



## **Views and information on means to achieve the mitigation objectives of Annex I Parties**

### **Submission of the Climate Action Network International 15 February 2008**

*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.

To achieve this, the binding quantified emissions limitation and reduction obligations of Annex I countries for post 2012 must be ambitious: *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. In addition to domestic efforts, deeper additional emissions reductions must be achieved internationally in support of sustainable development. It is indisputable that the greater the emissions reductions achieved, the lower the risk of higher, and therefore more dangerous, temperature increases. In this context, a purely 'bottom-up' approach to setting national targets is inappropriate, as it asks the question "what CAN we do?" rather than "what MUST we do?".

Setting and achieving mitigation objectives are questions of political will. Unfortunately, governments do not yet seem to have grasped how severe, how urgent, the climate crisis is, and are not yet ensuring that action is being taken quickly or effectively enough. Remember: global emissions will need to peak within the next 10 years. 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. The Stern report and other economic analyses demonstrate that the costs of action are far lower than the costs of inaction. There is no reason to delay action, and there is no reason to not effect the necessary deep emissions reductions.

## **Domestic action**

Domestic action is indubitably a prerequisite for the sustainable development of Annex I countries. These countries are currently and historically responsible for a disproportionate and unsustainable level of greenhouse gas emissions, through disproportionate and unsustainable consumption patterns. CAN argues strongly that serious mitigation efforts need to be undertaken domestically in developed countries, to help to address these global inequalities, and to make their consumption patterns more sustainable, leading to a zero carbon society. There are numerous studies that demonstrate that strong domestic action is not only possible, but can often be highly advantageous in the co-benefits, for example to human health, that it can bring.

Because of the urgent need to cut emissions, CAN reminds developed countries of the importance of reducing greenhouse gas emissions wherever possible, and that domestic policies must play the main role in fulfilling and exceeding obligations. In particular, energy efficiency has the potential for massive emissions reductions in industrial, electricity, housing, heating and cooling and transport sectors, at low, or even negative net costs. Substantially increasing the use of renewable sources of energy is vital for countries to successfully decarbonize their economies. Developed country investment in development and deployment of these important technologies helps to buy down the costs through mass production, making them more affordable and therefore accessible for developing countries. In CAN's view, nuclear power is an unsustainable, and therefore completely unacceptable, means to achieve mitigation objectives.

## **Kyoto Mechanisms**

The Kyoto flexible mechanisms were designed to complement the domestic action imperative, intending to facilitate cost-effective action internationally that should assist in transferring sustainable technologies and build capacity. While the mechanisms have had some benefits, notably in putting a price on greenhouse gas emissions - an important signal to the markets to encourage investment in cleaner technologies - there have also been significant problems. Therefore CAN looks forward to the review of these mechanisms under Article 9 in Poznan leading to substantive improvements in these mechanisms for the post 2012 period. The work of the AWG on the mitigation potentials of Annex I countries must be linked to the potentials under the mechanisms as they currently exist, but must fully take into account the recommendations of the Article 9 review to improve these mechanisms, as these become available, in scoping mitigation potentials of Annex I countries. CAN believes that social and environmental criteria, beyond greenhouse gas impacts, must be an integral aspect of the review of the Kyoto flexible mechanisms.

Any new mechanisms and financial obligations in the post 2012 agreement must also contribute to sustainable development in the recipient countries, and have the effectiveness and environmental integrity not to undermine the global mitigation effort.

## *CDM*

CAN has serious concerns about the current structure and functioning of the CDM. In terms of emission reductions, the CDM at its best only off-sets Annex I emissions, and without effective additionality testing and rigorous baselines, allows global emissions to increase in absolute terms. It is imperative to ensure that the CDM in the future moves beyond offsetting and in fact yields real, additional, net reductions in global emissions as well as real benefits for sustainable development. If the environmental integrity of uncapped trading cannot be assured, it should be abandoned and other means of financing and technology transfer be explored. Whatever the mechanism used to achieve this, it will need to be substantially larger in scale and scope than the current CDM if it is to deliver large emissions reductions and large-scale changes in technological investments in developing countries.

