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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

**AD HOC WORKING GROUP ON FURTHER COMMITMENTS  
FOR ANNEX I PARTIES UNDER THE KYOTO PROTOCOL**

Seventh session

Bonn, 29 March to 8 April 2009

**Item 5 (b) of the provisional agenda**

**Other issues arising from the implementation of the work programme of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol**

**Land use, land-use change and forestry**

**Further elaboration of the options, elements and issues contained in annex IV to document FCCC/KP/AWG/2008/3 and annex III to document FCCC/KP/AWG/2008/5, including on which proposals could address cross-cutting issues, and how**

**Submissions from Parties**

1. At its resumed sixth session, the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) invited Parties 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 the first part of its sixth session<sup>1</sup> and annex IV to the report of the AWG-KP at its resumed fifth session,<sup>2</sup> including views on how and which proposals could address cross-cutting issues. It requested the secretariat to compile these submissions into a miscellaneous document for consideration at its seventh session (FCCC/KP/AWG/2008/8, paragraph 52 (b)).
2. The secretariat has received 12 such submissions.<sup>3</sup> In accordance with the procedure for miscellaneous documents, these submissions are attached and reproduced\* in the language in which they were received and without formal editing.

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<sup>1</sup> FCCC/KP/AWG/2008/5.

<sup>2</sup> FCCC/KP/AWG/2008/3.

<sup>3</sup> Submissions were received from the Democratic Republic of Congo, Madagascar, the Republic of Moldova and Panama on behalf of Costa Rica and Colombia addressing modalities for land use, land-use change and forestry activities under the clean development mechanism. These submissions are contained in document FCCC/KP/AWG/2009/MISC.3.

\* These submissions have been electronically imported in order to make them available on electronic systems, including the World Wide Web. The secretariat has made every effort to ensure the correct reproduction of the texts submitted.

**FCCC/KP/AWG/2009/MISC.5**

GE.09-60395

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\* This submission is supported by Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey.

PAPER NO. 1: AUSTRALIA

**AUSTRALIA**

**Land Use, Land-Use Change and Forestry (LULUCF)**

**Submission to the AWG-KP and AWG-LCA  
March 2009**

Australia welcomes the opportunity to submit our 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. Australia will be providing additional views and proposals as the negotiations progress.

The full mitigation potential of the land sector has not been realised under the land use, land-use change and forestry (LULUCF) rules for the first commitment period. The Parties have an important opportunity when negotiating a post-2012 outcome to improve upon the current LULUCF rules to provide a stronger, long-term basis for an international climate change response.

Australia's aim in the negotiations is to improve the treatment of the land sector in the long-term, rather than develop short-term solutions to problems generated by the current rules. Our proposals build on the core considerations outlined in Australia's November 2008 LULUCF submission.

This submission is relevant to both the AWG-KP and AWG-LCA negotiating streams. A post-2012 outcome should treat the land sector in a comprehensive and integrated way that is comparable for all Parties taking on economy-wide mitigation targets.

**ESSENTIAL ELEMENTS**

In the negotiations on LULUCF post-2012, the Parties need to decide:

- How land-based emissions and removals are included towards Parties' mitigation commitments and associated baselines. This is closely linked to the broader negotiations on the contribution of Annex I Parties, individually or jointly, to the scale of emission reductions to be achieved by Annex I Parties in aggregate; and
- Which land-based anthropogenic emissions and removals are covered in the post-2012 outcome, and which parts of the land sector are mandatory or elective.

There is a strong preference for the coverage of the land sector to be known prior to final agreement on mitigation commitments, that is, 'rules' need to be agreed before 'targets'. This reduces the uncertainties that Parties take and gives them greater confidence when setting the level of national ambition for the next commitment period.

Note that in this submission, 'the Parties' refers to the Parties collectively. 'Parties' refers to the sub-set of these Parties that take on economy-wide mitigation targets.

## MITIGATION COMMITMENTS AND BASELINES

In the first commitment period, LULUCF is included towards Parties' mitigation commitments as an addition (net removals) or subtraction (net emissions) from their initial assigned amount. This is illustrated in Figure 1. Figure 2 illustrates how the amount by which LULUCF adjusts the initial assigned amount is derived<sup>1</sup>.

This approach was a consequence of the manner in which the rules for LULUCF were negotiated in the first commitment period, and matched the Parties' knowledge and capabilities at the time. However, it lacks appropriate transparency. Parties' first commitment period mitigation commitments (targets) alone do not express the comparable efforts taken by Parties to mitigate climate change. Comparable effort is also made up of the LULUCF rules and Parties' differentiated forest management caps.

The Parties need to decide whether the same approach should apply to a second commitment period. A decision on this issue should be made under the AWG-KP agenda item on the 'contribution of Annex I Parties, individually or jointly, to the scale of emission reductions to be achieved by Annex I Parties in aggregate', in consultation with the LULUCF negotiators.

This decision needs to be made in conjunction with a decision on baselines for LULUCF (including gross-net versus net-net accounting). This is because the decision on how and to what extent LULUCF is incorporated into Parties' mitigation commitments will greatly affect the choices that the Parties need to make on LULUCF baselines. The forest management cap should also be considered in this context.

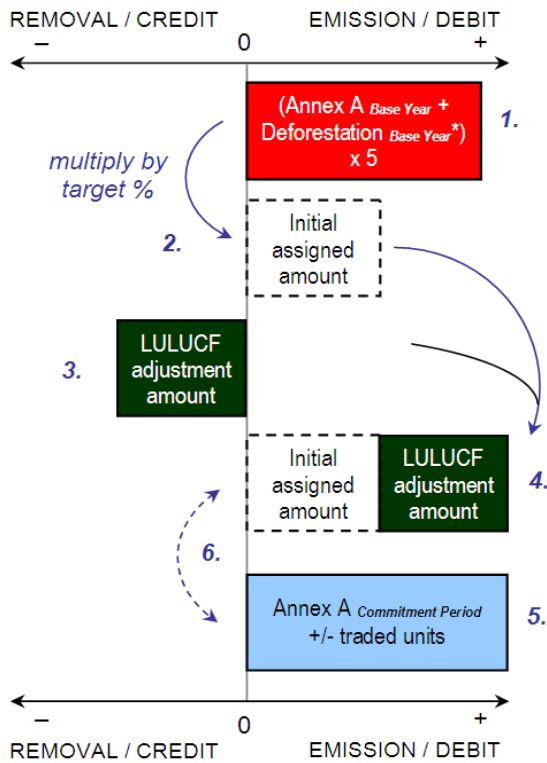
To illustrate this point, the effect of three different approaches for expressing mitigation commitments on LULUCF baseline options is outlined in Table 1.

**Table 1.** *Effect on LULUCF baselines of different expressions of mitigation commitments*

Possible approach	How mitigation commitment is expressed	Options for LULUCF baselines
Absolute amount	An absolute amount (megatonnes CO <sub>2</sub> -e) to be emitted in the second commitment period.	No baselines needed. Parties would include LULUCF in this absolute amount.
First commitment period initial Assigned Amount	Percentage change relative to a Party's first commitment period initial Assigned Amount	Lands subject to Article 3.3 and elected Article 3.4 activities contribute to a Party's compliance in the first commitment period. They may require a different treatment to activities that a Party elects for the first time post-2012.
Other base year	Percentage change relative to a Party's net emissions in a base year	All LULUCF activities would need to be considered to determine an appropriate baseline treatment. It may be appropriate for LULUCF to have a comparable but different baseline, for example, a base period rather than a base year.

<sup>1</sup> The examples in Figures 1 and 2 use hypothetical values for illustrative purposes, however LULUCF amounts can equate to either net emissions/debits or removals/credits.

**Figure 1.** Current provisions for how LULUCF emissions/removals adjust Parties' assigned amount after the mitigation commitment (target) is applied



**Before the commitment period:**

1. Take base year emissions for Annex A sectors, and deforestation if included\*, times five for the number of years in commitment period.

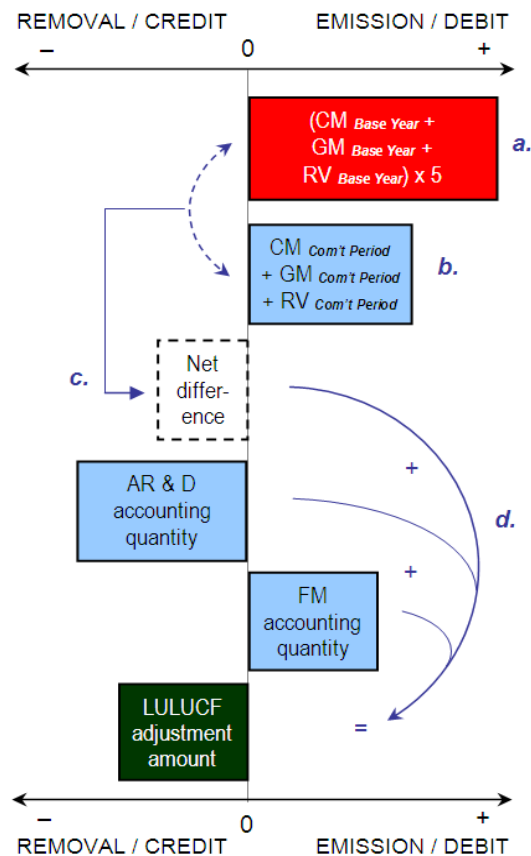
\* Deforestation is included in the baseline for Parties for whom land-use change and forestry (LUCF) was a net source of emissions in the base year. Parties for whom LUCF was a net sink exclude deforestation from the baseline.

2. Multiply this baseline value by the Party's percentage mitigation target as per Annex B. The result is the **initial** assigned amount.

**After the commitment period:**

3. Calculate the 'LULUCF adjustment amount' as per the Marrakesh Accords (refer Figure 2).
4. Adjust the initial assigned amount by the LULUCF adjustment amount ('2' minus '3'). The result is the **adjusted** assigned amount.
5. Take commitment period emissions for Annex A sectors only, plus units transferred or acquired under flexibility mechanisms.
6. Calculate the difference between '4' and '5' to assess whether the target is met.

**Figure 2.** Current provisions for deriving the LULUCF adjustment amount



**Before the commitment period:**

- a. Take base year net emissions/removals from lands subject to elected Article 3.4 activities Cropland Management (CM), Grazing Land Management (GM) and/or Revegetation (RV), time fives for the number of years in the commitment period.

**After the commitment period:**

- b. Take commitment period net emissions/removals for CM, GM and/or RV.
- c. Calculate the difference between 'a' and 'b' (**without** multiplying by the percentage mitigation target). The result is the 'net-net' accounting quantity for CM,GM and RV.
- d. Add to 'c' the following amounts from the commitment period:
  - the accounting quantity for lands subject to afforestation and reforestation (AR) with application of the credit/debit rule, and lands subject to deforestation (D); and
  - the accounting quantity for lands subject to forest management (FM), with application of the FM cap provisions.

The result is the LULUCF adjustment amount (which equates to '3' in Figure 1).

## COVERAGE

The UNFCCC pursues its objective of mitigating climate change by addressing all anthropogenic emissions by sources and removals by sinks of greenhouse gases. However, the current accounting rules and modalities for LULUCF do not provide for complete and consistent coverage of anthropogenic emissions and removals, as outlined in Australia's statement on LULUCF at the fifth meeting of the AWG-KP<sup>2</sup>.

There are several components to determining the coverage of anthropogenic land-based emissions and removals in the post-2012 outcome:

- i) To ensure that only anthropogenic emissions and removals are included towards mitigation commitments, a solution is required for each of the cross-cutting issues of natural disturbance and inter-annual variability. In addition, a solution is needed to adequately manage the legacy effects of the age class structure of forests established prior to 1990.
- ii) A structure for including land sector anthropogenic emissions and removals is required. This could be based on lands subject to the activities under Article 3.3 and Article 3.4 of the Protocol, or it could be based on Convention land-use categories. Coverage under the Clean Development Mechanism (CDM) also needs to be decided.
- iii) Once the structure is decided, the Parties can consider a number of other specific issues, including the treatment of Harvested Wood Products (HWP).
- iv) Finally, the Parties should decide which activities, or categories, are mandatory and which are elective.

### ***Kyoto Protocol first commitment period provisions***

For the first commitment period, the land sector covers emissions and removals from lands where a defined activity has taken place.

These activities are described in Articles 3.3 for compulsory activities (afforestation, reforestation and deforestation) and in Article 3.4 for elective activities (forest management, cropland management, grazing land management and revegetation).

Once a unit of land enters a Party's account, all emissions and removals on that land must be accounted for. No distinction is made as to whether these emissions and removals are anthropogenic or natural.

## AUSTRALIA'S VIEWS AND PROPOSALS

We are pleased to provide our views and proposals on:

1. Cross-cutting issues (natural disturbance, inter-annual variability, the legacy effects of age-class structure of forests prior to 1990);
2. The structure for covering the land-sector, including the CDM; and
3. Specific issues of HWP; the forest management cap; and the afforestation/reforestation harvest sub-rule.

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<sup>2</sup> Available on the UNFCCC website at [http://unfccc.int/kyoto\\_protocol/items/4373.php](http://unfccc.int/kyoto_protocol/items/4373.php).

To facilitate all Parties' understanding of the proposals, we note in each section where these issues appear in decision 16/CMP.1 and suggest changes that would be required.

## **1. Cross-cutting issues**

Regardless of the structure used for accounting for the land sector (i.e. Convention land-use categories or lands subject to activities under Articles 3.3 and 3.4), appropriate treatment of major natural disturbances and inter-annual variability is essential. In the absence of this treatment Australia would have no possibility of managing land sector emissions and removals to meet our mitigation commitment. For example, in 2003 wildfires in south-eastern Australia resulted in emissions of 190 Mt CO<sub>2</sub>-e<sup>3</sup> from existing forest lands. In addition, in 2002 inter-annual climate variability led to a spike in emissions of around 70 MtCO<sub>2</sub>-e from croplands<sup>4</sup>. This is compared to 591.5 Mt CO<sub>2</sub>-e annual allowable emissions during the first commitment period.

### **1.1 Natural disturbance**

In our November 2008 LULUCF submission, Australia put forward a proposal to allow Parties to choose to either symmetrically include or exclude non-anthropogenic emissions and subsequent removals from major natural disturbances from their mitigation commitments. This proposal remains our position on major natural disturbances. We have appended Attachment A from Australia's November 2008 LULUCF submission for reference. A key issue not covered in our earlier submission is discriminating major natural disturbance from other disturbance events. We are currently developing an approach to the definition of major natural disturbance that we will be happy to share with all Parties in the coming weeks.

We are pleased to note that since our November 2008 submission other Parties have also come forward with proposals for dealing with natural disturbance. We welcome further discussion on options for addressing this important issue and offer the following observations on the application of some of these proposals to Australia's national circumstances.

A number of the proposals either fully or partially include emissions and removals from major natural disturbances in Parties' accounts. Australia is concerned that these proposals are not consistent with Parties' commitments under the UNFCCC to mitigate anthropogenic emissions and removals.

#### *Caps and discount factors*

Caps and discount factors do not provide a solution to major natural disturbance. This is because Parties would be liable for non-anthropogenic emissions and removals. Incentives to mitigate emissions and enhance removals would be greatly limited by a low cap or high discount factor. However, a cap would need to be very low, or a discount factor very high, to allow Parties to be able to manage major natural disturbances within the accounting framework (see example in Appendix A).

#### *Carry-over provisions*

Carry-over provisions have been suggested, whereby emissions and removals from natural disturbance would remain in Parties' accounts, but Parties would have provisions for carrying over these emissions and removals over several years or commitment periods.

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<sup>3</sup> Source of data: 2005 National Greenhouse Gas Inventory, Department of Climate Change. These figures are reported in greater detail in Australia's November 2008 LULUCF submission, available from the UNFCCC website at [http://unfccc.int/kyoto\\_protocol/items/3878.php](http://unfccc.int/kyoto_protocol/items/3878.php).

<sup>4</sup> Source of data: *ibid*.

In addition to being inconsistent with the Convention's focus on anthropogenic emissions, these provisions would remove comparability between Parties' mitigation commitments. It would result in the inclusion of non-anthropogenic emissions, from major natural disturbances, in some Parties' commitments but not others'.

This approach could impact Parties' capacity to take on more ambitious commitments in future periods. Parties would be required to take into account the impacts of major natural disturbance in the negotiation of the mitigation commitment for the commitment period following the one in which the disturbance occurred, as the magnitude of the emissions could only be determined after the event.

Using the 2003 wildfires as an example, Australia could be required to carry-over around a third (190 Mt CO<sub>2</sub>-e) of its annual whole-of-economy emissions under this provision, as there would be no opportunity for managing this magnitude of emissions as part of an existing mitigation commitment.

#### *Global insurance mechanisms*

A global insurance mechanism has been proposed, whereby Parties would set aside a part of their removals from forest management to a global pool available to all Parties to compensate for major natural disturbance events. While this seeks to remove liability for natural disturbances from individual Parties, we have concerns with this type of mechanism to manage the impacts of major natural disturbance.

This approach would internalise non-anthropogenic emissions and removals in an accounting system, thereby creating a carbon cost for non-anthropogenic emissions and removals that is commensurate with anthropogenic emissions and removals.

There will also be challenges in how such a mechanism may work in practice. For example, Parties that are not subject to major natural disturbances, and whose existing forests are a sink, may effectively pay the cost (through anthropogenic removals) for compensating the non-anthropogenic emissions in those Parties where natural disturbances occur. This uneven sharing of costs could limit incentives for mitigation action. Broad participation in the mechanism would be needed to ensure the amount of removals necessary to compensate major natural disturbances were available.

#### *Suggested changes to 16/CMP.1*

*E. General: - revise to allow Parties to choose whether to symmetrically include or exclude from their accounts emissions and subsequent removals on lands subject to a major natural disturbance event.*

*(Refer to Australia's November 2008 LULUCF submission for further details)*

### **1.2 Inter-annual variability**

In our November 2008 LULUCF submission, Australia outlined a proposal for managing the impacts of inter-annual variability. Our position on this issue remains unchanged. We consider our proposal provides an effective means of addressing inter-annual variability as it requires Parties to account for all anthropogenic emissions and removals and provides a meaningful trend line (see example in Appendix B).

