

## **New Zealand**

### **A Submission to the Ad-Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP)**

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

**15 February 2009**

#### **Mandate**

At its resumed sixth Session the AWG-KP concluded, noting the iterative nature of its work programme, that in 2009 it will focus on agreeing on further commitments for Annex I Parties under the Kyoto Protocol. In this context, it recognized the need for work to be conducted on other issues arising from the implementation of the work programme, with due attention to improving the environmental integrity of the Kyoto Protocol, including the definitions, modalities, rules and guidelines for the treatment of land use, land-use change and forestry (LULUCF) in the second commitment period.

The AWG KP also agreed to continue, including through in-depth consultations at its seventh session, its deliberations on how to address, where applicable, the definitions, modalities, rules and guidelines for the treatment of LULUCF.

Parties were invited to submit, by 15 February 2009, their views and proposals for further elaboration of the options, elements and issues contained in annex III to the report of the AWG-KP at its sixth session and annex IV to the report of the AWG-KP at its resumed fifth session, including views on how and which proposals could address cross-cutting issues, for compilation by the secretariat into a miscellaneous document. New Zealand hopes this miscellaneous document can form the basis of a negotiating text.

New Zealand considers that Decision 16/CMP.1 provides a good basis for the LULUCF rules for post-2012. Conscious of the need to progress in our work, all of our proposed improvements are designed to fit within the existing rules framework. To assist the Chair of the Kyoto Protocol in elaborating a straight forward text, where appropriate we have provided short description of our proposals, their rationale and suggested legal text.

#### **Introduction**

1. The Fourth Assessment Report of the IPCC notes that in the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit.

2. Rules for LULUCF should optimise the contribution forests and land use activities can make to addressing climate change, while maintaining environmental integrity and leading to other environmental co-benefits that will contribute to sustainable development and food security.
3. The LULUCF rules have an important bearing on resource allocation in countries dependant on land-based sectors.
4. In this regard, the treatment of LULUCF in the first commitment period of the Kyoto Protocol has resulted in a number of complexities and major challenges for domestic policy implementation for New Zealand.
5. In the course of negotiations Parties should be conscious of the need to maintain confidence within the investment community – to address climate change the private sector needs to make major shifts in investment and management decisions. This is enhanced if decision-makers have confidence in the durability of the economic signals established under the rules of an international framework.
6. New Zealand recognises that LULUCF rules are complex and interlinked and that there may be differing approaches to achieve the same outcomes. We propose some solutions to key issues in this submission. New Zealand remains open to discussing any alternative approaches with Parties to achieve improvements, while ensuring environmental integrity.
7. New Zealand believes it is necessary to agree LULUCF rules before agreeing to further commitments. Knowing the rules prior to setting commitments allows those commitments to be established in an informed environment, for national circumstances to be taken into account, and to ensure the rules contribute to achieving the objective of the UNFCCC.

## **Views on the LULUCF Rules for Post-2012**

### **Article 3.3 Activities**

#### **Afforestation/Reforestation (A/R) Debit-Credit Rule**

##### **Description**

8. New Zealand considers that the Afforestation/Reforestation (A/R) Debit-Credit rule must continue for the post-2012 period, with a slight modification to paragraph 4 of the Annex to Decision 16/CMP.1 to clarify that the rule applies to any disturbance to the forest.

##### **Rationale**

9. The current Afforestation/Reforestation (A/R) Debit-Credit rule acts to limit liabilities that a Party faces as a result of harvesting activities in forests established since 1990. The rule limits liabilities to only the amount of carbon that was removed by the trees since the start of the first commitment period (2008), in other words the carbon sequestration that has been credited.
10. Without this rule, liabilities from these post-1990 forests could be greater than the amount of credits that are received for carbon stored in these forests.
11. This would retrospectively penalise Parties for having taken early action by establishing forests prior to the start of the commitment period – a perverse and inequitable outcome.
12. We consider the rules must be retained for future commitment periods, at least until most forests established after 1990 but before 2008 have been harvested once, this effectively means that this rule would phase out over time. New Zealand also believes it should be clarified to make clear that it covers all disturbances to new forests whether the disturbance is as a result of a human induced activity such as harvesting or is due to natural events like pests and fire. This would provide for a more comprehensive coverage of events or activities that affect these forests.

