

1 **2013 REVISED**
2 **SUPPLEMENTARY METHODS**
3 **AND GOOD PRACTICE**
4 **GUIDANCE ARISING FROM THE**
5 **KYOTO PROTOCOL**

6 **OVERVIEW**
7

Second Order Draft

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27 1 INTRODUCTION

28 The 2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol (*KP*
29 *Supplement*) provides supplementary methods and *good practice* guidance for measuring, estimating and
30 reporting anthropogenic greenhouse gas emissions and removals resulting from land use, land-use change and
31 forestry (LULUCF) activities under Article 3.3 and Article 3.4 of the Kyoto Protocol (KP) for the second
32 commitment period, 2013-2020.

33 The *KP Supplement* was requested by the Decision¹ on LULUCF of the UNFCCC Conference of the Parties
34 Serving as the Meeting of the Parties to the KP, taken in Durban in 2011. The *KP Supplement* updates Chapter 4
35 of the Good Practice Guidance for Land Use, Land-Use Change and Forestry² (*GPG-LULUCF*), which provides
36 supplementary methods for LULUCF activities for the first commitment period, 2008-2012. The structure and
37 wording of Chapter 4 have been maintained wherever possible. Consistent with the decision of the IPCC
38 Plenary³, the *KP Supplement* does not update Section 4.3 of *GPG-LULUCF*, which concerns LULUCF projects
39 hosted by Parties listed in Annex B of the Kyoto Protocol (Joint Implementation projects), and Afforestation or
40 Reforestation projects hosted by Parties not listed in Annex I of the UNFCCC (Clean Development Mechanism
41 projects).

42 Under the provisions of Article 7.1 of the KP, Parties include, in their annual greenhouse gas inventories and
43 national inventory reports, supplementary information relating to anthropogenic emissions by sources and
44 removals by sinks of CO₂ and other greenhouse gases associated with LULUCF activities under Articles 3.3 and
45 3.4 of the KP.⁴ The activities included under Article 3.3 are Afforestation (A), Reforestation (R) and
46 Deforestation (D) since 1990. For the second commitment period activities under Article 3.4 are Forest
47 Management (FM), which is mandatory, and elective activities, namely Revegetation, Cropland Management,
48 Grazing Land Management, and Wetland Drainage and Rewetting.⁵

¹ Decision 2/CMP.7 (Land use, land-use change and forestry) contained in document FCCC/KP/CMP/2011/10/Add.1.

² Intergovernmental Panel on Climate Change (IPCC) (2003). Penman J., Gytarsky M., Hiraishi T., Krug, T., Kruger D., Pipatti R., Buendia L., Miwa K., Ngara T., Tanabe K., and Wagner F (Eds). *Good Practice Guidance for Land Use, land-Use Change and Forestry* IPCC/IGES, Hayama, Japan.

³ Decision of the IPCC Panel at its 35th Session.

⁴ See Articles 3.3, 3.4, 3.7, 6 and 12 of the Kyoto Protocol (<http://unfccc.int/resource/docs/convkp/kpeng.pdf>) and Decisions 16/CMP.1, 18/CMP.1, 22/CMP.1 as contained in FCCC/KP/CMP/2005/8/Add.3, and 2/CMP.7 contained in FCCC/KP/CMP/2011/10/Add.1.

⁵ LULUCF related requirements are contained in Decision 16/CMP.1 (Land use, land-use change and forestry) and Decision 2/CMP.7 (Land use, land-use change and forestry) contained in documents FCCC/CP/2001/13/Add.1, and FCCC/KP/CMP/2011/10/Add.1, p.13 respectively. Decision 2/CMP.6 establishes that for the second commitment period *definitions of forest, afforestation, reforestation, revegetation, forest management, cropland management and grazing land management shall be the same as in the first commitment period under the Kyoto Protocol*. The activities are defined as follows:

“Afforestation” is the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources.

“Reforestation” is the direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest 31 December 1989.

“Deforestation” is the direct human-induced conversion of forested land to non-forested land.

“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.

“Cropland management” is the system of practices on land on which agricultural crops are grown and on land that is set aside or temporarily not being used for crop production.

“Grazing land management” is the system of practices on land used for livestock production aimed at manipulating the amount and type of vegetation and livestock produced.

