



Terra **prima**

ist spin-off

# Carbon Accounting and Carbon Neutrality

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CEPI – European Paper Week

**Assessing the legitimacy of promoting the carbon neutrality of biomass**

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# IPCC Provides rules for reporting Emissions, but does not define Carbon Neutrality of Biomass

- CO<sub>2</sub> emissions from biomass burning are not counted in the total of the energy sector
  - This reporting approach was later “rebranded” by others as *carbon neutrality*
  - IPCC never claimed that biomass burning has no emissions, nor have they made any incentives (or disincentives) of this mitigation practice: **the IPCC is policy neutral**
  - In reality this is a solution for avoiding double counting of the same emissions: **emissions from biomass burning are reported in the land sector and should not be counted twice**

# Reporting under the UNFCCC



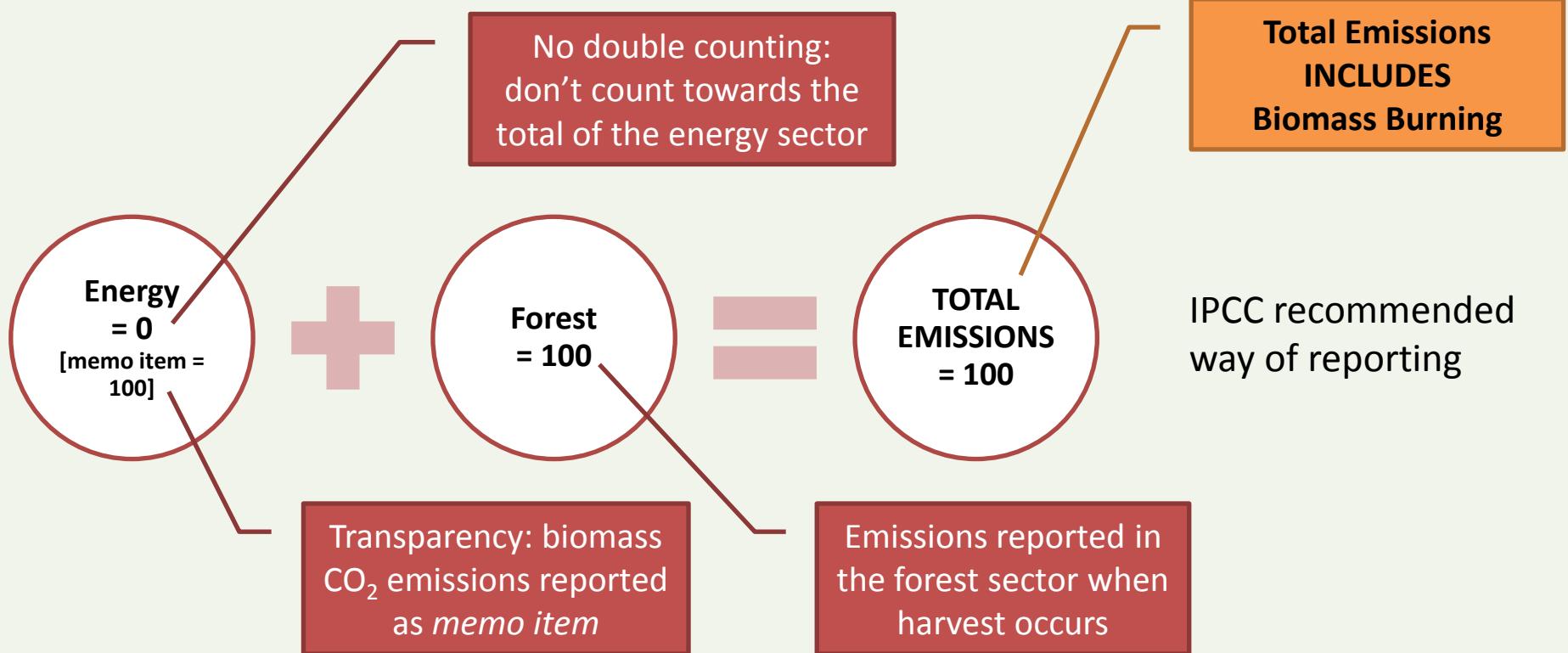
Each emission source is allocated to a specific sector

**Important IPCC Principle: NO DOUBLE COUNTING**

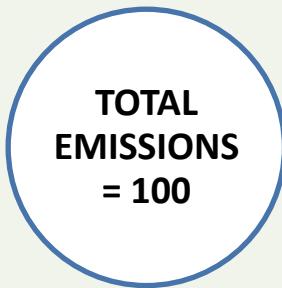
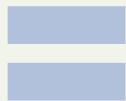
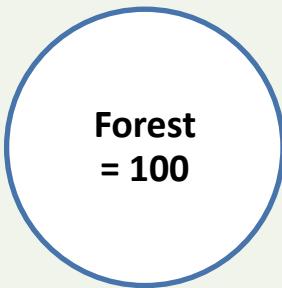
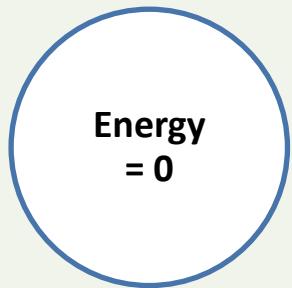
**General rule:** emissions are reported in the sector where they occur

