

Decision 2/CMP.7

Land use, land-use change and forestry

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

Affirming that the implementation of land use, land-use change and forestry activities included under the provisions of the Kyoto Protocol shall be consistent with the objectives and principles of, and any decisions taken under, the Convention and its Kyoto Protocol,

Also affirming that forests are systems of life that have multiple and integral functions and consist of communities of diverse, interrelated and interdependent components,

Having considered decision 16/CMP.1,

Recalling decision 2/CMP.6,

1. *Affirms* that the principles contained in decision 16/CMP.1, paragraph 1, continue to govern the treatment of land use, land-use change and forestry activities in the second and subsequent commitment periods of the Kyoto Protocol;
2. *Decides* that anthropogenic greenhouse gas emissions by sources and removals by sinks shall be accounted for in accordance with the principles and definitions referred to in decision 2/CMP.6, paragraphs 1 and 2, and in accordance with the annex to this decision;
3. *Also decides* that the information referred to in paragraph 2 above shall be reviewed in accordance with relevant decisions under Article 8 of the Kyoto Protocol;
4. *Agrees* to consider, at its eighth session, the need to revise decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol that are relevant to the annex to this decision, including those related to reporting and review under Articles 5, 7 and 8 of the Kyoto Protocol;
5. *Requests* the Subsidiary Body for Scientific and Technological Advice to initiate a work programme to explore more comprehensive accounting of anthropogenic emissions by sources and removals by sinks from land use, land-use change and forestry, including through a more inclusive activity-based approach or a land-based approach, and to report to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its ninth session on the outcomes of this work programme;
6. *Also requests* the Subsidiary Body for Scientific and Technological Advice to initiate a work programme to consider and, as appropriate, develop and recommend modalities and procedures for possible additional land use, land-use change and forestry activities under the clean development mechanism with a view to forwarding a draft decision on this matter to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol for adoption at its ninth session;
7. *Further requests* the Subsidiary Body for Scientific and Technological Advice to initiate a work programme to consider and, as appropriate, develop and recommend modalities and procedures for alternative approaches to addressing the risk of non-permanence under the clean development mechanism with a view to forwarding a draft decision on this matter to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol for adoption at its ninth session;

8. *Invites* the Intergovernmental Panel on Climate Change to review and, if necessary, update supplementary methodologies for estimating anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, related to the annex to this decision, on the basis of, inter alia, chapter 4 of its *Good Practice Guidance for Land Use, Land-Use Change and Forestry*;
9. *Requests* the Subsidiary Body for Scientific and Technological Advice to consider, following the completion of the methodological work by the Intergovernmental Panel on Climate Change outlined in paragraph 8 above, any supplementary methodologies related to the annex to this decision, with a view to forwarding a draft decision on this matter to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol for adoption at its tenth session;
10. *Also requests* the Subsidiary Body for Scientific and Technological Advice to initiate a work programme to develop and recommend modalities and procedures for applying the concept of additionality, with a view to forwarding a draft decision on this matter to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol for adoption at its ninth session;
11. *Adopts* the definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the Kyoto Protocol contained in the annex to this decision for application in the second commitment period.

Annex

Definitions, modalities, rules and guidelines relating to land use, land-use change and forestry activities under the Kyoto Protocol

A. Definitions

1. For land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol, the following definitions, in addition to those contained in decision 16/CMP.1 and referred to in decision 2/CMP.6, paragraph 2, shall apply:

(a) “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 and/or geological disturbances, beyond the control of, and not materially influenced by, a Party. These exclude harvesting and prescribed burning;

(b) “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 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.

B. Article 3, paragraph 3

2. For the purposes of Article 3, paragraph 3, eligible activities are those direct human-induced afforestation, reforestation and/or deforestation activities that meet the requirements set forth in this annex and that started on or after 1 January 1990 and before 31 December of the last year of the commitment period.