Discount factors and caps have also been proposed as an approach to manage inter-annual variability.



#### *Discount factor*

Discount factors only change the amplitude of emissions and removals, not the distribution, and thus a very high discount rate is needed to manage inter-annual variability. See Appendix B for an example based on the 70 Mt CO<sub>2</sub>-e emissions from croplands due to variation in rainfall in 2002 in Australia.

#### *Caps*

We do not consider that caps provide a solution for inter-annual variability. Once the cap is exceeded, emissions and removals from anthropogenic actions are treated in the same way as non-anthropogenic emissions and removals and not accounted. In addition, if caps were to be considered, then any cap would have to be Party and activity specific for it to provide an incentive to mitigate. For example, croplands are a net sink in Australia (see Appendix B), so an asymmetric cap (i.e. the cap would be larger for removals than for emissions) would need to be applied.

#### *Suggested changes to 16/CMP.1*

*E. General: - revise to allow Parties that estimate emissions and removals using annual climate data to account for these emissions and removals using a rolling average.*

*(Refer to Australia's November 2008 LULUCF submission for further details)*

### **1.3 Legacy effects of age-class structure**

Australia considers that the legacy effects of the age class structure of forests established before 1990 is a cross-cutting issue that requires a solution in the land sector accounting rules. We are open to considering all Parties solutions to this problem that are rigorous, robust and policy relevant.

## **2. Structure for the land-sector**

### **2.1 Accounting for relevant lands**

Parties should only account for anthropogenic emissions and removals from lands where there are, or have been since 1990, anthropogenic greenhouse gas emissions and removals. This will ensure a post-2012 accounting framework aligns with the commitment of the Convention to account for anthropogenic emissions and removals alone. Lands where there have not been anthropogenic emissions and removals should not be part of the accounting framework.

To realign the post-2012 accounting framework with this approach, there is a need for the Parties to provide additional rules and guidance. There is a need to address the construct of 'managed lands' as it appears in the 2003 IPCC Good Practice Guidance (GPG) for LULUCF and is reiterated in the 2006 IPCC Guidelines, which is not consistent with this approach.

'Managed lands' is an artificial trigger for the inclusion of lands for the purposes of carbon accounting. While the trigger may be appropriate for Parties that are dominated by intensive land uses (many European countries), it is not likely to be appropriate for Parties with extensive land uses (for example Australia, Canada, Russia) where 'management' (for example, for ecological or social reasons) may not always equate to management which leads to a change in emissions and removals.

### **2.2 Moving to a Convention-style framework**

There are a number of options for improving the current structure for land sector accounting.

Our preferred long-term option is to move to accounting for the land sector using Convention land-use reporting categories, with appropriate rules. This approach was considered in Option 4 of the Annex to the AWG-KP5.2 conclusions<sup>5</sup>. Another option is to improve upon the Article 3.3 and Article 3.4 activity-triggered framework, which was considered in Options 1-3 of the Annex to the AWG-KP5.2 conclusions<sup>6</sup> (see section 2.3 of this submission).

Coverage of anthropogenic emissions and removals from the land sector would be best achieved through inclusion of the sector using Convention land-use categories. This is a comprehensive framework that all Parties use to report emissions and removals under the Convention. In addition, the activities under Article 3.3 and Article 3.4 are a sub-set of Convention land-use categories, which would allow continuity of reporting between the first and subsequent commitment periods. Further, it would increase the comparability of land use accounts for all Parties taking on mitigation commitments in a future climate change outcome.

Although it may not be possible to make the transition to Convention land-use category reporting for a post-2012 outcome, we have considered how such a transition might be made. Moving to accounting using Convention land-use categories should create an enabling environment, whereby Parties are able to move to more complete coverage of anthropogenic emissions and removals over subsequent commitment periods. Parties should remain accountable for the lands covered by Article 3.3 activities and elected Article 3.4 activities. Beyond this, we consider that other land-use categories could be elective while Parties gain experience with this approach. Further, not all land-use categories will be relevant to individual Parties for accounting for anthropogenic emissions and removals.

In addition, we consider that Parties should use robust estimation methods (higher Tier 2 and Tier 3) to ensure confidence in the emissions and removals from the land-use categories. There would be no gain to the global climate from poorly estimated emissions and removals entering Parties' accounts, especially when considering land-use categories not covered by the Article 3.3 and Article 3.4 activity-triggers.

### **2.3 Retaining an activity-triggered structure**

A number of Parties are exploring options to revise the current activity-triggered structure. Given the short negotiating timeframe available for agreeing a post-2012 outcome, we consider that a revised Article 3.3 and Article 3.4 activity-triggered structure may be more feasible for a post-2012 outcome than moving to accounting using Convention land-use categories. However, any changes should allow the possibility of moving to more complete accounting of the land sector, as described in section 2.2, in some future commitment period.

There would need to be appropriate treatment of natural disturbances and inter-annual variability before Australia could accept increasing the activities for which Parties must account (see section 1).

Parties should consider whether:

- the activities currently defined in Article 3.3 and Article 3.4 are sufficient; and
- the need for greater clarification and comparability around the inclusion of lands under the Article 3.4 activities.

Australia is open to the consideration of new activities, such as wetland/peatland management, which seeks to include lands where there are anthropogenic emissions and removals which are not covered by existing activities.

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<sup>5</sup> FCCC/KP/AWG/2008/L.11

<sup>6</sup> *ibid.*

There is also a need for the Parties to provide additional guidance with respect to which lands are covered by Article 3.4 activities. Covered lands, for the purposes of accounting, should be lands where anthropogenic activities since 1990 have led to greenhouse gas emissions or removals. This can differ from the 2003 IPCC GPG for LULUCF concept of 'managed lands', as noted under section 2.1 of this submission. There may also be differences in the way individual Parties have applied the concept of managed lands. Additional guidance will help harmonise treatment across Parties' inventories.

*Suggested changes to 16/CMP.1*

- A. *Definitions:* possible additions of new Article 3.4 activities;  
B. possible guidance on how to interpret definitions.  
C. *Article 3.4:* possible additions of new activities.

## **2.5 Clean Development Mechanism**

Australia is open to considering changes to the treatment of the land sector in the CDM.

These changes should align with the core considerations outlined in Australia's November 2008 LULUCF submission. That is, the response must be rigorous and robust, account for anthropogenic emissions and removals at the time they occur, and be policy relevant.

Australia's views on emissions trading and the project-based mechanisms more broadly are provided in a separate submission.

*Suggested changes to 16/CMP.1*

- D. *Article 12:* revise to extend eligible activities or land-use categories.

## **3. Specific issues**

### **3.1 Harvested Wood Products**

The current approach to accounting for the carbon stored in HWP under the Kyoto Protocol is to assume that the carbon is instantly oxidised in the year of harvest. The problem with this approach is that it is not an accurate reflection of the anthropogenic emissions at the time they occur. It does not recognise that a proportion of the carbon in the forest at harvest is not released into the atmosphere until the wood product decays or is burnt. It also deviates from how accounting is done for all other emissions and removals under the Kyoto Protocol. The accounting rules for HWP should be changed and provide incentives for maximising the time in which carbon is stored in HWP.

New Zealand's 'Emissions to Atmosphere' proposal provides a practical approach which accounts for emissions when they occur and where liability for emissions remains with the producing country. This proposal has potential as a viable accounting treatment for HWP for the post-2012 outcome. We would need to ensure it can be instituted in a manner that does not create a perverse incentive for deforestation in countries not subject to emissions limitations, or reduce incentives for reducing emissions from deforestation and forest degradation in developing countries (REDD).

Australia supports New Zealand's proposal that the approach only be applied to wood products harvested from 1 January 2013 from lands that are covered by a given Party in a post-2012 outcome.

Using an approach such as 'Emissions to Atmosphere' is likely to create an incentive to produce longer lived wood products. It will be necessary to ensure that this does not at the same time create leakage for production of short lived wood products to countries not subject to emissions limitations.

The IPCC should be tasked with developing an appropriate methodology for the Emissions to Atmosphere approach which could be incorporated into IPCC guidelines. Tier 2 country specific data should be used as the input when data is available.

The Parties will need to consider whether HWP should apply to all lands covered by individual Parties after 2012, or an alternative approach.

*Suggested changes to 16/CMP.1*

*E. General:                    revise paragraph 21 to include HWP as an additional carbon                    pool  
which must be accounted for if appropriate data is available.*

**3.2 Afforestation/reforestation harvest sub-rule**

The afforestation/reforestation harvest sub-rule has allowed Parties to manage the risk of higher net emissions resulting from units of land afforested or reforested since 1990 and harvested during the commitment period.

The need for and application of the sub-rule post-2012 will be influenced by decisions on other issues, such as natural disturbance and HWP. The application of the rule post-2012 will need to be reviewed in light of these decisions. We are supportive of the sub-rule continuing, but consider it should not be applied to a unit of A/R land more than once. We consider that Parties who are able to discriminate which lands the sub-rule has applied to should have provision to continue the use of the sub rule in this manner.

If the sub-rule does not continue, then countries who intend to harvest in the second commitment period will be at a disadvantage compared to those who harvest during the first commitment period. At a national scale, this could create a perverse incentive to harvest before the end of the first commitment period.

**3.3 Soil carbon**

There is broad interest internationally to better explore the role that soil carbon might play in a post-2012 outcome on LULUCF. The current rules provide for accounting for changes in soil organic carbon for all lands subject to Article 3.3 activities and elected Article 3.4 activities.

There remain significant information gaps about the potential to achieve and sustain increases in soil carbon in Australian agricultural systems.

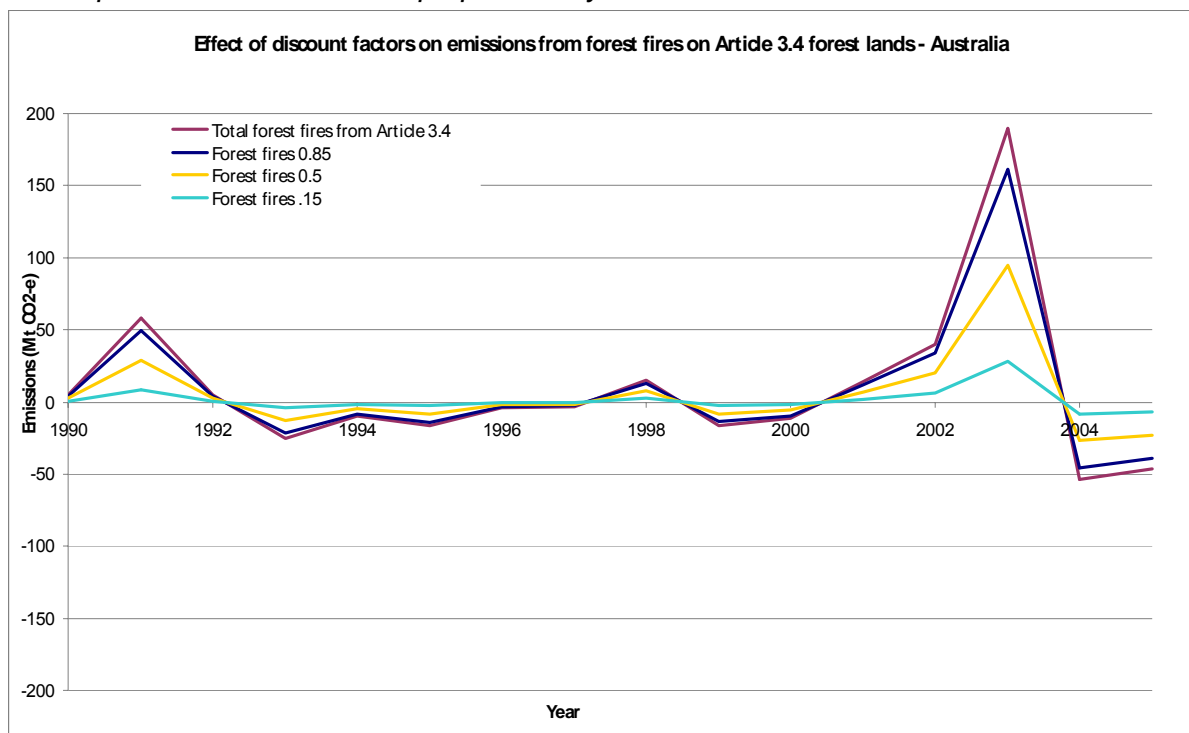
Management strategies such as conservation tillage in cropping systems and establishing perennial pastures in grazing systems could offer soil carbon sequestration benefits under certain circumstances.

Australia's experience shows there is evidence that gradual soil carbon increases could be achieved in high rainfall regions. Research to date indicates that in low rainfall grazing regions and cropping systems, sustained increases are unlikely. There are also risks that gains in any land systems could be rapidly lost through change in land use and management (e.g. a change from pasture to crop) and due to drought.

Australia has committed to improving our understanding soil carbon fluxes, particularly measuring carbon levels in agricultural systems, understanding the impacts of management practices in soil carbon, and the role Australian soils could play in sequestering carbon dioxide from the atmosphere.

## Appendix A – Example application of caps and discount factors (referred to in Section 1.1 Natural disturbance)

**Figure 3.** The effect of discount factors on fire disturbances from forest lands in Australia (uses same data as figure 1 as Australia's November 2008 LULUCF submission). This is presented for illustrative purposes only.



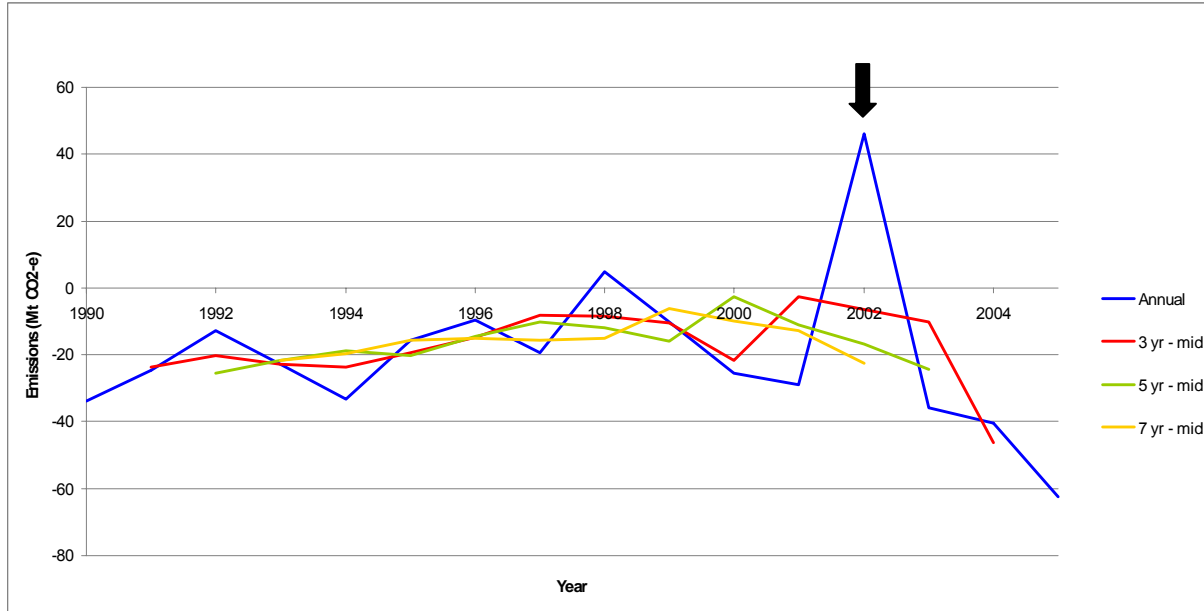
Source: 2005 National Greenhouse Gas Inventory, Department of Climate Change

**Table 2:** Emissions 2001-2005 from forest fires with an arbitrary cap applied annually and at end of commitment period. This table is for illustrative purposes only.

Year	No cap Actual MtCO <sub>2</sub>	Annual cap +/- 20 Mt CO <sub>2</sub>	Commitment period cap +/- 100 Mt CO <sub>2</sub>
2001	14	14	-
2002	40	20	-
2003	190	20	-
2004	-54	-20	-
2005	-46	-20	-
<b>Total</b>	<b>144</b>	<b>14</b>	<b>100</b>

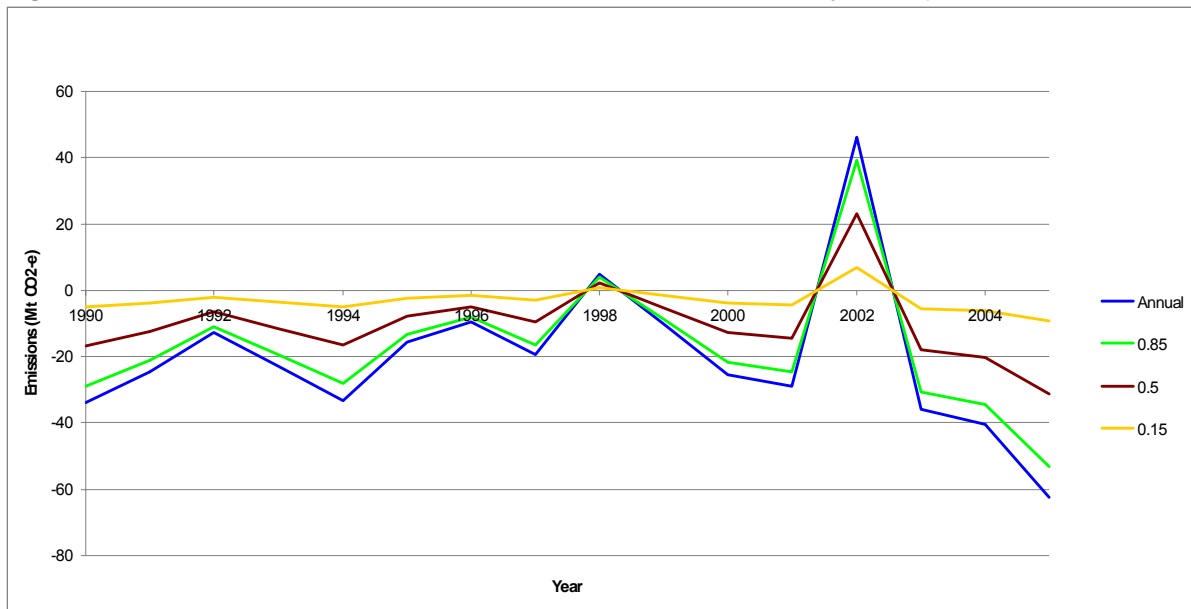
### Appendix B – Example of applying discount factors to address inter-annual variability (referred to in Section 1.2 Inter-annual variability)

**Figure 4.** Carbon stock changes in cropland (1990-2005), showing both annual estimates and rolling averages (mid-point averages of 3-, 5- and 7-year periods)  
(This is a repeat of figure 4 in Australia's November 2008 LULUCF submission)



Source: 2005 National Greenhouse Gas Inventory, Department of Climate Change

**Figure 5.** The effect of discount factors on inter-annual variability in croplands in Australia



Source: 2005 National Greenhouse Gas Inventory, Department of Climate Change

**AUSTRALIA**

**Land Use, Land-Use Change and Forestry (LULUCF) Sector**

**Submission to the AWG-KP and AWG-LCA**

**November 2008**

**Extract from Australia's November 2008 LULUCF submission.**

**A. Major natural disturbance: symmetrical exclusion of emissions and removals from national accounts**

Parties that report using robust, spatially-explicit estimation methodologies are able to clearly identify units of land subject to major natural disturbance events and the changes in carbon-stocks associated with such an event.

