

CLIMATE ACTION NETWORK (CAN)



SUBMISSION BY CAN¹
ON ISSUES RELATED TO MODALITIES
FOR INCLUDING AFFORESTATION AND REFORESTATION
UNDER ARTICLE 12.

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ABSTRACT

The Climate Action Network (CAN) continues to have serious concerns about the inclusion of sinks. Regarding the modalities for the inclusion of afforestation and reforestation under the CDM, CAN urges parties to:

- effectively and explicitly *exclude mono-culture industrial plantations*.

Furthermore²,

- *adhere to the principles* of LULUCF decision 11/CP.7 (see Box 1).
- *keep definitions* of afforestation and reforestation as agreed in the Marrakech Accords.
- *reject the Canadian proposal* to shift the 1990 reforestation baseyear.
- *adopt rigorous requirements for continued monitoring/verification* of carbon stocks (e.g. by adopting a T-CER₅ accounting approach)
- *assign full debits* for any reemission of sequestered carbon
- *provide strong incentives* for long-term, instead of short-term projects

¹ see Appendix A for a brief description of the Climate Action Network (CAN).

² The exclusion of mono-culture industrial plantations from eligible afforestation/reforestation projects under the CDM is highest priority. Other fundamental requirements for the modalities for inclusion of afforestation and reforestation under the CDM are thematically ordered.

- *not preclude the exclusion of sinks* in future commitment periods, if issues of additionality, leakage, uncertainties, socio-and environmental impacts, non-permanence, etc. are not satisfactorily resolved.
- require *real additionality* to “without project” case.
- design *standardized methodologies* to develop *project-specific baselines*.
- include a *national, regional and local factors in baseline*, such as socio-economic and legal factors as well as *natural regrowth*.
- require reasonable project *design elements to avoid leakage*.
- *fully adjust for residual leakage*, that accrues from any displaces demand for land, timber, fuel wood, or other goods and services
- specifically, develop strong modalities to capture *leakage on timber markets*.
- if at all, *err for the benefit of the climate*, regarding the handling of uncertainties.
- apply *good practice guidelines* for estimation of carbon stocks
- apply *strong rules for permanence, additionality, leakage* and other project elements to minimize uncertainty
- *adjust (or “discount”) estimates* of project benefits to reflect level of residual uncertainty
- ensure that projects “...*contribute to the conservation of biological diversity and sustainable use of resources*”
- ensure that afforestation and reforestation projects are those that promote *ecosystem restoration with native species* to maximize environmental benefits, such as watershed enhancement, biodiversity and social benefits.
- require that each project has undergone a *mandatory and participatory project design process* prior to its registration.
- ensure that such a process contains, inter alia, *an environmental and social impact assessment*,
- *exclude the use of genetically modified trees* or other organisms and the introduction or use of exotic species.
- ensure that all projects *respect and build upon the rights and needs of Indigenous People and local communities*.
- require ancillary social and environmental benefits of *all* projects.
- design meaningful *public participation and dispute resolution* mechanisms.

PREAMBLE

Parties and other organisations have been invited to present their views on the issues related to modalities for including afforestation and reforestation under the CDM. The Climate Action Network (CAN), a global network of environmental and social NGOs, welcomes this opportunity to submit its views and concerns to the UNFCCC Secretariat for distribution to policy makers.

CAN and its member organisations will engage constructively over the coming years in efforts to try to solve the many outstanding problems resulting from including sinks in the CDM. However, CAN is currently not too optimistic that there are environmentally satisfactory solutions to all or, indeed, any of the problems arising from the inclusion of sinks in the CDM.

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CHAPTER 1 “GENERAL”

I. INTRODUCTION

1. CAN continues to have a number of fundamental concerns about the use of biological sinks under the Kyoto Protocol.
2. Our overarching concern is that carbon sequestration is not the solution to human-induced climate change. It is, at best, a partial solution. Ultimately, the solution is for Parties to reduce their emissions at home, especially energy-related emissions.
3. Over-reliance on sequestration at the expense of emission reductions is likely to prevent countries from achieving the basic goal of climate stabilization. It will slow the rate at which emissions are reduced in earnest and impede technological innovation and institutional momentum needed to propel the transition to climate stabilisation trajectories. It is likely to store up problems for the future when countries emissions may be even harder to reduce.
4. Nevertheless, accounting for afforestation and reforestation under the CDM has been allowed for the first commitment period, on the binding condition that such projects meet a number of crucially important environmental and social requirements. Substantial weight must be given to Article 12.5(b) of the Kyoto Protocol, which requires that projects provide, “Real, measurable, and long-term benefits related to the mitigation of climate change”.
5. SBSTA has to design modalities in order to ensure that any CDM sink projects that are non-additional, harm biodiversity or natural ecosystems, have negative socio-economic or environmental impacts, are designed to be only short-term, cause high negative leakage, are subject to high uncertainties, or do not follow the principles laid out in the preamble of decision -/CMP.1 (land use, land-use change and forestry) (see Box 1) are ineligible and ruled out. Furthermore, the accounting rules have to assure that the problems associated with the inherent characteristics of sinks projects, namely uncertainty, leakage and non-permanence, are adequately addressed for all eligible projects. The Marrakech Accords require SBSTA to aim to complete this work at CoP9.
6. CAN calls on parties to design watertight, stringent modalities that address those crucial environmental and social issues. However, it is possible that parties may fail to design adequate modalities or that those modalities might not be adequately enforced. In both cases, the “first commitment period only” experiment of sinks in the CDM should clearly not be prolonged. Thus, parties have to ensure that any adopted accounting scheme and modalities agreed for the first commitment period do not preclude the exclusion of sinks in the second and subsequent commitment periods. (Existing projects from the first commitment period could be rolled over using the TCER accounting mechanism, however.)

7. CAN's overarching position on sinks in the CDM is that short-rotation industrial plantations must be excluded from eligibility. This is due to the high potential of such industrial plantations to create negative environmental and social impacts, their high propensity for leakage at local, regional and global scales, and the relatively abundant existing sources of commercial financing for industrial plantations, among other key issues of concern identified in the Marrakech Accords.
8. CAN supports the development of modalities that will focus afforestation and reforestation efforts on projects aimed at restoring natural forests and enhancing livelihood security and sustainability for relatively impoverished rural and peri-urban populations. These are extremely important global policy priorities for which there is a conspicuous lack of adequate funding. A carefully targeted set of eligible afforestation and reforestation projects in the CDM would help redress this, and is also most consistent with minimizing some of the key problems associated with the inclusion of sinks in the CDM.
9. CAN urges SBSTA to reiterate that all afforestation and reforestation projects applying for validation and registration under Article 12 must comply with the definitions and modalities still to be agreed. There should be no prompt start for CDM sink projects until agreement is reached.
10. This document presents CAN's views on the issues related to modalities for including afforestation and reforestation under the CDM. The following sections present CAN's concerns and positions on the issues: Chapter 1: general/introduction (I); plantations (II), definitions (III), non-permanence (IV), additionality (V), leakage (VI), uncertainties (VII) and socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems (VIII).