##### **Proposed legal text**

###### **Modified paragraph 4 of Annex to Decision 16/CMP.1**

**Debits arising from a unit of land, that was subject to afforestation and reforestation since 1990 and has not since been harvested, shall not be greater than credits accounted for in total on that unit of land.**

## **Land Use Flexibility for Planted Production Forests**

### **Description**

13. The current rules of the Kyoto Protocol unnecessarily limit the flexibility of land use for planted production forests that were established prior to 1990. This is an issue of critical importance to a country with a land-based economy, such as New Zealand.
14. We propose an addition to the Annex to Decision 16/CMP.1. The effect of this addition would allow planted production forests (i.e. forest plantations) that were established prior to 1990 to be able to be harvested and replanted on another area of land thus establishing an “equivalent forest” without incurring liabilities for deforestation. The new afforested area would not generate credits under Article 3.3, but rather would be deemed to be part of the pre-1990 forest estate and be treated exactly in accordance with the country’s Article 3.4 accounting obligations, if any.

### **Rationale**

15. The Kyoto Protocol creates economic imperatives (cost and benefits). The current LULUCF rules for deforestation impose unnecessary restrictions on the flexibility of production lands. The rules create significant opportunity costs and unnecessarily waste high quality food producing land by locking that land into existing uses for planted production forests even though there may be a higher value use for that land. Moreover in New Zealand’s case some areas of pre-1990 forest are in areas with climates that are expected to change in such a way to make them unsuitable for forestry, e.g. prolonged drought and increased fire risk.
16. The rules impose significant costs on countries and their economic actors, with no environmental benefit, due to the current definition of what constitutes deforestation. Our proposal would produce exactly the same outcome for the atmosphere as would have happened if the forest was replanted on the same piece of land (which under the current rules is not defined as deforestation and therefore does not attract an emissions liability).
17. The current situation where Parties have to deviate significantly from the international LULUCF framework created by the Kyoto Protocol in order to develop sensible domestic policy is inefficient, creates considerable ongoing costs and can be highly controversial. This has been the experience in New Zealand. It is therefore vital to create a more dynamically efficient and functional regime for land use, rather than expect countries to meet the considerable costs of providing flexibility as a domestic issue.
18. We consider that limiting the proposal for land use flexibility to planted production forests, and not to natural forests, removes risks to biodiversity and restricts the rule to only apply where 'moving forests' is appropriate. It is

therefore reasonable, and pragmatic for the rules to reflect the realities of a production landscape.

19. The benefit of the proposal is that it would allow countries to meet sustainable development objectives by allowing land use to change to its most economically and environmentally sustainable, including by increasing the options available for adaptation to climate change, e.g. the planting of erosion-prone land. This can be done with no reduction in environmental outcomes as long as the harvested forest is replaced with an equivalent forest elsewhere (which is not credited under Article 3.3).
20. The rules as they stand would presumably repeat this "loss of flexibility for no benefit" in other countries. This may be an impediment to countries taking on commitments under the Kyoto Protocol, especially countries with land-based economies.

### **Proposed Legal Text**

#### **Proposed new definitions and rules**

**1. (d) "Deforestation" is the direct human-induced conversion of forested land to non-forested land (unchanged from Decision 16/CMP.1)**

**1. (d bis) In the case of "planted production forests" established before 1 January 1990 only, conversion of forested land to non-forest land shall be considered harvesting, and shall not be considered deforestation, where an "equivalent forest" is established elsewhere on non-forest land that would have qualified for [as] afforestation or reforestation. For the purposes of paragraph (d bis):**

**(i) "Planted production forests"<sup>1</sup> are forest stands established by planting or/and seeding. They are either of introduced species, or intensively managed stands of indigenous species, which meet all the following criteria: one or two species at planting, even age class, regular spacing, and the extraction of forest products (usually wood and fibre) is the predominant management objective.**

**(ii) "Equivalent forest" is an area of forest that replaces a harvested planted production forest on a different area of land, and will achieve at least the same carbon stock over the same period as would have occurred had the harvested planted production forest been re-established on the original area;**

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<sup>1</sup> This definition has been derived from the FAO definition for 'plantation forest' as used in the Forest Resource Assessment 2000, and an FAO definition for 'production forests' to reflect the management intent of the forest. Reference: Forest Resources Assessment WP 79, Definitions Related to Planted Forests, Jim Carle and Peter Holmgren, October, 2003

iii) "Equivalent forest" shall not be included in a Party's assessment of emissions and removals from afforestation and reforestation activities and must be included in a Party's accounting of Forest Management under Article 3.4, if elected.