Given this capability, Australia submits that Parties using appropriate estimation methods should be able to choose whether to symmetrically include or exclude from their national accounts carbon dioxide emissions and removals from major natural disturbance on all Article 3.4 lands within their accounts. It may also be appropriate for Parties to be able to choose to symmetrically include or exclude emissions and removals from major natural disturbance on Article 3.3 lands, especially if the afforestation/reforestation credit/debit sub-rule is not continued post-2012. A similar approach is currently agreed for UNFCCC inventory reporting in the 2003 GPG for LULUCF<sup>1</sup>.

Clarification would need to be provided around when Parties could appropriately exclude emissions and removals from national accounts. The following issues could be considered in developing an approach:

1. Parties using estimation methodologies with the capability to identify major natural disturbances on units of land could choose to access this provision.
2. Carbon stock changes on the unit of land could continue to be reported to enable transparent monitoring.
3. Credits for removals on a unit of land prior to a loss due to major natural disturbance could be maintained in the Party's national accounts.
4. The unit of land could re-enter a Party's national accounts once the carbon dioxide removals equalled the carbon stock losses from the disturbance event.
5. The provision may apply only to units of land which do not undergo a land-use change from a forest to a non-forest land use. Where a forest to non-forest land-use change occurs as a result of major natural disturbance or following major natural disturbance, the Party could account for the full amount of emissions and removals associated with the disturbance event.
6. The trigger for a reduction in carbon stocks due to a major natural disturbance could be the sum of all carbon pools for that unit of land, specifically:
  - If carbon moved from the above-ground biomass pool to the dead wood pool without a change in total carbon stocks (e.g. due to a windthrow event in a forest) the temporary removal of the unit of land may not be triggered.
  - If subsequent decay in the dead wood pool reduced the total carbon stock on that unit of land, and this change was attributed to a major disturbance event, then a Party could exclude the carbon dioxide emissions and subsequent removals.
7. The provision could continue across commitment periods. Parties would need to agree on a year of disturbance before which these provisions would not apply.

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<sup>1</sup> IPCC (2003) Good Practice Guidance for Land Use, Land-Use Change and Forestry, Chapter 3 LUCF Sector Good Practice Guidance, Section 3.2.1.4.2

PAPER NO. 2: BELARUS

Министерство природных ресурсов и охраны окружающей среды  
Республики Беларусь

**Сообщение по вопросам определения условий, правил  
и руководящих принципов для режима осуществления  
деятельности в секторе «Землепользование, изменение  
землепользования и лесное хозяйство»  
во втором периоде обязательств**

в соответствии с документом FCCC/KP/AWG/2008/L.19 para 8 (b)  
Специальной рабочей группы по дальнейшим обязательствам согласно Киотскому  
протоколу для Сторон, включенных в Приложение I

**Введение**

Республика Беларусь приветствует предложение Специальной рабочей группы по дальнейшим обязательствам согласно Киотскому протоколу для Сторон, включенных в Приложение I (СРГ-КП) предоставить свои соображения по вопросам, поднятым Сторонами в отношении режима деятельности в рамках сектора «Землепользование, изменение землепользования и лесное хозяйство» (ЗИЗЛХ) во втором периоде обязательств.

Осуществление рациональной человеческой деятельности, связанной с ЗИЗЛХ, способствует снижению воздействия на климат, сохранению биоразнообразия и устойчивому использованию природных ресурсов. Несмотря на некоторые все еще имеющиеся неопределенности и техническую сложность в оценках выбросов и поглощений парниковых газов в секторе ЗИЗЛХ, современные научные представления о проходящих процессах достаточно продвинулись вперед, поэтому вопрос о включении максимально возможного количества элементов этого сектора в будущий режим является важным и своевременным.

Соображения и информация по этому вопросу представлены ниже в той последовательности, в которой они изложены в приложениях III и IV к документам FCCC/KP/AWG/2008/5 и FCCC/KP/AWG/2008/3, соответственно.

**Возможные варианты для рассмотрения, относящиеся к сектору  
ЗИЗЛХ**

**A. Определения**

Республика Беларусь считает необходимым включить в общий набор определений по сектору ЗИЗЛХ новые определения с тем, чтобы иметь возможность учитывать дополнительную деятельность в рамках пункта 4 статьи 3 Киотского протокола. В частности, Республика Беларусь отмечает, что деятельность по восстановлению и сохранению торфяников может и должна рассматриваться в рамках пункта 4 статьи 3 и предлагает внести соответствующие



поправки к решению 16/СМР.1 относительно включения специальных определений, касающихся восстановления и сохранения деградированных торфяников (аналогично определению «восстановление растительного покрова»). Республика Беларусь особенно акцентирует внимание Сторон на необходимость разработки определений и методологий, касающихся восстановления и сохранения торфяников, для включения этой деятельности во второй период действия обязательств. Причем включение деятельности по восстановлению и сохранению торфяников во второй период действия обязательств не должно повлечь за собой проблем с уже учитываемой деятельностью в рамках пунктов 3 и 4 статьи 3 Киотского протокола.

В обоснование приведенных выше соображений Республика Беларусь указывает на значение деятельности по восстановлению и сохранению торфяников в смягчении воздействия на климат. Деградация торфяников во всем мире приводит к выбросам углекислого газа, эквивалентным более чем 10% от глобальных выбросов CO<sub>2</sub>, выделяемых при сжигании ископаемого топлива. В то же время, деятельность по их восстановлению в долгосрочной перспективе приводит к заметному поглощению и накоплению углерода. Выбросы парниковых газов от осушенных торфяников во многих странах не учитываются в национальных системах инвентаризации выбросов согласно пункту 4 статьи 3 Киотского протокола. Республика Беларусь считает необходимым включить в Национальные инвентаризации оценки выбросов и поглощений парниковых газов на осушенных, деградированных торфяниках и естественных болотных экосистемах, особенно в тех странах, на территории которых имеются значительные площади таких земель.

В последние годы научно-методологическая база оценки выбросов и поглощений вводно-болотными экосистемами, включая деградированные, существенно улучшилась. Белорусские, немецкие и английские ученые и специалисты совместно осуществили ряд исследований и проектов в этой области. В ходе параллельных мероприятий в течение двух следующих сессий СРГ-КП Республика Беларусь представит всю необходимую информацию по возможностям использования имеющейся и активно развиваемой научно-методологической базы, а также представит результаты практического опыта по осуществлению проектов вторичного заболачивания деградированных торфяников на своей территории.

### ***С. Пункт 4 Статьи 3 Киотского протокола***

Республика Беларусь призывает всесторонне рассмотреть и скорректировать правила учета деятельности, осуществляемой согласно пункту 4 статьи 3.

Обращаем внимание на то обстоятельство, что для первого периода действия обязательств учет деятельности, осуществляемой в рамках пункта 4 статьи 3 Киотского протокола, выполняется согласно принципу чистого-нетто учета (сопоставление выбросов и абсорбции парниковых газов, связанных с определенной деятельностью в течение периода действия обязательств с выбросами и абсорбцией в базовом году). В конечном итоге, сокращение

накопления углерода в лесах вследствие изменений в возрастной структуре леса и заготовительной деятельности может привести к увеличению чистых выбросов, несмотря на уменьшение валовых выбросов (изменения в накоплениях углерода в период действия обязательств без сопоставления с уровнем базового года). Таким образом, деятельность, осуществляемая по устойчивому лесопользованию, может носить негативный характер.

#### ***D. Статья 12 Киотского протокола***

Республика Беларусь считает целесообразным включение проектов в области борьбы с деградацией лесов в механизмы гибкости, включая механизм чистого развития по статье 12 Киотского протокола. В тоже время, необходимо усовершенствовать правила и процедуры, связанные с обоснованием, подготовкой и реализацией таких проектов. Это предполагает возможность использования упрощенных методологий и расчетов, пересмотр существующих подходов к принципам дополнительности и определению границ проекта. Анализ рынка добровольных сокращений показывает, что около 30% всех проектов этого рынка относится именно к сектору ЗИЗЛ, и, следовательно, использование более гибкого подхода позволит активизировать деятельность в данном секторе. В эту же деятельность мы предлагаем включить также категории проектов, связанных с восстановлением и сохранением болот, устойчивым лесопользованием и землепользованием.

#### **Другие вопросы**

##### **Добровольная / обязательная отчетность**

Республика Беларусь отмечает, что, с одной стороны, добровольное принятие решений Стороной, включенной в Приложение I, об учете деятельности в соответствии с пунктом 4 статьи 3 Киотского протокола имеет положительный характер, т.к. принимает во внимание большие неопределенности в оценках выбросов и поглощений парниковых газов и наличие методологических проблем, а с другой стороны, такая необязательная отчетность ограничивает применение некоторых проектов по смягчению воздействия на климат.

Необходимо найти компромисс между теоретически возможной и технически осуществимой глубиной инвентаризации парниковых газов в секторе ЗИЗЛ и установить приемлемую степень неопределенности с тем, чтобы ввести учет максимального количества видов деятельности в рамках этого сектора.

##### **Заготовленные лесоматериалы и выбросы от изымаемой древесины на лесных площадях**

Известно, что леса не могут бесконечно долго накапливать углерод вследствие изменения возрастной структуры деревьев. Применение правила чистого нетто учета для деятельности по устойчивому лесопользованию, в конечном итоге, может привести к снижению проектной активности и не использованию имеющегося потенциала сектора. Республика Беларусь считает, что необходимо

разработать и использовать в последующем периоде такие правила учета, которые позволили бы стимулировать деятельность, направленную на устойчивое лесоправление, и в долгосрочной перспективе эффективно снижать выбросы парниковых газов и увеличивать накопление углерода лесными экосистемами. В частности, Республика Беларусь поддерживает мнение о необходимости включения проектов по заготовке лесоматериалов в перечень учитываемой деятельности.

### **Естественные возмущения**

Республика Беларусь отмечает, что устойчивое лесоправление должно быть направлено на снижение выбросов от естественных возмущений, таких как лесные пожары, ветровалы, нашествие насекомых и др. Для стимулирования этой деятельности необходимо рассмотреть варианты учета естественных возмущений и их влияние на баланс выбросов парниковых газов. Многие страны уже реализуют стратегии и программы по устойчивому развитию лесного хозяйства, включающие мероприятия по снижению рисков возникновения естественных возмущений и ликвидации последствий, связанных с такими возмущениями.

### **Заключение**

Республика Беларусь придает особое значение сектору ЗИЗЛХ и заинтересована в совершенствовании условий, правил и руководящих принципов для осуществления деятельности в секторе ЗИЗЛХ во втором периоде обязательств.

The Ministry of Natural Resources and Environmental Protection  
of the Republic of Belarus

**Submission on definitions, modalities, rules and guidelines for the  
treatment of land use, land-use change and forestry (LULUCF) in the  
second commitment period**

in accordance with document FCCC/KP/AWG/2008/L.19 para 8 (b)  
of the Ad Hoc Working Group on Further Commitments  
for Annex I Parties under the Kyoto Protocol

**Introduction**

The Republic of Belarus welcomes the proposal of Ad Hoc Working Group on Further Commitments to provide its views on the issues raised by the Parties regarding implementation of activities in the framework of LULUCF sector in the second commitment period.

The Republic of Belarus considers that implementation of rational anthropogenic activities connected to LULUCF promotes reduction of climate impact, conservation of biodiversity and sustainable utilization of natural resources. Despite of still existing uncertainty and technical complexity in assessment of GHG emissions and absorptions in LULUCF sector modern scientific concepts about processes involved have been considerably advanced, therefore the issue of inclusion of maximum possible elements of this sector in future commitment period is important and timely.

Ideas and proposals on this issue are presented below in the order as they are given in annexes III and IV to documents FCCC/AWG/2008/5 and FCCC/AWG/2008/3 accordingly.

**Possible options for review regarding LULUCF sector**

***A. Definitions***

The Republic of Belarus considers it to be necessary to include in general set of definitions regarding LULUCF new definitions to have possibility to take into account additional activities in the framework of para 4 Article 3 the Kyoto Protocol. In particular, the Republic of Belarus admits that peatland restoration and conservation activities can and should be considered in para 4 Article 3 and suggests amend decision 16/CMP.1 regarding inclusion of special definitions concerning restoration and conservation of degraded peatlands (identical to determination of “revegetation”). The Republic of Belarus turns attention of the Parties to necessity of elaboration of definitions and methodologies concerning restoration and conservation of peatlands for inclusion of these activities in second commitment period. At the same time, the inclusion of the

restoration and conservation activities in second commitment period should not result in problems of reporting on already considered activities in the framework of para 3 and 4 Article 3 the Kyoto Protocol.

Underpinning the views suggested above, the Republic of Belarus admits influence of peatland restoration and conservation activities on climate change mitigation. Global degradation of peatlands leads to carbon dioxide emission equivalent to 10 per cent of global CO<sub>2</sub> emitted during fossil fuel burning. At the same time, restoration activities in long-term perspective lead to considerable absorption of carbon and its accumulation. Greenhouse gas emissions from degraded peatlands in many countries are not considered in national emission inventory systems pursuant to para 4 Article 3 of the Kyoto Protocol. The Republic of Belarus considers it to be necessary to include assessment of emission and absorption of GHG at the degraded peatlands and natural wetland ecosystems in National inventories particularly in countries in which large territories of such lands exist.

In the later decade, the scientific and methodological ground for evaluation of the rate of emission and absorption by wetland ecosystems, including degraded ones, has been improved substantially. The Belarusian, German and English scientists and specialists have jointly conducted a range of studies and projects in this field. During the side events at the two subsequent sessions of AWG-KP, the Republic of Belarus will present all needed information concerning the applicability of existing and actively developed scientific and methodological framework, as well as the results of the practical experience on implementation of the rewetting of degraded peatlands in its territory.

#### ***C. Para 4 Article 3 of the Kyoto Protocol***

The Republic of Belarus calls upon to review and revise the rules of accounting of the activities implemented in accordance with para 4 Article 3.

We turns attention to the circumstance that for the first commitment period the accounting of the activities implemented in the framework of para 4 Article 3 of the Kyoto Protocol is conducted in accordance with net accounting (comparison of emission and absorption of greenhouse gases resulted from certain activities within commitment period with emission and absorption in a base year). Finally, reduction of carbon accumulation in forests in consequence of changes in forest age-specific structure and logging activities can lead to increase of net emissions despite of reduction of gross emissions (changes in carbon accumulation within commitment period without comparison with a base year level). Thereby the activities in sustainable forest management can be of negative nature.

#### ***D. Article 12 of the Kyoto Protocol***

The Republic of Belarus considers it to be expedient to include projects in the field of combating forest degradation in the flexible mechanisms, including clean development mechanism under Article 12 of the Kyoto Protocol. At the same time, it is necessary to pay attention to necessity to improve rules and procedures, connected to rationale, development and implementation of such projects. This supposes utilization of simplified methodologies and calculations, review of existing approaches to the additionality principle and determination of project boundaries. Analysis of voluntary emission reduction market shows that approximately 30 per cent of all projects are from LULUCF

sector and consequently utilization of more flexible approach will let making activities in this sector more active. We suggest including in this activity project categories connected to restoration and conservation of wetlands, sustainable forest-use and land-use.

## **2. Other issues**

### **Voluntary/ obligatory reporting**

The Republic of Belarus admits that from one side, the voluntary adoption by Annex I Party of decision on consideration of activities in accordance with para 4 Article 3 of the Kyoto Protocol is positive as it takes into consideration high uncertainties in assessment of GHG emission and absorption and existing methodological problems. From another side, such non-obligatory reporting limits utilization of project-based mechanisms for enhancement climate change mitigation potential.

It is necessary to find compromise between theoretically possible and technically achievable inventory of GHG in LULUCF and establish acceptable for Parties degree of uncertainty to enable implementing of obligatory consideration of entire activity in the framework of this sector.

### **Blanked timber and emissions from retrieved timber in forests**

Forests can not endless-long accumulate carbon due to change in forest age-specific structure and lumbering. Application of net-accounting rule for sustainable forest management activities finally can lead to reduction of climate change mitigation activities. The Republic of Belarus considers that it is necessary to develop and suggest in subsequent commitment period such rules of accounting, which would allow stimulating sustainable forest management activities and in long-term perspective effectively reduce GHG emissions and enhance carbon by forest ecosystems. Particularly the Republic of Belarus supports opinion on necessity to include timber harvest and lumbering in the list of considered activities.

### **Natural perturbation**

The Republic of Belarus admits that sustainable forest management should be directed to reduction of emissions from natural perturbation, such as forest fires, wind-falls, insect invasion etc. For stimulation of this activity, it is necessary to consider options for accounting of natural perturbances and their impact on GHG emission balance. Many countries are elaborating strategies of sustainable forest management, including measures on reduction of risks of natural perturbation emergence and elimination of consequences resulting from such perturbances.

