

Table III - Preliminary data and information provided by Annex I Party on Article 3.4 activities, related net GHG emissions, involved areas, and projected carbon stock changes (additional activities under Article 3.4)

Article 3.4 Country specific data	Accounting framework	a _i (ha) (x 1,000)	CO _{2,i} (t CO ₂)* Total over 6yrs('90-'95)	CH _{4,i} (t CO ₂ equiv.)* [§]	N ₂ O _i (t CO ₂ equiv.)* [§]	a _{ii} (ha) (x 1,000)	CO _{2,ii} (t CO ₂)* Total over 10 yrs('90-'99)	CH _{4,ii} (t CO ₂ equiv.)* [§]	N ₂ O _{ii} (t CO ₂ equiv.)* [§]	a _{cp} (ha) (x 1,000)	C _{cp} (t C) Total over 5 yrs (2008-2012)	CO _{2,cp} (t CO ₂)* Total over 5 yrs (2008-2012)	CH _{4,cp} (t CO ₂ equiv.)* [§]	N ₂ O _{cp} (t CO ₂ equiv.)* [§]	Methods and approaches	Data sources, data quality, and uncertainties (e.g. ranges)	Other information relevant to decision-making
Forest Management etc.: (All Forests)	Activity based	25,146,000	457,512,000	NE(See Text)	NE(See Text)	25,197,000	740,564,000	NE(See Text)	NE(See Text)	25,220,000	56,840,000	208,415,000	NE(See Text)	NE(See Text)	<ul style="list-style-type: none"> · Broadly-defined activity. · Estimated with the Activity-based accounting approach. · Emissions from harvesting are accounted for in carbon stocks. 	<ul style="list-style-type: none"> · Estimated sequestration based on growth in Managed Forest where additional human-induced activities take place. · Current status based on Forestry Statistics, and forecast based on Basic Plan on Forest Resources. 	
(Managed Forests)	Activity based	8,084,000	135,792,000	NE(See Text)	NE(See Text)	8,657,000	233,156,000	NE(See Text)	NE(See Text)	12,450,000	48,948,000	179,475,000	NE(See Text)	NE(See Text)			
Urban Greening etc.	Land based														<ul style="list-style-type: none"> · Broadly-defined activity. · Estimated with the Activity-based accounting approach. · Estimated biomass weight data of the trees planted in the parks, etc. that were planted artificially. 	<ul style="list-style-type: none"> · Used historical data and future perspectives for planted trees based on the "Survey of Preparation for the 5 year Greenery Promotion Plan" and "Green Plan 2000". 	
	Activity based	15,050	165,701	NE	NE	38,050	698,218	NE	NE	83,050	377,750	1,386,343	NE	NE			
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Note 1) : All data are preliminary. NE: Not Estimated

2) : ai, aii, and a_{cp} for urban greening and other such activities shows the number of planted trees per year (x 1,000)

* These columns would contain the sum over the years concerned of net annual emissions by sources and removals by sinks for the Article 3.4 activities proposed.
A negative sign indicates either emissions by sources or a decrease in carbon stocks. A positive sign indicates either removals by sinks or an increase in carbon stocks.
To convert a carbon amount to CO₂ multiply it by 3.67.

[§] CH₄ and N₂O emissions are converted to CO₂ equivalent emissions by using the global warming potential (GWP) values of 21 for CH₄ and 310 for N₂O (Source: Second Assessment Report of the IPCC, 1995)

a_i: Area (ha) in 1995 or possibly an earlier specific year involved in the Article 3.4 activity since 1990.
CO_{2,i}: Net CO₂ emissions (t CO₂) by sources and removals by sinks related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_i.
CH_{4,i}: CH₄ emissions (t CO₂ equivalent) by sources related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_i.
N₂O_i: N₂O emissions (t CO₂ equivalent) by sources related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_i.
a_{ii}: Area (ha) in 1999 or possibly an earlier specific year involved in the Article 3.4 activity since 1990.
CO_{2,ii}: Net CO₂ emissions (t CO₂) by sources and removals by sinks related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_{ii}.
CH_{4,ii}: CH₄ emissions (t CO₂ equivalent) by sources related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_{ii}.
N₂O_{ii}: N₂O emissions (t CO₂ equivalent) by sources related to the Article 3.4 activity, accumulated from 1990 to the same year as used in a_{ii}.
a_{cp}: Projected area (ha) in 2012 involved in the Article 3.4 activity since 1990.
ΔC_{cp}: Projected carbon stock changes (t C) over the first commitment period related to the Article 3.4 activity since 1990
CO_{2,cp}: Projected net CO₂ emissions related contribution (t CO₂) of the Article 3.4 activity to the first commitment period assigned amount of the Party
N₂O_{cp}: Projected N₂O emissions related contribution (t CO₂ equivalent) of the Article 3.4 activity to the first commitment period assigned amount of the Party.