Box 1: Principles in Preamble of Decision -/CMP.1 (land use, land-use change and forestry 11/CP.7) (FCCC/CP/2001/13/Add.1, page 56)

Affirms that the following principles govern the treatment of land use, land-use change and forestry activities:

- (a) That the treatment of these activities be based on sound science;
- (b) That consistent methodologies be used over time for the estimation and reporting of these activities;
- (c) That the aim stated in Article 3, paragraph 1 of the Kyoto Protocol not be changed by accounting for land use, land-use change and forestry activities;
- (d) That the mere presence of carbon stocks be excluded from accounting;
- (e) That the implementation of land use, land-use change and forestry activities contributes to the conservation of biodiversity and sustainable use of natural resources;
- (f) That accounting for land use, land-use change and forestry does not imply a transfer of commitments to a future commitment period;
- (g) That reversal of any removal due to land use, land-use change and forestry activities be accounted for at the appropriate point in time;
- (h) That accounting excludes removals resulting from: (i) elevated carbon dioxide concentrations above their pre-industrial level; (ii) indirect nitrogen deposition; and (iii) the dynamic effects of age structure resulting from activities and practices before the reference year;

II. MONO-CULTURE INDUSTRIAL PLANTATION HAVE TO BE EXCLUDED FROM THE CDM

11. Mono-culture industrial plantations are industrial pulp and timber factories, but they are not forests, that can meet the multiple goals of the CDM. Mono-culture plantations can be defined as “*forest stands established by planting or/and seeding in the process of afforestation or reforestation, which are either: of introduced species (all planted stands); or intensively managed stands of indigenous species which meet all the following criteria: one or two species at plantation, even age class, regular spacing*”³

12. Mono-culture industrial plantations have to be excluded from the CDM, because they threaten the biological diversity, watershed protection, and local sustainable livelihoods. Furthermore they are likely to be non-additional, and particularly prone to be non-permanent (because, by definition, they are intended to be cut down, and because they are vulnerable to pest attacks, soil deterioration etc.). We do not believe that any of the accounting systems currently being proposed resolve the non-permanence issue of plantations, i.e. ensure that sink projects have the potential to deliver long term (i.e., several hundred years) sustainable carbon storage⁴. In this regard, we are concerned that the currently proposed accounting systems tend to shift the burden of greenhouse gas mitigation to future generations. Plantations also are likely to cause high leakage (due to the fluid international markets for pulp and timber, planting is reduced elsewhere). Thus, CAN does not believe that mono-culture industrial plantations can meet the necessary requirements for CDM afforestation and reforestation projects.

13. CAN believes that mono-culture industrial plantations might be effectively excluded by rigorous carbon accounting modalities to meet the agreed criteria of additionality, non-leakage, and permanence. However, given the threat that mono-culture plantations pose for environmental integrity, biodiversity, and sustainable development, Parties should seek to exclude these projects from the CDM in the clearest, most direct fashion possible.

14. CAN urges Parties to provide clear signals to the public and project developers that mono-culture industrial plantations will be excluded from the CDM. Such early signals are particularly important, given that many projects are already being planned and additional investment might occur over the next one to two years. In order to avoid

³ The Temperate and Boreal Forest Resources Assessment 2000. This categorical exclusion of mono-culture plantations is of utmost importance due to their specific problems, such as threatening biodiversity, increased risks for non-permanence due to reduced pest resilience, etc...

⁴ see also paragraph 26.

sunken investments, investors and developers of sink CDM projects have to be informed that Parties will not accept mono-culture industrial plantations under the CDM. Clearly, NGOs, such as those organised within CAN, will take public action, if industrial mono-culture plantations were allowed to undermine the environmental and social integrity of the CDM.

CHAPTER 2 “DEFINITIONS”

III. DEFINITIONS

15. Whilst CAN has many serious reservations about the definitions, the majority of CAN groups considers that to re-open the text of a decision that Parties only agreed on in Marrakech would set an appalling precedent⁵.

16. The Canadian proposal that wants to change the reforestation base year from 1990 to 1999 is clearly to be rejected, not only because it would reopen the definitions of reforestation, but also for environmental reasons. CAN urges Canada to withdraw its proposal. The following section A. illustrates why Canada’s proposal is to be rejected.

A. No to “Canadian Proposal” of shifting the reforestation base year

17. A proposal to move forward the base year of the reforestation definition from 31 December 1989 (herewith 1990) to 31 December 1999 (herewith 2000) was tabled by Canada in the “sinks working group” at SBSTA 16. Canada argues that its proposal would create more opportunities for forest restoration activities and increase participation in the CDM by lesser developed countries. While CAN supports both these objectives, CAN is strongly opposed to Canada’s proposal to change the reforestation base year as the method to achieve this.

18. In CAN’s assessment, moving the base year forward to 2000 may well be counterproductive towards these aims. It has the potential to increase perverse incentives for deforestation, favour expansion of plantations over restoration, and fail to address the needs of lesser-developed countries to achieve effective and equitable participation.

19. CAN urges Canada to withdraw its proposal. The base year for the reforestation definitions should remain set at 1990 for the first commitment period. Shifting the base year forward for the first commitment period reduces the “buffer period” between deforestation and CDM eligibility, which may cause several problems in the first commitment period and beyond (see following three paragraphs 20 to 22)

20. **The Canadian proposal would create perverse incentives to clear/convert native forests, in order to make lands eligible for reforestation projects in future commitment periods.** This risk is manifest in two ways: (1) First, a change in the base year may create expectations that increase perverse incentives to deforest. A base year

⁵ The definitions for “afforestation” and “reforestation” as given in Annex I of 11/CP.7 are already agreed to be applied to Article 12. Draft decision –/CMP.1 in 11/CP.7 reads: “Adopts the definitions, modalities, rules and guidelines relating to LULUCF under Articles 3, 6 and 12 ... contained in the attached annex...”

change to 2000 for the first commitment period may generate expectations among some landowners and managers as to likely outcomes of negotiations on the base year for future commitment periods. These expectations may prompt land managers to clear currently forested land that is ineligible for reforestation projects in the first commitment period in the expectation of making them eligible in the second commitment period. (2) Second, land use decisions in developing countries are often made under conditions of imperfect information. Some land managers, lacking accurate information on the eligibility requirements for CDM projects, may clear their lands with inaccurate expectations of making them eligible under the CDM. While this scenario can occur with the base year set at 1990 as well, the risk of inaccurate information may be greater if the base year changes.

21. **In the absence of sound rules limiting the eligibility of industrial monoculture plantations, the Canadian proposal would open up large areas of recently deforested land to plantation expansion.** Moving the base year forward increases in an absolute sense the eligible pool of lands for CDM sinks projects. For example, very large areas in Indonesia were burned in the 1990s for conversion to oil palm and pulp plantation interests. While such lands are also eligible for natural reforestation projects, in some countries existing incentives (e.g. subsidies) for plantation establishment coupled with carbon revenues under the CDM will create or enhance a competitive advantage relative to restoration projects. While the additionality criteria should be designed specifically to prevent these negative outcomes, only perfect development and application of these criteria would fully preclude an advantage to plantation establishment over restoration projects.

22. **Furthermore, the Canadian proposal would not take account of the fact that no credits are awarded for business-as-usual or non-action, and hence, natural regrowth is part of the baseline.** Credits can only be given for direct planting and management activities that would boost carbon stocks above baseline of natural regrowth rates. A shift in the base year from 1990 to 2000 is likely to increase the relative economic incentives to plant faster-growing (exotic) species on recently deforested areas, thus displacing their high natural regrowth potential and degrading biodiversity values.

