### Methodologies to assess GHG emission levels and global warming potentials under the Kyoto Protocol



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UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

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### Overview

- Methodologies under the Convention
- Methodologies under the **Kyoto Protocol**
- Global warming potentials under the **Kyoto Protocol**







# Methodologies under the Convention









### Methodological and reporting requirements (1)

- Articles 4 and 12 of the Convention
  - All Parties to develop, periodically update, publish and make available to the COP national inventories on GHG not controlled by the Montreal Protocol, using comparable methodologies, agreed by the COP

### • Article 7 of the Convention

 The COP to promote and guide, in accordance with the objective and provisions of the Convention, the development and periodic refinement of comparable methodologies, to be agreed on by the COP, inter alia, for preparing GHG inventories







### Methodological and reporting requirements (2)

- Article 4, paragraph 2(c)
  - Calculations of emissions by sources and removals by sinks of greenhouse gases should take into account the **best available** scientific knowledge
  - The COP shall consider and agree on methodologies for these calculations at its first session and **review them regularly** thereafter







### **Methodological and** reporting requirements (3)

- COP decisions on reporting and review
  - Annex I Parties
    - Annual submission of GHG inventory (on 15 April), decisions 3/CP.1, 18/CP.8 and 14/CP.11
    - Annual review GHG inventory decisions 6/CP.5 and 19/CP.8
  - Non-Annex I Parties
    - Inventory reporting in the national communication, decision 17/CP.8

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## **Existing methodological**

### framework (1)

- Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories (1996), decision 2/CP.3
  - Mandatory for all Parties
- IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (2000)
  - Conclusions by SBSTA12 and decision 18/CP.8 that operationalize them
  - Mandatory for Annex I Parties
  - Non-Annex I Parties encouraged to use

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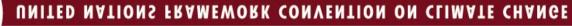




## Existing methodological framework (2)

- IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry (2003), decision 13/CP.9
  - Mandatory for Annex I Parties as of 2005
  - Non-Annex I Parties encouraged to use











–Parties can use the available methodologies; need to be justified

–Have to report in current reporting framework and **not** the framework of the 2006 IPCC guidelines

#### •Consideration by SBSTA 28

–Annex I Parties to gain experience with the use of methodologies in the 2006 IPCC guidelines

–SBSTA 30 to continue the consideration of these guidelines taking into account the experience gained by the Parties in applying them

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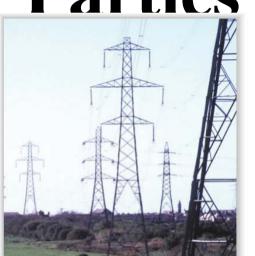




## Methodologies under the Kyoto Protocol for Annex I















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### **Kyoto Protocol requirements**

- Article 5, paragraph 2
  - Methodologies for estimating GHG emissions by sources and removals by sinks of all gases not controlled by the Montreal Protocol shall be those accepted by the IPCC and agreed upon by the COP3
  - CMP to regularly review and revise such methodologies taking into account COP decisions
- Reporting requirements under the Protocol build upon the Convention reporting requirements, decision 2/CP.3





- Overall methodological and reporting requirements, decision 15/CMP.1
  - Annex I Parties to prepare their annual inventories in accordance with Article 5, paragraph 2, and submit them in accordance with CMP and COP decisions







### CMP decisions on methodologies for the LULUCF sector

- Decisions 16/CMP.1
  - Use of the Revised 1996 IPCC Guidelines and any future elaboration of them and any good practice guidance on LULUCF in accordance with COP and CMP decisions
- Decision 17/CMP.1 and 15/CP.10
  - Use of the IPCC GPG for Article 3, paragraph 3 and 4 activities





## Global warming potentials (GWP) under the Kyoto Protocol for Annex I Parties







### Article 5, paragraph 2, on GWPs

- The GWP to calculate the CO<sub>2</sub>eq of GHG emissions listed in Annex A shall be those accepted by the IPCC and agreed by COP3
- The CMP to **regularly review** and, as appropriate, **revise** the GWP for each GHG based on the work of, *inter alia*, the IPCC and advice provided by the SBSTA taking into account COP decisions
- Any revision to a GWP to apply only:
  - To commitments under Article 3
  - In any commitment period subsequent to the revision





## **GWP for the first commitment period**



- *Reaffirms* that GWP used by Parties should be those provided by the IPCC SAR ("1995 IPCC GWP values")
- Based on the effects of the GHG over a 100-year time horizon
- Takes into account the inherent and complicated uncertainties involved in GWP
- For information purposes only, Parties may use another time horizon, as provided in the IPCC SAR









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