CAN therefore suggests exploring shifting from the project-by-project approach to more top-down approaches, variously discussed as policy-based CDM, sectoral CDM, or no-lose targets. Policy-based crediting would mean to reward specific policies which result in reduced emissions compared to an agreed reference level. Sectoral crediting would look at the performance of a sector as a whole, i.e. the transport sector in a country or province, and would generate reduction units for sale if the sector's emissions stayed below the baseline. No-lose targets would function very similarly to sectoral crediting, with credits being awarded if the target is overachieved but no penalties applied if the target is not met. They would have the added advantage that the target would be negotiated, however care would need to be taken to ensure that the targets adopted would result in real emission reductions. Any changes in rules governing the CDM or other mechanisms should be negotiated in parallel to, rather than after the Annex I targets are set.

Sectoral approaches to the CDM, however, also entail some new risks. In particular, the quantification of emissions and reductions at the sectoral level will have to rely on modeling and projections, which always possess a degree of uncertainty and may be subject to the same problems of gaming that currently are observed in the CDM. Projections at the sectoral level may be more reliable than project-by-project additionality testing, but they might be even worse. It is therefore imperative to assess the reliability of quantifying developing country reductions at the sectoral level before scaling up uncapped trading.

If the project-based CDM is retained instead of or alongside sectoral approaches, major reforms would be needed, in particular to severely strengthen additionality testing.

CAN also has strong concerns regarding the environmental and social sustainability of many CDM projects to date. At a minimum, CDM projects must be required to meet the CDM Gold Standard<sup>1</sup> To prevent projects with high social and environmental costs from being registered under the CDM, international sustainability standards, and procedures for stakeholder consultations, that have been adopted by many international financial organizations such as the World Commission on Dams should be applied to the CDM, in

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<sup>1</sup> <http://www.cdmgoldstandard.org/>

the first commitment period, as well as post 2012. Improving sustainability of the CDM will also require a greater geographic distribution of CDM activities.

**"The Gold Standard" is an independent, transparent, internationally recognized benchmark for "high quality" CDM projects.**

The Gold Standard, amongst others, only certifies projects which meet the following criteria:

- they must be end use efficiency or renewable energy projects (this includes methane to energy in certain circumstances);
- they must pass a sustainable development screen i.e. there must be evidence that the project is making a real contribution to sustainable development and that it benefits the local community;
- they must only provide an energy service that helps catalyze the transition to non- fossil fuel based energy systems. Projects which generate credits from the destruction of industrial waste gases such as HFCs are therefore not eligible. These projects have little or no wider sustainable development benefits and
- they must follow a conservative, guided interpretation of the UNFCCC- additionality test that is necessary to demonstrate that a project delivers real emission savings which would not have occurred anyway under 'business as usual'.

### *Joint Implementation*

JI shares the fundamental flaw of the CDM in that it is generally not possible to demonstrate that an investment would not have taken place under business as usual conditions. JI should therefore be progressively replaced by domestic cap-and-trade emission trading systems in all industrialized countries.

### *Cap-and-Trade Emissions Trading*

The strength of a cap and trade system is that it places an absolute limit on the total emissions that can occur and therefore has the potential to guarantee environmental effectiveness, as long as it excludes external credits from uncapped sources. Furthermore it reduces emissions with the lowest possible compliance cost to all participants compared to other mechanisms, particularly if the market is global, or if sizeable (and appropriately structured) carbon markets are linked. It is important to understand that different sectors and sources of greenhouse gases need different instruments to address them effectively and efficiently. Emissions trading is not a one-size-fits-all instrument that can usefully cover all emissions in the current policy context and its use needs to bring clear added value for the environment and the people affected by such mechanisms compared to using other policies. Importantly, emissions trading is a part of the policy mix for any sector that it is applied to.

Deployment of sustainable technologies requires a suitably high carbon price, which fundamentally, requires urgent and deep verifiable emissions reductions commitments for developed countries.