3. For the purposes of determining the area of deforestation to come under the accounting system under Article 3, paragraph 3, each Party shall determine the forest area using the same spatial assessment unit as is used for the determination of afforestation and reforestation, but this must be not larger than 1 hectare.

4. Each Party included in Annex I shall report, in accordance with Article 7, on how harvesting or forest disturbance that is followed by the re-establishment of a forest is distinguished from deforestation. This information will be subject to review in accordance with Article 8.

5. Each Party included in Annex I shall report and account for, in accordance with Article 7, all emissions arising from the conversion of natural forests to planted forests.

C. Article 3, paragraph 4

6. A Party included in Annex I may choose to account for anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from any or all of the following

activities: revegetation, cropland management, grazing land management, and wetland drainage and rewetting.

7. All Parties included in Annex I shall account for anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from the following: any activity under Article 3, paragraph 4, elected in the first commitment period, and forest management.

8. A Party included in Annex I wishing to account for elected activities under Article 3, paragraph 4, in the second commitment period shall identify, in its report to enable the establishment of its assigned amount pursuant to Article 3, paragraphs 7 and 8, or any amendments thereto, the activities under Article 3, paragraph 4, that it elects to include in its accounting for the second commitment period. Upon election, a decision by a Party will be fixed for the second commitment period.

9. During the second commitment period, a Party included in Annex I shall demonstrate that activities referred to in paragraph 6 above, in addition to those already selected for the first commitment period, have occurred since 1990 and are human-induced. A Party included in Annex I shall not account for emissions by sources and removals by sinks resulting from activities under Article 3, paragraph 4, if these are already accounted for under Article 3, paragraph 3.

10. For the second commitment period, accountable anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from revegetation, cropland management, grazing land management, and wetland drainage and rewetting under Article 3, paragraph 4, shall be equal to anthropogenic greenhouse gas emissions by sources and removals by sinks in the commitment period, less the duration of the commitment period in years times the anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from these eligible activities in the base year of that Party, while avoiding double accounting.

11. Accounting for wetland drainage and rewetting shall be based on estimation methodologies for wetlands, lands converted to wetlands and land use on drained organic soils in the Intergovernmental Panel on Climate Change (IPCC) guidelines most recently adopted or encouraged by the Conference of the Parties, and any subsequent clarifications agreed by the Conference of the Parties.

12. For the second commitment period, accountable anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from forest management under Article 3, paragraph 4, shall be equal to anthropogenic greenhouse gas emissions by sources and removals by sinks in the commitment period, less the duration of the commitment period in years times the reference level inscribed in the appendix.¹

13. For the second commitment period, additions to the assigned amount of a Party resulting from forest management under Article 3, paragraph 4, and from forest management project activities undertaken under Article 6, shall not exceed 3.5 per cent of the base year greenhouse gas emissions excluding land use, land-use change and forestry

¹ The forest management reference levels inscribed in the appendix to this annex were set transparently, taking into account: (a) removals or emissions from forest management as shown in greenhouse gas inventories and relevant historical data; (b) age-class structure; (c) forest management activities already undertaken; (d) projected forest management activities under business as usual; (e) continuity with the treatment of forest management in the first commitment period; and (f) the need to exclude removals from accounting in accordance with decision 16/CMP.1, paragraph 1. Points (c), (d) and (e) above were applied where relevant. The forest management reference levels also took into account the need for consistency with the inclusion of carbon pools and the provisions for addressing natural disturbances contained in paragraphs 33–35 below.

pursuant to Article 3, paragraphs 7 and 8, or any amendments thereto, times the duration of the commitment period in years.

