

Decision -/CP.10

Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol

The Conference of the Parties,

Recalling decisions 11/CP.7, 19/CP.7, 21/CP.7, 22/CP.7 and 13/CP.9,

1. *Recommends* that the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol adopt draft decision -/CMP.1 (*Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol*) below;
2. *Encourages* Parties included in Annex I to the Convention that have ratified the Kyoto Protocol to submit, on a voluntary basis, with their submission due on 15 April 2007: estimates of greenhouse gas emissions by sources and removals by sinks resulting from activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, using the tables of the common reporting format¹ contained in annex II to this decision; and supplementary information to be included in an annex to the national inventory report, in accordance with the guidance contained in annex I to this decision;
3. *Invites* Parties to submit to the secretariat, by 30 June 2007, their views on the tables of the common reporting format referred to in paragraph 2 above and accounts of their experiences on the use of these tables;
4. *Requests* the secretariat to synthesize the views of Parties submitted in accordance with paragraph 3 above, for consideration by the Subsidiary Body for Scientific and Technological Advice at its twenty-seventh session (November 2007);
5. *Requests* the Subsidiary Body for Scientific and Technological Advice, following the consideration of experiences gained in using the tables referred to in paragraph 2 above, to update those tables and to prepare a draft decision for adoption by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol to incorporate the updated tables in an annex to the decision referred to in paragraph 1 above;
6. *Requests* the secretariat, subject to the availability of supplementary funding, to develop a provisional module for the tables referred to in paragraph 2 above, in order to facilitate their submission.

¹ The common reporting format is a standardized format to be used by Parties for electronic reporting of estimates of greenhouse gas emissions and removals and any other relevant information. For technical reasons (for example, size of tables and fonts), the layout of the printed version of the tables of the common reporting format for land use, land-use change and forestry activities in this document cannot be standardized.

ANNEX I

Guidance on reporting of supplementary information on land use, land-use change and forestry (LULUCF) activities under Article 3.3 and 3.4 to be included in an annex to the national inventory report

1. This annex provides guidance on reporting supplementary information on land use, land-use change and forestry (LULUCF) activities under Article 3.3 and 3.4 to be included in the national inventory report¹ (NIR). This guidance is provided to help Parties fulfil the requirements of decision 22/CP.7 and is based, where appropriate, on the *IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry* (hereinafter referred to as the IPCC good practice guidance for LULUCF). Additional information may be included in the NIR, depending on the Party's national approach for estimating greenhouse gas (GHG) emissions and removals from LULUCF under the Kyoto Protocol.
2. Consistent with the guidance below, Parties should report:
 - (a) General information
 - (b) Land-related information
 - (c) Activity-specific information
 - (d) Other information
 - (e) Information relating to Article 6.
3. The activity-specific information should be reported for each activity under Article 3.3 and each elected activity under Article 3.4. As Afforestation and Reforestation are subject to the same provisions specified in the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7, they can be reported together.

1. General information

- 1.1 Definition of forest (as in table NIR 1.1) and any other criteria (e.g., minimum width)
- 1.2 Elected activities under Article 3.4 (as in table NIR 1)
- 1.3 Description of how the definitions of each activity under Article 3.3 and each elected activity under Article 3.4 have been implemented and applied consistently over time
- 1.4 Description of precedence conditions and/or hierarchy among Article 3.4 activities, and how they have been consistently applied in determining how land was classified.

2. Land-related information

- 2.1 Spatial assessment unit used for determining the area of the units of land under Article 3.3 (in accordance with paragraph 3 of the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7)
- 2.2 Methodology used to develop the land transition matrix in table NIR 2
- 2.3 Maps and/or database to identify the geographical locations, and the system of identification codes for the geographical locations, all of which can be provided electronically.

¹ The national inventory report is submitted in accordance with decision 18/CP.8, as modified by decision 13/CP.9.

3. Activity-specific information

3.1 *Methods for carbon stock change and GHG emission and removal estimates*

- 3.1.1 Description of the methodologies and the underlying assumptions used
- 3.1.2 Justification when omitting any carbon pool or GHG emissions/removals from activities under Article 3.3 and elected activities under Article 3.4 (table NIR 1 should be accompanied by such information in all cases where NR is entered)
- 3.1.3 Information on whether or not indirect and natural GHG emissions and removals have been factored out
- 3.1.4 Changes in data and methods since the previous submission (recalculations) (see, inter alia, section 4.2.4.1 of the IPCC good practice guidance for LULUCF)
- 3.1.5 Uncertainty estimates (see, inter alia, section 5.2 of the IPCC good practice guidance for LULUCF)
- 3.1.6 Information on other methodological issues (e.g., measurement intervals, interannual variability) (see, inter alia, section 4.2.3 of the IPCC good practice guidance for LULUCF)
- 3.1.7 For the purpose of accounting as required in paragraph 18 of the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*) attached to decision 11/CP.7, an indication of the year of the onset of an activity, if after 2008.