## **Conclusion**

The Republic of Belarus attaches a particular importance to LULUCF sector and is interested in improvement of conditions, rules and guiding principles for implementation of activities in LULUCF sector in the second commitment period.

PAPER NO. 3: CANADA

**CANADA**

**VIEWS AND PROPOSALS  
ON LAND USE, LAND-USE CHANGE AND FORESTRY**

**27 February 2009**

**1. Introduction**

At its resumed sixth session, the Ad-hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) invited Parties to submit their views and proposals for elaboration of the options, elements and issues related to treatment of land use, land-use change and forestry (LULUCF), as contained in annex III to the report of AWG-KP6.1 and annex IV to the report of the AWG-KP5.2. Canada welcomes the opportunity to provide its views on these important issues and is committed to working to develop an effective system for the treatment of LULUCF within a UNFCCC agreement. Canada reiterates its position on the importance of agreement on the rules for accounting in all sectors and mechanisms, prior to agreement on commitments. This approach will ensure that commitments are based on clear and common understanding by all Parties of rules and procedures, and that the commitments will not be negotiated through the development of the rules themselves.

**2. Objectives for LULUCF Rules**

Enhanced effectiveness of means within the LULUCF sector to achieve mitigation objectives can be achieved if rules aim to achieve three objectives<sup>1</sup>.

1. Provide substantially improved incentives for mitigation benefits through sustainable land management.
2. Ensure an accurate reflection of what happens to LULUCF carbon (for example, in the harvested wood products pool).
3. Implement accounting that focuses on anthropogenic emissions and removals in the LULUCF sector.

Rules will need to make sense for all developed countries and consistency is needed between rules applied to developed countries and those applied to developing countries. Rules should be robust and broadly applicable across countries, taking into account the substantial differences that exist in terms of the characteristics of their land, how it is used and managed, and the institutional and policy settings. Finally, revised treatment of LULUCF should allow use of current measuring and monitoring systems.

In Canada's view, these overarching objectives and criteria should guide Parties in their consideration of any future LULUCF rules, rather than the set of principles in decision 16/CMP.1 that guided the rules elaborated for the purpose of the first commitment period.

**3. Definitions**

Changes to definitions can have significant implications for Annex I Parties, which have already invested significantly in national monitoring and reporting systems based on definitions

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<sup>1</sup> See the discussion in Canada's submission at [http://unfccc.int/files/kyoto\\_protocol/application/pdf/canada.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/canada.pdf).

established for the first commitment period. Changes to definitions therefore should be minimal. However, Canada believes that the term “revegetation” and its definition should be replaced by the term “vegetation management”, defined as “a system of practices for stewardship and use of land not classified as forest land, cropland, grazing land or wetland”.

#### **4. Land-Use Change Activities**

Canada believes all Annex I Parties should fully account for deforestation in the same way. Moreover, there is no need to link forest management accounting with deforestation accounting because limits and caps on forest management should not be used in post-2012 accounting. With respect to afforestation/reforestation, Canada supports the rule under which debits from harvesting on a unit of land cannot exceed previous credits earned on that land, and believes that the situation in which natural disturbances affect a unit of land also needs to be addressed in the accounting.

#### **5. Forest Management**

Canada’s overall goals for LULUCF were listed above. With respect to forest management, more specific criteria for judging the effectiveness and fairness of an accounting system include how it focuses accounting on the impact of direct human activities and addresses the following influences:

- i. Regional climate variability (e.g. inter-annual variability in precipitation and temperature);
- ii. Global change (e.g. CO<sub>2</sub> fertilization and nitrogen deposition);
- iii. Age class structure of the forest (as a legacy effect); and
- iv. Natural disturbances (e.g. wildfires, insects, wind storms, floods).

Below we provide views on three options identified in Annex III to the report of AWG-KP6 (FCCC/KP/AWG/2008/5), starting with the Canadian proposal, Option 3.

#### ***Option 3 – Accounting using a forward-looking baseline***

It is of critical importance to Canada that accounting focus on anthropogenic emissions and removals in the LULUCF sector so as to provide strong incentives for real mitigation activity and ensure environmental integrity. Previous submissions described Canada’s forward-looking baseline proposal to achieve this goal<sup>2</sup>. Canada’s proposal is designed to satisfy all of the above criteria, thereby ensuring that accounting enables comparability of effort among Parties<sup>3</sup>. The approach uses “net-net” accounting: net anthropogenic GHG emissions in the commitment period are compared to net anthropogenic GHG emissions in a “forward-looking” or projected baseline for the period. Net GHG emissions are the sum of emissions and removals during the period. The impacts of regional climate variability, global change and age-class effects are removed from the accounting through comparison to the projected baseline. Natural disturbance impacts (both emissions and removals) are explicitly removed from the accounting, with environmental integrity ensured by reporting and international review of a Parties’ accounting estimates. Canada is aware that natural disturbances are not as significant for other

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<sup>2</sup> See in particular [http://unfccc.int/files/kyoto\\_protocol/application/pdf/canadalulucfcp271108.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/canadalulucfcp271108.pdf)

<sup>3</sup> Analysis of alternative accounting approaches to address various influences on forest management carbon stock changes, and focus accounting on providing incentives for human activity, can be found in H. Bottcher, W.A Kurz and A. Freibauer (2008), Accounting of forest carbon sinks and sources under a future climate protocol – factoring out past disturbances and management effects on age-class structure. *Environmental Science & Policy* 11: 669-686.



countries' forests as they are for Canada – thus, excluding impacts of natural disturbances would be optional.

Canada's proposal would require agreement on rules that do the following:

- i. Establish the net-net method for calculating anthropogenic GHG emissions and removals from forest management that will enter the accounting.
- ii. Specify that a Party wishing or required to account for forest management must report the projected anthropogenic GHG emissions and removals baseline.
- iii. Specify that the information regarding the projected baseline shall be subject to review and adjustment in accordance with established procedures and that Parties must include a description of the process and information used to establish the projection, including current forest inventory information, regional or national forest management plans, actual historical forest management activities and their relationship to the management plans.
- iv. Specify that a Party has the option of excluding from the accounting the emissions and any subsequent removals resulting from natural disturbances.
- v. Specify that if a Party chooses to exclude GHG impacts of natural disturbances, then information regarding the exclusion shall be subject to review and adjustment and must a) include transparent and verifiable information that the disturbances are non-anthropogenic, b) identify the areas of land subject to these events and c) explain how the emissions and removals were excluded from the accounting.

#### ***Option 1 – Accounting using caps or discount factors***

Continued application of negotiated caps to forest management will not satisfy the criteria or general goals described above. In particular, experience has shown they are ineffective at focussing the accounting on anthropogenic GHG emissions and removals or providing incentives for mitigation in most cases. While discount factors are better than caps, they suffer from similar failings. To improve their relevance, it would be necessary to negotiate country-specific discounts that could vary for emissions and removals because natural and indirect human effects - the rationale for the discounts - can vary considerably in importance and magnitude across Parties.

#### ***Option 2 – Accounting relative to a base year or period***

A simple base year approach in a net-net formulation fails to take into account the significant variation that can occur in forest emissions and removals due to natural factors, though it does help remove global change impacts from the accounting. Thus the choice of the base year will create winners and losers depending solely on sinks or sources in that year compared to the commitment period, instead of accounting for real mitigation activity. A base period approach is an improvement but it still does not adequately address the issue of inter-annual variation given the scale of variability (in both frequency and GHG impact) of natural disturbances in Canada's forests. Canada would welcome proposals addressing how these net-net approaches could be used in a way that removes the impacts of natural disturbances from the accounting.

## **6. Agriculture**

The current net-net with base year approach to cropland management, grazing land management and revegetation can result in perverse effects because of eventual carbon saturation. This is expected to be the case for Canada in the next few decades as our croplands near their maximum carbon storage capacity and will no longer be able to remove carbon at the same rate as in the base year (Canada's croplands were a net sink of about 2 Mt CO<sub>2</sub>eq in 1990). If current rules are maintained then Canada would be debited because sequestration will be lower than in the base year although there are no emissions from these

lands and management practices have not changed. This saturation issue will need to be addressed in new rules for agriculture.

## **7. Other Issues**

### ***Treatment of Harvested Wood Products***

Improved rules for LULUCF should add harvested wood products (HWPs) as an additional carbon pool to be included in the accounting related to forests. It is well understood that the approach taken in the Kyoto Protocol—assuming that the carbon in HWPs is emitted at the point of harvest—is not accurate. The current rules provide no incentive to capture the mitigation potential that may exist around the production, use and disposal of carbon in HWPs. Adding HWP as another pool in the accounting will help create that incentive. Treating forest management and HWP in an integrated way in the accounting could dramatically reduce the implications of alternative HWP estimation approaches. Canada believes Parties should focus on the key issues and objectives for HWP accounting such as what set of incentives around production, use and disposal are most important in realizing HWP mitigation potential.

### ***Land-based accounting of all managed lands***

Annex III to the report of AWG-KP6 (FCCC/KP/AWG/2008/5) identified comprehensive land-based accounting an option to replace the current LULUCF accounting structure. The report of the upcoming May 2009 IPCC meeting “Revisiting the Use of Managed Land as a Proxy for Estimating National Anthropogenic Emissions and Removals” may be relevant to further consideration of this option. However, Canada would judge this approach on how well it addresses the criteria noted above, including age-class legacy and factoring out indirect and natural effects. An approach that does not meet these criteria would not likely be acceptable for Canada. If a land-based accounting approach were to meet the criteria above in a way acceptable to Canada and other Parties, we anticipate that estimation methods and estimates for some categories of managed lands would need to be improved.

Ottawa

## CANADA

### POINTS DE VUE ET PROPOSITIONS SUR L'UTILISATION DES TERRES, DE CHANGEMENTS D'AFFECTATION DES TERRES ET FORESTERIE

27 février 2009

#### 1. Introduction

À la reprise de 6e session, le Groupe de travail spécial des nouveaux engagements des Parties visées à l'annexe I au titre du Protocole de Kyoto (AWG-KP) a invité les Parties à présenter leurs points de vue et propositions pour l'élaboration d'options, d'éléments et d'enjeux liés au traitement de l'utilisation des terres, de changements d'affectation des terres et foresterie (UTCATF), comme il est indiqué à l'annexe III du rapport du AWG-KP6.1 et à l'annexe IV du rapport du AWG-KP5.2. Le Canada est heureux de présenter ses points de vue sur ces questions importantes et s'engage à établir un système efficace pour le traitement du secteur UTCATF dans le cadre de la Convention-cadre des Nations Unies sur les Changements Climatiques (CCNUCC). Le Canada réitère sa position sur l'importance de la Convention régissant les règles de comptabilisation dans tous les secteurs et mécanismes avant l'accord sur les engagements. Cette approche permettra d'assurer que les engagements sont fondés sur une compréhension des règles et des procédures claire et commune par toutes les Parties et que les engagements ne sont pas négociés au moyen de l'élaboration des règles comme telles.

#### 2. Objectifs pour les règles de l'UTCATF

Une plus grande efficacité des moyens dans le secteur de l'UTCATF afin de réaliser les objectifs d'atténuation lorsque les règles tentent d'atteindre les trois objectifs suivants <sup>1</sup>.

4. Fournir des incitatifs grandement améliorés pour tirer profit des avantages liés à l'atténuation au moyen de la gestion durable des terres;
5. Assurer une évaluation exacte de la situation entourant le carbone dans le cadres de l'UTCATF (par exemple dans le réservoir de produits de bois récoltés); et
6. Mettre en œuvre un système de comptabilisation axé sur les émissions et les absorptions anthropiques dans le secteur de l'UTCATF.

Les règles devront être logiques pour tous les pays développés et la cohérence s'impose entre les règles qui s'appliquent aux pays développés et celles qui s'appliquent aux pays en développement. Les règles seront robustes et applicables dans tous les pays, en tenant compte des différences importantes qui existent sur le plan des caractéristiques de leurs terres, de la façon dont ils sont utilisés et gérés ainsi que des contextes institutionnels et des politiques. Enfin, le traitement révisé de l'UTCATF doit permettre l'utilisation des systèmes actuels de mesure et de surveillance.

Selon le Canada, ces objectifs généraux et critères devraient guider les Parties dans leur étude des nouvelles règles de l'UTCATF, au lieu de l'ensemble de principes dans la décision 16/CMP.1 qui ont guidé les règles élaborées en fonction de la première période d'engagement.

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<sup>1</sup> Voir la discussion dans la présentation du Canada à l'adresse : [http://unfccc.int/files/kyoto\\_protocol/application/pdf/canada.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/canada.pdf) (Disponible en anglais seulement)

### 3. Définitions

Les modifications apportées aux définitions peuvent avoir des conséquences importantes pour les Parties visées à l'annexe I, lesquelles ont déjà beaucoup investi dans des systèmes nationaux de surveillance et de déclaration fondés sur les définitions établies pour la première période d'engagement. Par conséquent, les modifications apportées aux définitions doivent être réduites au minimum. Cependant, le Canada croit que le terme «restauration du couvert végétal» et sa définition doivent être remplacés par l'expression «gestion de la couvert végétal», définie comme un «système de pratiques pour la bonne intendance des terres non classifiées comme terres forestières, terres cultivées, terres de pâturage ou terres humides».

### 4. Activités liées aux changements d'affectation des terres

Le Canada croit que toutes les Parties visées à l'annexe I doivent strictement représenter le déboisement dans leur comptabilisation de la même manière. De plus, il n'est plus nécessaire de lier la comptabilisation de la gestion des forêts à la comptabilisation du déboisement, car les limites et les plafonds sur la gestion des forêts ne doivent pas être utilisés dans la comptabilisation après 2012. En ce qui concerne le reboisement et le déboisement, le Canada appuie la règle selon laquelle les débits de l'exploitation forestière sur une parcelle de terre ne doivent pas dépasser les crédits précédents acquis sur cette terre et croit que la situation où les perturbations naturelles touchent une parcelle de terre doit être réexaminée dans la comptabilisation.

### 5. Gestion des forêts

Les buts généraux du Canada pour l'UTCATF ont été énumérés ci-dessus. En ce qui concerne la gestion des forêts, des critères plus précis pour juger de l'efficacité et de l'impartialité d'un système de comptabilisation portent sur la façon dont ce système rend compte l'impact des activités humaines directes et traite des influences suivantes :

- i. Variation climatique régionale (p. ex. variation interannuelle des précipitations et de la température);
- ii. Changement mondial (p. ex. fertilisation par le dioxyde de carbone (CO<sub>2</sub>) et dépôt d'azote);
- iii. Structure de classe d'âge de la forêt (comme effet dont nous hériterons);
- iv. Perturbations naturelles (p. ex. feux de friches, insectes, tempêtes de vent, inondations).

Ci-après, nous offrons les points de vue sur trois options établies à l'annexe III du rapport de l'AWG-KP6 (FCCC/KP/AWG/2008/5), en commençant par la proposition canadienne, option 3.

#### ***Option 3 – Comptabilisation avec une approche de référence projetée***

Il est d'une importance essentiel pour le Canada que la comptabilisation se concentre sur les émissions et les absorptions anthropiques dans le secteur de l'UTCATF afin de fournir des incitatifs fortes et d'assurer l'intégrité environnementale en récompensant des activités d'atténuation réelles. Les soumissions précédentes du Canada indiquent que la proposition d'une approche de référence projetée atteint ce but<sup>2</sup>. Cette proposition est conçue en vue de satisfaire à tous les critères susmentionnés, assurant ainsi que la comptabilisation permet la

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<sup>2</sup> Voir en particulier [http://unfccc.int/files/kyoto\\_protocol/application/pdf/canadalulucfcp271108.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/canadalulucfcp271108.pdf)

comparabilité d'effort parmi les Parties<sup>3</sup>. L'approche utilise un système de comptabilisation «net-net» : les estimations d'émissions et d'absorptions de gaz à effet de serre (GES) anthropiques durant la période d'engagement sont comparées aux données de référence projetées. Les émissions de GES nettes égalent la somme des émissions et des absorptions pendant la période. Les effets de la variation climatique régionale, le changement mondial et la structure de classe d'âge de la forêt sont éliminés de la comptabilisation en effectuant la comparaison avec une approche de référence projetée. Les effets des perturbations naturelles (à la fois les émissions et les absorptions) sont explicitement éliminés de la comptabilisation, en assurant l'intégrité environnementale à l'aide de la déclaration et de l'examen international des prévisions de comptabilisation d'une Partie. Le Canada est conscient que les perturbations naturelles ne sont pas aussi importantes pour les forêts des autres pays qu'elles sont pour le Canada – alors l'exclusion des effets des perturbations naturelles serait facultative.

La proposition du Canada nécessiterait un accord sur les règles qui ferait en sorte :

- vi. d'établir la méthode net-net de calcul des émissions et des absorptions de GES anthropiques découlant de la gestion des forêts qui entreraient dans la comptabilisation;
- vii. de préciser qu'une Partie souhaitant ou obligé d'effectuer une comptabilisation pour la gestion des forêts doit déclarer les données des émissions et des absorptions des GES anthropiques projetées;
- viii. de préciser que l'information concernant les données projetées seront assujetties à un examen et à un rajustement conformément aux procédures établies et que les Parties doivent inclure une description du processus et l'information utilisée pour établir la projection, y compris l'information sur l'inventaire forestier actuel, les plans régionaux et nationaux de la gestion des forêts, les activités historiques réelles de la gestion des forêts et leurs liens avec les plans de gestion;
- ix. de préciser qu'une Partie a l'option d'exclure de la comptabilisation les émissions et toutes les absorptions subséquentes découlant des perturbations naturelles;
- x. de préciser que si une Partie choisit d'exclure les effets des GES des perturbations naturelles, alors l'information concernant l'exclusion sera assujettie à un examen et à un rajustement et doit a) inclure des renseignements transparents et vérifiables que les perturbations ne sont pas anthropiques, b) identifier les terres affectés par ces événements et c) expliquer la façon dont les émissions et les absorptions ont été exclues de la comptabilisation.