23. Canada argues that the quality and availability of land use data under a 2000 base year is better than data for 1990, so a change to 2000 would allow greater participation in the CDM by lesser and least developed countries. In fact, CAN finds that the quality and availability of data for 2000 are not categorically better than those for 1990. For example, there are two global 1-km grid land cover datasets readily available for years around 1990 including lesser and least developed countries, as described in the literature⁶.

⁶ Some references regarding the readily available global landcover datasets:

a) Defries, R.S., A.S. Belward (2000) "Global and regional land cover characterization from satellite data: in introduction to the Special Issue", Int. J. Remote Sensing, Vol 21, No. 6&7, 1083-1092.

b) Hansen, M.C., R.S Defries, J.R.G. Townshend and R. Sohlberg (2000) "Global land cover classification at 1km spatial resolution using a classification tree approach" Int. J. Remote Sensing, Vol. 21, No. 6&7, pp. 1131-1364

(see, for example, <http://glcf.umiacs.umd.edu>). Historic fine grid data (30m) are not yet analyzed as a global dataset, but it is possible to analyze specific areas from LANDSAT and SPOT data “on demand”. A more important limiting factor to balance participation in the CDM by developing countries, regardless of the base year chosen, is a lack of institutional capacity and resources to access, compile, and analyze existing land use data. CAN finds that appropriate capacity building and technology transfer are what is truly required to ensure full participation

c) Defries, R. S., M. C. Hansen, et al. (2000). "A new global 1-km dataset of percentage tree cover derived from remote sensing." *Global Change Biology* 6(2): 247-254.

d) Loveland, T.R., B.C. Reed, J.F. Brown, D.O. Ohlen, Z. Zhu, L. Yang, J.W. Merchant (2000) “Development of a global land cover characteristics database and IGBP DISCover from 1km AVHRR data” *Int. J. Remote Sensing*, 2000, Vol. 21., No 6&7, 1303-1330.

CHAPTER 3 “MODALITIES”

IV. NON-PERMANENCE / ACCOUNTING PROPOSALS

A. Background

24. Biological sinks are “reversible”: that is, they can become net sources of carbon dioxide for a variety of natural and human-induced reasons, including climate change itself. However, in order to benefit the atmosphere, sequestered carbon must be stored forever, or, if it is released, it must be “bought back”, either by truly additional⁷ emission reductions or by further carbon sequestration that is equivalent to the release. It is thus essential that the rules for accounting for sink projects in the CDM are structured in a way that ensures that carbon either remains sequestered or that any releases to the atmosphere are made up for elsewhere.

25. The problem of non-permanence uniquely distinguishes biological sinks from energy sector projects, and therefore requires a unique solution. Among the currently tabled accounting proposals, CAN considers that a modified version of the Columbian proposal, often called Temporary CERs (T-CERs), that restricts the lifetime of credits to a five-year validity period, might be most appropriate.

26. However, an accounting scheme alone cannot address the permanence issue satisfactorily. Any acceptable accounting scheme requires rigorous monitoring and verification and full debits for potential re-emissions of sequestered carbon. In addition to the application of an appropriate accounting scheme, sinks projects must have the potential to deliver long term (i.e., several hundred years) sustainable carbon storage. A project can meet this criterion even if the project activities do not continue indefinitely, so long as the project implementation is such that it is intrinsically likely to maintain long-term carbon storage even if payments stop. Well-designed agroforestry CDM projects for poverty alleviation could also meet this criterion, because if farmers find them useful and of benefit, they will have developed the ecological capital that allows them to maintain these practices into the future. Forest restoration projects also have the potential to deliver long term (i.e. several hundred years) sustainable carbon storage. Short rotation, exotic species plantations, on the other hand, are unlikely to meet this criteria because of their unsustainable socio- and environmental impacts.

27. Carbon storage cannot be equivalent to a fossil emission reduction because it is not permanent. The T-CER approach relies on the notion that temporary carbon storage followed by a permanent emission reduction (technically, the retirement of an AAU) in

⁷ Note the importance of “truly additional” as laid out in Section V. .

the future would also be equivalent to a permanent emission reduction today. This is the best available option because it clearly assigns liability for the loss of carbon storage (i.e., impermanence). However, even this approach does not avoid the problem inherent to sinks that a liability is placed on the future. CAN is concerned that this future liability may cause serious problems, for example, spikes in demand for emission reductions (when T-CER's are retired and replacement units needed), weakening of future commitments, and ultimately a failure to actually make the promised additional and permanent emission reductions. The proposed rule to replace T-CERs if there is no subsequent commitment period in place, and the requirement for long-term sustainable projects, are both designed to complement the T-CERs.

28. Furthermore, it must be stressed that although T-CERs provide a reasonable accountancy solution, this approach must be combined with satisfactory solutions for addressing additionality, leakage, uncertainties and socio-economic and environmental impacts, including on biodiversity and natural ecosystems.

B. The CAN position

29. In order to accurately reflect the change of atmospheric greenhouse gas concentrations due to afforestation and reforestation projects under the CDM, accounting rules for these projects should:

- ensure requirements for rigorous monitoring and verification;
- apply the principle of indefinite liability for accidental or intentional reversal of sequestered carbon.

In addition, the accounting rules have to provide strong incentives for long-term projects, and the sink projects design has to be such that sequestered carbon has the potential to be sequestered for a long-term and additional storage.

30. To achieve this end, CAN considers that – among the currently tabled accounting proposals - a modified version of the proposal tabled by Colombia (FCCC/SBSTA/2000/MISC8) might be most appropriate, often called Temporary CER (T-CER) approach, that restricts the credit lifetime to the length of one commitment period. In essence, the Colombian proposal states that CERs issued for sinks projects have a lifetime of about 30 years. At the end of a T-CER's lifetime it would expire and require replacement, either by an AAU, ERU, CER or a new T-CER.

31. The original Colombian proposal with its concept of temporary credits addresses one of the core concerns about accounting for permanence. However, a 30-year timescale is far too long because it would allow carbon loss to go undetected for long periods of time. The accounting approach should require more frequent verification that credited sinks remain intact.

32. A five-year lifetime with an opportunity for a Party to have the T-CER renewed or reissued⁸ if the project continues to additionally store sequestered carbon, is more appropriate than other currently proposed accounting schemes. A five-year lifetime with an opportunity for renewal will provide an incentive to monitor and verify carbon storage continuously, or at least once in each commitment period. Five years with a renewal option also provides flexibility to developers and host countries, without requiring that land be “locked up” with long term contracts.

33. At the close of the five-year lifetime, the T-CER would expire and will need to be reissued or replaced. Reissue requires the re-certification of carbon stored at the project site for a subsequent and consecutive period. Alternatively, an expired LULUCF CER can be replaced with another valid LULUCF CER or with a non-LULUCF CER or an AAU.

34. This approach encourages the provision of continuous financial returns to project developers and local communities, thereby giving regular incentives for long-term carbon storage. It provides flexibility for investors and project developers to design longer-term contracts for T-CER generation. Also, the five-year T-CER approach is consistent with, and in some ways similar to, the Removal Unit (RMU) approach adopted for Article 6 LULUCF projects, i.e. they are of limited duration and, if they reverse, must be compensated for by additional removals or emission reductions.