“Revegetation” is a direct human-induced activity to increase carbon stocks on sites through the establishment of vegetation that covers a minimum area of 0.05 hectares and does not meet the definitions of afforestation and reforestation contained here.

49 The *KP Supplement* builds on methods and guidance provided by the 2006 IPCC Guidelines for National
 50 Greenhouse Gas Inventories (2006 IPCC Guidelines). The 2006 IPCC Guidelines were themselves prepared in
 51 response to an invitation from the Parties to the UNFCCC, and are now agreed for use for reporting from 2015
 52 by Annex I Parties to the UNFCCC and the KP⁶. The 2006 IPCC Guidelines build upon IPCC's previously
 53 developed Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories⁷ (1996 IPCC Guidelines)
 54 which, together with the Good Practice Guidance and Uncertainty Management in National Greenhouse Gas
 55 Inventories⁸ (GPG2000) and the GPG-LULUCF, provide the internationally agreed⁹ methodologies that
 56 countries currently use to estimate greenhouse gas inventories to report under the UNFCCC and the KP.

57 2 BACKGROUND

58 The UNFCCC Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol at its
 59 seventh session (CMP 7), held in December 2011 in Durban, South Africa, invited the IPCC to:

60 ...review and, if necessary, update supplementary methodologies for estimating
 61 anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from
 62 land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the
 63 Kyoto Protocol, related to the annex to this decision, on the basis of, inter alia, chapter 4 of
 64 its Good Practice Guidance for Land Use, Land-Use Change and Forestry¹⁰.

65 The Subsidiary Body for Scientific and Technological Advice at its thirty-sixth session (SBSTA 36) invited the
 66 IPCC to consider completing the work on the *KP Supplement* within a revised time frame, by October 2013, to
 67 allow for adoption of a decision on this matter by the CMP at its ninth session (CMP 9).

68 In response to the UNFCCC's invitation, the need to update Chapter 4 was considered at the IPCC Scoping
 69 Meeting to consider the Invitation from UNFCCC CMP 7 that took place in Geneva in May 2012¹¹. The Scoping
 70 Meeting concluded that, whilst much of the structure and the content of Chapter 4 remains relevant and useful,
 71 there was a need for significant updating to take account of the Decision 2/CMP.7 (LULUCF), other relevant
 72 decisions by COP and CMP, the 2006 IPCC Guidelines, IPCC's work on wetlands¹², and other IPCC products,
 73 and developments in the scientific literature.

74 The IPCC at its 35th Session decided to produce the *KP Supplement* by the revised target date of October 2013
 75 and agreed Terms of Reference, a Table of Contents and a Workplan¹³. The Workplan envisaged completion in

"Wetland drainage and rewetting" is a system of practices for draining and rewetting on land with organic soil that covers a minimum area of 1 hectare. The activity applies to all lands that have been drained since 1990 and to all lands that have been rewetted since 1990 and that are not accounted for under any other activity as defined above, where drainage is the direct human-induced lowering of the soil water table and rewetting is the direct human-induced partial or total reversal of drainage.

⁶ Decision 15/CP.17 contained in document FCCC/CP/2011/9/Add.2 and Decision 4/CMP.7 contained in document FCCC/KP/CMP/2011/10/Add.1.

⁷ Intergovernmental Panel on Climate Change (IPCC) (1997). Houghton J.T., Meira Filho L.G., Lim B., Tréanton K., Mamaty I., Bonduki Y., Griggs D.J. and Callander B.A. (Eds). *Revised 1996 IPCC Guidelines for National Greenhouse Inventories*. IPCC/OECD/IEA, Paris, France.

⁸ Intergovernmental Panel on Climate Change (IPCC) (2000). Penman J., Kruger D., Galbally I., Hiraishi T., Nyenzi B., Emmanuel S., Buendia L., Hoppaus R., Martinsen T., Meijer J., Miwa K., and Tanabe K. (Eds). *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories*. IPCC/OECD/IEA/IGES, Hayama, Japan.

⁹ See the Report of the Fourth Session of the Subsidiary Body for Scientific and Technological Advice (FCCC/SBSTA/1996/20), paragraph 30; decisions 2/CP.3 and 3/CP.5 (UNFCCC reporting guidelines for preparation of national communications by Parties included in Annex I to the Convention, part I: UNFCCC reporting guidelines on annual inventories), decision 18/CP.8, revising the guidelines adopted under decisions 3/CP.5, and 17/CP.8 adopting improved guidelines for the preparation of national communications from Parties not included in Annex I to the Convention, and subsequent decisions 13/CP.9 and Draft Decision /CP.10.