14. When accounting for forest management, Annex I Parties shall demonstrate methodological consistency between the reference level and reporting for forest management during the second commitment period, including in the area accounted for, in the treatment of harvested wood products, and in the accounting of any emissions from natural disturbances. Parties shall make technical corrections, if necessary, to ensure consistency, including applying IPCC methods for ensuring time-series consistency (e.g. overlap with historical data) and shall report on how these corrections were made. Information on technical corrections and methodological consistency shall be reported as part of the annual greenhouse gas inventories and inventory reports, in accordance with relevant decisions under Articles 5 and 7 of the Kyoto Protocol, and reviewed as part of the review of the annual greenhouse gas inventory review in accordance with relevant decisions under Article 8 of the Kyoto Protocol.

15. After adoption of the reference level for forest management, if the reported data on forest management or forest land remaining forest land used to establish the reference level are subject to recalculations, a technical correction shall be applied to include in the accounting the impact of the recalculations on the reported data that have been used by the Party to set the reference level.

16. Emissions that occur during the second commitment period from harvested wood products removed from forests prior to the start of the second commitment period shall also be accounted for. In the case the forest management reference level is based on a projection, a Party may choose not to account for the emissions from harvested wood products originating from forests prior to the start of the second commitment period, and shall ensure consistency in the treatment of the harvested wood products pool in the second commitment period in accordance with paragraph 14 above. Emissions from harvested wood products already accounted for during the first commitment period on the basis of instantaneous oxidation shall be excluded. The treatment of harvested wood products in the construction of a projected forest management reference level shall be on the basis of provisions outlined in paragraph 29 below and shall not be on the basis of instantaneous oxidation.²

D. Article 12

17. Afforestation and reforestation are eligible project activities under the clean development mechanism in the second commitment period. Activities additional to afforestation and reforestation will be eligible if agreed by any future decision of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

18. The modalities and procedures contained in decision 5/CMP.1 for afforestation and reforestation project activities under the clean development mechanism, and in decision 6/CMP.1 for small-scale afforestation and reforestation project activities under the clean development mechanism, shall apply, *mutatis mutandis*, to the second commitment period. Alternative approaches to addressing the risk of non-permanence may apply in accordance with any future decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol.

19. For the second commitment period, the total of additions to a Party's assigned amount resulting from afforestation and reforestation project activities under Article 12

² Taking in to account the provisions of paragraph 32 below.

shall not exceed one per cent of the base year emissions of that Party, times the duration of the commitment period in years.

E. General

20. Each Party included in Annex I shall, for the purpose of applying the definition of “forest” as contained in decision 16/CMP.1, apply the definition of forest selected in the first commitment period.

21. Those Parties included in Annex I that did not select a definition of forest for the first commitment period shall, for the purpose of applying the definition of “forest” as contained in decision 16/CMP.1, select a single minimum tree crown cover value of between 10 and 30 per cent, a single minimum land area value of between 0.05 and 1 hectare and a single minimum tree height value of between 2 and 5 metres.

22. For the second commitment period, and subject to other provisions in this annex, the additions to and subtractions from the assigned amount of a Party pursuant to Article 3, paragraphs 7 and 8, or any amendments thereto, shall be equal to anthropogenic greenhouse gas emissions by sources and removals by sinks measured as verifiable changes in carbon stocks, and to non-carbon dioxide greenhouse gas emissions during the commitment period resulting from afforestation, reforestation and deforestation under Article 3, paragraph 3, that have taken place since 1 January 1990. Where the result of this calculation is a net sink of greenhouse gases, this value shall be added to the assigned amount of that Party. Where the result of this calculation is a net source of greenhouse gas emissions, this value shall be subtracted from the assigned amount of that Party.

23. The accounting of anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, shall begin with the onset of the activity or the beginning of the commitment period, whichever comes later.

24. Once land is accounted for under Article 3, paragraphs 3 and 4, this land must be accounted for throughout subsequent and contiguous commitment periods.

25. National inventory systems established under Article 5, paragraph 1, shall ensure that areas of land subject to land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, are identifiable, and information on these areas shall be provided by each Party included in Annex I in their national inventories in accordance with Article 7. Such information will be reviewed in accordance with Article 8.