3.2 *Article 3.3*

- 3.2.1 Information that demonstrates that activities under Article 3.3 began on or after 1 January 1990 and before 31 December 2012 and are direct human-induced
- 3.2.2 Information on how harvesting or forest disturbance that is followed by the re-establishment of forest is distinguished from deforestation
- 3.2.3 Information on the size and geographical location of forest areas that have lost forest cover but which are not yet classified as deforested.

3.3 *Article 3.4*

- 3.3.1 Information that demonstrates that activities under Article 3.4 have occurred since 1 January 1990 and are human-induced
- 3.3.2 Information relating to Cropland Management, Grazing Land Management and Revegetation, if elected, for the base year
- 3.3.3 Information relating to Forest Management:
 - (a) That the definition of forest for this category conforms with the definition in item 1.1 above
 - (b) That forest management is a system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic and social functions of the forest in a sustainable manner (paragraph 1 (f) of the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7).

4. Other information

- 4.1 Key category analysis for Article 3.3 activities and any elected activities under Article 3.4 (as in, inter alia, table NIR 3, section 5.4 of the IPCC good practice guidance for LULUCF).

5. Information related to Article 6

- 5.1 The identification code in the relevant tables of the common reporting format for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, contained in annex II to decision -/CMP.1 (*Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol*) should include a specific indication of whether the boundary of the geographical location encompasses land subject to a project under Article 6 of the Kyoto Protocol.

TABLE NIR 1. SUMMARY TABLE
Activity coverage and other information relating to activities under Article 3.3 and elected activities under Article 3.4

activities	Change in carbon pool reported ⁽¹⁾				Greenhouse gas sources reported ⁽²⁾						
	Above-ground biomass	Below-ground biomass	Litter	Dead wood	Fertilization ⁽³⁾	Drainage of soils under forest management	Disturbance associated with land-use conversion to croplands	Liming	Biomass burning ⁽⁴⁾		
					N ₂ O	N ₂ O	N ₂ O	CO ₂	CO ₂	CH ₄	N ₂ O
Afforestation and Reforestation											
Management											
Management											
Management											
Revegetation											

⁽¹⁾ Indicate R (reported), NR (not reported), IE (included elsewhere) or NO (not occurring), for each relevant activity under Article 3.3 or elected activity under Article 3.4. If changes in a carbon pool are not reported, it must be demonstrated in the NIR that this pool is not a net source of greenhouse gases. Indicate NA (not applicable) for each activity that is not elected under Article 3.4. Explanation about the use of notation keys should be provided in the text.

⁽²⁾ Indicate R (reported), NE (not estimated), IE (included elsewhere) or NO (not occurring) for greenhouse gas sources reported, for each relevant activity under Article 3.3 or elected activity under Article 3.4. Indicate NA (not applicable) for each activity that is not elected under Article 3.4. Explanation about the use of notation keys should be provided in the text.

⁽³⁾ N₂O emissions from fertilization for Cropland Management, Grazing Land Management and Revegetation should be reported in the Agriculture sector. If a Party is not able to separate fertilizer applied to Forest Land from Agriculture, it may report all N₂O emissions from fertilization in the Agriculture sector.

⁽⁴⁾ If CO₂ emissions from biomass burning are not already included under changes in carbon stocks, they should be reported under biomass burning; this also includes the carbon component of CH₄. Parties that include CO₂ emissions from biomass burning in their carbon stock change estimates should report IE (included elsewhere).

Table NIR 1.1 Additional information
Selection of parameters for defining "Forest" under the Kyoto Protocol

Parameter	Selected value
	0.05 - 1 ha
Minimum crown cover	10 - 30 %
	2 - 5 m

Table NIR 2. LAND TRANSITION MATRIX
Area change between the previous and the current inventory year^{(1), (2), (3)}

	Article 3.3 activities		Forest Management (if elected)	Cropland Management (if elected)	Grazing Land Management (if elected)	Revegetation (if elected)	Other	Total
	Afforestation and Reforestation							
FROM...	(kha)							
activities	Afforestation and Reforestation							
	Deforestation							
	Forest Management (if elected)							
activities								
Other								
Total area								

(1) This table should be used to report land area and changes in land area subject to the various activities in the inventory year. For each activity it should be used to report area change between the previous year and the current inventory year. For example, the total area of land subject to Forest Management in the year preceding the inventory year, and which was deforested in the inventory year, should be reported in the cell in column of Deforestation and in the row of Forest Management.