### ***Option 1 – Comptabilisation avec des plafonds ou les taux d'abattement***

L'utilisation continue des plafonds négociés pour la gestion des forêts ne permettra pas de satisfaire aux critères ou aux objectifs généraux décrits ci-dessus. Notamment, l'expérience a démontré qu'ils sont inefficaces dans la plupart des cas pour axer la comptabilisation sur les émissions et les absorptions de GES anthropiques ou pour fournir des incitatifs d'atténuation. Même si les taux d'abattement sont plus préférables que les plafonds, ils comportent les mêmes faiblesses. Pour améliorer leur pertinence, il est nécessaire de négocier des *taux d'abattement* propres aux pays qui varieraient pour les émissions et les absorptions, puisque les effets naturels et indirects sur les humains – la justification pour l'utilisation *les taux d'abattement* – peuvent varier considérablement en importance et en magnitude entre les Parties.

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<sup>3</sup> Une analyse des autres approches de comptabilisation afin de traiter des diverses influences sur les modifications des stocks de carbone découlant de la gestion des forêts et d'axer la comptabilisation sur le fait d'offrir des incitatifs pour l'activité humaine se trouve dans H. Bottcher, W.A Kurz and A. Freibauer (2008), Accounting of forest carbon sinks and sources under a future climate protocol – factoring out past disturbances and management effects on age-class structure. *Environmental Science & Policy* 11: 669-686.

## ***Option 2 – Comptabilisation relative à une année de base ou une période de base***

Une approche fondée sur une simple année de base dans un système de comptabilisation «net-net» ne tient pas compte de la variation importante qui peut survenir dans les émissions et les absorptions forestières causées par les facteurs naturels, bien qu'elle contribue à éliminer les effets du changement mondial de la comptabilisation. Par conséquent, le choix de l'année de base engendrera des gagnants et des perdants en s'appuyant uniquement sur les puits ou les sources dans l'année en question comparativement à la période d'engagement, au lieu de la comptabilisation de l'activité réelle d'atténuation. Une approche fondée sur une période de base constitue une amélioration, mais on ne règle pas de façon adéquate la question de la variation interannuelle étant donné l'ampleur de la variation (à la fois en fréquence et en effets des GES) des perturbations naturelles dans les forêts canadiennes. Le Canada serait heureux d'accueillir des propositions qui traiteraient de la façon dont ces approches «net-net» peuvent être utilisées afin d'éliminer les effets des perturbations naturelles de la comptabilisation.

### **6. Agriculture**

L'approche actuelle (un système net-net fondée sur l'année de base face à la gestion des terres cultivées, des terres de pâturage et de la restauration du couvert végétal) peut occasionner des effets pervers en raison de la saturation éventuelle de carbone. On s'attend à ce que ce soit le cas pour le Canada au cours des prochaines décennies puisque nos terres cultivées ont presque atteint leur capacité maximale de stockage de carbone et que nous ne sommes plus en mesure d'éliminer le carbone au même rythme que pendant l'année de base (les terres cultivées du Canada se situaient à un puits net d'environ 2 Mt d'équivalent-CO<sub>2</sub> en 1990). Si l'on conserve les règles actuelles, alors le Canada serait débité, car la séquestration sera inférieure à l'année de base bien qu'il n'y ait aucune émission provenant de ces terres et que les pratiques de gestion n'aient pas changé. Cette question de saturation devra être abordée dans les nouvelles règles pour l'agriculture.

### **7. Autres questions**

#### ***Traitement des produits ligneux récoltés***

L'amélioration des règles de l'UTCATF devrait ajouter les produits ligneux récoltés comme réservoir de carbone additionnel à inclure dans la comptabilisation liée aux forêts. Il est bien connu que l'approche adoptée dans le Protocole de Kyoto—en supposant que le carbone dans les produits ligneux récoltés est émis au point de récolte—n'est pas exacte. Les règles actuelles n'offrent aucun incitatif pour saisir le potentiel d'atténuation qui peut exister dans la production, l'utilisation et l'élimination du carbone dans les produits ligneux récoltés. L'ajout des produits ligneux récoltés comme réservoir dans la comptabilisation permettra d'engendrer cet incitatif. En traitant la gestion des forêts et les produits ligneux récoltés de façon intégrée dans la comptabilisation, cela pourrait réduire de façon spectaculaire les répercussions des autres approches d'estimation des produits ligneux récoltés. Le Canada croit que les Parties doivent se concentrer sur les questions et les objectifs principaux de la comptabilisation des produits ligneux récoltés, y compris sur l'ensemble des incitatifs touchant la production, l'utilisation et l'élimination qui sont les plus importants pour réaliser le potentiel d'atténuation des produits ligneux récoltés.

### ***Comptabilisation fondée sur toutes les terres aménagées***

L'annexe III du rapport de l'AWG-KP6 (FCCC/KP/AWG/2008/5) présente la comptabilisation détaillée fondée sur les terres comme une option de remplacement de la structure de comptabilisation actuelle de l'UTCATF. Le rapport de la prochaine réunion du Groupe d'experts intergouvernemental sur l'évolution du climat (Revisiting the Use of Managed Land as a Proxy for Estimating National Anthropogenic Emissions and Removals) qui aura lieu en mai 2009 et qui portera sur l'examen de l'utilisation des terres aménagées comme moyen de calculer par approximation les émissions et les absorptions anthropiques nationales peut être pertinent pour approfondir davantage cette option. Cependant, le Canada jugera cette approche sur la façon dont elle permet de satisfaire aux critères susmentionnés, y compris la structure de classe d'âge existante et l'exclusion des effets indirects et naturels. Une approche qui ne permet pas de satisfaire à ces critères ne serait probablement pas acceptable pour le Canada. Si une approche de comptabilisation fondée sur les terres devait permettre de satisfaire aux critères susmentionnés de manière acceptable pour le Canada et les autres Parties, nous prévoyons que les méthodes d'estimation et les prévisions pour certaines catégories de terres aménagées devront être améliorées.

Ottawa

PAPER NO. 4: CHILE

**CHILE'S SUBMISSION TO AWG-KP ON  
LAND USE, LAND USE CHANGE, AND FORESTRY**

The basic mechanisms available for reducing Greenhouse Gases (GHG) are energy savings via efficiency and replacement of fossil fuels by non-contaminating renewable ones. Sustainable forest management (SFM) and its associated industry currently generate significant mitigation contributions against climate change on both counts. Chile's forestry sector -forest and forest industry- effectively contributes to mitigate the environmentally negative effects of GHG, thereby providing a valuable service that is relevant both at the national and the international level.

**Global warming and the role of forests**

The UN's Intergovernmental Panel on Climate Change (IPCC) has concluded that CO<sub>2</sub> emissions generated by abiotic activities, in addition to other GHG, are the main culprits of global warming. The Kyoto Protocol (KP) is committed to an important reduction of GHG, and has recognized the role of forests in carbon sequestration. Forests, in effect, play a fundamental role in controlling GHG, since throughout their existence they store carbon in the form of biomass.

In fact, the IPCC's "Climate Change 2007: Synthesis Report" mentions typical forestry activities like afforestation, reforestation, reduction of deforestation, forest management, wood product handling, biofuels to replace fossil fuels, and tree improvement to increase biomass, as specific mechanisms to enhance carbon sequestration. Moreover, to stimulate these activities it recommends the use of economic incentives -national and international- to increase the areas under forest cover, reduce deforestation, and improve sustainable forest management.

Planted forests with high growth rates, sustainably managed, and planted on non-forested soils, increase the area under cover and the total carbon sequestration capacity. This is particularly relevant considering that, by contrast, deforestation in several undeveloped countries explains approximately 20% of the world's annual CO<sub>2</sub> emissions in recent years, due to the relentless advance of the agricultural frontier into former natural forests. Therefore, Chile considers that the definitions, modalities, rules and guidelines for the treatment of land use, land-use change and forestry (LULUCF) should be addressed in order to enhance the implementation of afforestation and reforestation CDM projects.

**Forest industry and the forest products**

But forests not only contribute to carbon sequestration. Forest products continue to hold this sequestered carbon in the form of lumber and paper products for extended periods, as recognized by the IPCC. Lumber, as a construction material, originates from biomass generated with a negative carbon footprint; a unique situation in the industrial world. Subsequently when transported and processed it also demands a relatively small energy input compared to competing materials like steel and cement. A recent study illustrates this situation with eloquent figures: comparable four-storey buildings (1190 m<sup>2</sup>) using lumber structures, siding and panels have a negative footprint of -150 tons of carbon dioxide while using concrete have a positive carbon footprint of 96 tons of carbon dioxide, considering a 100-year period ("Greenhouse Gas Benefits of Wood Substitution: Comparing Concrete- and Wood-Framed Buildings in Finland and Sweden").

Moreover, many forest products can be recycled, and in effect they are in a high proportion in the case of paper and boards. A growing proportion of the fiber currently used for paper and paperboard production comes from recycled material, representing 50 to 60% of the total fiber input in industrialized countries. Other sub-products find their way into energy generation with low carbon footprint, since they mostly



emit the CO<sub>2</sub> that was previously absorbed from the atmosphere to generate this biomass. In fact, the byproducts of the mechanical transformation of wood -e.g., sawmilling, wood panels, and lumber remanufacturing- are normally utilized either as a fiber for paper products, or as carbon neutral fuels for energy generation. It should also be noted that Chile's chemical pulp production, a significant industry in the country, not only is self-sufficient in energy, but is able to generate a substantial surplus of electricity that is provided to the national electrical power grid.

In parallel with the conventional uses of the forest biomass for energy generation, new technologies are being investigated with good expectations for transforming wood into biofuels capable of substituting traditional, contaminating fossil fuels.

#### **The environmental contribution of Chile's forest plantations**

Chile has nearly 2.2 million hectares of fast growing forest plantations. Estimates of the CO<sub>2</sub> stock already captured by these planted forests amounts to 223 million tons. Currently, an afforestation program of approximately 45,000 hectares per annum increases the carbon stock by more than 8 million tons on a sustainable basis given that the vast majority of the plantations are reforested after harvesting.

However, these estimates assume, incorrectly, that when forests are harvested the whole of the carbon contained in the aerial biomass is emitted back to the atmosphere. Thus, the figures shown above greatly underestimate the effective CO<sub>2</sub> sequestration performed by planted forests in Chile's case.

In 2007, some parties proposed that sustainable forest management be considered in the climate change negotiations for Kyoto's subsequent commitment periods, recognizing that only a fraction of the carbon stored in biomass is emitted back to the atmosphere at the time of harvesting. To this end, these countries have proposed changes in the existing rules for LULUCF in order to improve the scientific precision of the CO<sub>2</sub> accounting methodologies as they stand today. Naturally, the oxidation of harvested biomass takes time and it varies according to the product mix generated after harvesting. Chile strongly supports the ongoing efforts to improve the precision of the assumptions and the formulas designed to estimate the GHG mitigation contribution of forestry and forest industry.

#### **Closing remarks**

Chile's forests add a significant contribution to the world's effort to control climate change via CO<sub>2</sub> sequestration, although we have a relatively small territory. Supported by this premise, and in view of the coming debate on climate change leading to CMP 5 in Copenhagen, which is expected to generate ambitious commitments for the subsequent periods of the Kyoto Protocol, Chile submits this document to express its views on the principles that should frame the future of this international protocol vis-à-vis forestry and forest industry.

PAPER NO. 5: CHINA

**SUBMISSION BY CHINA ON LULUCF UNDER AWG-KP**

In paragraph 8 of document FCCC/KP/AWG/2008/L.19, AWG-KP invited Parties 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 its deliberations on how to address, where applicable, the definitions, modalities, rules and guidelines for the treatment of LULUCF. China welcomes this opportunity and would like to submit the following views.

1. The mandate of the AWG-KP, as clearly defined in decision 1/CMP.1, is to consider further commitments for Parties included in Annex I for the period beyond 2012 in accordance with Article 3, paragraph 9, of the Protocol. This is a focused mandate which shall be completed by the adoption of an amendment to Annex B of the Kyoto Protocol.

2. For completion of this mandate, the AWG-KP decided that its work shall include three tasks as set out in paragraph 17 of FCCC/KP/AWG/2006/4, namely (a) analysis of mitigation potentials and ranges of emission reduction objectives of Annex I Parties, (b) analysis of possible means to achieve mitigation objectives and (c) consideration of further commitments by Annex I Parties. The purpose of work on (a) and (b) is to inform work on (c), the focus of AWG-KP is work on (c) which does not depend on the outcome of work on (a) and (b). The AWG-KP had already spent almost three year discussing (a) and (b), which is helpful to the consideration of (c). In 2009 the AWG-KP should focus without delay its work on (c).

3. The treatment of LULUCF should not lead to the creation of loopholes for Annex I Parties to achieve their emissions reduction commitments by simply doing "magic" paper work. Also complex and lengthy technical discussions on LULUCF should not be used by Annex I Parties as an excuse for delaying tactics. Nor does discussion on this issue have to be completed before the completion of the work of AWG-KP.

4. The definitions, modalities, rules and guidelines for the treatment of LULUCF as contained in

Decision 16/CMP.1 should be maintained, considering the uncertainties caused by natural disturbance, inter-annual variation, CO<sub>2</sub>-fertilisation and nitrogen deposition.

5. To ensure the continuity of activities and environmental integrity, the activity-based accounting approach and the base year of 1990 should be kept unchanged. The accounting of source and removal of LULUCF should follow the principle of conservativeness and symmetric. The contribution of LULUCF activities should not result in reduction of the mitigation efforts in other sectors.

6. The options, elements, and issues contained in annex III to the report of AWG-KP at its sixth session and annex IV to the report of AWG-KP at its resumed fifth session should be narrowed down. With specific attention on the accountable anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from forest management under Article 3, paragraph 4 of Kyoto Protocol, it could be voluntarily or compulsorily accounted and reported, but the net-net method with certain discount factors or limitation could be a better option.

7. The CDM A/R activity should be continued in the second commitment period of the Kyoto Protocol. Due to difficulties in relevant data and methodologies, the new elements under LULUCF such as carbon storage in harvested wood product, the wetland restoration and management, and other additional activities should not be taken into consideration at this stage.

## **SUBMISSION BY THE CZECH REPUBLIC ON BEHALF OF THE EUROPEAN COMMUNITY AND ITS MEMBER STATES**

**This submission is supported by Albania, Bosnia and Herzegovina, Croatia, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey**

Prague, 12 February 2009

**Subject: Definitions, modalities, rules and guidelines for the treatment of land use, land-use change and forestry (LULUCF) in the second commitment period (AWG-KP). Views and proposals for further elaboration of the options, elements and issues contained in annex III to the report of the first part of the sixth session, and annex IV to the report at the resumed fifth session, including views on how and which proposals could address cross-cutting issues**

The EU submits the following in response to the paragraph 8(b) of the conclusions on Land use, land-use change and forestry (LULUCF) of the sixth session of the AWG-KP held in Poznan, which invites Parties to submit 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 6<sup>th</sup> 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.

This submission is in addition to the views expressed previously by the EU and contained in the submissions prior to the meetings in Bangkok (AWG-KP 5.1)<sup>1</sup>, Bonn (AWG-KP 5.2), Accra (AWG-KP 6.1)<sup>2</sup> and Poznan (AWG-KP 6.2)<sup>3</sup>. The EU believes that the following considerations should also guide us in further elaborating options, elements and issues identified in Accra.

**1 - Estimation of anthropogenic emissions and removals:** It is the EU's view that given the current level of scientific knowledge complete separation of anthropogenic from non-anthropogenic effect is currently not possible. The EU therefore supports the concept of “managed land” applied within the Convention reporting as a first proxy for estimating national anthropogenic emissions and removals. In this context the EU looks forward to the IPCC meeting held in May this year in Brazil on this special issue. Definition of managed land for all land use classes should be described in a transparent manner and applied consistently over time.

**2 - Permanence:** as a general principle, the EU believes that any credits generated under the LULUCF accounting rules need to be backed by the assurance that if a reversal occurs, it should be accounted for as an emission.

**3 - Link between Kyoto Protocol and Convention reporting:** the EU notes that Annex I Parties have to report according to land-used categories under the Convention. Activity based reporting for the purpose of the accounting of Article 3.3 and 3.4 activities under the Kyoto Protocol is supplementary to

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<sup>1</sup> <http://unfccc.int/resource/docs/2008/awg5/eng/misc01.pdf>

<sup>2</sup> [http://unfccc.int/files/kyoto\\_protocol/application/pdf/lulucf\\_eu.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/lulucf_eu.pdf)

<sup>3</sup> [http://unfccc.int/files/kyoto\\_protocol/application/pdf/france\\_on\\_behalf\\_of\\_the\\_european\\_community\\_and\\_its\\_member\\_states.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/france_on_behalf_of_the_european_community_and_its_member_states.pdf)

the Convention reporting and is often obtained by deriving activity based information from other land-based data. This translates into an increased reporting burden that will increase over time as lands subject to 3.3 and 3.4 activities must be identifiable, adequately reported and tracked into the future. With a long term perspective in mind, the EU is of the view that convergence in the reporting systems should be promoted.

**4 - Incentives for mitigation in the LULUCF sector:** the EU recalls that the ultimate aim of the accounting regime is to incentivize actions to mitigate climate change. The EU is of the view that the accounting regime should provide a basis for further incentives to promote emissions reduction, the use of sustainable biomass for energy, the use of wood products and the sustainable use and management of agricultural and forest land. In this regard, the EU observes that the signal delivered by net-net or unconstrained gross-net accounting rules is the same in principle and that the choice does not impact the LULUCF incentives as such. It does however influence the contribution of the LULUCF sector to, and its implication on, the overall target of a country.

Since the base year is not taken into account under gross-net, there is a need to constrain the amount of emissions and removals that are accounted for.

The intention of the cap, introduced by 16/CMP.1, on forest management was to limit the overall contribution of the activity and as a pragmatic proxy for direct human-induced effect. However, capping creditable emissions/removals also removed the incentive for additional carbon stock increment in the forestry sector as long as the overall balance of the Party was beyond the range of the cap. It is the EU's understanding that a discount factor, if used, may provide a more effective solution than a cap since the incentive for action will always exist. The EU believes that the methodology used to derive a cap or a discount factor should be applied consistently to all Parties. A single discount factor should apply to all Parties.