C. Some outstanding issues concerning T-CERs

35. Although the T-CER approach is likely to be a more appropriate accounting tool than other tabled proposals, several outstanding issues must be resolved, in order to ensure its effectiveness.

36. Provisions must allow for the exclusion of sinks in the second commitment period: If it turns out that the issues of additionality, leakage, non-permanence, uncertainties, socio-economic and environmental (biodiversity) impacts cannot be satisfactorily resolved, there mustn't be any new sink projects in the CDM for the 2nd CP. (Existing projects from first commitment period could be rolled over using the T-CER accounting mechanism, however.)

37. The proposal does not necessarily address potential perverse incentives for deforestation and short-term plantations. This is because the definitions and modalities for the inclusion of LULUCF activities included in Article 12 for the second and

⁸ Technically, the CDM Executive Board would issue a new T-CER for ongoing carbon storage rather than reissue or renew an existing TCER that has expired. It is really the commitment by the project developer that is renewed, which results in the issuance of a new T-CER. This is because the registry cannot apply a single TCER toward compliance in more than one period; there must be a sequence of T-CERs with each one covering a specific 5-year period.

subsequent commitment periods have yet to be decided. In order to avoid creation of perverse incentives to deforest, definitions of afforestation and reforestation for the first commitment period include a requirement that the land was under non-forested land uses in 1990. If, however, the eligibility date for subsequent commitment periods were to be brought forward, the move would send a message that unscrupulous parties could plant a plantation, claim reforestation credits for it while clearcutting another forest, plant on that land after five years and claim more reforestation credits while clearcutting another forest, and so on. It is therefore of great importance that parties ensure, probably on the level of project approval screening criteria from the CDM EB, that these perverse incentives do not materialize.

38. As aforementioned, in addition to the application of an appropriate accounting scheme, sinks projects must have the potential to deliver long term (i.e., several hundred years) sustainable carbon storage. A project can meet this criterion even if the project activities do not continue indefinitely, so long as the project implementation is such that it is intrinsically likely to maintain long-term carbon storage even if payments stop. During project validation, a reasonable implementation and management plan must be demonstrated that guarantees that the project will lead to an additional, sustainable and potentially long-term carbon storage. In line with the provisions for RMU's, T-CERs shall only be applicable to meet commitments in the same commitment period, as the T-CERs are issued and thus the carbon storage verified.

39. If at the end of the first commitment period there is no subsequent commitment period in place under which T-CERs are recognized and which requires replacement upon expiration, then no T-CERs may be used for the purposes of compliance during the first commitment period.

D. Matters concerning accountancy, registries and crediting

40. When a T-CER that has been used to meet a commitment expires 5 years after issuance, an AAU will be subtracted from the current assigned amount of the Party that has used it. Thus, if an equivalent amount of additionally stored carbon can be verified again, the reduction of the assigned amount can be offset by a newly issued T-CER.

41. If it is verified that the project that gave rise to the original T-CER retains the original carbon, the T-CER may be reissued. A project may accrue additional T-CERs if additional carbon is verifiably sequestered. If carbon is released by the project, then only T-CERs equivalent to that carbon remaining stored should be re-issued. Similarly, if the sequestered carbon may no longer be verified then no T-CERs will be issued and previous T-CERs should be voided as appropriate.

42. There are considerable advantages in allowing long crediting periods for forest sinks. Short periods will tend to encourage plantations of fast growing monocultures whereas long periods will tend to encourage more ecologically sound forestry. A long

crediting period would be achievable under this five-year T-CER approach with T-CERs being used sequentially. (Non-LULUCF projects can generate credits either for ten years or renewably twice for periods of seven years, i.e. up to a maximum of twenty one years.)

43. Two potential limitations on any accountancy approach are that a) the work of the IPCC is likely to significantly change forest definitions for the second commitment period and b) that sequestration may not be permitted in the CDM during and after the second commitment period. The five-year T-CER copes with either or both of these eventualities.

Inappropriate other accountancy proposals

“Equivalence based” accounting.

44. Equivalence based accounting (e.g. “tonne-year”) is based upon the assumption that the sequestration and subsequent storage of carbon for a certain “equivalence” time (e.g. 46 or 100 years) would offset the same amount of emissions, whether or not the stored carbon were re-emitted after the “equivalence” time. In the original proposal, the project generates a flux of credits over time (yearly credits then equal average mass of stored carbon divided by the equivalence time in years).

45. The difficulty with this approach is that the scientific basis is incorrect. There is no finite “equivalence” time. Only additional sequestration and subsequent permanent storage can offset emissions.

The original “Colombian” proposal.

46. The original Colombian proposal (FCCC/SBSTA/2000/MISC8) tries to address non-permanence of sink projects by issuing “expiring” credits. These expiring credits have to be replaced by another credit after their “expiration” lifetime. The credit lifetime can, for example, be the envisaged project lifetime (e.g. 30 years). Although better than the “equivalence” based accounting schemes, the original Colombian proposal contains some flaws. In particular, the lifetime length is inappropriate. Projects should be monitored continuously, with CERs issued regularly, in order to incentivize land use decisions that most benefit the climate. Moreover, there is no inherent incentive structure, either for the investor country or the project developer, to monitor and verify the additional carbon stocks in the project once the credits have been given.

V. ADDITIONALITY

47. A key challenge to LULUCF project implementation under the CDM is verifying whether carbon sequestration resulting from project activities is truly *additional* to the baseline. This baseline must represent what would have happened anyway, without the project⁹. i.e. “the world without the project.”

48. To the extent possible, the SBSTA should develop standardized approaches for developing LULUCF project baselines and for establishing carbon additionality. Methods that are reasonably simple, transparent, and reproducible are necessary to establish the credibility of LULUCF projects as well as to manage project costs and technical/data requirements.

49. Standard methods for baselines and additionality must strike a difficult balance between taking account of both national and regional trends and local and project-specific factors. The likely baseline scenario for LULUCF projects will depend on a mix of factors including legal and regulatory standards, commercial viability and trends, the range of current management practices, and development funding and financial investment flows. These factors are likely to be based on national and regional historic data and projections and should be incorporated in a systematic way into project assessment. Thus, in order to maximize consistency, all projects within a region or country might use the same national and regional data.

50. However, although analytical *approaches* and *methods* should be standardized, the *baselines* themselves clearly have to be individual project baselines. Again, these individual project baselines should ideally be simple. However, this is challenging for forest sinks projects, because of the number and diversity of factors to consider, such as soil type and condition, prevalent biomes types, climatic and ecological variability, as well as other project-specific geographic, ecological and socio-economic factors. A “one size fits all” type of standardised baseline is therefore not appropriate.

51. It is, however, vital that any baseline fully takes into account the fact that forest or other biomass will tend to grow back naturally. It is this natural regrowth that constitutes the baseline. Additionality can clearly only be claimed for anything in excess of natural regrowth, unless it can be clearly shown that the land would otherwise be used for a purpose where natural regrowth would be artificially prevented. (In this context, it is worth noting that intensively managed tree-plantations, once their economically useful life is completed, typically significantly reduce the subsequent natural regrowth capacity of the site.)