¹⁰ See paragraph 8 of Decision 2/CMP.7 in FCCC/KP/CMP/2011/10/Add.1 (<http://unfccc.int/resource/docs/2011/cmp7/eng/10a01.pdf>)

¹¹ See <http://www.ipcc-nggip.iges.or.jp/newsdoc/120611TORetc.pdf>

¹² IPCC TFI is also producing The 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (*Wetlands Supplement*) that provides methods for estimating anthropogenic emissions and removals of greenhouse gases from wetlands (lands that are saturated by water for all or part of the year). This work is due to be completed in October 2013 (<http://www.ipcc-nggip.iges.or.jp/home/wetlands.html>).

¹³ See http://www.ipcc-nggip.iges.or.jp/home/2013KPSupplementaryGuidance_inv.html.

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76 time for adoption and acceptance at the 37th session of the IPCC, in October 2013, in accordance with the revised
 77 timeframe as requested by SBSTA 36. The Terms of Reference specified that the revision of Chapter 4 of the
 78 *GPG-LULUCF* should be consistent with the *2006 IPCC Guidelines* and with decisions of the COP and CMP. It
 79 should not revise or replace the *2006 IPCC Guidelines* and maintain the structure and content of the existing
 80 Chapter 4 of the *GPG-LULUCF*.

81 **3 THE NEED TO UPDATE CHAPTER 4 OF GPG** 82 **LULUCF**

83 Chapter 4 of the *GPG-LULUCF* provides supplementary methods and *good practice* guidance related to
 84 LULUCF activities based on the general greenhouse gas inventory guidance provided in other chapters of the
 85 *GPG-LULUCF* and the rules governing the treatment of LULUCF activities in the first commitment period of
 86 KP¹⁴. The need to review and update Chapter 4 of the *GPG-LULUCF* arises because:

87 *firstly*, the rules for LULUCF for the second commitment period under the KP differ in some respects from the
 88 rules for the first commitment period.

89 *secondly*, since Chapter 4 of *GPG-LULUCF* was intended to be used with the latest IPCC guidance on LULUCF,
 90 updating is needed in the light of the CMP decision to use the *2006 IPCC Guidelines* for the second commitment
 91 period under the KP¹⁵.

92 The new rules for the treatment of LULUCF in the second commitment period of KP agreed by CMP 7 contain,
 93 amongst other things, new provisions on Forest Management, emissions associated with natural disturbances in
 94 forests, harvested wood products (HWP), and Wetland Drainage and Rewetting, which are not covered in the
 95 existing Chapter 4 of the *GPG-LULUCF*. Table 1 provides details of the important changes in the treatment of
 96 LULUCF activities in the second commitment period of the Kyoto Protocol under Decision 2/CMP.7.

97 The changes required for *KP Supplement* can be classified as follows:

- 98 • *Changes stemming from the use of the 2006 IPCC Guidelines*. These include the changes needed to make
 99 the general GHG inventory-related guidance in Chapter 4 consistent with the *2006 IPCC Guidelines*.
- 100 • *Changes pursuant to Decision 2/CMP.7*. These include:
 - 101 (i) General consequential changes such as:
 - 102 ○ Making reference to the “second commitment period” and updating references to CMP decisions;
 - 103 ○ Changes reflecting the mandatory nature of FM activity; inclusion of wetlands drainage and
 104 rewetting (WDR) as an elective activity under Article 3.4; and inclusion of HWP pool for mandatory
 105 reporting.
 - 106 (ii) Substantive changes reflecting the revised rules governing the treatment of LULUCF in the second
 107 commitment period of KP. These are summarized in Table 1. The changes involve adding new
 108 guidance and updating the existing guidance including decision trees and figures.

109

TABLE 1 CHANGES IN THE TREATMENT OF LULUCF IN THE SECOND COMMITMENT PERIOD OF THE KYOTO PROTOCOL PURSUANT TO DECISION 2/CMP.7		
Element	2/CMP.7	16/CMP.1
Forest management (FM)	<ul style="list-style-type: none"> • FM shall be mandatorily accounted for along with Art. 3.3 activities and Art. 3.4 activities elected in the first commitment period. • Accounting for FM shall be done on the basis of the reference level (FMRL) given in the appendix to the Decision 2/CMP.7. • Annex I Parties shall demonstrate methodological consistency between the FMRL 	<ul style="list-style-type: none"> • FM is an elective activity under Article 3.4. • Accounting of FM is to be done on a “gross-net” basis.