26. Each Party included in Annex I shall account for all changes in the following carbon pools: above-ground biomass, below-ground biomass, litter, dead wood, soil organic carbon and harvested wood products.³ With the exception of harvested wood products, a Party may choose not to account for a given pool in a commitment period, if transparent and verifiable information is provided that demonstrates that the pool is not a source.

27. Emissions from harvested wood products removed from forests which are accounted for by a Party under Article 3, paragraphs 3 and 4, shall be accounted for by that Party only. Imported harvested wood products, irrespective of their origin, shall not be accounted for by the importing Party.

28. Accounting shall be on the basis of instantaneous oxidation.

29. Notwithstanding paragraph 28 above, and provided that transparent and verifiable activity data for the harvested wood product categories specified below are available,

³ The accounting of this pool may be on the basis of instantaneous oxidation.

accounting shall be on the basis of the change in the harvested wood products pool during the second and subsequent commitment periods, estimated using the first-order decay function⁴ with default half-lives⁵ of two years for paper, 25 years for wood panels and 35 years for sawn wood.

30. A Party may use country-specific⁶ data to replace the default half-lives specified above, or to account for such products in accordance with the definitions and estimation methodologies in the most recently adopted IPCC guidelines and any subsequent clarifications agreed by the Conference of the Parties, provided that verifiable and transparent activity data are available and that the methodologies used are at least as detailed or accurate as those prescribed above.

31. Harvested wood products resulting from deforestation shall be accounted for on the basis of instantaneous oxidation.

32. Where carbon dioxide emissions from harvested wood products in solid waste disposal sites are separately accounted for, this shall be on the basis of instantaneous oxidation. Carbon dioxide emissions from wood harvested for energy purposes shall be accounted for on the basis of instantaneous oxidation.

33. With respect to the treatment of natural disturbances emissions:

(a) A Party shall indicate whether it intends to apply this provision to forest management under Article 3, paragraph 4, during the second commitment period, in which case it shall provide country-specific information in its national greenhouse gas inventory report for 2015 on a forest management background level⁷ of emissions associated with annual natural disturbances that have been included in its forest management reference level, how the background level has been estimated and information on how to avoid the expectation of net credits or net debits during the commitment period, including through the use of a margin, where a margin is needed.⁸ When accounting for forest management under Article 3, paragraph 4, and provided that requirements of paragraph 34 below are met, a Party may exclude from the accounting, either annually or at the end of the second commitment period, emissions from natural disturbances that in any single year exceed the forest management background level. Any subsequent removals during the commitment period on the lands affected shall also be excluded from the accounting. Parties may only exclude emissions from disturbances in years where those emissions are above the background level plus the margin, where a margin is needed;

⁴ Using equation 12.1 of the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, as a basis for estimating changes in the harvested wood products pool during a commitment period.

⁵ Half-lives are based on table 3a.1.3 of the *2003 IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry*.

⁶ In the case of exported harvested wood products, country-specific data refers to country-specific half-lives and harvested wood products usage in the importing country.

⁷ The background level can be defined as the average of a consistent and initially complete time series containing 1990–2009 emissions associated with natural disturbances after the application of an iterative process to remove outliers, based on twice the standard deviation around the mean until no outliers can be identified. Alternatively, Parties may apply a transparent and comparable country-specific approach using a consistent and initially complete time series of data including for the period containing 1990–2009. All approaches shall avoid the expectation of net credits during the commitment period. If a Party's forest management reference level does not include a background level of emissions, for the application of the background level as referred to in paragraph 33(a), a value for the background level would be estimated by applying the first approach mentioned above.

⁸ In the case that the background level is defined using the first approach in footnote 7, the margin would equal twice the standard deviation of the time series defining the background level. In the case that the background level is defined using a country-specific approach or the Party's reference level is zero, the Party must describe how a margin is established, where a margin is needed. All approaches shall avoid the expectation of net credits during the commitment period.