### *Use of the Kyoto Mechanisms to leverage funds*

In CAN's opinion, the Kyoto mechanisms must not only work towards mitigation efforts, but also contribute towards the funding of adaptation, technology transfer and tropical

deforestation reduction (REDD) measures, based on the polluter pays and historical responsibility principles. CAN believes that sufficient finance must be generated both within and beyond the post 2012 agreement to adequately address each of these areas. In this context, CAN supports the exploration of:

- Placing a levy on each of the three flexible mechanisms of the Kyoto Protocol, so that the burden of funding to the Adaptation Fund is broadly and fairly shared. Currently a 2% levy is limited to the CDM. This could be spread to emissions trading and joint implementation in the future. The total amount generated would depend both on the size of the market and the level of the levy set, which must be set from a comprehensive assessment of adaptation needs.
- Share of Assigned Amounts. There are a range of options that should be explored in this field including:
  - On the international level, the Assigned Amount for developed countries would not be allocated for free to countries, but rather would be determined by a central auction under an agreed, and tight, overall cap. Part of the revenues generated would be put in a separate global fund in support of adaptation, technology and REDD
  - On the international level, *part* of the Assigned Amount would not be allocated for free to countries but rather taken out and put in a separate global fund to be monetized and allocated to adaptation, technology and REDD
  - On the national level, permits would be auctioned and part of that revenue would be placed in a national fund coordinated with other national funds or an international fund for adaptation, technology and REDD

Auctioning could be a significant funding source. For example, assuming a price of \$30 to \$40/tonne, each one percent of Annex I assigned amount set aside for this purpose would generate \$3.75bn/year for these purposes. This would go a long way towards financing the adaptation requirements of the most vulnerable, while helping to effect technology transfer and reducing emissions from deforestation

While the Kyoto mechanisms need to be used to generate some of the finance required to achieve the objectives of the Convention, additional, non-market sources of funding, including governmental contributions, need to be increased and can help to leverage and catalyze additional funding. Ending fossil fuel subsidies and redirecting them to fund clean technologies would be a good start. Exploration of means to leverage private sector and multilateral bank funding flows in support of the aims and operation of the UNFCCC process should also be done. Any funds must be governed through fair representation of Parties and interest groups in the decision-making process.

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

Addressing emissions from LULUCF in developed countries is important to limit warming to below 2°C. Under the Kyoto Protocol deforestation activities result in an accounted increase in emissions which creates an incentive to reduce these activities. Other activities which are not accounted for under the Protocol by individual Parties, such as unsustainable forestry practices, may however lead to increased emissions. Accounting for this in a manner that does not create perverse incentives for other

unsustainable activities or which asymmetrically account for sinks and not emissions has proven to be, so far, a very difficult problem. In addition the mandatory inventory reporting system for LULUCF for the Annex I Parties reports a significantly larger sink than appears to be consistent with full accounting of all carbon exchanges across the territories of these countries.

The two key issues for the AWG in relation to a review of the LULUCF area are:

- a) Whether to continue, reduce or expand the scope (activities and land areas covered) of the present system. Examination of this issue would include proposals for full carbon accounting at one end of the spectrum, to cessation of LULUCF accounting at the other end.
- b) What improvements are needed to the reporting, accounting, monitoring and verification system of LULUCF activities.

In this context two important framing issues are:

- a) The role and limitations of the use of LULUCF accounted emissions 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 happened 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.

In conducting such 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 are reported and accounted in the post 2012 agreement, and 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 I LULUCF rules should be negotiated in parallel rather than after the Annex I targets are set. This will limit the gaming of the level of effort of the targets. A review of all of the existing provisions of the Marrakech 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.

The review should also include approaches to factoring out natural changes in emissions and removals from the effects of human activities so that accounting focuses more precisely on emissions and removals resulting from direct human activities.

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 strategies, 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

The review should also include the issue of the inclusion of harvested wood products in the Kyoto accounting system. This has been discussed for several years and has remained excluded for the time being from accounting system due to concern over unintended consequences in that the proposals so far could incentivize increased harvesting and thus encourage unsustainable logging. An additional problem was reported in coded terms in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories where it was found that "The approaches that have been identified are mutually exclusive in the sense that a global or regional estimate of annual /HWP Contribution /would only be correct if all the different countries provided estimates using the same approach."<sup>2</sup>

## **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 (NF<sub>3</sub>), trifluoromethyl sulfur pentafluoride (SF<sub>5</sub>CF<sub>3</sub>) are not included), and all fluorinated ethers and perfluoropolyethers.<sup>3</sup>

The global warming potentials used in the Kyoto Protocol also need to be updated based on the latest scientific assessment. At present the GWPs are from the IPCC SAR and the AR4 indicates substantial changes. Revised GWPs would be applied in the flexible mechanisms.