⁹ see Decision 17/CP.7, annex, paragraph 43

52. Modalities for sink CDM projects must provide a strong incentive for more sustainable national forest policies. One example would be to say that no project could proceed unless there was no net deforestation in the country concerned, together with socio-economic and environmental safeguards. Parties should explore ways through which the CDM can provide incentives for sustainable national forestry policies and practices.

53. Furthermore, modalities regarding additionality have to take into account:

- the net balance of carbon dioxide, methane and nitrous oxide in order to set the baseline. Methane and nitrous oxide are high GWP gases, which in some cases may significantly affect the net climate effect of the project.
- not only the plant biomass carbon, but also soil organic carbon. In some wet areas, afforestation and reforestation may lead to significant losses of soil organic carbon, possibly offsetting the increase of plant biomass carbon. For example, Jackson et al. (2002) recently found that in certain grasslands of the south-western U.S., woody plant invasions into wetter grassland sites lost soil organic carbon, offsetting increases in plant biomass carbon, while drier sites gained carbon.¹⁰
- other uncertainties. See section VII.C on "Additionality and Uncertainties"

54. Baselines should be fixed for the first five-year commitment period, and then be regularly adjusted for each subsequent commitment period to reflect changing socio-economic, political, and ecological conditions¹¹. Finally, baseline and additionality determinations should be independently certified before any credits can be given to the project.

¹⁰ Furthermore, according to this recent study in North America, "such shifts make carbon stocks more vulnerable to loss from fire, biomass harvesting, and other disturbances." : Jackson, R.B. et al. (2002) "Ecosystem carbon loss with woody plant inversion of grasslands", Nature, Vol. 418, 8. August, p. 623.

¹¹ pursuant to decisions by the CoP regarding the treatment of LULUCF projects in subsequent commitment periods.

VI. LEAKAGE

55. CDM projects do not operate in a vacuum. By changing practices to reduce emissions within the project boundary, projects have the potential to influence emissions outside their project boundaries. Higher off-site emissions can cancel some or all of the project benefits. This external effect is referred to as “leakage.”

56. Leakage can occur whenever a project displaces demand for land, timber, fuelwood, or other goods and services. Leakage can occur through many different mechanisms and across a range of geographic scopes from local to international. For example, a project’s use of land may displace local slash-and-burn-farmers or ranchers who will deforest other forest areas.

57. Commercial plantations are particularly prone to high leakage that occurs long distances from project site, because they sell into large, fluid markets. Plantation projects will alter the supply of timber and pulp, causing other suppliers to national or international markets to change planting and harvesting decisions on lands elsewhere. The amount of leakage will depend on the origin of the replaced supply and the associated changes in land management, which will be hard to trace given the fluctuations and geographic scope of many markets. Commercial plantation projects should be excluded from the CDM because of their potential for high and geographically-distant leakage that is hard to estimate, unless methodologies are applied that can be proven to fully adjust for leakage.

58. Leakage has the potential to entirely reverse the climate benefits of a project if the underlying demand for land, timber, pulp etc. remains unchanged and emissions-producing activity occurs elsewhere instead. The potential for 100 percent loss of carbon benefits requires that rigorous methodologies are implemented to adjust for leakage. Given the narrow definition of project boundary under paragraph 52, which includes only emissions sources under the direct “control of the project participants,”¹² it is vital that the definition of leakage in paragraph 51 is interpreted broadly. Specifically, the terms “measurable and attributable the CDM project activity” in paragraph 51 should include market leakage and potential leakage at all scales – local, national, and international.

59. There are no simple solutions to leakage and this is recognized as an area of project assessment that requires significant development. SBSTA should develop methodologies that are appropriate for specific project types and all types of leakage. Leakage methodologies should be transparent, consistent and objective.

60. CAN believes that leakage is best addressed by combining two complementary approaches: (1) selecting the project assessment boundary and methods to capture

¹² (Annex of -/CMP.1 of 17/CP.7 in FCCC/CP/2001/13/Add.2)

geographically proximate leakage, and (2) estimating leakage that occurs outside the reasonable range of direct measurement. This recognizes the fact that some leakage may be estimated by monitoring flows across well defined boundaries, while other leakage effects may be indirect, influencing remote locations socio-economically or environmentally in ways that are unpredictable from direct monitoring of carbon flows (for example, through investment crowding, supply displacement, demand displacement and activity displacement). Leakage that cannot be directly measured at the local level should be estimated using appropriate models of land use, production and markets.

61. SBSTA shall develop definitions and modalities for afforestation and reforestation projects that address leakage that will:

- (a) Distinguish the types and magnitude of leakage that may occur from different project types;
- (b) Identify methods for estimating and accounting for leakage that are appropriate for specific project types and types of leakage;
- (c) Require reasonable project design elements and eligibility requirements to avoid leakage;
- (d) Define project boundary requirements such that direct project monitoring takes into account geographically proximate leakage;
- (e) Develop standard methodologies to account for unmitigated leakage occurring outside the project boundary, including leakage that may occur beyond national borders.

VII. UNCERTAINTIES

A. General

62. Estimates of the climate benefits of project-based activities are subject to two main types of uncertainties: in measurement of emissions and in delineating project-related parameters. Measurement uncertainty occurs because of the unavoidable limitations of even the best estimates of carbon stocks or emissions of greenhouse gases. This is, in part, due to the fact that emissions and removals of greenhouse gases are almost never directly measured, for reasons of both practicality and cost. They are estimated from so-called activity data which are multiplied by emission factors¹³. Both activity data and emission factors are generally more accurate for fossil fuel burning than they are for LULUCF activities, in part because such data has long been collected for economic reasons (for example, taxation) and partly because the well-defined, comparatively constantly emitting, point sources typical of fossil fuel burning are intrinsically easier to estimate than the less well characterized, fluctuating and diffuse sources that constitute most sinks. This was, to a significant extent, the reason why the Kyoto Protocol focuses on changes in carbon stocks rather than emissions from forests. Nevertheless, it is also hard to estimate carbon stocks accurately. There is thus a need for a means of coping with uncertainty in LULUCF projects, in general, and in forest-related projects, in particular.

63. Delineating project-related parameters, such as additionality, baselines, and leakage are necessarily subjective and introduce significant uncertainties unique to evaluating project-based activities. This section focuses mainly on ways of reducing, or allowing for, measurement uncertainty. It also briefly examines some issues relating to uncertainties in assessing additionality (specifically baselines). Other types of uncertainty or risk are addressed elsewhere in this paper, related to non-permanence and the inability to generate intended social and non-climate environmental goals.)

64. CAN believes that there are three steps to handling uncertainty.

- Step 1: Measurement Uncertainty. Apply good practice guidelines for estimation of carbon stocks and GHG emissions;
- Step 2: Apply strong rules for permanence, additionality, leakage and other project elements;
- Step 3: Adjust (or “discount”) the resulting estimates of project benefits to reflect the level of residual uncertainty before issuing CERs.

65. The first two steps can help to avoid unacceptable levels of uncertainty. Good practice guidelines for measurement are being developed as part of IPCC’s ongoing

¹³ For example, emissions from trucks would be estimated from activity data on their numbers, engine sizes, distances travelled and emission factors on emissions per unit fuel consumed.

work. Issues related to strong rules are addressed in other sections of this paper. Therefore, we focus first on the third step, how to adjust for measurement uncertainty.

