Information on the Treatment of Land Use, Land-Use Change and Forestry (LULUCF)

Submitted by Canada

This informal submission elaborates on a proposal made by Canada for an improved accounting method for forest management. Initially outlined in the June 2008 roundtable session of the AWG-KP 5.2¹, Canada presented a more detailed explanation of the "forward-looking baseline" approach to Parties in Accra at AWG-KP 6.1 in August 2008². The issues addressed in this submission reflect the main questions and comments received from Parties and observer organizations at the Accra meeting.

Overview of Approach

The forward-looking baseline (FLB) approach is a net-net³ approach that focuses accounting for forest management (FM) on anthropogenic emissions and removals, in keeping with the focus of the UNFCCC on the anthropogenic influence on the climate system. It will also help ensure that accounting provides an improved incentive structure for sustainable land management. The application of the FLB approach can be summarized simply as follows:

- 1. At the start of each commitment period (CP) the Party establishes a projected business-as-usual FM baseline for the CP, which:
 - a. Would be documented and subject to international expert review and adjustment;
 - b. Reflects business-as-usual FM including emissions and removals from harvesting and post-harvest regeneration;
 - c. Includes the effects of the age-class legacy (from pre-1990 disturbances and management); and
 - d. Does not include projected impacts of natural disturbances.
- 2. During the CP, emissions and removals in the FM area are monitored.
 - a. In the case that the FM area is identical to the managed forest, then the emission and removal estimates are those reported to the UNFCCC in annual greenhouse gas inventory reports.
 - b. These 'actual' estimates include all impacts of management, age-class structure, natural disturbances and any other natural or indirect effects.
- 3. After the CP, the impacts of natural disturbances are removed from the 'actual' emission and removal estimates, and debits or credits are accounted relative to the Party's baseline. Note that the comparison to the baseline

¹ http://unfccc.int/files/meetings/ad hoc working groups/kp/application/pdf/lulucf awg kp 5 canada.pdf

² Submission http://unfccc.int/files/kyoto protocol/application/pdf/canada.pdf and presentation http://unfccc.int/files/kyoto protocol/application/pdf/canada.pdf and presentation http://unfccc.int/files/meetings/ad hoc working groups/kp/application/pdf/accra pres lulucf canada.pdf

³ A net-net accounting method is one where the net of GHG emissions and removals in a commitment period are compared to the net of GHG emissions and removals in the same sector (or activity) in a reference period. For the 1st commitment period, the only sectors or activities that do not follow a net-net accounting approach are Afforestation, Reforestation, Deforestation and Forest Management.

removes the impacts of age class structure and other natural and indirect effects.

a. The estimate of the impacts of natural disturbances would be documented and subject to international expert review and adjustment.

Criteria, guidelines or rules for setting baselines

Compared to a base year or period, a FLB better reflects the forest dynamics and business-as-usual forest management practices in the commitment period – it thus is a better basis for comparison in net-net accounting. Given the importance of the baseline in a net-net accounting system, a set of guidelines or rules will be required to ensure that each country's FM baseline meets a common methodological standard. Canada believes that the IPCC can be asked to provide such guidance, and it will be able to draw from its existing Guidelines and Good Practice Guidance that address baselines and related issues for projects. This new guidance would also serve as a basis for international expert review and adjustment following the approach used for the 1st commitment period of the Kyoto Protocol. Canada believes the overarching principles for setting baselines should include:

- i. Transparency: Clear and full documentation of the baseline setting process and of determination of the baseline.
- ii. Demonstrated justification: For example, in projecting business-as-usual forest management activities, demonstration of consistency with regional or national management plans and historic trends relative to historic forest management plans, and taking into account any projected development.
- iii. Appropriate spatial scale: Baselines should be developed at the spatial scale at which forest management planning occurs (reporting could be at a higher aggregation).

To avoid penalizing action taken by Parties to help meet their 1st CP targets, the FM baseline could be determined based on laws, regulations, policy and management plans in effect prior to 2008 (e.g. 2006).

Criteria, quidelines or rules for estimating the impacts of natural disturbances

As described above for setting the baseline, guidance on how to estimate the impacts (emissions and removals) resulting from natural disturbances, for the purposes of accounting, can be developed by the IPCC.

The principles underlying any guidelines or rules for removing natural disturbances from actual FM estimates should include:

- i. Transparency: Clear and full documentation.
- ii. Demonstrated justification: For example, that the impacts identified as resulting from natural disturbances are not directly human-induced. This requires existence of classification systems and data that allow identification of cause (of whether a disturbance is directly human-induced or not).

-

⁴ IPCC GPG LULUCF Chapter 4.3

- iii. Appropriate spatial scale: Estimates should be developed at the spatial scale at which management planning occurs (reporting could be at higher aggregation).
- iv. Conservativeness: Parties can choose to <u>not</u> remove some or all natural disturbances if the result is a more conservative estimate (reduced credit, increased debit).

Applicability of the FLB approach to various monitoring and measuring systems

Countries have developed their forest carbon measurement and monitoring systems based on existing inventory and monitoring systems, and have adapted new systems to suit their national circumstances. For example, Canada uses a simulation model, while some countries use forest inventory plus carbon stock change calculation procedures, and others employ process models. While technically different, all these systems are capable of producing estimates of emissions and removals consistent with IPCC Guidelines for Greenhouse Gas Inventories and Good Practice Guidance.

All of these systems can also accommodate the FLB method. Countries that use simulation or process models with explicit disturbances should have little difficulty in developing projections. For countries that use comparison of two inventories, the data and the tools required to implement the FLB method are available and can be adapted to suit their particular inventory systems. It is Canada's view that the type of forest carbon measurement and monitoring system currently used by a country does not restrict the application of the FLB method. For countries without significant natural disturbances, or for whom the additional cost of monitoring and measuring their impacts exceed the benefits of removing them, Parties may chose not to factor out natural disturbances if the above-noted principle of conservativeness is maintained.