¹⁴ Decision 16/CMP.1 (Land use, land-use change and forestry) contained in document FCCC/KP/CMP/2005/8/Add.3.

¹⁵ Decision 4/CMP.7 contained in document FCCC/KP/CMP/2011/10/Add.1.

	<p>and reporting for FM during the second commitment period, including in area accounted for; the treatment of HWP and accounting of any emissions from natural disturbances.</p> <ul style="list-style-type: none"> • Parties shall make technical corrections, if necessary, to ensure consistency between FMRL and reporting of FM in the commitment period, including applying IPCC methods for ensuring time-series consistency. • Technical corrections shall be applied after adoption of the FMRL if the reported data used to establish the reference level are subject to recalculations, to include in accounting the effect of the recalculations. 	
<p>Accounting of harvested wood products (HWP)</p>	<ul style="list-style-type: none"> • HWP from a Party's forest shall be accounted for by the Party itself and imported HWP shall not be accounted by the Party. • Accounting of HWP shall be on the basis of instantaneous oxidation. • Notwithstanding the above, if transparent and verifiable activity data (AD) for the specified categories is available, accounting of HWP shall be using first-order decay (FOD) with default half-lives provided in the Decision 2/CMP.7 (based on <i>GPG-LULUCF</i>). In the case of projected FMRL, instantaneous oxidation is not applicable. • Parties may also use country-specific half-lives (if transparent and verifiable AD is available) or methodologies and definitions from the most recently adopted IPCC Guidelines if transparent and verifiable AD is available and these are at least as detailed and accurate as the above. • HWP resulting from deforestation, solid waste disposal sites (where accounted separately) and wood used for energy purposes shall be accounted for on the basis of instantaneous oxidation. • Emissions from HWP in the second commitment period from HWP removed from forests in the first commitment period shall also be accounted for but excluding those already accounted for using instantaneous oxidation in the first commitment period. • For FM, Parties can choose not to account for HWP from forests before the second commitment period if FMRL is based on projections but consistency of treatment between FMRL and the reporting of FM shall be maintained. 	<ul style="list-style-type: none"> • HWP pool not accounted, or equivalently assumed to be instantaneously oxidised.
<p>Treatment of natural disturbances</p>	<ul style="list-style-type: none"> • <i>Natural disturbances are non-anthropogenic events or non-anthropogenic circumstances. For the purposes of this decision, these events or circumstances are those that cause significant emissions in forests and are beyond the control of, and not materially influenced by, a Party. These may include wildfires, insect and disease infestations, extreme weather events</i> 	<ul style="list-style-type: none"> • All emissions and subsequent removals from natural disturbances on (units of) lands subject to an activity (ARD or FM) are to be accounted for under that activity¹⁶.

¹⁶ The emissions and subsequent removals from natural disturbances are to be estimated using relevant methodological guidance provided in GPG LULUCF.

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	<p><i>and/or geological disturbances, beyond the control of, and not materially influenced by, a Party. These exclude harvesting and prescribed burning.</i></p> <p>Parties can choose to exclude from accounting of ARD and FM (either annually or at the end of second commitment period) emissions from natural disturbances that in any single year exceed the FM background-level (including margins if any) of emissions. (In the case of FM, this background level is to be included in its FMRL).</p> <ul style="list-style-type: none"> • Background level has to be derived without expectation of net debits or credits including the use of margins, if needed. • Subsequent removals from lands affected by the natural disturbance shall also be excluded. • Parties shall provide country-specific information in their National Inventory Report (NIR) for 2015 on estimation of their background level and how the expectation of net credit/debit has been avoided including the use of margins. • Parties shall account for emissions from salvage logging and shall not exclude the emissions from natural disturbances if followed by land-use change. • Parties shall provide transparent information on: <ul style="list-style-type: none"> • Identification of the lands subject to natural disturbance (geo-referenced location, year and types of natural disturbance); • Estimation of annual emissions resulting from natural disturbance. • Parties shall also provide transparent information demonstrating: <ul style="list-style-type: none"> • No land-use change has occurred and methods and criteria for identifying any future land use changes; • Occurrences were beyond the control of and not influenced by the Party; • Efforts made to rehabilitate the lands; • Inclusion of salvage logging emissions. 	
<p>Treatment of emissions from harvest and conversion of forest plantations to non-forests¹⁷</p>	<ul style="list-style-type: none"> • Parties may include in its accounting under Article 3.4 (FM) emissions/removals from harvest and conversion of forest plantations provided the following conditions are met: <ul style="list-style-type: none"> • The plantation was first established before 1 January 1990 or re-established after 1 January 1960 by direct human-induced planting and/or seeding of non-forest land; • A new forest of at least equivalent area and the potential to reach equivalent C stocks in the normal harvesting cycle as the harvested plantation at the time of harvest is established on a non-forested land by direct human-induced planting and/or seeding on land that did not contain forest on 31 December 1989. 	<ul style="list-style-type: none"> • Emissions/removals from harvest and conversion of forest plantations are to be accounted for under deforestation (D) activity.