(b) A Party shall indicate whether it intends to apply this provision during the second commitment period to afforestation and reforestation under Article 3, paragraph 3, in which case it shall provide country-specific information in its national greenhouse gas inventory report for 2015 on an afforestation and reforestation background level of emissions associated with annual natural disturbances,⁹ how the background level has been estimated and information on how to avoid the expectation of net credits or net debits during the commitment period, including through the use of a margin, where a margin is needed. When accounting for afforestation and reforestation under Article 3, paragraph 3, and provided that the requirements of paragraph 34 below are met, a Party may exclude from the accounting, either annually or at the end of the second commitment period, emissions from natural disturbances that in any single year exceed the afforestation and reforestation background level. Any subsequent removals during the commitment period on the lands affected shall also be excluded from the accounting. Parties may only exclude emissions from disturbances in years where those emissions are above the background level plus the margin, where a margin is needed;

(c) Parties shall account for emissions associated with salvage logging;

(d) Parties shall not exclude from accounting emissions from natural disturbances on those lands that are subject to land-use change following the disturbance.

34. A Party included in Annex I that applies the provisions described in paragraph 33 above shall calculate the net emissions and removals subject to those provisions and shall provide transparent information:

(a) Showing that all lands subject to paragraph 33(a) and (b) above are identified, including their georeferenced location, year and types of disturbances;

(b) Showing how annual emissions resulting from disturbances and the subsequent removals in those areas are estimated;

(c) Showing that no land-use change has occurred on lands for which the provisions in paragraph 33 above are applied and explaining the methods and criteria for identifying any future land-use changes on those land areas during the commitment period;

(d) That demonstrates that the occurrences were beyond the control of, and not materially influenced by, the Party in the commitment period, by demonstrating practicable efforts to prevent, manage or control the occurrences that led to the application of the provisions contained in paragraph 33 above;

(e) That demonstrates efforts taken to rehabilitate, where practicable, the land for which the provisions in paragraph 33 above are applied;

(f) Showing that emissions associated with salvage logging were not excluded from accounting.

35. The supplementary information described in paragraph 34 above shall be included in the national greenhouse gas inventory reports of Parties that apply paragraph 33 above. All information and estimates referred to in paragraphs 33 and 34 above shall be subject to review as part of the periodical review of annual greenhouse gas inventory reports submitted by Parties.

36. The treatment of emissions and removals that occur on the lands referred to in paragraph 33 above in the subsequent commitment periods shall be reflected in land use, land-use change and forestry accounting for those commitment periods.

⁹ The afforestation and reforestation background level of emissions associated with disturbances and a margin, where a margin is needed, shall be calculated using a methodology consistent with the one used by the Party to calculate the forest management background level.

37. A Party included in Annex I may include in its accounting of forest management under Article 3, paragraph 4, anthropogenic greenhouse gas emissions by sources and removals by sinks resulting from the harvest and conversion of forest plantations, accounted for under forest management, to non-forest land, provided that all of the requirements below are met:

(a) The forest plantation was first established through direct human-induced planting and/or seeding of non-forest land before 1 January 1990, and, if the forest plantation was re-established, that this last occurred on forest land through direct human-induced planting and/or seeding after 1 January 1960;

(b) A new forest of at least equivalent area as the harvested forest plantation is established through direct human-induced planting and/or seeding of non-forested land that did not contain forest on 31 December 1989;

(c) This newly established forest will reach at least the equivalent carbon stock that was contained in the harvested forest plantation at the time of harvest, within the normal harvesting cycle of the harvested forest plantation, and, if not, a debit would be generated under Article 3, paragraph 4.

38. All lands and associated carbon pools subject to the provision described in paragraph 37 above shall be accounted for as forest management under Article 3, paragraph 4, and not under Article 3, paragraph 3.