(2) Some of the transitions in the matrix are not possible and the cells concerned have been shaded.

(3) In accordance with section 4.2.3.2 of the IPCC good practice guidance for LULUCF, the value of the reported area subject to the various activities under Article 3.3 and 3.4 for the inventory year should be that on 31 December of that year.

(4) Lands subject to Cropland Management, Grazing Land Management or Revegetation which, after 2008, are subject to activities other than those under Article 3.3 and 3.4, should still be tracked and reported under Cropland Management, Grazing Land Management or Revegetation, respectively.

TABLE NIR 3. SUMMARY OVERVIEW FOR KEY CATEGORIES FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Country
Year
Submission

REMOVALS	GAS	CRITERIA USED FOR KEY CATEGORY IDENTIFICATION		COMMENTS ⁽³⁾
		Associated category in UNFCCC inventory ⁽¹⁾ is key (indicate which category)	Category contribution is greater than the smallest category considered key in the UNFCCC inventory ⁽¹⁾ (including LULUCF)	
Specify key categories according to the national level of disaggregation used ⁽¹⁾				
<i>For example: Cropland Management</i>	CO ₂	X (<i>Cropland remaining Cropland</i>)		

⁽¹⁾ See section 5.4 of the IPCC good practice guidance for LULUCF.

⁽²⁾ This should include qualitative consideration as per section 5.4.3 of the IPCC good practice guidance for LULUCF or any other criteria.

⁽³⁾ Describe the criteria identifying the category as key.

guidance for LULUCF).

ANNEX II

Tables of the common reporting format for land use, land-use change and forestry under the Kyoto Protocol*

TABLE 5(KP). REPORT OF SUPPLEMENTARY INFORMATION FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES Country Year Submission

GREENHOUSE GAS SOURCE AND SINK ACTIVITIES	Net CO ₂ emissions/ removals ^{(3), (4)}	CH ₄ ⁽⁵⁾ (Gg)	N ₂ O ⁽⁶⁾
A. Article 3.3 activities			
A.1. Afforestation and Reforestation ⁽⁷⁾			
A.1.1. Units of land not harvested since the beginning of the commitment period			
A.1.2. Units of land harvested since the beginning of the commitment period			
A.2. Deforestation			
B. Article 3.4 activities			
B.1. Forest Management (if elected)			
B.2. Cropland Management (if elected)			
B.4. Revegetation (if elected)			

Documentation box:

under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

(1) All estimates in this table include emissions and removals from projects under Article 6 hosted by the reporting Party.
 (2) If Cropland Management, Grazing Land Management and/or Revegetation are elected, this table and all relevant tables should also be reported for the base year for these activities.
 (3) According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and by changing the sign for net CO₂ removals to be negative (-) and net CO₂ emissions to be positive (+).
 (4) CO₂ emissions from liming, biomass burning and drained organic soils, where applicable, are included in this column.
 (5) CH₄ emissions reported here for Cropland Management, Grazing Land Management and Revegetation, if elected, include only emissions from biomass burning (with the exception of savannah burning and agricultural residue burning which are reported in the Agriculture sector). Any other CH₄ emissions from Agriculture should be reported in the Agriculture sector.
 (6) N₂O emissions reported here for Cropland Management, if elected, include only emissions from biomass burning (with the exception of savannah burning and agricultural residue burning which are reported in the Agriculture sector) and N₂O from conversion to Cropland of lands other than Forest Land (Table 5(KP-II)3). Any other N₂O emissions from Agriculture should be reported in the Agriculture sector.
 (7) As both Afforestation and Reforestation under Article 3.3 are subject to the same provisions specified in the annex to draft decision -/CMP.1 (Land use, land-use change and forestry), attached to decision 11/CP.7, they can be reported together.