**Exception:** biomass CO<sub>2</sub> emissions: emissions reported in the AFOLU sector  
(instead of energy or waste)

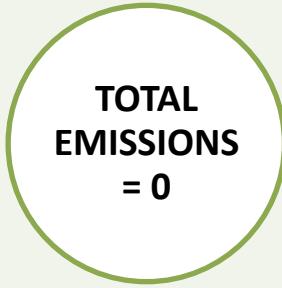
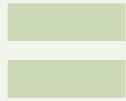
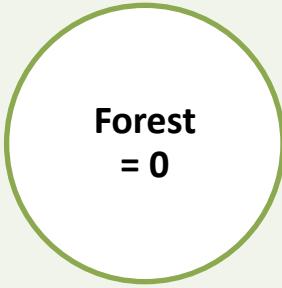
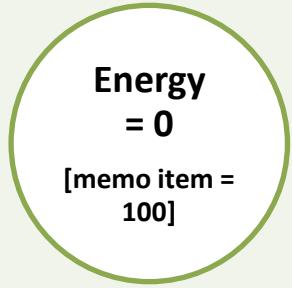
# Emissions from biomass **ARE ALWAYS** reported



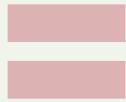
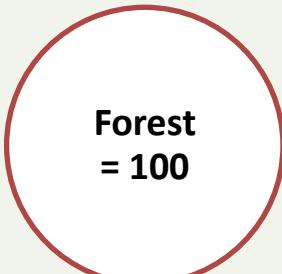
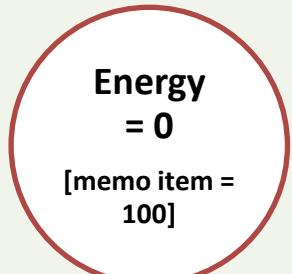
# What if wood is imported or exported?