¹⁷ The Carbon Equivalent Forest Conversion provisions

	<ul style="list-style-type: none"> • A debit under Art 3.4 is generated if the newly established forest does not reach at least the equivalent carbon stock. • All lands and pools associated with the provisions continue to be identified, monitored, reported (including geo-referenced location and the year of conversion) and accounted for under FM. 	
Inclusion of wetland drainage and rewetting (WDR) as an elective activity under Article 3.4	<ul style="list-style-type: none"> • WDR was added as a new elective activity under Art. 3.4 by Decision 2/CMP.7. • “<i>Wetland drainage and rewetting</i>” is a system of practices for draining and rewetting on land with organic soil that covers a minimum area of 1 hectare. The activity applies to all lands that have been drained since 1990 and to all lands that have been rewetted since 1990 and that are not accounted for under any other activity as defined in this annex where drainage is the direct human-induced lowering of the soil water table and rewetting is the direct human-induced partial or total reversal of drainage. • Estimation methodology for WDR shall be based on the most recently adopted IPCC guidelines and any subsequent clarifications. • Accounting for WDR shall be done on a “net-net” basis. 	<ul style="list-style-type: none"> • WDR is not part of the elective activities under Article 3.4¹⁸.
Other changes	<ul style="list-style-type: none"> • Parties shall report and account for all emissions from conversion of natural forests to planted forests. 	<ul style="list-style-type: none"> • Reporting and accounting for all emissions from conversions of natural forests to planted forests is to be included under FM activity.

4 STRUCTURE AND CONTENT OF THE KP SUPPLEMENT

KP Supplement maintains the structure and general content of Chapter 4 in *GPG-LULUCF*. Wherever necessary it replaces references to the *GPG-LULUCF* by those to *2006 IPCC Guidelines*, and adds additional material to existing sections or adds new sections where required by the new rules. It updates Chapter 4 of the *GPG-LULUCF* to be consistent with the *2006 IPCC Guidelines* but does not revise or replace the *2006 IPCC Guidelines*.

There are two chapters in the *KP Supplement* corresponding to the first two main sections of Chapter 4 of the *GPG-LULUCF*:

Chapter 1: Introduction

This chapter deals with overview of steps to estimate and report supplementary information for Article 3.3 and 3.4 activities; general rules for categorisation of lands under Articles 3.3 and 3.4 activities; and relationship between Annex I national inventories and Article 6 projects. Updates include:

- (i) Changes to steps for reporting supplementary information and the general rules for categorisation of lands under Articles 3.3 and 3.4 lands including the reporting hierarchy of activities, due to FM being made a mandatory activity and inclusion of WDR as an elective activity under Article 3.4;
- (ii) Updating all decision trees and figures to reflect Decision 2/CMP.7.

Chapter 2: Methods for estimation, measurement, monitoring and reporting of LULUCF activities under Articles 3.3 and 3.4

¹⁸ Wetlands subject to drainage and rewetting since 1990 could potentially be included in any other Article 3.3 or 3.4 activity under the rules in the first commitment period (see Sections 1.1, 1.2 and 2.12).