Each Party included in Annex I shall report, in accordance with Article 7, on how harvesting or forest disturbance that is followed by the re-establishment of a forest is distinguished from deforestation, including where an equivalent forest is established in accordance with provisions for planted production forests set out in paragraph X (*consequential addition once text is finalised*). This information will be subject to review in accordance with Article 8.

## Article 3.4 Activities

### Description

21. New Zealand supports the continuation of voluntary Article 3.4 activities for post-2012.

### Rationale

22. It is clear that there are many issues associated with Article 3.4 activities that make accounting for these activities as part of meeting national obligations very difficult. These issues vary according to the characteristics and accounting approach of each specific activity but include: data limitations and uncertainty, the high cost of measurement and monitoring, factoring out non-anthropogenic effects of climate change such as drought and inter-annual variability and managing the effects of historic management practices (legacy effects).
23. Clearly, accounting for Article 3.4 activities is not appropriate in every Party's circumstances. This is evidenced by the small number of Parties electing 3.4 Activities in the first commitment period of the Kyoto Protocol.

### *Grazing land, Cropland Management and Revegetation*

24. As stated above, significant technical barriers exist for realising the technical potential for soil carbon sequestration. An additional barrier is the net-net method of accounting for Grazing land, Cropland and Revegetation. Net-net accounting creates some important and non-intuitive consequences. There are data problems (having to know the net emissions in 1990). There can also be problems with "saturation" and ongoing liabilities even though emissions may not be occurring. For example, if a country that was losing carbon in 1990, is still losing carbon in the commitment period but at a lower rate – then they would get credits. On the other hand if a country that was gaining carbon

in 1990, is still gaining carbon in commitment period but at a lower rates - then they would get liabilities.

25. Also, accounting for carbon loss due to erosion is problematic where it is difficult to distinguish between anthropogenic and natural erosion in a volcanic and tectonically active landscape.
26. Finally, we need to consider whether accounting for these activities makes a material difference. The Fourth Assessment Report of the IPCC notes the large global technical potential for increasing storage of soil carbon in agricultural lands soils. However, it also notes that while agricultural lands generate very large CO<sub>2</sub> fluxes both to and from the atmosphere, the *net* flux is small (estimated at 40 MtCO<sub>2</sub>-eq, less than 1% of global anthropogenic CO<sub>2</sub> emissions).
27. With the above challenges in mind, and given that agricultural soils are not a significant *net* source of emissions, New Zealand considers that it is unnecessary and unrealistic to expect compulsory accounting by Parties at this point in time.

#### *Forest Management*

28. Forest Management should remain a voluntary activity post-2012.
29. New Zealand has specific issues in relation to Forest Management that would make accounting for this activity practically impossible, at least with the current framework. New Zealand's planted production forest estate that was established prior to 1990 is expected to become a net source from around 2011 due to business as usual harvesting of these forests. It is then expected to returning to a net sink from 2022. The magnitude of these emissions under gross-net and net-net accounting is many times larger than New Zealand's total annual emissions – though given their short-term cyclical nature (in climate change terms) they are of little consequence to meeting the global climate change challenge as the long term carbon stock will remain the same.
30. While we do not support mandatory accounting for Forest Management, New Zealand is open to considering modifications to the rules for Forest Management accounting for post-2012. Key issues that need to be resolved in an equitable and sensible manner include factoring out age class structure, legacy effects of past management practices, natural disturbances, and inter-annual variability.
31. New Zealand considers that the application of caps and/or discount factors, while recognising their limitations, may be a practical way to address many of the above issues.

### *Wetland Management*

32. New Zealand is open to the inclusion of wetlands as a new voluntary activity for post-2012. We recognise the importance of emissions from degraded wetlands – principally on organic/peat soils.
33. We need to ensure that there is no double accounting (e.g. wetlands on grazing land where grazing land has already been elected).
34. We need to develop appropriate definitions of wetlands and there should also be symmetrical treatment of this new activity, i.e. accounting for wetland restoration should be balanced by accounting for wetland degradation.

