December, 2009

Japan's informal submission on data on Forest Management

Japan informally submits data on forest management, based on the data format for voluntary submission agreed among parties during AWG-KP9.2 in Barcelona[1], to facilitate the discussion of accounting rules of forest management. The relevant historical data and projections of emissions/removals of GHGs related to forest are also presented on the former submissions in September 2009[2] and October 2009[3].

1. The table shows the data on forest management, basically following the data format.

2. Comments on data on forest management (column I of the data format) are as follows;

1) A: 1990 emissions/removals
The value is 1990 emissions/removals from all forests in Japan, and is from forest land under the UNFCCC.

2) B: Proposed reference level
Japan's proposed reference level is zero. Japan considers that Gross-net with "narrow approach" is the best approach in providing appropriate incentives for continued sustainable forest management in the long term that realizes maximum overall benefits of mitigation of climate change, thus, proposes to set the reference level as zero, which represents Gross-net. This proposed zero reference level for Japan is justified taking into account the criteria as contained in Option 3 (reference level) under para 11, Option A in Annex (contained in FCCC/KP/AWG/2009/Add.3/Rev.3) as follows:
(i) net removals are expected to decline due to age class structure even in the presence of extensive and continued sustainable forest management activities in the past as well as in the future in accordance with basic government plans of forest and forestry including the Nationwide Forest Plan (please see Japan's submission in September at footnote 2);
(ii) forest management is elected in the first commitment period, and the continuity with treatment of forest management is essential to maintain incentives for continued sustainable forest management created under the current rules; and,
(iii) "narrow approach" is taken to identify and exclusively account forests subject to forest management activities since 1990.
Japan currently does not consider using any reference intervals. However, there may be a possibility for Japan to consider using reference interval depending on the course of discussion.

3) C: Forecast for 1st CP
The forecast for 1st CP in Japan is from the revised Kyoto Protocol Target Achievement Plan (Cabinet Approval in March 2008). The accounting rule for 1st CP is Gross-net, and the calculation is based on using "narrow approach" applied by Japan. Japan's domestic target for forest management is 47.67Mt-CO2/year, and Japan has been accelerating forest management practices including thinning to achieve this target.

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1 http://unfccc.int/files/kyoto_protocol/application/pdf/awgkplulucftable131109.pdf
2 http://unfccc.int/files/kyoto_protocol/application/pdf/japanlulucf290909.pdf
3 http://unfccc.int/files/kyoto_protocol/application/pdf/awgkplulucf_japan311009.pdf

4) D: Forecast for 2013-2020

The forecast assumes that Gross-net with "narrow approach" will be used in the same manner as in the first commitment period. The values are the forecasts for 2015 and 2020, instead of the annual average for 2013 -2020, merely due to time constraints for calculation. Anyway, the annual average for 2013-2020 would be close to the 2015 value. The forecast is developed using the following assumptions; (a) the current level of forest management activities including thinning continues to be maintained, and, (b) the change of the level of harvesting and planting and subsequent changes of forest area and age class structure are in accordance with the current basic government plans of forest and forestry including the Nationwide Forest Plan (2008), (c) natural disturbances are not taken into account, as the negative effects from natural disturbances are difficult to foresee.

5) E: Forecast based on 1990

The forecast is calculated on the assumption that the historical data in 1990 and forecasts in 2015 and 2020 are emissions and removals from forest land under the UNFCCC reporting (i.e. Net-net with base year 1990). In this case, the forecasted values for 2015 and 2020 (D values for the column E) are different form those shown in the column D because under the "narrow approach" forests subject to forest management since 1990 are parts of forests under the UNFCCC reporting. The D values used in this column are -67 MtCO2e/yr in 2015 and -62 MtCO2e/yr in 2020. The forecast of "D" in this column is also developed using the following assumptions; (a) the current level of forest management activities including thinning continues to be maintained, and, (b) the change of the level of harvesting and planting and subsequent change of forest area and age class structure are in accordance with the current basic government plans of forest and forestry including the Nationwide Forest Plan (2008), (c) natural disturbances are not taken into account, as the negative effects from natural disturbance are difficult to foresee. The forecasted positive numbers in this column are due to the effect of age class structure even in the presence of extensive and continued sustainable forest management activities.

6) F: Forecast based on reference level

The calculation uses F = D – B. The value of B and D is calculated on the assumption of "narrow approach, for the reason written in 2) above. The values of D are the forecasts for 2015 and 2020, instead of 2013 -2020.

7) G: Forecast based on 1st CP

The forecast is calculated on the assumption that the forecasts in 1st CP, 2015 and 2020 are emissions and removals from forest land under the UNFCCC reporting (i.e. Net-net with base period 1st CP). In this case, the forecasted values for 1st CP (C value for the column G) and 2015 and 2020 (D values for the column G) are different form those shown in the column C and column D respectively, because under the "narrow approach" forests subject to forest management since 1990 are parts of forests under the UNFCCC reporting. The C value used in this column is -76 MtCO2e/yr, and D values used in this column are the same as those shown in 5).

8) H: Forecast under Option B

It is calculated using Net-net assuming 1990 as the base year and is from forest land under the UNFCCC, as there is no clear instruction that what value is filled in on this column. As a result, the value is the same as E (please refer to 5 above).

9) The calculation of HWP basically follows the approach described in paragraph 21 Option 1 of Annex (contained in FCCC/KP/AWG/2009/Add.3/Rev.3, Annex II), with existing HWP pool included, but all the exported HWPs were calculated based on instantaneous oxidation. The HWP

column on proposed reference level (Column B) is zero, because the same approach in setting the reference level for forest management should be applied for HWP as far as HWP is the sixth pool in order to keep consistency.

10) The forest and forestry policy in Japan may be changed in such ways as putting more focus on the promotion of the forest products utilization including bioenergy use. This likely increases harvesting, which leads to the decline of the CO2 removals, while it is, on the other hand, expected to contribute to the decline of emissions from other sources.

Table: Data on forest management of Japan

	A	B	C	D	E	F	G	H
	1990 emissions/ removals (MtCO2e/yr)	Proposed reference level (MtCO2e/yr)	Forecast for 1st CP (MtCO2e/yr)	Forecast for 2013-2020 (MtCO2e/yr)	Forescast based on 1990 (MtCO2e/yr) (E=D-A)	Forecast based on reference level (MtCO2e/yr) (F=D-B)	Forecast based on 1st CP (MtCO2e/yr) (G=D-C)	Forecast under Option B (MtCO2e/yr)
	-81	0	-47.67	Year: 2015 ～-39	Year: 2015 ～14	Year: 2015 ～-39	Year: 2015 ～9	Year: 2015 ～14
				Year: 2020 ～-37	Year: 2020 ～19	Year: 2020 ～-37	Year: 2020 ～15	Year: 2020 ～19
HWP only (For reference)	0.76	0	～-0.36	Year: 2015 ～-0.54	Year: 2015 ～-1.3	Year: 2015 ～-0.54	Year: 2015 ～-0.17	Year: 2015 ～-1.3
				Year: 2020 ～-0.72	Year: 2020 ～-1.5	Year: 2020 ～-0.72	Year: 2020 ～-0.35	Year: 2020 ～-1.5

Note: Positive numbers denote emissions; negative number denote removals