker fuels
- Scope of LULUCF (reduced or expanded) and the effects of LULUCF credits on target-setting for industrial emissions
- Improving accounting of emissions (debits) from forest and peatland degradation
- Whether to include harvested wood products in accounting systems
- How to ensure that LULUCF rules have net environmental benefits (other than mitigation)

CAN further requests Parties or organizations that have specific proposals and expertise in the areas listed above be invited to present their respective approaches.