### **Proposed legal text**

#### **Paragraph 6 of the Annex to Decision 16/CMP.1**

**Prior to the start of any commitment period a Party included in Annex I may choose to account for anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from any or all of the following human-induced activities, other than afforestation, reforestation and deforestation, under Article 3, paragraph 4: revegetation, forest management, cropland management, and grazing land management.**

### **Cross-cutting Issues**

#### **Emissions from Harvesting (Harvested Wood Products)**

##### **Description**

35. New Zealand proposes that emissions from harvesting activities, post-2012, should be accounted for, in the producing country, on the basis of *when* they occur. New Zealand has proposed the “Emissions to Atmosphere” (ETA) approach.

##### **Rationale**

36. The current treatment of emissions from forest harvesting – where the emissions are assumed to be instantly oxidised and released into the atmosphere – does not reflect reality, and acts as an impediment to forest investment and sustainable timber production.
37. Under the Emissions to Atmosphere approach, where countries have reliable data, they should be able to choose to account for emissions from harvesting of their forests *when* the emissions actually occur. The responsibility for those

emissions would remain with the wood producing country (that is the country that received any RMUs in respect of these forests) irrespective of whether the harvested wood was exported to another country.

38. Depending on the average lifetime of the end-uses of the wood, emissions from harvesting could occur over a number of years. Recognising the value of storing carbon in wood products would help to address cash-flow problems associated with the existing instant oxidation approach, and provide strong incentives through the supply chain to produce longer lived wood products. These incentives would start within the forest, with growers seeking to produce wood suitable for long lifetime applications. It would also affect the product mix of producers, especially in integrated forestry/wood processing companies.
39. New Zealand considers it is not necessary to account for emissions from existing wood products (i.e. wood products produced prior to 2012), since this wood product pool will continue to be sustainably replenished by wood produced outside the Kyoto Protocol accounting system (where it has not been used as an accounting offset). This wood could be sourced from forests in countries outside the Kyoto Protocol regime, from forests in Kyoto Protocol countries that are outside accounting (where 3.4 Forest Management has not been elected), or where Forest Management has been elected, from forests growth above the cap. Even for forests accounted for under the Kyoto Protocol, all emissions from harvesting over the period 2008-2012 have been assumed to be oxidised instantly (therefore replenishing the existing pool) and all harvest of these forests prior to 2008 has not been credited under the Kyoto Protocol (therefore replenishing the existing pool).
40. Finally, emissions from existing wood products are unlikely to be greater than they were in 1990. Consistent with accounting for other 'emissions sources' in other sectors (energy, agriculture etc), any emissions from existing wood products in 1990 would presumably be factored into a Party's allocation of assigned amount units. The net result of including the existing wood products pool in an accounting system would be essentially a zero sum game.
41. The international community has made no significant progress in developing rules for the accounting of Harvested Wood Products in the many years that the issue has been discussed to date.
42. New Zealand considers that that our simplified proposal offers the only real prospect of success in the second commitment period. Importantly, it would also leave open the door open for a more comprehensive approach to be agreed in the future. It would also encourage the gathering of data to support other approaches in the future.
43. Maintaining the current "instant oxidation" approach for post-2012 would be a poor outcome in terms of encouraging longer life wood products, investment in forests and, especially, allowing sustainable timber production.

44. We propose the ETA also apply to wood produced from forests established under the CDM, potentially making such activities more attractive to investors, while ensuring environmental integrity.

#### **Proposed legal text**

##### **Proposed new paragraph 22 of the Annex to Decision 16/CMP.1**

**Carbon removed in wood and other biomass from forests accounted for under the Kyoto Protocol under articles 3, 6 and 12, shall be accounted for on the basis of default instantaneous oxidation or on the basis of estimates as to when emissions occur provided verifiable data is available. Such carbon, including carbon in exported wood, may be transferred to a harvested wood products pool to be accounted for by the Party producing the wood.**

***Note that the issue of accounting guidelines and good practice for the post-2012 period will need to be addressed as a cross-cutting issue in the final LULUCF decision text, as will provisions for reporting and review.***