B. Step 1: Measurement uncertainty

66. Adjusting project estimates to reflect residual uncertainty is critical to ensure that there is equal *confidence* that each CER represents the same climate benefit. Any reasonable application of Steps 1 and 2 above will result in estimates with uncertainties that will vary from project to project. This is not an acceptable basis upon which to issue CERs. Rather, the number of CERs issued for a project should reflect the lower end of an appropriate statistical confidence level.

67. Scientific convention is frequently to report values at the 95 percent confidence level, and this may be a reasonable approach in this case. Applied to the CDM sinks framework, this means that no carbon is credited which is not at least 95% certain to have been additionally sequestered (see Figure 1). Additional methodological work would be necessary to implement this principle, but the concept is straightforward and similar approaches have in fact been used in many pilot projects.

68. The practical implication of Step 3 is that projects with higher residual uncertainty have their estimates “discounted” relative to projects with lower uncertainty. Note that, reaching a given level of confidence across projects is not the same as requiring that all project estimates achieve the same level of uncertainty. One can accept a higher level of uncertainty from some projects as long as the project estimate is discounted to reflect that uncertainty before issuing CERs.

69. The discounting of project estimates based on uncertainty has several important attributes. First, it protects the integrity of the CDM by preventing CERs with wildly different levels of uncertainty to enter into the market.¹⁴ Second, it offers considerable flexibility to project developers who can determine for themselves the cost-effective level of monitoring, trading off the cost of additional assessment versus the potential to certify more CERs. Third, it is fair, because projects with greater uncertainty will bear more costs than other projects.

¹⁴ The discounted CERs have the same level of uncertainty, even though the underlying project estimates have different uncertainties.

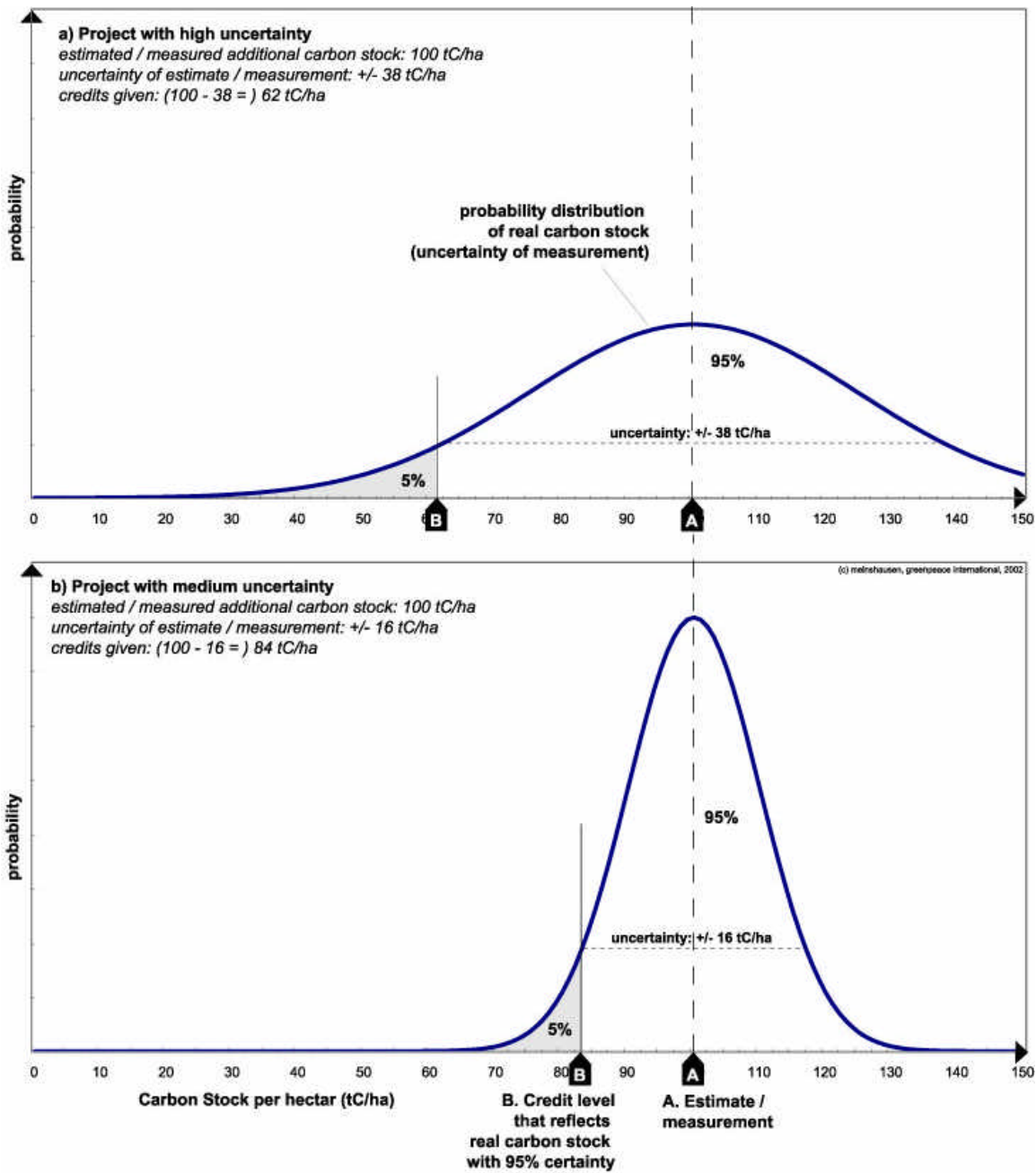


Figure 1 - Discounting for Uncertainty. The task is to guarantee conservative estimates of the real carbon stock. One has to ensure that given credits reflect the real carbon stock with at least 95% certainty. Thus, the credits have to equal the lower bound of the uncertainty (B), here illustrated schematically for projects with high (upper figure) and medium uncertainty (lower figure). This illustrates that it is important to decide rigorous procedures to determine uncertainty of sink project carbon estimates (or in other words: to determine the probability distributions).

70. Alternative approaches to addressing uncertainty that avoid the discounting described in Step 3 all introduce significant problems. Requiring a set level of certainty will essentially make some project types ineligible, either because assessment methods do not exist or are prohibitively expensive. Specifying exact methods will remove flexibility for developers, and are also likely to be determined by what is possible not by what is necessary to maintain the integrity of the CDM.

71. This paper addresses issues identified in the request for August 20, 2002 submissions, which focuses on afforestation and reforestation projects. However, it should be noted that rigorous procedures to handle uncertainty should be applied even-handedly to all project types to promote consistency and integrity in the CDM.

72. In conclusion, it should be recognized that it is not always possible to reliably assess uncertainty. Where there are many direct measurements on which to base an estimate, then it can be reliably estimated statistically. However, some estimates are simple experts' "best guesses" and are not amenable to statistical treatment. A conservative default discount rate should thus be provided for particular types of project, probably in the forthcoming IPCC Good Practice Guidelines.

C. Additionality and baselines

73. A key area of uncertainty in any project is that which can be introduced by estimation of the baseline from which it is measured. Indeed, because additionality means additional to what would have happened anyway, and it is never possible to be completely confident of what would have happened (but has not), additionality is a fundamentally intractable problem, in theory at least.