EXPLANATORY TEXT (table III)

I. Forest Management etc.

1. Activities and accounting

a) Definitions and descriptions of all activities proposed.

Forest Management : Activities to establish healthy and vital forests, in order to develop and enhance various functions of forests comprehensively, and to assure national land conservation, prevent disasters and provide a comfortable environment.

More specifically, the activities include plantation, regeneration assisting practices such as surface scarification and brush cutting, weeding, clean-cutting among others.

b) Scope of activities and how they fit into broader managed land categories.

Forest Management includes a broad range of forestry operations implemented in the forest area.

c) Accounting approaches

The activity-based accounting approach is applied for estimation and, as with Article 3.3, carbon pools of above- and below-ground biomass other than understory vegetation, litter, humus and soil carbon, are considered.

Sequestration is estimated based on growth of the Managed Forest in the assessment period and, as with carbon stocks from the activities under Article 3.3, above- and below-ground biomass is estimated with standing tree volume, and then sequestration under Article 3.3 and emissions due to harvest are subtracted.

d) Proposals for key accounting features, e.g. assumptions on baselines, are the basis for the area estimates covered by activity.

Baseline has not been established.

For area and growth of the Managed Forest accounted for in the assessment period, present status is based on Japan's national "Forestry Statistics", and forecasting is based on Japan's "Basic Plan on Forest Resources."

2. Carbon pools included (e.g. above ground biomass, litter and woody debris, below-ground biomass, soil carbon, and harvested materials).

Same as the explanatory note for Article 3.3, Table I.2.

3. Methodologies and data

a) Data sources

"Forestry Statistics" and "Basic Plan on Forest Resources" are referred to as information on forest resources.

b) Sampling techniques

Complete enumeration has been implemented for the Survey of the Current Status of Forest Resources, which forms the base of estimation for sequestration.

c) Models and key parameters

No models or key parameters are used in relation to forest accounting.

d) Uncertainties

Uncertainty is considered relatively low since complete enumeration was implemented for the Survey of the Current Status of Forest Resources, which forms the base of estimation for sequestration.

4. Treatment of non CO₂ greenhouse gases.

Emissions of greenhouse gases from forests, other than CO₂, are not considered except in special cases.

5. Methods and key assumptions in projections for the first commitment period (2008–2012) and discussion, if possible, of trends beyond the first commitment period.

It would be possible to estimate carbon sequestration beyond the first commitment period, based on the "Basic Plan on Forest Resources", and use the same approach applied here to estimate carbon sequestration for the first commitment period.

. Urban Greening, etc.

1. Activities and accounting:

a) Definitions and descriptions of all activities proposed.

Activities in planting trees on the urban parks, roads, rivers, etc., sewage-disposal plants, facilities for government and other public offices, public housing, among others.

b) Scope of activities and how they fit into broader managed land categories.

Accounted by the number of planted trees for this estimation. Therefore, it is also applicable in the case of other divisions of land.

c) Accounting approaches.

Use the annual average number of planted trees and the trends from 1991 to 1995 and project the activity data during the commitment period, assuming that trends will continue uniformly after 2000.

Estimate carbon stocks by multiplying this projected activity data: biomass increase in the wooded land under the IPCC definition (2.0 t/ha); carbon content coefficient (0.5); surveyed number of planted tree in the urban park (1,000 pieces/ha).

d) Proposals for key accounting features, e.g. assumptions on baselines, basis for the area estimates covered by activity.

Since these activities develop areas of land, to plant trees artificially where there has been previously no greenery, no baseline is used.

This is because it can be regarded as the same activities as "afforestation" under Article.3.3.

2. Carbon pools included (e.g. above ground biomass, litter and woody debris, below-ground biomass, soil carbon, and harvested materials).

Above- and below-ground biomass other than understory vegetation, litter, humus and soil carbon are included in carbon pools.

3. Methodologies and data

a) Data sources

Historical data and established goals for planted trees based on the "Survey for Preparation of 5 Year Greenery Promotion Plan" and "Green Plan 2000."

b) Sampling techniques

Surveys of current status of urban parks which form green zones in urban planning, that are the basis of the activity data, have been implemented.

c) Models and key parameters

No models or key parameters are used.

d) Uncertainties

Uncertainty is low for the surveys of the current status of urban parks which form the basis of the activity data since complete enumeration has been implemented.

4. Treatment of non CO₂ greenhouse gases.

No corresponding section.

5. Methods and key assumptions in projections for the first commitment period (2008–2012) and discussion, if possible, of trends beyond the first commitment period.

Can estimate area and carbon stocks at times subsequent to those of the first commitment period with the trend of historical data used in this estimation.