** On all CRF tables, please use, as applicable, the notation keys as specified in the annex to decision 18/CP.8.*

TABLE 5(KP-DA.1.1. SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Country
Year
Submission

Article 3.3 activities: Afforestation and Reforestation^{(1), (2)}

Units of land not harvested since the beginning of the commitment period

GEOGRAPHICAL LOCATION ⁽³⁾	ACTIVITY DATA		IMPLIED CARBON STOCK CHANGE FACTORS ⁽⁷⁾						emission/removal factor per area ⁽⁸⁾	CHANGE IN CARBON STOCK ⁽⁷⁾								
			Carbon stock change in above-ground biomass per area ^{(5), (6)}			Carbon stock change in below-ground biomass ^{(5), (6)}				Carbon stock change in above-ground biomass ^{(5), (6)}		Carbon stock change in below-ground biomass ^{(5), (6)}		Net carbon stock change in litter ⁽⁵⁾	Net carbon stock change in dead wood ⁽⁵⁾	Net carbon stock change in soils ⁽⁵⁾	emissions/removals ⁽⁶⁾	
			Gains	Losses	Net change	Gains	Losses	Net change		Gains	Losses	Net change	Gains					Losses
activity A.1.1 [specify identification code]		subject to the activity	(Mg C/ha)						(Gg C)						(Gg CO ₂)			
	[specify subdivision]																	
	[specify subdivision]																	
	[specify identification code]																	
	[specify subdivision]																	
	...																	

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ Report here information on anthropogenic change in carbon stock for the inventory year for all geographical locations that encompass units of land subject to Afforestation and Reforestation under Article 3.3 not harvested since the beginning of the commitment period.
⁽²⁾ As both Afforestation and Reforestation under Article 3.3 are subject to the same provisions specified in the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7, they can be reported together.
⁽³⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.
⁽⁴⁾ Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.
⁽⁵⁾ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).
⁽⁶⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.
⁽⁷⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6a of the IPCC good practice guidance for LULUCF).
⁽⁸⁾ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

TABLE 5(KP-DA.1.2. SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Country
Year
Submission

Article 3.3 activities: Afforestation and Reforestation^{(1), (2)}
Units of land harvested since the beginning of the commitment period

GEOGRAPHICAL LOCATION ⁽³⁾	ACTIVITY DATA		IMPLIED CARBON STOCK CHANGE FACTORS ⁽⁷⁾						emission/removal factor per area ⁽⁸⁾	CHANGE IN CARBON STOCK ⁽⁷⁾								
			Carbon stock change in above-ground biomass per area ^{(5), (6)}			Carbon stock change in below-ground biomass per area ^{(5), (6)}				Carbon stock change in above-ground biomass ^{(5), (6)}		Carbon stock change in below-ground biomass ^{(5), (6)}		Net carbon stock change in soils ⁽⁵⁾	Net carbon stock change in dead wood ⁽⁵⁾	Net carbon stock change in litter ⁽⁵⁾	Net CO ₂ emissions/removals ⁽⁸⁾	
			Gains	Losses	Net change	Gains	Losses	Net change		Increase	Decrease	Increase	Decrease					(Gg C)
activity A.1.2 [specify identification code]		subject to the activity (kha)																
	[specify subdivision]																	
	[specify subdivision]																	
	[specify identification code]																	
...	...																	

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR. Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR, if any additional details are needed to understand the content of this table.

(1) Report here information on anthropogenic change in carbon stock for the inventory year for all geographical locations that encompass units of land subject to Afforestation and Reforestation under Article 3.3 harvested since the beginning of the commitment period.
(2) As both Afforestation and Reforestation under Article 3.3 are subject to the same provisions specified in the annex to draft decision -/CMP.1 (*Land use, land-use change and forestry*), attached to decision 11/CP.7, they can be reported together.
(3) Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.
(4) Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.
(5) The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).
(6) In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.
(7) Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6a of the IPCC good practice guidance for LULUCF).
(8) According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

TABLE 5(KP-1A.1.3. SUPPLEMENTARY BACKGROUND FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Article 3.3 activities: Afforestation and Reforestation ^{(1), (2)}

Units of land otherwise subject to elected activities under Article 3.4 (information item)

Country
Year
Submission

GEOGRAPHICAL LOCATION ⁽³⁾		ACTIVITY DATA
Identification code	Subdivision ⁽⁴⁾	(kha)
Total for activity A.1.3		
[specify identification code]		
...	[specify subdivision]	
	[specify subdivision]	
	...	

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ Units of land subject to Afforestation or Reforestation under Article 3.3 otherwise subject to elected activities under Article 3.4 are implicitly included under A.1.1 or A.1.2. They are reported here for transparency and to fulfill the requirement of paragraph 6 (b) (ii) of the annex to draft decision -/CMP.1 (Article 7), attached to decision 22/CP.7.

⁽²⁾ As both Afforestation and Reforestation under Article 3.3 are subject to the same provisions specified in the annex to draft decision -/CMP.1 (Land use, land-use change and forestry), attached to decision 11/CP.7, they can be reported together.