74. In practice, uncertainty can be minimized. For afforestation and reforestation projects, this would entail work on estimating carbon uptake were the land use on the site in question to continue or take a path typical for the area. For example, what would be the carbon uptake (or release) if a particular agricultural practice were to continue, or what would be the rate of uptake if the area were abandoned to regrow its natural vegetation? These estimates would then constitute the baseline, which would almost certainly change over time (i.e. it would be a so-called dynamic baseline).

75. Following the first two steps, mentioned earlier, the third step would help reduce uncertainty on baselines, although they would probably not completely remove it. In addition, baseline estimates should be regularly reviewed and adjusted over time. (Nearly all AIJ projects required baseline adjustments.) Review and adjustment could take place at the same time as TCER eligibility is reviewed (see section IV on permanence).

VIII. SOCIO-ECONOMIC AND ENVIRONMENTAL IMPACTS, INCLUDING IMPACTS ON BIODIVERSITY AND NATURAL ECOSYSTEMS

76. Parties have a responsibility to adhere to the agreed principles governing LULUCF projects. When dealing with social and environmental issues, the most starkly relevant principle is that LULUCF projects "...contribute to the conservation of biological diversity and sustainable use of natural resources". Thus, Parties need to determine methods by which they can ensure that they are indeed adhering to this agreed principle, as well as the underlying mandate that Article 12 CDM projects contribute to sustainable development of host countries.

77. CAN believes that such methods must be consistent for all projects, and all Parties (host countries and project proponents). A consistent, transparent and common methodology is the most simple and basic tool that the Executive Board operational entities must use to measure biodiversity and sustainable use impacts, both positive and negative, of the CDM on a global scale. Critical to note is that such tools exist already, and Parties have already agreed to accept these tools regardless of national circumstances. These will be presented below.

78. The international nature of the CDM should not allow countries to solely apply national laws, regulations and enforcement procedures when undertaking CDM LULUCF projects. The argument put forth by some Parties that applying international standards and guidelines conflicts with national sovereignty is simply a way to avoid being held to a common, transparent and international standard, and thus could challenge global accountability for project quality. Such an approach fails to recognize the unique nature of the CDM as a mechanism, agreed by Parties, to attain sustainable development objectives and climate benefits on a global scale. The Kyoto Protocol, and its Framework Convention, are international in nature, and bind the Parties to specific desired outcomes. Thus, permitting Parties to solely apply national law and regulations for global objectives should not be accepted. This is true of other international environmental agreements with specific binding outcomes, such as CITES, International Whaling Commission agreements, and others. In addition, CERs are internationally tradable commodities, and could thus be subject to trading regulations promulgated by the World Trade Association (WTO).

79. Allowing countries to depend solely on national environmental and social laws and regulations is potentially discriminatory, and could potentially subject Parties to violations of international law. Two scenarios present this potential.

80. In the first scenario, host country X has impeccable environmental credentials. Based on Country X's national law and regulation, CDM projects would be subject to environmental and social assessment processes consistent with other environmental projects, and would be designed to adhere to the principles of the Marrakech Accords and

the Framework Convention. Country X legally recognizes and respects indigenous and traditional land tenure regimes, and would ensure that CDM projects are done in accordance with relevant laws, and in accordance with the definitions and modalities agreed at COP9. With this framework in place, Country X could either attract ample CDM investments because its national laws and regulations give investors a high degree of confidence that their projects will not be subject to international scrutiny and potentially negative public relations impacts from civil society (i.e. CDM/SinksWatch¹⁵). This would discriminate against countries with less stringent and transparent legal, regulatory frameworks in place. Alternatively, Country X may be at the losing end of CDM investment, because investors could perceive that CDM projects would be too costly. Country X affectively discriminates against itself, which could provide incentive to weaken or ignore its own legal framework.

81. In the second scenario, Country Y has weak and/or non-enforced environmental laws, rampant corruption, illegal logging problems and unclear land tenure policies, which have resulted in ample deforested lands for CDM projects. Given this framework, investors may find CDM very attractive, as they can establish large-scale monoculture exotic plantations with less perceived investment than in Country X. This scenario discriminates against Country X, puts at risk remaining biological diversity, and exacerbates social tensions among the rural poor in Country Y.

82. While both scenarios are hypothetical, they are grounded within the range of possibility. The point is that without a common framework and standards for project design, some countries will attract more investment than others, and the CDM will not be equitable and will not contribute to sustainable development. Ironically, as the scenarios illustrate, this could be for positive or negative reasons.

83. As stated, agreed standards already exist as a baseline for project development under the framework of the UN system, other Multilateral Environmental Agreements (MEAs) such as CBD and CCD, and the binding guidelines of the World Bank in particular. CAN recognizes that these processes have weaknesses and gaps, for example the CBD and CCD have yet to deliver binding commitments, and some CAN members advocate against the World Bank's environmental policies and procedures as being inadequate in some cases. However, the rules and research of these MEAs and multi-lateral institutions do provide baselines for the development of social and environmental assessments. All Parties are members of the UN, and most are members of the World Bank as either donors or borrowers, and thus already accept the World Bank procedures for environmental and social impacts. While imperfect, these existing mechanisms provide a point of departure that can allow for comparative and transparent evaluation of projects by Operational Entities, the Executive Board, project stakeholder and civil society.

84. All CDM LULUCF projects must be evaluated against one consistent and transparent set of guidelines. The guidelines need to include processes and tools to

¹⁵ see www.cdmwatch.org and www.sinkswatch.org, which will be online until the end of 2002.

evaluate social and environmental impacts, with binding impact mitigation procedures or other consequences, such as denial of registration, if projects fail to meet minimum standards. The project development and monitoring cycle must involve procedures for gathering relevant information and evaluating projects, including mechanisms for effective stakeholder input at the project's conceptual stage, and at regular intervals throughout the project design and implementation cycles.

85. Furthermore, land rights have to be considered. What the Protocol refers to as sinks are often homes to some people, whose communities, livelihoods and cultures could be undermined by LULUCF activities. The land rights of many indigenous peoples, especially forest people, have frequently been usurped or grossly infringed in the past. A concern is that by ascribing a carbon value to new forests, the land rights of indigenous people may again be forfeited.

86. Project experience prior to the Marrakech Accords illustrates that the lack of common and transparent social and environmental assessment guidelines can promote a race to the bottom for some investors seeking cheap credits through minimal design processes. These losses should be unacceptable, especially as they are potentially avoidable.