Another possibility could be to replace the cap with a "bar". Under the bar approach, only removals beyond a certain, pre-determined level (i.e. bar) would be creditable. The absolute level of crediting would therefore be adjusted without removing the incentive to improve performance. Efforts leading to higher removals would result in higher credits, while lower removals would reduce credits.

**5 - Compliance risk:** the EU recognizes that changes within the LULUCF accounting system will require consideration of an approach to address compliance risk resulting from potentially large, sudden and uncontrollable emissions related to natural disturbances. For example, fires, storms and pest outbreaks can lead to significant emission from forests and recovery to the previous carbon stocks levels may take a long time. The EU is open to explore ways to address the compliance risk resulting from such events. However, the integrity of the accounting system needs to be preserved.

This compliance risk depends, to a large extent, on the overall accounting rules for LULUCF. The following is a brief assessment of the various accounting approaches that have been identified in earlier submissions by Parties from the perspective of compliance risk resulting from extreme events:

- **Gross-net accounting:** In case of gross-net accounting, EU believes that there is a need to constrain the amount of emissions and removals that are accounted for. Such limitation can also reduce the compliance risk.
  - **Cap:** By capping the amount of emissions and subsequent removals that a party can account for, the emissions and subsequent removals resulting from natural disturbances would not be accounted for if they are outside the range of the cap.
  - **Discount factor:** By applying a discount factor the result is similar to that of the cap, but a party would account for a proportion related directly to the emissions and subsequent removals resulting from natural disturbances.
- **Forward-looking baseline:** In this proposal an ex-ante baseline of forest carbon stocks is established, considering the age structure of the forest under the current and foreseen management

practices, species, etc. Forest carbon stocks are monitored during the commitment period. At the end of the commitment period, the emissions resulting from natural disturbances are deducted from the monitored carbon stocks and the Party accounts for the difference between the monitored carbon stocks and the baseline adjusted by the emissions/removals from natural disturbances. The sequestration effect, if any, reflects only the additional sequestration, resulting from changes in management practices, compared to business-as-usual.

- **Net-net accounting:** In the case of net-net accounting, the impact of extreme events on the accounting system would be unmitigated. Net-net accounting could be applied with a moving base year/base period, taking the previous commitment period ( $CP_{n-1}$ ) as reference period for the ongoing commitment period ( $CP_n$ ). For the upcoming commitment period ( $CP_{n+1}$ ) the new reference period would be  $CP_n$ . If emissions from natural disturbances happen during  $CP_n$  the party would have to account for increased emissions in  $CP_n$ , but would benefit from the use of a lower baseline in  $CP_{n+1}$ .

There are several options that could be applied to reduce compliance risk where it is of significant concern to Parties. However, the EU believes that only events that can be categorized as “extreme” should qualify for such treatment. The EU considers that criteria and guidance should be established to define classification of extreme event. Once the magnitude of a particular event would qualify as extreme, specific accounting options could be applied to the emissions resulting from such an event.

The EU believes that it is important to separate between 1) options where the emissions from extreme events are accounted for, but the compliance risk is mitigated through specific accounting devices and, 2) options where extreme emissions are reported but not accounted for.

1) Options where the emissions from extreme events are accounted for:

- **Carry-over system.** Under this system, emissions from natural disturbances would not be taken out of accounting, but parties would have the option to divide the emissions over several accounting years and/or commitment periods (carry-over).
- **Global insurance mechanism.** Under such a system, Parties would set aside part of their removals from forest management, which would be deposited into a global pool available for all Parties. Parties that suffer from an extreme event would, upon demonstration of the exceptional nature of the event, be eligible for partial or total compensation of the exceptional emissions. Any unused credits in the deposit at the end of the commitment period would be returned to Parties or carried over to the next commitment period. Participation in the system could be mandatory for all Parties selecting forest management in article 3.4.

2) Option where the emissions from extreme events are not accounted for:

- **Ex-post adjustment.** The ex-post adjustment only considers the correction of emissions resulting from extreme events at the end of the commitment period. The corrections would apply to the accounted amount, generated in areas that suffered from extreme natural disturbances during the commitment period. Areas subject to ex post adjustment would be geographically identified. Any subsequent net removals on those areas would be accounted for only when the adjustment is fully compensated.

The assessment of the above mentioned options should take into account inter alia how they address the issues raised in paragraph 2 of this submission, how incentives for efficient prevention policies are given and what the implications on reporting and monitoring are. Without prejudice to the eventual treatment of the compliance risk in the accounting regime, the EU believes that all emissions and removals on managed land, including those resulting from extreme events, should be reported.

**6- Harvested wood products:** The EU is willing to consider moving from the current default accounting method for harvested wood products which assumes no net change in the pool or, equivalently, instant oxidation. Accounting for the storage of carbon in wood products and the subsequent emissions from these products should better reflect the point in time when emissions are released and would provide incentives for the management of the forest products pool.

In seeking a way to move beyond the current system the EU is open to consider stock change or production approaches.

The EU also believes that the following features should be used as a basis for future accounting of HWP:

- Accounting would be confined to wood originating from forests for which emissions and removals are accounted for
- The existing wood product pool would be included in the estimations of net emissions over the accounting period.

The EU's view is that many Annex 1 Parties have sufficient data to account for harvested wood on the basis indicated. Such accounting would be optional. The current instant oxidation approach would apply to Parties choosing not to account for HWP.

**7- Cropland management, grazing land management and revegetation:** the EU is of the view that, in the context of an activity based accounting, current net-net accounting rules for cropland management; grazing land management and revegetation are satisfactory.

PAPER NO. 7: ICELAND

**Proposal for a Decision XX/CP.15**  
**Submission of Iceland to the AWG-KP, 15 February 2009**

*The Conference of the Parties*

*Recalling* its decision 1/CP.3, paragraph 5 (d) and its decision 14/CP.7 on Impact of single projects on emissions in the commitment period,

*Recognizing* the importance of renewable energy in meeting the objective of the Convention,

1. *Decides* that, the provisions of decision 14/CP.7, adopted by the Conference of the Parties at its seventh session, shall continue to apply for the second commitment period with the conditions detailed therein.



A proposal  
for an amendment to  
decision 16/CMP.1 on Land use, land-use change and forestry  
adopted by decision 11/CP.7

**Definition of wetland restoration and degradation**

to be included in the Annex to the decision 16/CMP.1 on Land use, land-use change and forestry adopted by the decision 11/CP.7

The following additions and amendments are suggested:

**Section A, Definitions**

**Article 1, paragraph (i) (j)**

(i) "*Wetland restoration*" is a direct human-induced activity to reduce emissions of greenhouse gases and increase carbon stocks by restoring previously degraded wetlands. This requires accounting for both wetland degradation and restoration.

(j) "*Wetland degradation*" is human-induced drainage of wetland resulting in increased emissions of greenhouse gases and reduction of carbon stocks.

**Section C, Article 3, paragraph 4**

**Article 6**

In the last line, add the wording "and wetland restoration" after the wording "grazing land management. Delete "and" before "grazing".

## Japan's view on the treatment of land use, land-use change and forestry (LULUCF)

Japan has already submitted its view on the treatment of LULUCF as part of its views and information on the means to achieve mitigation objectives in March, 2008 (FCCC/KP/AWG/MISC.1/Add.1), and its more detailed views on a voluntary and informal basis in August and November, 2008 ([http://unfccc.int/files/kyoto\\_protocol/application/pdf/japan.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/japan.pdf), [http://unfccc.int/files/kyoto\\_protocol/application/pdf/japanlulucf281108.pdf](http://unfccc.int/files/kyoto_protocol/application/pdf/japanlulucf281108.pdf)). Japan welcomes the opportunity to further present our view and submits it as follows.

### 1. Basic ideas

As far as carbon dioxide is concerned, LULUCF activities contribute to the stabilization of GHG concentration in the atmosphere through both carbon removals through photosynthesis and its storage in vegetation, soils and others, and emission reductions from such carbon pools, whereas fossil-fuel-related sectors contribute to climate change mitigation through emission reductions.

Since the amount of organic matters produced and stored through photosynthesis has limitation under limited environment, increase of carbon stocks in organic matters will inevitably become slower in the long term in any countries or regions (Fig.1).

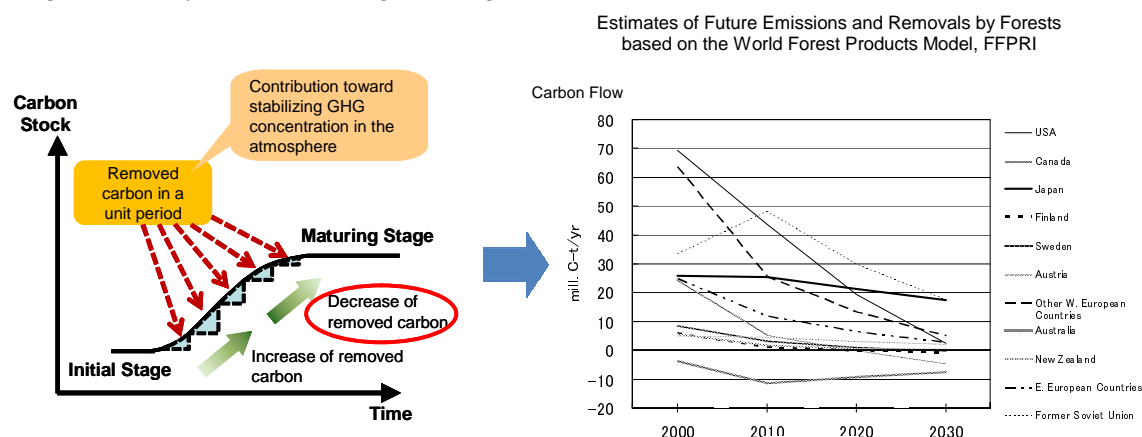


Fig.1

Source : FFPRI (Forestry and Forest Products Research Institute, Japan)

- \* Emissions and removals by above- and belowground biomass pools
- \* Removals by HWP not included

Taking into account the above-mentioned characteristics of the LULUCF sector, Japan believes that rules applicable to the LULUCF sector in the framework beyond 2012 should be established based on the following principles:

- As clearly described in the IPCC Fourth Assessment Report (AR4), the LULUCF sector has a significant mitigation potential for GHG emission reductions, most of which could be materialized with currently available technologies. Given the paramount necessity of deep and urgent cut of GHG emissions, the mitigation potential of the LULUCF sector should be fully exploited;
- Carbon removals and storage into vegetation, soils and others is a long-term process and the LULUCF sector should optimize such process in the long run. Therefore, long-term and continued incentives should be provided for activities contributing to the enhancement of sinks and emission reductions of GHGs including sustainable forest and cropland management, revegetation and extended and cascade use of wood and wood products; and
- To secure environmental integrity, IPCC's scientific works delivered after setting the LULUCF

rules for the first commitment period should be reflected in treatments of LULUCF. In addition, it is necessary to identify lands strictly subject to human-induced activities and to account only for such lands.

With a view to enhancing transparency and comparability of each country's national reduction commitment, Parties should decide on the rules of LULUCF and make clear the mitigation potential of LULUCF of each country prior to deciding on its national commitment.

## **2. Accounting method in each land-use category of LULUCF**

### **(1) Forest land**

#### **(Concept)**

As referred to in the IPCC AR4, in the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing a sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit. Therefore, the rules related to forest sinks should be designed to promote sustainable forest management.

#### **(Accounting options)**

For forest-related activities, namely afforestation, reforestation and deforestation under Article 3.3 and forest management under Article 3.4 of the Kyoto Protocol, the gross-net accounting should be adopted in order to provide incentives for sustainable forest management regardless of the stage of forest maturity.

The decrease of removals would be accounted for as "emissions" in the net-net accounting, even if forests keep removing carbon from the atmosphere. Since the decrease of removals is unavoidable, it could create a negative impact on sustainable forest management and thus would hamper efforts for climate change mitigation in forest-related activities from a long-term perspective.

The baseline accounting, under which the difference of the amount of removals between projected removals in case where human-induced activities will not take place and actual removals is to be accounted for, has still many technical problems in setting baselines without arbitrariness in the prospect of future forestry practices. Furthermore, forest/forestry policy, which should be based on a long-term perspective, might be distorted when securing removals exceeding the baseline.

#### **(Harvested Wood Products)**

The accounting of harvested wood products (HWP, including the concept of emissions from wood removed from an area of forest mentioned at the first part of the sixth session of the AWG-KP) should be treated as a part of the forest-related activities and contribute to the mitigation of climate change as a whole. In this sense, the objective of introducing the accounting of HWP should be clearly defined and shared among Parties, and the most appropriate accounting option to achieve the objective should be chosen.

The main objective of introducing the accounting of HWP should be to provide incentives for the promotion of effective use of wood in order to maximize their mitigation functions of emission reduction through substituting more energy-intensive materials and fossil fuels as well as of carbon reservoir. The objective should not be limited to monitoring carbon dynamics accurately.

Based on the ideas above, it is necessary that the accounting method should meet the following requirements:

- Conform with the accounting rules on emissions and removals by forest-related activities under Articles 3.3 and 3.4;
- Not affect negatively but rather promote sustainable forest management domestically and internationally;
- Promote extended and cascade use of wood and wood products; and

- Not create an excessive amount of credits merely by new application or modification of an accounting method.

In light of the points above, it is unlikely that the atmospheric flow approach (these approaches are shown in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories) could provide an incentive for the promotion of use of wood since this approach accounts only for removals in case of exported HWP and only emissions in case of imported HWP and it will have a message of promoting exports of HWP and curb their imports, in other words, it discourages the use of wood and wood products within the national territory.

In contrast, the production approach encourages the use of HWP of domestic origin and is consistent with the objective of the accounting of HWP, i.e. promotion of use of wood. On the other hand, an incentive for more and longer use of imported HWP would not be created through this approach since stock changes of removals and emissions from HWP are counted in the country where the HWP are produced.

The stock-change approach will have a message of increasing carbon stocks of wood and wood products within the country. However, it is necessary to address the treatment of HWP originated from forests of non-Annex I Parties as well as forests of Annex I Parties other than those covered under Articles 3.3 and 3.4 of the Kyoto Protocol.

In addition to the issues to be solved above, the following perspectives should be taken into account for the consideration of accounting rules:

- Indirect effects of HWP to the mitigation of climate change such as substitution for energy-intensive materials and fossil fuels which will not be accounted for in this accounting should be fully recognized. The rules should have a message to promote the functions of HWP for such indirect effects, since they may have greater impacts than the direct effects to be accounted for as carbon storage within HWP. In this regard, it would be questionable to include HWP in Solid Waste Disposal Sites (SWDS) into the accounting, since HWP should contribute to emission reductions from fossil fuels through utilization of wood and wood products as recycling materials and/or bio-fuels, rather than reserving carbon as HWP in SWDS, which does not produce any indirect contribution;
- Data availability: Carbon stocks should be measurable in the manner accurate enough to be comparable among Parties; and
- Cost-effectiveness: Merits (additional effects) of introducing the accounting of HWP should have sufficient impacts compared with additional costs of such introduction (costs including measurement, report and verification). The projected margin of error should be much smaller than the credits/debits derived from HWP accounting.

## **(2) Croplands and grasslands**

The IPCC AR4 has revealed that agricultural activities would perform a large mitigation potential and most of it would be able to be brought out through using currently available technologies.

In particular, carbon sequestration into the agricultural soil offers a large mitigation potential and it is essential to take full advantage of the mitigation potential in terms of efficient and effective prevention of climate change. Therefore, cropland management and grazing land management should continue to be included in the Article 3.4 activities as one of the means available to Annex I Parties to reach their national commitments as in the first commitment period.

As for carbon sequestration through cropland management and grazing land management, there are various management practices across countries and regions, such as application of compost in Japan. Therefore, it is crucial not only to promote such practices, but also to offer such treatment adoptable by as many countries as possible.

Furthermore, incentives for such cropland management and grazing land management activities which contribute to facilitating carbon removals and emission reductions should be equal to all countries.

### **(3) Wetlands**

Japan fully recognizes the important role of wetland management, including wetland restoration and degradation, to mitigate climate change. However, it is difficult for many countries to measure, report and verify removals and emissions through wetland management accurate enough to be used for the achievement of national commitments in light of current scientific knowledge, including ours, and the IPCC's Good Practice Guidance for LULUCF (LULUCF-GPG).

However, provided that the choice of wetland management is voluntary, it is possible to establish a rule where a country, equipped with enough data and information enabling the accurate accounting, could account for removals and emissions through wetland management to achieve its national commitment. In such a case, it is necessary to establish the definition of wetland distinct from other activities such as forest-related ones in order to avoid arbitral classification of land.

### **(4) Settlements**

Japan selects revegetation for its accounting during the first commitment period and interprets the definition of "revegetation", based on the LULUCF-GPG, as follows:

Practices for creation of "park and green space", "public green space", and "private green space guaranteed by administration" which have been carried out in settlements since 1990. Activities which cover less than an area of 0.05 hectares or meet the definitions of afforestation and reforestation are not included in "revegetation".

Japan is enhancing effectiveness of removals through planting in urban areas by promoting such activities. Continuity of the current rule is very important in the second commitment period for a longer-lasting effect.

There is a view that emissions from devegetation should be accounted for from the viewpoint of the symmetrical accounting of revegetation. However, Japan's current view on this issue is as follows:

- It is easy to account for emissions from devegetation in the area where revegetation activities were conducted before. However, it is technically very difficult to account comprehensively in all the areas due to very little information and data available at the current moment;
- Therefore, it is necessary first to discuss such issues as the definition of devegetation, a way of application which will ensure symmetry with revegetation under specific national circumstances of each country, an actual possibility of the accounting and cost effectiveness in order to decide on emission accountings from revegetation; and
- It is also necessary to consider management and conservation of vegetation before the base year if the scope of the current accounting rule is to be changed.

### **(5) Land-based accounting**

Mandatory accounting by all Annex I Parties under the land-based accounting which covers emissions and removals from all managed lands to be reflected in the achievement of national commitments with due accuracy would be extremely difficult at the current moment, as shown in the reporting practices under the current UNFCCC.