⁽³⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation, which would otherwise be included in land subject to elected activities under Article 3.4.

⁽⁴⁾ Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

TABLE 5(KP-I)A.2.1. SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Article 3.3 activities: Deforestation⁽¹⁾

Units of land otherwise subject to elected activities under Article 3.4 (information item)

Country
Year
Submission

GEOGRAPHICAL LOCATION ⁽²⁾		ACTIVITY DATA	
Identification code	Subdivision ⁽³⁾	Area subject to the activity (kha)	
Total for activity A.2.1.			
[specify identification code]			
...	[specify subdivision]		
...	[specify subdivision]		
[specify identification code]			
...	...		

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ Units of lands subject to Deforestation under Article 3.3 otherwise subject to elected activities under Article 3.4 are implicitly included under A.2. They are reported here for transparency and to fulfill the requirement of paragraph 6 (b) (ii) of the annex to draft decision -/CMP.1 (Article 7), attached to decision 22/CP.7.
⁽²⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation which would otherwise be included in land subject to elected activities under Article 3.4.
⁽³⁾ Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.

TABLE 5(KP-I)B.1. SUPPLEMENTARY BACKGROUND DATA ON CARBON STOCK CHANGES AND NET CO₂ EMISSIONS AND REMOVALS FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL
Elected Article 3.4 activities: Forest Management⁽¹⁾

Country
Year
Submission

GEOGRAPHICAL LOCATION ⁽²⁾	ACTIVITY DATA	IMPLIED CARBON STOCK CHANGE FACTORS ⁽⁶⁾										emission/removal factor per area ⁽⁷⁾	CHANGE IN CARBON STOCK ⁽⁶⁾						Net carbon emissions/removals ⁽⁷⁾
		Carbon stock change in above-ground biomass per area ^{(4),(5)}					Carbon stock change in below-ground biomass ^{(4),(5)}						carbon stock change in litter ⁽⁴⁾	carbon stock change in dead wood ⁽⁴⁾	Net carbon stock change in soils ⁽⁴⁾				
		Gains	Losses	Net change	Gains	Losses	Net change	Gains	Losses	Net change	Gains					Losses	Net change		
													(Mg C/ha)						
Identification code	subject to the activity (kha)																		
Total for activity B.1																			
<i>[specify identification code]</i>																			
	<i>[specify subdivision]</i>																		
	<i>[specify subdivision]</i>																		
	<i>[specify identification code]</i>																		
...	...																		

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ If Forest Management has been elected, report here information on anthropogenic carbon stock change for the inventory year for all geographical locations that encompass land subject to Forest Management under Article 3.4.
⁽²⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management (if elected).
⁽³⁾ Activity data may be further subdivided according to climate zone, management system, soil type, vegetation type, tree species, ecological zone, national land classification or other criteria. Complete one row for each subdivision.
⁽⁴⁾ The signs for estimates of gains in carbon stocks are positive (+) and of losses in carbon stocks are negative (-).
⁽⁵⁾ In all cases where the good practice guidance methods used give separate estimates of gains and losses, these estimates should be reported.
⁽⁶⁾ Note that net change corresponds to increase/decrease of carbon stock (see table 4.2.6a of the IPCC good practice guidance for LULUCF).
⁽⁷⁾ According to the Revised 1996 IPCC Guidelines, for the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+). Net changes in carbon stocks are converted to CO₂ by multiplying C by 44/12 and changing the sign for net CO₂ removals to be negative (-) and for net CO₂ emissions to be positive (+).

TABLE 5(KP-II)1 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL

Country _____
 Year _____
 Submission _____

Direct N₂O emissions from N fertilization^{(1),(2)}

Identification code of geographical location	ACTIVITY DATA	IMPLIED EMISSION FACTOR	EMISSIONS
A.1.1. Afforestation/Reforestation: units of land not harvested since the beginning of the commitment period⁽⁴⁾			
[specify identification code]			
...			
A.1.2. Afforestation/Reforestation: units of land harvested since the beginning of the commitment period⁽⁴⁾			
[specify identification code]			
...			
B.1. Forest Management (if elected)⁽⁵⁾			
[specify identification code]			
...			