87. To address socio-economic and environmental issues SBSTA shall develop definitions and modalities, supported by standards and guidelines, for afforestation and reforestation projects that will:

- (a) Be fully consistent with local and national environmental laws and policies, with World Bank operational policy relating to environmental and social impacts of projects, and consistent with the goals and objectives of other Multilateral Environmental Agreements (MEA) such as the Convention on Biological Diversity (CBD) (with a joint work program in place), the Convention to Combat Desertification (CCD); and the RAMSAR Convention on Wetlands.
- (b) Require that Parties publish and effectively disseminate national rules or guidelines on environmental and social sustainability of projects, consistent with relevant national law, the modalities and procedures established for the CDM, relevant World Bank operational policies, and that are consistent with relevant MEAs for a participant country, prior to participation in CDM project activities of that Party or of entities resident in or operating under the jurisdiction of that Party;
- (c) Develop a mandatory process for environmental and social impact assessments based on (a) (b), above, and (e) below.
- (d) Require that each project activity has undergone a mandatory and participatory project design process prior to its registration. Such a process shall, at a minimum:
 - i. Determine whether project activities will be consistent with the criteria set forth in the Marrakech Accords and with any additional criteria or guidance adopted by the Conference of the Parties or the Executive Board;

- ii. Require a social and environmental impact assessment to assist project developers identify and mitigate any potentially negative impacts and enhance potential environmental or social benefits. Rather than being a constraint to project developers such assessments can help design projects that minimize risk to both investors, host countries and local stakeholders.
 - iii. The impact assessment process has to ensure that information necessary to assess the environmental and socio-economic impacts of each project is made available to all stakeholders in a timely and culturally appropriate manner.
 - iv. Ensure meaningful and transparent stakeholder participation during each phase of the project cycle (project proposal, validation, registration, verification and certification, and issuance of CERs), including opportunities to contribute to all phases of the project development and design, review and comment upon relevant documents within a 60 day time frame, and to receive responses as to why stakeholder input was incorporated or rejected in project design¹⁶;
 - v. Contain specific strategies and plans to mitigate any negative environmental or social impacts of the project, and to reject a project if mitigation proposals are inadequate to ensure the conservation of biodiversity and the sustainable use of natural resources;
 - vi. Be subject to review by the Operational Entity and/or Executive Board at any time during the life of the project.
 - vii. Ensure that the consistency of the project with all requirements listed under (e) below can be assessed prior to the project's registration.
- (e) Require that CDM projects:
- i. Are afforestation and reforestation projects that promote ecosystem restoration with native species to maximize environmental benefits, such as watershed enhancement, biodiversity and social benefits, such as poverty alleviation and sustainable livelihoods with the agreement and participation of local communities;
 - ii. Are subject to a meaningful and transparent stakeholder participation during each phase of the project cycle (project proposal, validation, registration, verification and certification, and issuance of CERs), including opportunities to contribute to all phases of the project development and design, review and comment upon relevant documents within a 60 day time frame, and to receive responses as to why stakeholder input was incorporated or rejected in project design;

¹⁶ for more on public participation in the CDM, see "Key Opportunities to Strengthen Public Participation in the CDM" Nathalie Eddy, Greenpeace USA, SB16 Briefing paper, available at <http://www.climnet.org/sbsta16/GPs16-cdmpublicpart.pdf>

- iii. Clearly demonstrate ancillary environmental benefits, including protection of biodiversity, soil and freshwater conservation, combating desertification, and improvement of air and water quality;
- iv. Not contain any plantations, defined as “*forest stands established by planting or/and seeding in the process of afforestation or reforestation, which are either: of introduced species (all planted stands); or intensively managed stands of indigenous species which meet all the following criteria: one or two species at plantation, even age class, regular spacing*”¹⁷.
- v. Where applicable, promote protection of sensitive species and ecosystems, such as those listed under CITES and the IUCN Red Book.
- vi. Clearly demonstrate ancillary social benefits, including the generation of local income, the promotion of secure land tenure and capacity building;
- vii. Not contribute to the risk of desertification or soil erosion on affected or adjacent lands, or reduce the quantity or quality of fresh water resources;
- viii. Respect and build upon the rights and needs of Indigenous People and local communities, including customary rights related to land tenure and the right of indigenous peoples to prior informed consent over projects that affect them and their lands. This requirement should be clearly reflected in the definitions, modalities and safeguards for assessment and monitoring of afforestation and reforestation projects in the CDM.
- ix. Ensure sustainable forest practices, such as those carried out by many local communities as well as those prescribed under creditable independent certification processes. Exclude the use of harmful forestry practices, such as forest simplification, intensive soil disturbance, extensive application of pesticides, herbicides or other chemicals.
- x. Not involve displacement of local communities or indigenous peoples;
- xi. Exclude the conversion of, or negative impacts to, native ecosystems, including all native forests, inclusive of old growth and late successional forest areas, wetlands, grasslands or deserts. In ecosystems that have human communities, exclude areas where land tenure is in dispute and activities that have negative impacts on those communities and their livelihoods.
- xii. Exclude the use of genetically modified trees or other organisms, and the introduction or use of exotic species;

¹⁷ The Temperate and Boreal Forest Resources Assessment 2000. This categorical exclusion of mono-culture plantations is of utmost importance due to their specific problems, such as threatening biodiversity, increased risks for non-permanence due to reduced pest resilience, etc...

- xiii. Exclude the use of pesticides whose use or transport is prohibited under multilateral environmental agreements, or the laws of the participating countries;
 - xiv. Not alter natural or traditional indigenous fire regimes, except where essential for initial site preparation prior to reforestation. Especially not alter fire regimes, where they are an integral part of the ecosystem, and exclude fire suppression to obtain carbon credits in these areas.
- (f) guarantee that approval or disapproval of a project (registration) is based on the results of the mandatory environmental and social impact assessment, described under (c) and (d) above.
- (g) Solicit and incorporate input and guidance from the Convention on Biological Diversity, the United Nations High Commissioner for Human Rights, and other intergovernmental organizations with relevant expertise;
- (h) Monitor projects periodically to verify compliance with paragraphs (a)-(e). Projects that are not in compliance with paragraphs (a)-(e) shall not be issued CERs.

IX. MISCELLANEOUS

A. Dispute Resolution

88. Given the high socio-economic and ecological complexities of land use, the importance of land to directly meeting the subsistence needs of billions of persons around the globe, and the greater complexities of assessing realistic baselines in the land-use sector, Parties will want to ensure that the CDM provides additional procedural safeguards for LULUCF projects. In cases where the CDM inadvertently approves projects that worsen poverty by reducing access to land and other resources, lead to environmental degradation in the areas where they are implemented, and/or are based on fundamentally flawed baseline, additionality or leakage assumptions, affected stakeholders should have recourse to a CDM LULUCF Dispute Resolution mechanism in order to have an opportunity to resolve such problems effectively.

B. Wood Products

89. Finally, a remark about wood products. CAN opposes any ideas to award credits for carbon storage in wood products. Not only is carbon storage in wood products, and its related leakage and its additionality impossible to monitor and verify, accounting for the carbon storage in wood products does as well divert financial and political resources away from the primary task to reduce societies' dependence of fossil fuels. Thus, CAN supports the IPCC's reporting guideline default assumption that harvested wood is assumed to be oxidised into carbon dioxide when trees are cut.

X. CONTACT

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XI. APPENDIX A: WHO IS “CAN” ?

90. The Climate Action Network (CAN) is a global network of about 300 Non-Governmental Organizations (NGOs) working to promote government and individual action to limit human-induced climate change to ecologically sustainable levels. CAN members work to achieve this goal through the coordination of information exchange and NGO strategy on international, regional and national climate issues. CAN has seven regional offices which co-ordinate these efforts in Africa, Central and Eastern Europe, Europe, Latin America, North America, South Asia, and Southeast Asia. Diverse environmental organizations from around the globe, ranging from large international groups such as World Wildlife Fund (WWF), Greenpeace, Friends of the Earth, to small local groups in developing countries such as Terre Vivante in Mauritania and the Green Coalition in the Philippines, work collaboratively within CAN.

91. For more information about CAN, please visit www.climatenetwork.org and www.climnet.org.