#### **Natural Disturbances**

45. New Zealand considers that the factoring out of natural disturbances for Article 3.4 forests is fundamentally different than it is for Article 3.3 Afforestation / Reforestation forests. The key difference between these two types of forest is a Parties' ability to manage economic risk.
46. This needs to be taken into account in the future rules. New Zealand does not believe it is necessary to apply 'time outs' or other policies for natural disturbances to 3.3 forests, provided that the proposal to continue with an amended A/R Debit Credit rule is accepted. This rule, as proposed by New Zealand, can adequately address the issue of natural disturbances in forests established since 1990 through Afforestation and Reforestation since it would limit a Parties' liabilities from such forests to only the credits previously received.
47. In New Zealand's suggested approach, the only economic risk from natural disturbances to Afforestation / Reforestation is the carbon credited from 2008 onwards. Parties can make a sovereign choice on how to best manage this risk of natural disturbances, for example, by retaining a proportion of the credited carbon in high risk areas. As carbon credited for removals from Afforestation / Reforestation can be used to offset emissions elsewhere New Zealand considers it important that this carbon loss is compensated for when it occurs.

48. The carbon stored in 3.3 A/R forests was not present in 1990 and will be credited under the Kyoto Protocol (at least the portion from 2008 onwards). This is a very different situation to the standing stock in Article 3.4 forests.
49. In these, pre-1990 (Article 3.4) forests much of the carbon stock existed as at 1990, and has not been credited under the Kyoto Protocol. It became, by advent of the 1990 base-year, a significant economic risk that a country is unable to manage completely. As this carbon has not been used to offset emissions elsewhere, the LULUCF rules need to develop a way to address this.
50. In this regard, New Zealand is open to considering all methodological approaches to factor out natural disturbances. Equally, we think that policy approaches such as caps and/or discount factors (while acknowledging their significant shortcomings) may offer pragmatic solutions in the time available for negotiations.

## **Article 12**

### **Afforestation and Reforestation Activities in the Clean Development Mechanism**

51. New Zealand considers that there are a number of ways to address issue of non-permanence of A/R activities in the CDM.
52. The first commitment period resulted in the issue of differentiated credits for A/R activities in non-Annex I Parties through the CDM with tCERs and /CERs
53. Experience so far as shown that this has been very effective in addressing non-permanence by virtue of the fact that it has probably prevented many A/R CDM projects being established in the first place (though there are many reasons why investors may not choose to invest in forests under the CDM). This is a substandard outcome for Parties with great potential for afforestation and reforestation activities.
54. An option to address non-permanence would be for non-Annex one Parties to voluntarily take on responsibility for any reversal of carbon stored through an A/R activity. This is how the issue of non-permanence is addressed within Annex I Parties and non-Annex I Parties could be offered the same opportunity. Non-permanence is not an issue as long as there is full compensation of the carbon that was once stored. The challenge is to ensure that such long term obligations are met by an entity that will endure in the long term. A countries' sovereign government is one such entity – just as it is in the case of Annex I countries.
55. New Zealand considers this approach could be applied to LULUCF projects in the CDM and we consider it worthy of further consideration in these discussions. Non-Annex I Parties would only enter into this sort of arrangement at their own discretion and if they wished increase the viability of

their A/R CDM projects. The existing *t*CER and *I*CER framework would still be available to non-Annex I Parties that do not want to take on such a responsibility.

56. As we have suggested in the section on Emissions from Harvesting (Harvested Wood Products), we consider that the Emissions to Atmosphere approach could be applied to A/R activities in the CDM. This should also improve the incentives for the establishment of such projects and sustainable, high value timber production from them.

### **Agriculture Soil Carbon in the Clean Development Mechanism**

57. New Zealand considers that we should consider the inclusion of agriculture soil carbon as an eligible activity under the Clean Development Mechanism (CDM).
58. We recognise that methodologies will need to be developed at the project level to ensure verified removals/emissions of soil carbon (and other agriculture GHGs) below baselines, additionality will need to be demonstrated, and as with A/R in the CDM non-permanence will need to be addressed appropriately.
59. New Zealand considers that the same approach suggested to address non-permanence in CDM A/R activities could be applied to CDM soil carbon activities; that is through the issuance of *I*CERs or *t*CERs or by non-Annex I Party voluntarily taking on responsibility for any reversal.