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR; Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

(1) N₂O emissions from fertilization for Cropland Management, Grazing Land Management and Revegetation should be reported in the Agriculture sector. If a Party is not able to separate fertilizer applied to Forest Land from Agriculture, it may report all N₂O emissions from fertilization in the Agriculture sector. This should be explicitly indicated in the documentation box.
 (2) Direct N₂O emissions from fertilization are estimated following section 3.2.1.4.1 of the IPCC good practice guidance for LULUCF based on the amount of fertilizer applied to land under Forest Management. The indirect N₂O emissions from Afforestation and Reforestation and land under Forest Management are estimated as part of the total indirect emissions in the Agriculture sector based on the total amount of fertilizer used in the country. Parties should show that double counting of N₂O emissions from fertilization with Agriculture sector estimates has been avoided.
 (3) In the calculation of the implied emission factor, N₂O emissions are converted to N₂O-N by multiplying by 28/44.
 (4) Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.
 (5) Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management (if elected).

TABLE 5(KP-II)2 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL
N₂O emissions from drainage of soils^{(1), (2)}

Country
Year
Submission

Identification code of geographical location ⁽³⁾	ACTIVITY DATA	IMPLIED EMISSION FACTOR	EMISSIONS
	Area of drained soils (kha)	N ₂ O-N per area drained (kg N ₂ O-N/ha) ⁽⁴⁾	N ₂ O (Gg)
B.1. Forest Management (if elected)			
<i>Total for organic soils</i>			
<i>Total for mineral soils</i>			
<i>[specify identification code]</i>			
Organic soils			
Mineral soils			
...			

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

⁽¹⁾ Methodologies for estimating N₂O emissions from drainage of soils are not addressed in the Revised 1996 IPCC Guidelines, but Appendix 3a.2 of the IPCC good practice guidance for LULUCF provides methodologies for consideration.
⁽²⁾ N₂O emissions from drainage of soils include those resulting from Forest Management. N₂O emissions from drained Cropland and Grassland soils are covered in the Agriculture sector under Cultivation of Histosols.
⁽³⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management (if elected).
⁽⁴⁾ In the calculation of the implied emission factor, N₂O emissions are converted to N₂O-N by multiplying by 28/44.

TABLE 5(KP-II)3 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL
N₂O emissions from disturbance associated with land-use conversion to cropland^{(1), (2)}

Country
Year
Submission

Identification code of geographical location	ACTIVITY DATA	IMPLIED EMISSION FACTOR	EMISSIONS
	Land area converted (kha)	N ₂ O-N per area converted ⁽⁵⁾ (kg N ₂ O-N/ha)	N ₂ O (Gg)
A.2. Deforestation^{(3), (6)}			
<i>Total organic soils</i>			
<i>Total mineral soils</i>			
<i>[specify identification code]</i>			
Organic soils ⁽⁷⁾			
Mineral soils ⁽⁷⁾			
...			
B.2. Cropland Management (if elected)^{(4), (8)}			
<i>Total organic soils</i>			
<i>Total mineral soils</i>			
<i>[specify identification code]</i>			
Organic soils ⁽⁷⁾			
Mineral soils ⁽⁷⁾			
...			
Information items⁽⁹⁾			
A.2.1. Deforestation: units of land otherwise subject to elected activities under Article 3.4⁽⁶⁾			
<i>Total organic soils</i>			
<i>Total mineral soils</i>			
<i>[specify identification code]</i>			
Organic soils ⁽⁷⁾			
Mineral soils ⁽⁷⁾			
...			

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

- ⁽¹⁾ Methodologies for N₂O emissions from disturbance associated with land-use conversion to Croplands are found in section 3.3.2.3.1.1 of the IPCC good practice guidance for LULUCF. N₂O emissions from fertilization in the preceding land use and new land use should not be reported here. Parties should avoid double counting with N₂O emissions from drainage and from cultivation of organic soils reported in Agriculture under Cultivation of Histosols.
- ⁽²⁾ According to the IPCC good practice guidance for LULUCF N₂O emissions from disturbance of soils are relevant only for land conversions to Cropland. N₂O emissions from Cropland Management when Cropland is remaining Cropland are included in the Agriculture sector.
- ⁽³⁾ Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation.
- ⁽⁴⁾ Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management, if elected.
- ⁽⁵⁾ In the calculation of the implied emission factor, N₂O emissions are converted to N₂O-N by multiplying by 28/44.
- ⁽⁶⁾ N₂O emissions associated with Deforestation followed by the establishment of Cropland should be reported under Deforestation even if Cropland Management is not elected under Article 3.4.
- ⁽⁷⁾ Parties may separate data for organic and mineral soils, if they have data available.
- ⁽⁸⁾ This includes N₂O emissions in land subject to Cropland Management from disturbance of soils due to the conversion to Cropland of lands other than Forest Lands.
- ⁽⁹⁾ Units of land subject to Deforestation under Article 3.3 otherwise subject to elected activities under Article 3.4 are implicitly included under A.2. They are reported here for transparency and to fulfil the requirement of paragraph 6 (b) (ii) of the annex to draft decision -/CMP.1 (Article 7), attached to decision 22/CP.7.