The land-based accounting would be more complicated and enhance uncertainties by incorporating many land-use categories such as "wetlands", "settlements" and "other lands". In addition, when the net-net accounting is employed together with this accounting, it would have the same shortcomings inherent to the net-net accounting as described in other parts of this submission.

Therefore, the land-based accounting is not appropriate for the achievement of national commitments in the second commitment period.

### 3. Cross-cutting issues

Japan's views on the cross-cutting issues identified at the resumed fifth session of the AWG-KP, including the implication of each option compiled at the first part of the sixth session of the AWG-KP, are as follows.

#### **(1) Consistency and continuity with the current rules**

Japan is conducting forest management practices based on the rules of the first commitment period and the current rules provide incentives for sustainable forest management. There should be a continuity of the rules for the treatment of forest-related activities because the growth of forest will take several decades and forest/forestry policy needs continuity. For a country which has already been implementing forest/forestry policy in accordance with the rules of the first commitment period, significant changes of the rules could damage continuity of the policy.

From this viewpoint, the gross-net accounting, which is the current accounting, is the most appropriate rule for the accounting of forest-related activities. There would be no consistency of the net-net accounting for countries whose forests are in their maturing stage with slower growth, since this growth would come to be entitled as "emissions". In the baseline accounting, there would be a risk to discourage incentives for continuing forest management practices currently conducted, depending on the baseline setting, and continuity would not be maintained.

If discontinuity in the rules of the first commitment period brings negative impacts on the implementation of the long-term forest/forestry policy, the accounting of removals and emissions in LULUCF should continue to be voluntary even for a Party which has selected forest management under Article 3.4 during the first commitment period.

Japan also selects revegetation under Article 3.4 during the first commitment period. If continuity of the accounting rule for revegetation is not maintained, the accounting of removals and emissions from revegetation should continue to be voluntary as well as in the case of forest management.

#### **(2) Factoring out, including age structure and indirect climate change effects**

Application of a discount factor(s) to forest management of Article 3.4 as a suboption under the gross-net accounting listed at the first part of the sixth session of the AWG-KP is assumed to be a response to factoring out. However, it should be noted that the IPCC has reported that "The scientific community cannot currently provide a practicable methodology for factoring out" (Expert Meeting Report of "IPCC Meeting on Current Scientific Understanding of the Processes Affecting Terrestrial Carbon Stocks and Human Influences upon Them", July, 2003).

Therefore, the most appropriate approach to deal with the issue of factoring out is the strict application of the activity-based approach which allows accounting for removals only from forests where human-induced activities since the base year are clearly identified.

There is an argument that the net-net accounting could exclude natural and indirect human-induced effects such as those of age structure. However, in countries where the forest growth hits its peak after the base year, the effect of age structure itself would generate substantial removals in the short term. It is therefore not appropriate to conclude that the net-net accounting actually factors out natural effects.

The baseline accounting with proper baselines might be able to deal with factoring out. However, it has many technical problems in setting baselines without arbitrariness as discussed above.

#### **(3) Inter-annual variability, natural disturbances**

Emissions from natural disturbances such as fire and pest/insect outbreaks should be prevented through the management practices in the areas where human-induced activities since the base year have been identified.

Extraction of the effect of natural disturbances is not easy. If the effect of emissions from natural disturbances is to be excluded, proper methods for proper extraction of the effects of natural disturbances and emissions to be excluded need to be duly explored in order that such methods and emissions would be based on accurate measurement, report and verification.

Under the baseline accounting, it is proposed to revise baselines in response to natural disturbances. If it is possible to extract the effect of natural disturbances technically, this method would be applicable not only to the baseline accounting but also to the gross-net and the net-net accounting. Therefore, the exclusion of natural disturbances should be considered as a common issue among all the accounting methods.

Inter-annual variability of removals and emissions in activities under the net-net accounting will vary in countries and activities. A base period approach instead of the base year approach might be considered if such period can properly be set from the viewpoint of equity and objectivity.

#### **(4) Symmetry in the accounting of emissions and removals**

As for the proposal of including emissions from forest degradation mentioned in the resumed fifth session of the AWG-KP, there is no need to add "forest degradation" to the Article 3.4 activities since both emissions and removals from forest management are accounted for under the current Article 3.4 rules and thus emissions from forest degradation are already calculated under the category of forest management.

Regarding the proposal made in the resumed fifth session of the AWG-KP to account for emissions due to devegetation, please see Section 2. (4) above.

#### **(5) Sustainable forest management**

(Please see Section 2. (1) above.)

Setting caps well below the removal potential of forest management would undermine incentives for enhancement of removals and emission reductions through forest management practices. Indeed, during the first commitment period, the overall cap of Annex I Parties is only a part of the actual removal volumes or removal potentials indicated in the IPCC AR4 due to the imposition of excessively limited caps for many Annex I Parties. This might be one of the main reasons why some Parties have pointed out that the current rules do not provide incentives for sustainable forest management.

#### **(6) Co-benefits, including biodiversity**

In forest-related activities, accounting methods which require fast-growing forestry practices or tree species for acquiring credits would contradict the objective of sustainable forest management and negatively affect co-benefits other than climate change mitigation, such as biodiversity conservation, water resources reservation, mountain disaster prevention, and maintenance of rural community livelihood. From the viewpoint of biodiversity conservation in particular, emphasis on tree growth speed may sometimes conflict with securing ecological services. The gross-net accounting would generate some credits in accordance with the growth volume brought in through forest management practices suitable for each of the local ecosystems while providing many benefits and thus climate change mitigation and other benefits are compatible in this accounting.

Enhancing carbon sequestration into the agricultural soil not only contributes to mitigation of climate change, but also ensures crop productivity and bio-diversity conservation and promotes organic waste recycling.

Conservation of green spaces and promotion of greening in urban areas provide not only climate change mitigation, but also create environmental benefits such as biodiversity conservation and various social and economic benefits, including ecological services, to citizens in urban areas.

PAPER NO. 9: NEW ZEALAND

**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 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;

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.

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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

## **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 iCERs
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 tCER and iCER 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 iCERs or tCERs or by non-Annex I Party voluntarily taking on responsibility for any reversal.

**ВЗГЛЯДЫ И ПРЕДЛОЖЕНИЯ ПО ПРИМЕНЕНИЮ В ХОДЕ ВТОРОГО ПЕРИОДА ДЕЙСТВИЯ ОБЯЗАТЕЛЬСТВ КИОТСКОГО ПРОТОКОЛА ОПРЕДЕЛЕНИЙ, УСЛОВИЙ, ПРАВИЛ И РУКОВОДЯЩИХ ПРИНЦИПОВ, СВЯЗАННЫХ С ДЕЯТЕЛЬНОСТЬЮ В ОБЛАСТИ ЗЕМЛЕПОЛЬЗОВАНИЯ, ИЗМЕНЕНИЙ В ЗЕМЛЕПОЛЬЗОВАНИИ И ЛЕСНОГО ХОЗЯЙСТВА**

**Введение**

По мнению Российской Федерации, эффективное выполнение будущих обязательств по Киотскому протоколу (КП) может быть достигнуто лишь при таком соглашении, которое обеспечивает полноправное участие всех экономических секторов, включая землепользование, изменения в землепользовании и лесное хозяйство. Россия готова участвовать в выработке таких соглашений и представляет свои взгляды и предложения по применению в ходе второго периода действия обязательств КП определений, условий, правил и руководящих принципов, связанных с деятельностью в области землепользования, изменений в землепользовании и лесного хозяйства (ЗИЗЛХ). Настоящее официальное представление подготовлено с учетом рекомендаций Специальной рабочей группы по дальнейшим обязательствам для Сторон, включенных в Приложение I, согласно Киотскому Протоколу (СРГ-КП) на 2009 год, принятой на Шестой сессии (FCCC/KP/AWG/2008/L.19).

Российская Федерация считает принципиально важным отказаться от любых искусственных ограничений (предельных показателей или понижающих коэффициентов) на зачет поглощения парниковых газов в результате деятельности в области ЗИЗЛХ в течение последующих периодов действия обязательств КП. По нашему мнению, исключение каких-либо искусственных ограничений на зачет деятельности в области ЗИЗЛХ согласуется с принципом общей, но дифференцированной, ответственности, провозглашенным в Статье 4 РКИК ООН, и представляет странам необходимую гибкость при разработке национальных политики и мер для лучшего выполнения обязательств по Киотскому протоколу. Кроме того, считаем, что система представления отчетности по сектору ЗИЗЛХ дорогостоящая, носит громоздкий характер и тяжело проверяема. Считаем, что её необходимо упростить и, в настоящем документе, предлагаем пути её упрощения.

**Особенности землепользования и лесного хозяйства, имеющие отношение к выполнению Российской Федерацией обязательств по Киотскому протоколу**

В Российской Федерации сосредоточено 22% лесов мира и более 50% бореальных лесов. Лесами страны накоплено 11% глобальных запасов углерода в растительности и верхнем (до глубины 1 м) слое почв. Лесистость России составляет 45%, а в возрастной структуре преобладают спелые и перестойные леса (около 57%). Оборот коммерческих рубок по основным лесобразующим породам страны составляет 60-100 лет. В секторе ЗИЗЛХ и связанных с ним других секторах экономики занято около 11% трудящегося населения страны. Изменение землепользования — непрерывный процесс, обусловленный экономическим развитием страны. Национальный приоритет страны — сбалансированное пользование лесным фондом на основе устойчивого управления лесами — обеспечивает не только сохранение существующих резервуаров углерода, но и их наращивание. Участие в международных соглашениях стимулирует деятельность в землепользовании, лесном хозяйстве и связанных с ними отраслях и способствуют поддержанию занятости. Деятельность в области ЗИЗЛХ в России имеет следующие особенности:

- Устойчивое управление лесами страны имеет важное глобальное значение, так как предотвращает неконтролируемые выбросы парниковых газов в атмосферу и обеспечивает сохранение существующих резервуаров углерода. Устойчивое лесопользование также обеспечивает сохранение бореальных лесов, выполняющих климат-стабилизирующие и природоохранные функции;

- Лесоразведение ограничивается доступностью территорий, что обусловлено высоким уровнем лесистости в стране и низкой плотностью населения в отдельных регионах;
- Поддержание депонирующих функций лесов в долгосрочной перспективе требует увеличения лесозаготовок в связи с преобладанием спелых и перестойных лесов в составе лесного фонда, которые снижают абсорбцию CO<sub>2</sub> из атмосферы;
- Продолжительность цикла выращивания и заготовки древесины намного превышает длительность периода выполнения обязательств.

### **Взгляды и предложения по общим руководящим принципам Статьи 3 Киотского протокола применительно к сектору ЗИЗЛХ**

Российская Федерация считает принципиально важным отказаться от любых искусственных ограничений (предельных показателей или понижающих коэффициентов) на зачет поглощения парниковых газов в результате деятельности в области ЗИЗЛХ в течение последующих периодов действия обязательств КП. По нашему мнению, исключение каких-либо искусственных ограничений на зачет деятельности в области ЗИЗЛХ согласуется с принципом общей, но дифференцированной, ответственности, провозглашенным в Статье 4 РКИК ООН, и представляет странам необходимую гибкость при разработке национальной политики и мер для лучшего выполнения обязательств по Киотскому протоколу. Снятие искусственных барьеров и ограничений соответствует положениям Статьи 2 КП и представляется особенно важным для стимулирования устойчивого развития сектора ЗИЗЛХ и связанных с ним других секторов экономики Сторон Приложения В.

Как показал технический анализ Секретариата РКИК, чистая абсорбция лесами не превышает 7% совокупных выбросов парниковых газов Сторон Приложения I к РКИК ООН (FCCC/TP/2008/2). Если рассматривать Стороны Приложения В, ратифицировавшие Киотский Протокол, соотношение между абсорбцией и выбросами будет еще меньше. Таким образом, абсорбционный эффект от хозяйственной деятельности только в секторе ЗИЗЛХ является недостаточным для выполнения обязательств по Киотскому протоколу даже без применения искусственных ограничений.

Российская Федерация предлагает отказаться от фиксированного представления деятельности на определенной территории в течение последующих периодов действия обязательств, как это указывается в Решениях КС/СС 15/СМР.1 и 16/СМР.1. В соответствии с Решениями 15/СМР.1 и 16/СМР.1 территория, подверженная, например, обезлесению, должна считаться таковой даже в том случае, если на ней через некоторое время снова будет посажен лес. Учитывая обязательный характер представления информации по обезлесению, Стороны Приложения В могут столкнуться с несоответствием требований представления отчетности с фактической деятельностью в секторе ЗИЗЛХ. По мнению Российской Федерации, представление информации должно соответствовать фактической деятельности, имевшей место за отчетный год.

Кроме того, считаем, что система представления информации о географической идентификации земель, на которой осуществляются определенные виды деятельности по сектору ЗИЗЛХ дорогостоящая, носит громоздкий характер и тяжело проверяема, поскольку не соответствует ежегодным фактическим изменениям в землепользовании и лесном хозяйстве по выше указанным причинам. Российская Федерация предлагает пересмотреть положения соответствующих решений КС/СС (15/СМР.1, 16/СМР.1, 18/СМР.1, 19/СМР.1, 20/СМР.1 и 22/СМР.1), содержащие требования к представлению и рассмотрению информации о географической идентификации земель, на которых осуществляются отдельные виды деятельности. Для повышения прозрачности и достоверности информации, представляемой Сторонами Приложения В, предлагаем разработать критерии и индикаторы, подтверждающие наличие или выполнение включенных в отчеты видов деятельности. Такие критерии и индикаторы могут включать национальные административно-законодательные, организационно-хозяйственные, финансовые или фискальные показатели, которые подтвердят факт осуществления определенных видов антропогенной деятельности в секторе ЗИЗЛХ.

Российская Федерация против применения принципов территориального учета земель при отчете о выполнении обязательств по РКИК ООН и КП. Использование территориального учета земель противоречит основным положениям РКИК ООН и КП, которые ставят цель сократить выбросы парниковых газов исключительно в результате антропогенной деятельности (Статьи 1, 2 и 4 РКИК ООН и Статьи 3, 7 и 10 КП). Считаем, что переход к территориальному учету не обеспечит надежного отделения антропогенной деятельности от природных процессов в области ЗИЗЛХ.

Признавая важность представления полной, прозрачной и проверяемой информации об источниках и поглотителях парниковых газов по сектору ЗИЗЛХ, считаем, что Руководящие принципы РКИК ООН (FCCC/SBSTA/2006/9) и Руководство МГЭИК по эффективной практике в области ЗИЗЛХ (IPCC LULUCF GPG, 2003) содержат достаточные рекомендации, выполнение которых обеспечит репрезентативность и полноту представляемых Сторонами Приложения В к КП информации и данных, а также доказательство того, что выполненные оценки не являются завышенными или заниженными и что нет двойного учета или перекрывания категорий источников или поглотителей. Соответственно представление информации и оценок выбросов парниковых газов в соответствии с рекомендациями РКИК ООН и МГЭИК обеспечит требуемый уровень полноты и прозрачности без использования территориального учета земель.

### **Взгляды и предложения по применению определений**

По мнению Российской Федерации, на второй и последующие периоды действия КП следует сохранить приведенные в Приложении к Решению КС/СС 16/СМР.1 определения леса и видов деятельности в области землепользования и лесного хозяйства. Целесообразно воздержаться и от изменений или дополнений определений, содержащихся в Решении 16/СМР.1. Их сохранение обеспечит согласованность временных рядов в Национальных кадастрах парниковых газов и позволит избежать дополнительных финансовых и иных расходов, связанных с изменением Национальных систем и перерасчетом выбросов и абсорбции парниковых газов.

Считаем, что перечень видов антропогенной деятельности в области ЗИЗЛХ не следует ограничивать. На второй период действия обязательств КП его можно расширить, чтобы лучше учесть разнообразие направлений хозяйственной деятельности Сторон Приложения В, которая может сопровождаться выбросами или абсорбцией парниковых газов и, соответственно, способна воздействовать на климат. В случае дополнения действующего перечня необходимо удостовериться, что новые виды хозяйственной деятельности не повторяют и не перекрываются с уже существующими направлениями антропогенной деятельности.

### **Взгляды и предложения по применению условий и правил относительно Статьи 3 Киотского протокола**

Российская Федерация считает, что на второй и последующие периоды действия обязательств КП необходимо сохранить добровольный порядок выбора видов антропогенной деятельности в области ЗИЗЛХ. Сохранение добровольного порядка выбора деятельности обеспечит согласованность в представлении информации в национальных кадастрах парниковых газов. Такое решение позволит избежать дополнительных и, часто неоправданных, расходов в связи со сбором, расчетом и представлением информации о направлениях деятельности в секторе ЗИЗЛХ, которые не оказывают воздействия на эмиссию или абсорбцию парниковых газов или их вклад в совокупную национальную эмиссию минимален при высоких финансовых и иных затратах на представление отчетности.

Необходимо отметить высокие неопределенность и риски от использования потенциала сектора ЗИЗЛХ для выполнения обязательств по Киотскому протоколу. Абсорбционный эффект в результате антропогенной деятельности в области землепользования может быть нивелирован или вообще потерян в результате негативных воздействий пожаров, вредителей и болезней, неблагоприятных метеорологических и других факторов, частота которых, по данным МГЭИК, в последние годы значительно возросла. По нашему мнению, следует сохранить действующую систему оценки выбросов и абсорбции парниковых газов в секторе ЗИЗЛХ, когда выбросы и поглощения от антропогенной деятельности по облесению, лесовозобновлению, обезлесению и

лесоуправлению рассчитываются и зачитываются только по фактическому состоянию на период выполнения обязательств и не сопоставляются с показателями базового года. Использование во втором и последующих периодах обязательств по КП действующих принципов оценки и представления информации о выбросах и абсорбции парниковых газов позволит сохранить согласованность представленных данных и временных рядов. Кроме того, такой подход позволит снизить неопределенности и риски, связанные с воздействием негативных факторов (пожары, вредители и болезни, климатические и метеорологические воздействия).