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129 This chapter includes generic and activity-specific methodological guidance on area identification, stratification
 130 and reporting; and estimation of carbon stock changes and non-CO₂ emissions and removals. Some new sections
 131 have been added and the existing guidance in Chapter 4 of *GPG LULUCF* has been extensively revised and
 132 expanded to reflect the changes stemming from Decision 2/CMP.7 and the use of the *2006 IPCC Guidelines*.
 133 Main changes include:

- 134 (i) Revision of the section on “Disturbances” (Section 2.3.9; Section 4.2.3.6 in Chapter 4 of *GPG-*
 135 *LULUCF*) in the light of the new rules regarding the treatment of emissions from natural
 136 disturbances in ARD and FM lands;
- 137 (ii) Addition of new sections on Forest Management Reference Levels (FMRL) (Section 2.7.5),
 138 Technical Corrections (Section 2.7.6) and Carbon Equivalent Forests (Section 2.7.7);
- 139 (iii) Addition of a new section on Harvested Wood Products (HWP) (Section 2.8);
- 140 (iv) Addition of a new section on Wetland Drainage and Rewetting (WDR) (Section 2.12).

141 Table 2 shows the Table of Contents of the *KP Supplement*. The new sections are shown by an asterisk (*).
 142

TABLE 2 TABLE OF CONTENTS OF THE <i>KP SUPPLEMENT</i>	
Chapter	Contents
Chapter 1: Introduction	1.1 Introduction 1.2 Overview of steps to estimating and reporting supplementary information for activities under Articles 3.3, 3.4 and 6 1.2 General rules for categorisation of land areas under Articles 3.3 and 3.4 1.3 Relationship between Annex I Parties’ national inventories and Article 6 LULUCF projects
Chapter 2: Methods for estimation, measurement, monitoring and reporting of LULUCF activities under Articles 3.3 and 3.4	2.1 Relationship between UNFCCC land-use categories and Kyoto Protocol (Articles 3.3 and 3.4) land-use categories 2.2 Generic methodologies for area identification, stratification and reporting 2.2.1 Reporting requirements 2.2.2 Reporting Methods for Lands subject to Article 3.3 and Article 3.4 activities 2.2.3 Reporting Methods for Lands subject to Additional Accounting Provisions for CP2 and beyond* 2.2.4 Relationship between Approaches in Chapter 3, Volume 4 of the <i>2006 IPCC Guidelines</i> and Reporting methods in Section 2.2.2 2.2.5 Choice of Reporting Method 2.2.6 How to identify lands in general 2.3 Generic Methodological Issues for Estimating Carbon Stock Changes and Non-CO ₂ Greenhouse Gas Emissions 2.3.1 Pools to be reported 2.3.2 Years for which to estimate carbon stock changes and non-CO ₂ greenhouse gas emissions 2.3.3 Correct implementation of C stock change estimation methods when areas are changing* 2.3.4 Relationship between measurement and reporting intervals 2.3.5 Interannual Variability* 2.3.6 Choice of method 2.3.7 Factoring out indirect, natural and pre-1990 effects 2.3.8 Reference Levels* 2.3.9 Disturbances 2.4 Other generic methodological issues 2.4.1 Developing a consistent time series 2.4.2 Recalculation of Time Series* 2.4.3 Uncertainty assessment 2.4.4 Reporting and documentation 2.4.5 Quality assurance and quality control