### *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.

In its 1999 report, the IPCC projected that "Global passenger air travel, as measured in revenue passenger-km, is projected to grow by about 5% per year between 1990 and 2015, whereas total aviation fuel use-including passenger, freight, and military is projected to increase by 3% per year, over the same period". For aviation, since the radiative forcing effects results not only from the greenhouse gas emissions, but also

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<sup>2</sup>[http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4\\_Volume4/V4\\_12\\_Ch12\\_HWP.pdf](http://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/4_Volume4/V4_12_Ch12_HWP.pdf)

<sup>3</sup> 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.

from the contrails and cirrus cloud formation, it is important that a multiplier reflecting the true radiative forcing is included in emissions accounting.

A technical workshop on bunker emissions held last year in Oslo 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 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.

Maritime transport is responsible for 13 % of the world's total transport GHG emissions at the moment. Projections foresee a growth of 35–45 % in absolute levels between 2001 and 2020, based on expectations of continued growth in world trade<sup>4</sup>. Several unique features of the industry 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 CO<sub>2</sub> emitted during international maritime operations also merits further discussion, alongside the paper by Tuvalu.

For some countries, aviation and maritime emissions from the military represent a not insignificant subset of emissions and should not be exempt. Other military greenhouse gas emissions should also be included in Annex A.

**Inclusion of new sectors and sources to the post 2012 agreement will necessitate additional deeper emissions reduction targets to effect the necessary structural changes in the energy use and consumption patterns of developed countries' economies in the existing source and sector categories.**

## Sectoral Approaches

There are a range of discussions underway on so-called "sectoral approaches." CAN urges clarity in definitions so that we ensure a rational discussion about the various ideas around sectoral. Specifically, there seem to be three main areas where sectoral approaches are being discussed:

- 1.) Sectoral commitments in Annex I countries as a replacement for national caps on emissions
- 2.) Global sectoral commitments for internationally competitive sectors based on benchmarking or other approaches
- 3.) Sectoral commitments in developing countries instead of national caps.

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<sup>4</sup> Eyring, V., H. W. Köhler, A. Lauer, and B. Lempert (2005), Emissions from international shipping: 2. Impact of future technologies on scenarios until 2050, *J. Geophys. Res.*, 110, D17306, doi:10.1029/2004JD005620.



In regards to the approach described in number one, sectoral approaches must not in any way undermine the necessary Kyoto-style binding national, economy-wide absolute emissions caps for developed countries in the second commitment period. Developed countries, are of course welcome to develop sectoral policies and measures, either as national policies and measures to achieve their commitments, or as part of a legally-enforceable regional system. CAN notes that more comprehensive economy-wide approaches are more economically efficient than a sector-by-sector approach.

CAN recognizes that global sectoral agreements, subordinate to these absolute emissions caps in developed countries, may be appropriate for certain internationally competitive industrial sectors to help address competitiveness concerns and to help to avoid leakage. Developing country participation in such global sectoral targets should be predicated on suitable support and incentives. This will then replace any CDM activities in that sector for a participating country.

In addition, developing country sectoral commitments in non-internationally competitive sectors eg power sector, are also a welcome evolution of approach in developing countries where it is not yet suitable to implement a national cap. As noted in the Bali Action Plan, such enhanced actions must be matched with capacity building, technology and finance.

While there is considerable interest in sectoral approaches, CAN notes the broad range of ideas in this area that have been put forward, and emphasizes the need for specificity in the discussion, and careful analysis of the implications of the different approaches.

### **In-session Thematic Workshop**

The workshop needs to facilitate Parties coming to a common understanding of the scope of options available and their implications for the 25-40% range, in the case that new sectors and sources are added.

CAN requests that Working Group 3 of the IPCC be invited to give a presentation on mitigation objectives, and the means of achieving them, at the in-session thematic workshop.