

2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol

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Task Force on National Greenhouse Gas Inventories

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Foreword

Recognizing the problem of global climate change, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) co-established in 1988 the Intergovernmental Panel on Climate Change (IPCC). One of the IPCC's activities is to support the UN Framework Convention on Climate Change (UNFCCC) through its work on methodologies for national greenhouse gas inventories.

The *2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol (KP Supplement)* provides supplementary methods and *good practice* guidance for estimating anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry (LULUCF) activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol for the second commitment period. It revises and updates Chapter 4 of the *Good Practice Guidance for Land Use, Land-Use Change and Forestry (GPG-LULUCF)*¹. This provides supplementary methods and *good practice* guidance related to LULUCF activities based on the general greenhouse gas inventory guidance provided in its other chapters and the rules governing the treatment of LULUCF activities in the first commitment period of the Kyoto Protocol.

In December 2011, the Parties to the Kyoto Protocol to the UNFCCC invited the IPCC to review and, if necessary, update supplementary methodologies for estimating anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from LULUCF activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, related to the annex to decision 2/CMP.7², on the basis of, *inter alia*, Chapter 4 of the *GPG-LULUCF*. In response, the IPCC at its 35th Session in Geneva (June 2012) decided to produce the *KP Supplement* by October 2013 agreeing the Terms of Reference, Table of Contents and work plan. According to the work plan, the work on the production of the *KP Supplement* was carried out by the Task Force on National Greenhouse Gas Inventories (TFI) in 2012 and 2013. The Overview Chapter of the *KP Supplement* was adopted and the entire report was accepted at the 37th Session of IPCC held in Batumi, Georgia (October 2013).

The development of the *KP Supplement* has been made possible by the enormous contribution made by the Coordinating Lead Authors, Lead Authors and Contributing Authors – a total of 71 authors worldwide – through their exceptional knowledge, expertise and hard work. A total of nine Review Editors oversaw the IPCC review process. We wish to thank them for their commitment, time and efforts in preparing this report. As with all the IPCC Methodology Reports, this report has built upon the work of the previous IPCC Methodology Reports including the *GPG-LULUCF* and the *2006 IPCC Guidelines for National Greenhouse Gas Inventories (2006 IPCC Guidelines)*³. We are pleased to acknowledge our debt to all those who contributed to those reports.

The Steering Group, consisting of IPCC TFI Co-Chairs Takahiko Hiraishi (Japan) and Thelma Krug (Brazil) together with Rizaldi Boer (Indonesia), Sergio González Martineaux (Chile), Jim Penman (UK), Robert Sturgiss (Australia), Nalin Srivastava (TFI Technical Support Unit (TFI-TSU)), Kiyoto Tanabe (TFI-TSU) and Washington Zhakata (Zimbabwe), has guided the development of this report, ensuring its internal consistency as well as consistency with the *2006 IPCC Guidelines* and the *GPG-LULUCF*. We would wish to sincerely thank them for their considerable efforts in leading the task and providing strategic guidance. We express a high appreciation to the IPCC Task Force Bureau on National Greenhouse Gas Inventories (TFB) for their overall guidance and oversight.

The Lead Author meetings were held in Kobe (Japan); Wollongong (Australia); Oslo (Norway) and Chiang Mai (Thailand). We would like to thank the host countries and agencies for organising these meetings. We would also like to thank all governments that supported authors and reviewers for their contribution, without which the production of this report might not have been possible.

¹ 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., Wagner F., *Good Practice Guidance for Land Use, land-Use Change and Forestry* IPCC/IGES, Hayama, Japan.

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

³ Intergovernmental Panel on Climate Change (IPCC) (2006), Eggleston H.S., Buendia L., Miwa K., Ngara T. and Tanabe K. (eds.), *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, Prepared by the National Greenhouse Gas Inventories Programme. IPCC/IGES, Hayama, Japan

A comprehensive review is an important element of the IPCC process. The *KP Supplement* underwent two rounds of review, followed by a round of submission of written comments by governments in 2013. The review of the First Order Draft received over 2500 comments from 93 expert reviewers while the review of Second Order Draft received more than 1600 comments from expert reviewers and 18 governments. The Final Draft received over 300 comments from 14 governments. The review comments from both governments and expert reviewers, have contributed greatly to the quality of the final report and we wish to sincerely thank them for their time and efforts.

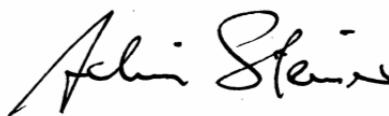
In addition, the TFI-TSU (Head: Kiyoto Tanabe; Deputy Head; Nalin Srivastava; Programme Officers: Baasansuren Jamsranjav, Maya Fukuda and Tiffany Troxler; Administrative Assistant: Koh Mikuni; Secretary: Eriko Nakamura; and IT Officer: Toru Matsumoto) has made an invaluable contribution to the development of the *KP Supplement* by providing technical and organisational support to the project. Apart from working tirelessly to organise meetings and reviews, they worked extensively with the authors, especially in editing of the drafts and preparation of the final version, to deliver high quality outputs in a very challenging time frame. We wish to congratulate them and sincerely thank them for their exemplary work. Thanks are also due to the former TSU Head, Simon Eggleston, who led the TSU work on the development of the *KP Supplement* in its early stages. We would also like to express our gratitude to the Government of Japan, for its generous support of the TFI-TSU, without which this report might not have been completed. We would also like to thank the Institute for Global Environmental Strategies (IGES) for hosting the TFI-TSU.

We would also like to thank the IPCC Secretariat, led by the Secretary, Renate Christ, for their continued assistance and support in enabling this project to meet its tight deadlines.

Finally we would like to thank the IPCC Chair Rajendra Pachauri for his support and guidance.



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Preface

The *2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol (KP Supplement)* provides supplementary methods for estimating anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry (LULUCF) activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol for the second commitment period.

This report will assist, in particular, Annex I Parties to the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) in reporting supplementary information relating to anthropogenic emissions by sources and removals by sinks of carbon dioxide and other greenhouse gases associated with LULUCF activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.

The *KP Supplement* builds on methods and guidance provided in the *2006 IPCC Guidelines* that have been agreed for use for reporting from 2015 by Annex I Parties to the UNFCCC and the Kyoto Protocol. The *KP Supplement* will be used in conjunction with the *2006 IPCC Guidelines* and with the *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*⁴ that has also been produced alongside the *KP Supplement* by the IPCC Task Force on National Greenhouse Gas Inventories (TFI).

We would like to thank all the authors as well as reviewers, Review Editors, the Steering Group and IPCC Task Force Bureau on National Greenhouse Gas Inventories (TFB) for their great contribution to this task. We would also like to thank all the governments who contributed by hosting meetings (Kobe, Japan; Wollongong, Australia; Oslo, Norway; and Chiang Mai, Thailand) as well as those who supported authors and other contributors. Finally we would like to express our gratitude to the TFI Technical Support Unit and the IPCC Secretariat for their invaluable support throughout the entire process of drafting and producing this report.



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⁴ Intergovernmental Panel on Climate Change (IPCC) (2014), Hiraishi, T., Krug, T., Tanabe, K., Srivastava, N., Baasansuren, J., Fukuda, M., Troxler, T.G. (eds), *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. Published: IPCC, Switzerland.