TABLE 5(KP-II)4 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL
Carbon emissions from lime application⁽¹⁾

Country
Year
Submission

Identification code of geographical location ⁽²⁾	ACTIVITY DATA	IMPLIED EMISSION FACTOR	EMISSIONS
	Total amount of lime applied (Mg/year)	Carbon emission per unit of lime (Mg C/Mg)	Carbon (Gg)
A.1.1. Afforestation/Reforestation: units of land not harvested since the beginning of the commitment period^{(2), (8), (9)}			
<i>Total for limestone</i>			
<i>Total for dolomite</i>			
<i>[specify identification code]</i>			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
...			
A.1.2. Afforestation/Reforestation: units of land harvested since the beginning of the commitment period^{(2), (8), (9)}			
<i>Total for limestone</i>			
<i>Total for dolomite</i>			
<i>[specify identification code]</i>			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
...			
A.2. Deforestation^{(3), (8), (9)}			
<i>Total for limestone</i>			
<i>Total for dolomite</i>			
<i>[specify identification code]</i>			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
...			
B.1. Forest Management (if elected)^{(4), (8), (9)}			
<i>Total for limestone</i>			
<i>Total for dolomite</i>			
<i>[specify identification code]</i>			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
...			
B.2. Cropland Management (if elected)^{(5), (8), (9)}			
<i>Total for limestone</i>			
<i>Total for dolomite</i>			
<i>[specify identification code]</i>			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
...			
B.3. Grazing Land Management (if elected)^{(6), (8), (9)}			
<i>Total for limestone</i>			
<i>Total for dolomite</i>			
<i>[specify identification code]</i>			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
...			
B.4. Revegetation (if elected)^{(7), (8), (9)}			
<i>Total for limestone</i>			
<i>Total for dolomite</i>			
<i>[specify identification code]</i>			
Limestone (CaCO ₃)			
Dolomite (CaMg(CO ₃) ₂)			
...			
Documentation box:			
Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.			

(1) Carbon emissions from agricultural lime application are addressed in sections 3.3.1.2.1.1 and 3.3.2.1.1.1 of the IPCC good practice guidance for LULUCF.
(2) Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.
(3) Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation.
(4) Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management, if elected.
(5) Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management, if elected.
(6) Geographical location refers to the boundaries of the areas that encompass land subject to Grazing Land Management, if elected.
(7) Geographical location refers to the boundaries of the areas that encompass land subject to Revegetation, if elected.
(8) If Parties are not able to separate lime application for different geographical locations, they should include liming for all geographical locations in the total.
(9) A Party may report aggregate estimates for total lime applications when data are not available for limestone and dolomite.

TABLE 5(KP-II)5 SUPPLEMENTARY BACKGROUND DATA FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER THE KYOTO PROTOCOL
GHG emissions from biomass burning

Country
Year
Submission

Identification code of geographical location	ACTIVITY DATA			IMPLIED EMISSION FACTOR			EMISSIONS		
	Description ⁽⁷⁾	Unit	Values	CO ₂	CH ₄	N ₂ O	CO ₂ ⁽⁸⁾	CH ₄ ⁽⁸⁾	N ₂ O
	Area (AB) or biomass burned (BB)	ha or kg dm		(Mg/activity data unit)			(Gg)		
A.1.1. Afforestation/Reforestation: units of land not harvested since the beginning of the commitment period^{(1), (9)}									
<i>Total for controlled burning</i>									
<i>Total for wildfires</i>									
<i>[specify identification code]</i>									
Controlled burning									
Wildfires									
...									
A.1.2. Afforestation/Reforestation: units of land harvested since the beginning of the commitment period^{(1), (9)}									
<i>Total for controlled burning</i>									
<i>Total for wildfires</i>									
<i>[specify identification code]</i>									
Controlled burning									
Wildfires									
...									
A.2. Deforestation^{(2), (9)}									
<i>Total for controlled burning</i>									
<i>Total for wildfires</i>									
<i>[specify identification code]</i>									
Controlled burning									
Wildfires									
...									
B.1. Forest Management (if elected)^{(3), (9)}									
<i>Total for controlled burning</i>									
<i>Total for wildfires</i>									
<i>[specify identification code]</i>									
Controlled burning									
Wildfires									
...									
B.2. Cropland Management (if elected)^{(4), (9), (10)}									
<i>Total for controlled burning</i>									
<i>Total for wildfires</i>									
<i>[specify identification code]</i>									
Controlled burning									
Wildfires									
...									
B.3. Grazing Land Management (if elected)^{(5), (9), (11)}									
<i>Total for controlled burning</i>									
<i>Total for wildfires</i>									
<i>[specify identification code]</i>									
Controlled burning									
Wildfires									
...									
B.4. Revegetation (if elected)^{(6), (9)}									
<i>Total for controlled burning</i>									
<i>Total for wildfires</i>									
<i>[specify identification code]</i>									
Controlled burning									
Wildfires									
...									