**Взгляды и предложения по применению условий и правил относительно Статей 3, 6 и 12 Киотского протокола**

Российская Федерация выступает за одинаковое отношение к единицам абсорбции в результате хозяйственной деятельности в секторе ЗИЗЛХ и единицам сокращения выбросов парниковых газов в других секторах национальных экономик. Изменение возрастной структуры лесов, необходимость экономического использования лесных ресурсов и задачи сохранения и поддержания биологического разнообразия, климат-стабилизирующих, природоохранных, рекреационных и других функций лесов и других объектов землепользования в долгосрочной перспективе повышают экономические затраты на обеспечение устойчивого развития сектора ЗИЗЛХ.

Таким образом, затраты на функциональное обеспечение деятельности в области землепользования и лесного хозяйства становятся сопоставимыми с затратами в других секторах национальной экономики, а в ряде случаев даже превышают их. Учитывая вышесказанное, мы предлагаем приравнять статус и срок действия единиц поглощения, полученных в секторе ЗИЗЛХ, к статусу и сроку действия единиц сокращения выбросов, полученных в других секторах экономик Сторон Приложения В независимо от года их получения.

[Translation as provided]

Informal translation

**Russian Federation**

**THE VIEWS AND PROPOSALS ON THE APPLICATION OF THE DEFINITIONS, MODALITIES, RULES AND GUIDELINES FOR THE TREATMENT OF LAND USE, LAND-USE CHANGE AND FORESTRY IN THE SECOND COMMITMENT PERIOD OF THE KYOTO PROTOCOL**

**Background**

Russian Federation believes that the efficient implementation of future commitments under the Kyoto Protocol (KP) will be made possible only in case of the agreement, which ensures fully legitimate involvement of all sectors of the national economy including the land use, land-use change and forestry (LULUCF). Russian Federation is prepared to participate in elaboration of such agreement and herewith submits its views and proposals on the application of definitions, modalities, rules and guidelines for the treatment of LULUCF in the second commitment period of the Kyoto Protocol. This official submission is prepared in accordance with Work Programme for 2009 of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP), which was agreed at its Sixth session (FCCC/KP/AWG/2008/L.19).

For subsequent and contiguous commitment periods of the Kyoto Protocol, Russian Federation objects any artificial restrictions (caps, discount factors etc.), which may be applied for accounting for removals in the LULUCF sector. It is the principal position of the Russian Federation, which is important to point out. In the view of the Russian Federation, the rejection of any artificial limits for accounting for the LULUCF activities corresponds to the principle of common but differential responsibility declared by the United Nations Framework Convention on Climate Change (UNFCCC) Article 4 and provides Parties with flexibility needed for elaboration domestic policies and measures for better implementation their commitments under the Kyoto Protocol. Furthermore, Russian Federation believes that reporting requirements for provision the LULUCF information are expensive, bulky and difficult to review. In a view of the Russian Federation, the reporting requirements should be simplified. The present submission provides the proposals on simplification the reporting requirements.

**Specific features of land use, land-use change and forestry in the Russian Federation relevant to implementation of the national commitments under the Kyoto Protocol**

In the Russian Federation, 22 per cent of world forests and more than 50 per cent of boreal forests are located. Almost 11 per cent of global carbon reserves are in the forest vegetation and upper soil layer of 1-meter depth. Forest land is almost 45 per cent of the country territory. Mature and over-mature stands comprise about 57 per cent of the national growing stock. Cutting interval for the major commercial woody species varies from 60 to 100 years. The employment in forest and related sectors comprises almost 11 per cent of the employable population of Russia. The land-use change is a continuous process governed by economic development of the country. The national priority is sustained forest use, which is based on sustainable forest management. It ensures conservation of existing carbon stocks and their enhancement. Participation in international agreements provides incentives for operational development and maintains employment in the LULUCF and relevant sectors of national economy. The following features are characteristic for LULUCF sector of Russian Federation:

- Sustainable forest management in Russia is of a global significance. It prevents from uncontrolled greenhouse gas emissions to the atmosphere and ensures conservation of existing carbon stocks. It also maintains important climate stabilizing and environmental services performed by the boreal forests;
- Afforestation and reforestation activities are limited by the area availability owing to high percentage of existent forest land within the country and low population density in some regions of the country;
- The predominance of mature and over-mature forests hampers CO<sub>2</sub> absorption from the atmosphere. Intensive commercial harvest operations are required to retain carbon absorption capacities of forests in the long term;
- The duration of harvest regeneration cycle in Russian forests is significantly longer than the commitment period of the Kyoto Protocol;

### **The views and proposals on general guidelines for the treatment of LULUCF sector under the provisions of Article 3 of the Kyoto Protocol**

For subsequent and contiguous commitment periods of the Kyoto Protocol, Russian Federation objects any artificial restrictions (caps, discount factors etc.), which may be applied for accounting for removals in the LULUCF sector. It is the principal position of the Russian Federation, which is important to point out. In the view of the Russian Federation, the rejection of any artificial limits for accounting for the LULLUCF activities corresponds to the principle of common but differentiated responsibility declared by the UNFCCC Article 4 and provides Parties with flexibility needed for elaboration domestic policies and measures for better implementation of their commitments under the Kyoto Protocol. The elimination of artificial barriers and limits is in line with provisions of the KP Article 2 and is highly important as an incentive for sustained development of the LULUCF and other related economy sectors of the Annex B Parties.

The Technical paper prepared by the UNFCCC Secretariat demonstrates that net removals in the UNFCCC Annex I Parties do not exceed 7 per cent of their cumulative greenhouse gas emissions without LULUCF (FCCC/TP/2008/2). The ratio between net removals and cumulative emissions will be even less, if the UNFCCC Annex I Parties, which are also the Parties to the Kyoto Protocol are considered. Thus, even without the artificial restrictions, the removals from human activities in the LULUCF sector are not enough to meet the Kyoto Protocol targets.

For subsequent and contiguous commitment periods of the Kyoto Protocol, Russian Federation proposes to deny the requirement on constant reporting on specific type of human activity attached to particular land, as specified in the decisions 15/CMP.1 and 16/CMP.1. For example, in accordance with the decisions 15/CMP.1 and 16/CMP.1, the land subject to deforestation should be treated as deforested throughout subsequent and contiguous commitment periods of the Kyoto Protocol even despite the succeeding establishment of forest on it in a due time. Given the mandatory requirement for provision the information on deforestation, Annex B Parties may face a mismatch between the reporting requirements and actual activities in the LULUCF sector. In a view of the Russian Federation, the annual reporting should comply with actual activity, which took place in the reported year.

Furthermore, Russian Federation believes that reporting requirements for provision the information on geographical identification of lands subject to specific LULUCF activities are expensive, bulky and

difficult to review, because they may not match with annual changes in land use and forestry due to abovementioned reasons. Russian Federation proposes to revise provisions of appropriate decisions 15/CMP.1, 16/CMP.1, 18/CMP.1, 19/CMP.1, 20/CMP.1 and 22/CMP.1, which contain requirements on reporting and review the information on geographical identification of land. To enhance transparency and reliability of information provided by Annex B Parties, Russian Federation proposes to elaborate criteria and indicators, which affirm occurrence and implementation of specific types of activities in the annual reports. These could be national executive, legislative, economic, institutional, financial and fiscal indices, which could prove the implementation of specific types of human activities in the LULUCF sector.

Russian Federation is against the use of land-based accounting for reporting on the implementation of the UNFCCC and its Kyoto Protocol. The use of land-based accounting is in conflict with the basic provisions of the UNFCCC and KP, which aim at reducing greenhouse gas emissions solely from anthropogenic activities (i.e. they use activity-based approach). It is indicated in the UNFCCC Articles 1, 2 and 4 and the KP Articles 3, 7 and 10. Russian Federation believes that the application of land-based accounting will not allow for reliable distinction between the human activities and natural processes in the LULUCF sector.

Russian Federation recognizes importance of provision complete, transparent and verifiable information on sources and removals of the greenhouse gases for the LULUCF sector. We consider that the UNFCCC reporting guidelines (FCCC/SBSTA/2006/9) and the IPCC Good Practice Guidance for the LULUCF (IPCC, 2003) include sufficient guidance, which, being adequately implemented, will ensure the representation and completeness of information and data reported by the Annex B Parties, as well as the evidence that the greenhouse gas estimates are neither overestimated nor underestimated and there is no double counting or overlapping between the categories. Correspondingly, the provision of information and greenhouse gas estimates in accordance with the UNFCCC and IPCC guidance ensures sufficient level of completeness and transparency without the use of land-based accounting approach.

### **The views and proposals on application of the definitions**

In the view of the Russian Federation, the definitions of forest and activity types in the LULUCF sector in the Annex to decision 16/CMP.1 should be retained for the second and contiguous commitment periods of the KP. It is expedient to avoid any revisions or amendments of the existing definitions. Their preservation will ensure time series consistency in national greenhouse gas inventories and allows avoiding the supplementary financial and other costs relevant to revision of national systems and recalculation of greenhouse gas estimates.

Russian Federation believes that the list of human activities in the LULUCF sector should not be limited. For the second commitment period, it could be extended for better accounting for diverse anthropogenic activities undertaken by the Annex B Parties, which could cause greenhouse gas emissions and removals and consequently, could affect the climate. However, the additions to the list should be cross-checked to ensure that the new types of human activities neither repeat nor overlap with the existing types.

### **The views and proposals on application of modalities and rules for the treatment of LULUCF sector under the provisions of Article 3 of the Kyoto Protocol**

Russian Federation believes that in the second and contiguous commitment periods of the Kyoto Protocol it is necessary to retain the voluntary selection of types of anthropogenic activities in the LULUCF



sector. The maintaining voluntary selection of the activities ensures consistency in the reporting on national greenhouse gas inventories. Furthermore, it allows avoiding additional, and frequently unreasonable, costs relevant to collection, estimation and provision of the information on the LULUCF activities, which do not affect national emissions and removals otherwise make negligible contribution to national greenhouse gas profile, despite the significant financial and other costs for information collection and reporting.

It should be noted that the LULUCF sector has high risks and therefore, its use to meet the commitments of the Kyoto Protocol becomes rather uncertain. The effect of removals from human activities within the sector could be neutralized or even lost due to negative disturbances caused by fires, insects, pathogens, unfavorable weather conditions etc., which are difficult to predict and control. According to the IPCC, the frequency of unfavorable events in the LULUCF sector has notably increased recently. In our view, the existing gross-net approach to account for afforestation, reforestation, deforestation and forest management activities should be retained for the second and contiguous commitment periods. The consistent use of the same accounting approach enables to maintain consistency in activity data and time series. Furthermore, the gross-net accounting approach will reduce the uncertainties and risks associated with the impact of the negative factors such as fires, insect and pathogenic outbreaks, weather events etc.

### **The views and proposals on application of modalities and rules as in the Articles 3, 6 and 12 of the Kyoto Protocol**

Russian Federation comes forward for similar treatment of the removable units acquired owing to human activities in the LULUCF sector and emission reduction units gained in other economic sectors. The changes in the age structure of forests and the need for sustained commercial use of forest resources together with the tasks for maintaining and conservation of biological diversity, climate stabilizing, recreation, environmental and other functions of forests and other objects of land use practices all together increase the economic costs for sustainable long-term development of the LULUCF sector.

Thus, the LULUCF operational costs become equivalent to those in the other sectors of national economy. Sometimes the LULUCF operational costs may be even higher than those required for other economic sectors. Based on above said, we propose to equalize the status and expiry period of removable units acquired owing to human activities in the LULUCF sector to those of emission reduction units gained in other economic sectors of Annex B Parties to the Kyoto Protocol irrelevant to the year, when they have been obtained.

PAPER NO. 11: SAUDI ARABIA

## SUBMISSION BY SAUDI ARABIA

*February 15, 2009*

### Definition, modalities, rules and guidelines for the treatment of land use, land-use change and forestry (LULUCF) in the second commitment period (AWG-KP)

Saudi Arabia welcomes the opportunity to submit its views on Definition, modalities, rules and guidelines for the treatment of land use, land-use change and forestry (LULUCF) in the second commitment period (AWG-KP) by 15 February, 2009 as included in the following documents:

1. FCCC/KP/AWG/2008/L.19, paragraph 8(b)

LULUCF is a very important and relevant emission source that should be treated in a balanced manner to emissions from other source and it will contribute greatly to the mitigation potential. Furthermore, LULUCF is the sector that has the least spillover effects on developing countries that will be impacted most from mitigation actions. Therefore, Saudi Arabia calls for as well as supports:

- Utilization of the full mitigation potentials in the sector towards the further Annex I parties commitments.
- Development of adequate rules and modalities to guide the treatment of LULUCF to achieve the objective of Sustainable Development.
- An urgent settlement of the GWP issue.

PAPER NO. 12: SWITZERLAND

**Submission on Possible Options for Consideration Relating to Land-Use, Land-use Change and Forestry**

In response to the call for comments at the 6<sup>th</sup> session of the AWG-KP, in which 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<sup>1</sup> and Annex IV to the report of the AWG-KP at its resumed fifth session<sup>2</sup>, including views on how and which proposals could address cross-cutting issues, for compilation by the secretariat into a miscellaneous document, Switzerland presents the following views:

**Basics**

1. Switzerland has consistently supported and continues to agree with the existing LULUCF principles as contained in decisions 11/CP.7 and 16/CMP.1, paragraph 1. Any new definitions, modalities, rules and guidelines will have to reflect these principles, especially as they ensure the environmental integrity of the Kyoto Protocol and any subsequent agreements serving the ultimate goal of the UNFCCC. Switzerland also wishes to emphasize the need to continue the LULUCF regime without any gaps as also foreseen by decision 11/CP.7 and 16/CMP.1, paragraph 19.
2. LULUCF accounting should be methodologically developed as close to the UNFCCC GHG reporting as possible. In this way, overly complex and resource-demanding accounting methods could be avoided in order not to overburden the Parties with their reporting tasks.

Based on these considerations of a more fundamental nature, Switzerland proposes that current LULUCF negotiations are best conducted such that they are guided by some views of a long-term development of the LULUCF or AFOLU sector. This is particularly relevant for forests and forestry, since their management is typically of a long-term nature.

**Third Commitment Period**

3. For the longer term, i.e. the third and subsequent commitment periods, Switzerland favors a land-based system to LULUCF accounting and reporting that is consistent with the reporting of GHGs under the Convention. The 2<sup>nd</sup> CP could then be seen as a transition phase towards the long-term land-based system and making steps in that direction such as changing from a gross-net to a net-net accounting for forest management. This could also help avoid problems of discontinuity and complexity in the reporting of the LULUCF sector. Switzerland offers to report additionally on a voluntary basis already in the 2<sup>nd</sup> CP according to the land-based approach, hoping this will facilitate the envisaged transition and to demonstrate its feasibility. Under the new scheme we propose to use always the previous commitment period as the base period for the respective next commitment period. The objective of using the previous base period would be to avoid penalizing countries with a long-standing tradition of sustainable forest management. We believe such a system would best promote the sustainable use of forest resources including the sustainable harvesting of wood products. In this context, we are convinced that the accounting for HWP would improve the new system even further (see paragraph 7).

**Second Commitment Period**

4. For the 2<sup>nd</sup> CP Switzerland wishes an extension of paragraph 1 of the Annex to 16/CMP.1 and 11 CP.7 by adding a further paragraph

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<sup>1</sup> FCCC/KP/AWG/2008/L.11

<sup>2</sup> FCCC/KP/AWG/2008/3, p. 5-6

(i) “wetland management” is the system of practices on wetlands aimed at manipulating the amount and type of vegetation and soil carbon.

Hereby the same wetland definitions should be applied as already used in the existing GHG reporting under the Convention.

5. To further promote the comprehensiveness of the next LULUCF regime, Switzerland wishes that Article 3.4 of the Kyoto Protocol is implemented so as to make any accounting for all activities as listed in 11 CP.7 and 16/CMP.1 paragraph 1 of the Annex, including any new activities (see above), compulsory as of the second commitment period. This will also help to avoid risks of double-accounting and offers the advantage of treating in general Article 3.3 and 3.4 of the Kyoto Protocol in a more consistent and similar manner.

### **Factoring Out and Discount Factors**

6. Switzerland recommends a simple and symmetrical solution for factoring out for windfall effects and natural disturbances, as proposed earlier in our submission contained in FCCC/SBSTA/2004/MISC.8. According to recent scientific findings the positive effect of elevated carbon dioxide concentrations and indirect nitrogen deposition may be quantitatively less significant than assumed in the nineties. However, the age structure effects appear still to be prominent. On the other hand ongoing climate change increases the risks of more frequent and more intense forest fires, disturbances from insects such as bark beetles, and possibly storms. Switzerland believes that this calls for the application of a discount factor to factor out windfall effects and natural disturbances instead of accounting by country specific caps or other complicated accounting rules and modalities (cf. 16/CMP.1, paragraphs 10 to 12 and paragraph 4). To keep credits from removals and debits from disturbance-caused sources balanced, symmetrical discount factors should be applied to removals by sinks and emissions by sources. The rule to apply this could read as follows:

*A discount rate of [x]% for carbon credits and [x]% for carbon debits shall be applied during the accounting phase for all carbon credits and carbon debits, which result from activities under articles 3.3 and 3.4 beginning with the onset of the second and subsequent commitment period.*

### **Harvested Wood Products HWP**

7. Switzerland believes that HWP accounting could help to create incentives beyond a mere CO<sub>2</sub> removal mechanism. HWP accounting should be used as an instrument to promote the sustainable management of forests and the “cascaded” use of wood to substitute carbon-intensive materials and fossil fuels. A Swiss study<sup>3</sup> showed that the cascaded use of wood could have a mitigating effect as large as the removals achievable by sinks in the Swiss forests. Moreover, in contrast to the finite mitigation capacity of sinks, the effect of cascaded use of wood is sustainable, i.e. it is infinite and does not saturate. As an option, accounting for HWPs could begin on a voluntary basis, assuming accounting for forest management is compulsory, and approach-specific minimal data requirements for use of wood could be formulated. In order to ensure conservative accounting, Switzerland suggests that in this case only wood exchanged between countries that all voluntarily account for HWP be eligible for crediting.

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<sup>3</sup> <http://www.bafu.admin.ch/publikationen/publikation/00076/index.html?lang=en>