39. All lands and associated carbon pools subject to paragraph 37 above shall be identified, monitored and reported, including the georeferenced location and year of conversion.

Appendix

<i>Party^a</i>	<i>Reference level (Mt CO₂ eq/year)^b</i>	<i>Applying first-order decay function for HWP</i>
Australia		4.700
Austria	-2.121	-6.516
Belarus	-30.020	
Belgium	-2.407	-2.499
Bulgaria	-8.168	-7.950
Canada	-70.600	-114.300
Croatia	-6.289	
Cyprus ^{c, d}	-0.164	-0.157
Czech Republic	-2.697	-4.686
Denmark	0.334	0.409
Estonia	-1.742	-2.741
European Union (27) ^{c, e}	-253.336	-306.736
Finland	-19.300	-20.466
France	-63.109	-67.410
Germany	-2.067	-22.418
Greece ^f	-1.830	
Hungary	-0.892	-1.000
Iceland	-0.154	

<i>Party^a</i>	<i>Reference level (Mt CO₂ eq/year)^b</i>	<i>Applying first-order decay function for HWP</i>
Ireland	-0.008	-0.142
Italy	-21.182	-22.166
Japan	0.00	
Latvia	-14.255	-16.302
Liechtenstein	-0.0025	0.0001
Lithuania	-4.139	-4.552
Luxembourg ^g	-0.418	
Malta ^{c, g}	-0.049	
Monaco ^h		
Netherlands	-1.464	-1.425
New Zealand	11.150	
Norway	-11.400	
Poland	-22.750	-27.133
Portugal	-6.480	-6.830
Romania ⁱ	-15.444	-15.793
Russian Federation	-116.300	
Slovakia	0.358	-1.084
Slovenia	-3.033	-3.171
Spain	-20.810	-23.100
Sweden	-36.057	-41.336
Switzerland	0.220	
Ukraine ^j	-48.700	
United Kingdom of Great Britain and Northern Ireland	-3.442	-8.268

Note: Parties have made different assumptions in the construction of the reference levels proposed in the appendix above. These assumptions are found in Parties' submissions (see <<http://unfccc.int/4907.php>>).

Abbreviation: HWP = harvested wood products.

^a Technical corrections will be made to include, if necessary, the treatment of natural disturbances and harvested wood products, or any other relevant provisions included in this annex.

^b Assuming instantaneous oxidation.

^c The European Union total includes Cyprus and Malta. Cyprus and Malta are member States of the European Union that are Parties to the Kyoto Protocol but without a commitment inscribed in Annex B to the Kyoto Protocol.

^d Cyprus did not prepare an individual submission and its data were included only in the technical assessment report for the European Union (FCCC/TAR/2011/EU).

^e In a communication to the secretariat dated 7 February 2012, the European Commission requested that the forest management reference level for the European Union be adjusted to reflect the sum of the numbers of its member States.

^f In a communication to the secretariat dated 7 February 2012, Greece noted that there is no estimate for their forest management reference level value applying the first-order decay function for harvested wood products and therefore it requested the removal of the estimate reflected in the table contained in document FCCC/KP/AWG/2011/L.3/Add.2.

^g Luxembourg and Malta did not prepare individual submissions and their data were included only in the technical assessment report for the European Union (FCCC/TAR/2011/EU). For both

Parties there were no estimates, which applied the first-order decay function for harvested wood products.

^h Monaco did not propose a forest management reference level due to its lack of forest land.

ⁱ Romania's forest management reference level (applying first-order decay function for harvested wood products) that was included in document FCCC/KP/AWG/2011/L.3/Add.2 was not updated in accordance with the revised value for instantaneous oxidation as contained in the technical assessment report for Romania (FCCC/TAR/2011/ROU). In a communication to the secretariat dated 19 December 2011, Romania requested that this revised forest management reference level be included in this table.

^j Ukraine's revised forest management reference level is a preliminary or interim estimate.

*10th plenary meeting
11 December 2011*