Documentation box:

Parties should provide detailed explanation on the land use, land-use change and forestry sector in the relevant annex of the NIR: Supplementary information on LULUCF activities under the Kyoto Protocol. Use this documentation box to provide references to relevant sections of the NIR if any additional details are needed to understand the content of this table.

- (1) Geographical location refers to the boundaries of the areas that encompass units of land subject to Afforestation and Reforestation.
- (2) Geographical location refers to the boundaries of the areas that encompass units of land subject to Deforestation.
- (3) Geographical location refers to the boundaries of the areas that encompass land subject to Forest Management, if elected.
- (4) Geographical location refers to the boundaries of the areas that encompass land subject to Cropland Management, if elected.
- (5) Geographical location refers to the boundaries of the areas that encompass land subject to Grazing Land Management, if elected.
- (6) Geographical location refers to the boundaries of the areas that encompass land subject to Revegetation, if elected.
- (7) For each activity, activity data should be selected between area burned (AB) or biomass burned (BB). Units will be ha for area burned, and kg dm for biomass burned. The implied emission factor will refer to the selected activity data with an automatic change in the units.
- (8) If CO₂ emissions from biomass burning are not already included in Tables 5(KP-I)A.1.1 to 5(KP-I)B.4, they should be reported here. This also includes the carbon component of CH₄. This should be clearly documented in the documentation box and in the NIR. Parties that include all carbon stock changes in the carbon stock tables (5(KP-I)A.1.1 to 5(KP-I)B.4) should report IE (included elsewhere) in the CO₂ column.
- (9) Parties should report controlled/prescribed burning and wildfires emissions separately, where appropriate.
- (10) Burning of agricultural residues is included in the Agriculture sector.
- (11) Greenhouse gas emissions from prescribed savannah burning are reported in the Agriculture sector.

Draft decision -/CMP.1

Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol,

Recalling, in particular, Article 3, paragraphs 3 and 4, Article 5, paragraph 2, and Article 7, paragraph 1, of the Kyoto Protocol,

Recalling also decisions 11/CP.7, 19/CP.7, 21/CP.7, 22/CP.7 and 13/CP.9,

Reaffirming that anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol should be reported in a transparent, consistent, comparable, complete and accurate way,

Having considered the relevant recommendations of the Subsidiary Body for Scientific and Technological Advice,

1. Decides that for the first commitment period Parties included in Annex I to the Convention that have ratified the Kyoto Protocol shall apply the good practice guidance for land use, land-use change and forestry, as developed by the Intergovernmental Panel on Climate Change, in a manner consistent with the Kyoto Protocol and draft decision -/CMP.1 (*Land use, land-use change and forestry*) and the annex to this draft decision,¹ for the purpose of providing information on anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, in accordance with Article 5, paragraph 2 of the Kyoto Protocol;

2. *Decides* to use, for reporting information supplementary to annual greenhouse gas inventory information in the first commitment period, in addition to the elements specified in paragraphs 5–9 of the annex to draft decision -/CMP.1 (*Article 7*), attached to decision 22/CP.7, supplementary information to be included in an annex to the national inventory report, contained in annex I to this decision, as well as the tables of the common reporting format² for activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, contained in annex II to this decision;

3. *Requests* the secretariat to develop reporting software for the tables referred to in paragraph 2 above.

¹ Noting that reporting methods contained in chapter 4 of the Intergovernmental Panel on Climate Change *Good Practice Guidance for Land Use, Land-use Change and Forestry*, should ensure that areas of land subject to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, are identifiable.

² The common reporting format is a standardized format to be used by Parties for electronic reporting of estimates of greenhouse gas emissions and removals and any other relevant information. For technical reasons (for example, size of tables and fonts), the layout of the printed version of the tables of the common reporting format for land use, land-use change and forestry activities in this document cannot be standardized.

ANNEXES

[to be incorporated in accordance with decision -/CP.10, paragraph 5]