	2.4.6	Verification
2.5		Afforestation and Reforestation
	2.5.1	Definitional issues and reporting requirements
	2.5.2	Choice of methods for identifying units of land subject to direct human-induced Afforestation/ Reforestation
	2.5.3	Choice of methods for estimating carbon stock changes and non-CO ₂ emissions
2.6		Deforestation
	2.6.1	Definitional issues and reporting requirements
	2.6.2	Choice of methods for identifying units of land subject to direct human-induced Deforestation
	2.6.3	Choice of methods for estimating carbon stock changes and non-CO ₂ emissions
2.7		Forest Management
	2.7.1	Definitional issues and reporting requirements
	2.7.2	Choice of methods for identifying lands subject to Forest Management
	2.7.3	Choice of methods for estimating carbon stock changes and non-CO ₂ emissions
	2.7.4	Methods to address natural disturbance*
	2.7.5	Forest Management Reference Levels*
	2.7.6	Technical Corrections for accounting purposes*
	2.7.7	Carbon Equivalent Forests*
2.8		Harvested Wood Products (HWP)*
	2.8.1	Initial steps to estimate HWP contribution*
	2.8.2	Tier 1: "Instantaneous oxidation"*
	2.8.3	Tier 2: First order decay*
	2.8.4	Tier 3: Country-specific methods*
	2.8.5	Consideration of the HWP pool in FMRLs*
	2.8.6	Uncertainty assessment*
	2.8.7	Quality assurance/Quality control*
2.9		Cropland Management
	2.9.1	Definitional issues and reporting requirements
	2.9.2	Base year
	2.9.3	Choice of methods for identifying lands subject to Cropland Management activities
	2.9.4	Choice of methods for estimating carbon stock changes and non-CO ₂ greenhouse gas emissions
2.10		Grazing land management
	2.10.1	Definitional issues and reporting requirements
	2.10.2	Base year
	2.10.3	Choice of methods for identifying lands subjected to Grazing Land Management
	2.10.4	Choice of methods for estimating carbon stock changes and non-CO ₂ greenhouse gas emissions
2.11		Revegetation
	2.11.1	Definitional issues and reporting requirements
	2.11.2	Base year
	2.11.3	Choice of methods for identifying lands
	2.11.4	Choice of methods for estimating carbon stock changes and non-CO ₂ greenhouse gas emissions
2.12		Wetland drainage and rewetting*
	2.12.1	Definitional issues and reporting requirements*
	2.12.2	Choice of methods for identifying lands*
	2.12.3	Choice of methods for estimating greenhouse gas emissions and removals*

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*New sections added to the *KP Supplement*.

143 5 POLICY RELEVANCE

144 For Kyoto Protocol reporting, *KP Supplement* aims to provide policy-neutral scientific operationalization of the
145 agreement set out in Decision 2/CMP.7. On some specific points, the *KP Supplement*:

- 146 • Provides guidance on *estimating* and reporting anthropogenic *emissions and removals*. It does not deal with
147 *accounting*, which covers the rules by which the UNFCCC uses reported information to assess how Parties
148 are complying with commitments, except in so far as accounting rules need to be reflected in guidance on
149 emissions and removals estimation and reporting. The *Supplement* aims to be consistent with Decisions of
150 the CMP but not to extend them. The word *shall* is therefore only used when Decisions are quoted directly.
- 151 • Combines the concepts of *units of land* and *land*. Chapter 4 of the *GPG-LULUCF* uses the former in the
152 context of Art 3.3 activities and the latter in the context of Art 3.4. This reflects the usage in Decisions
153 15/CMP.1 and 16/CMP1, but the methodological treatment of land identification in Chapter 4 of the *GPG-*
154 *LULUCF* is the same in both cases, so uniting the concepts simplifies the text and avoids the impression that
155 Parties need to treat the cases differently, which would increase costs.
- 156 • Recognises that whilst the definition of forest adopted by 16/CMP.1 and taken over by 2/CMP.7 for the
157 second commitment period, is based on area, tree height and canopy cover thresholds, in implementing this
158 definition many countries, consistent with information that they report to FAO, do not count as forested,
159 land which meets these definitions but is predominantly under agricultural or urban land use. The *KP*
160 *Supplement* provides guidance in the case that a pure threshold definition is applied, and also in the case that
161 predominant land use is taken into account. This guidance is to ensure transparency in the criteria adopted
162 for land identification, consistency in their application, and consistency with categories reported previously.
- 163 • Also on definitions, the *KP Supplement* continues to use the date of 31 December 1989 in the definition of
164 Reforestation for the second commitment period, but recognises there are continuing discussions on this
165 question. The methodologies are flexible enough to accommodate possible outcomes of discussions on this
166 question.
- 167 • Clarifies the guidance on hierarchies between Art 3.3 and 3.4 activities, but maintains the prioritisation in
168 the ordering of Deforestation under Art 3.3. This has the consequence (revealed by secondary classification)
169 that Deforestation land can contain trees, if it has been subsequently reforested. The approach shows
170 transparently the sequences that have occurred.
- 171 • On the disturbance provisions, provides guidance that all emissions and removals on land affected would
172 need to be removed from accounting unless there is land-use change or salvage logging. This is consistent
173 with Decision 2/CMP.7 and reflects the difficulty in practice of separating on any particular land the
174 emissions and removals due to a disturbance from other emissions and removals.
- 175 • Avoids making judgements about rules beyond the second commitment period, for example concerning land
176 use change occurring after the end of the second commitment period on land to which natural disturbance
177 provisions were applied, and hence emissions excluded, during the second commitment period.

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