Biomass exporter



Biomass importer



Globally biomass emissions are still fully reported

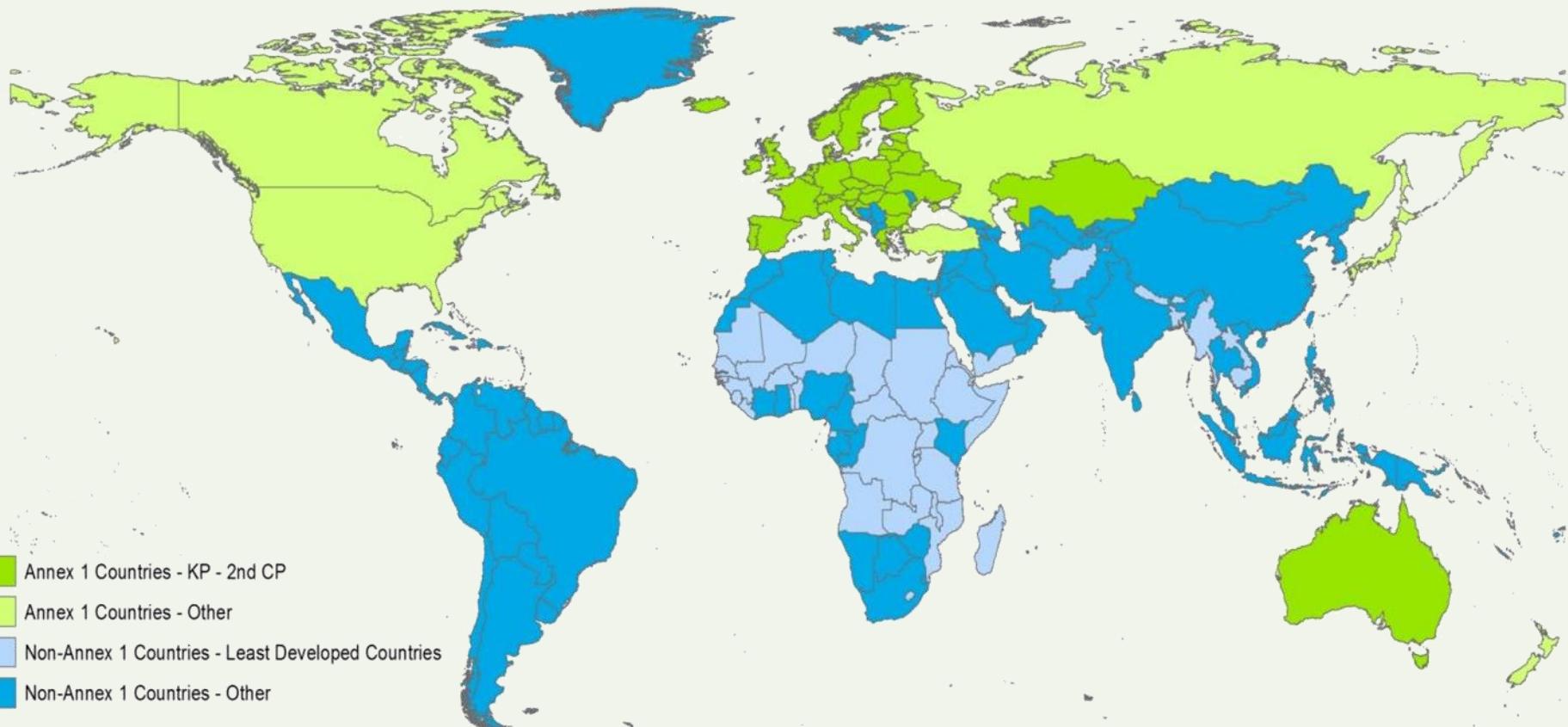
# GHG Reporting is NOT GHG Accounting

- ***Reporting*** accumulating, organising, storing, and accessing the information on activity data, emission factors and calculation formulae, which is needed for two purposes:
  - Describing the amount and trends in emissions and removals of a particular country, sector, gas, etc.
  - Assessing the quantities that are relevant for accounting
- ***Accounting*** comparing the reported quantities with a pre-defined standard or emission target, a comparison which is made using a pre-defined set of accounting rules

# Accounting under the Kyoto Protocol

- Kyoto Protocol
  - CO2 Biomass Energy Emissions  
MEMO ITEM (i.e. It doesn't add to the total of the energy)
  - Forest and Land Sector Emissions  
partially accounted:
    - Wood produced in KP/ANNEX 1 Countries fully accounted for (this is most of the biomass produced in Europe)
    - Some minor domestic biomass sources are not accounted for (e.g. biomass from pruning in urban areas or permanent crops)
    - Importing from countries outside the KP is not accounted for

# The KP World Map

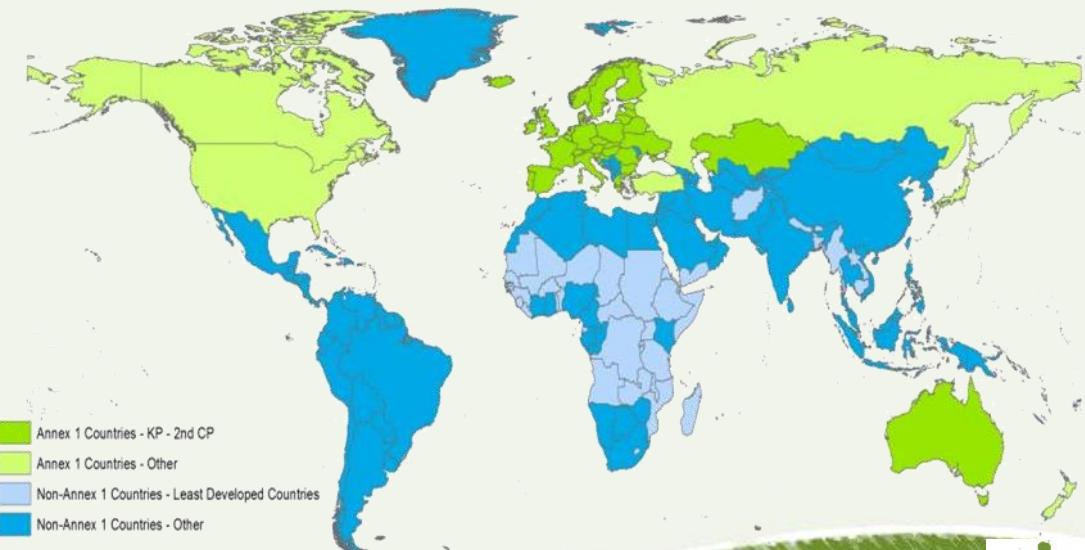


# Conclusions

- Accounting (**≠**Reporting) for CO<sub>2</sub> emissions from biomass as zero in the energy sector is only acceptable if *those emissions are being accounted by someone, somewhere, in the global accounting system*
  - This holds true even without any considerations on sustainability
    - If *unsustainable forest practices* are being held, the country where those practices occur shall account for those emissions
    - Note that considering the sustainability of the practices is relevant for developing good climate policy, but not for Carbon accounting

# Conclusions

- The current KP accounting system does a good approximation of this ideal,
  - But only for KP Annex 1 countries (EU included)
  - AND provided that most of the wood comes from KP Annex 1 Parties



# Consequences for the future Global and EU climate policy

- There are two consequences for the future climate discussions
  - As more countries take on international targets that include forest emissions, the smaller the potential problem is
  - As more activities (or land uses) are integrated into the accounting system, the smaller the amount of biomass harvests that is not captured by the accounting system
- Not accounting for LULUCF (or AFOLU) **in any way** undermines the legitimacy of reporting biomass as zero emissions in the energy sector
  - In this case, this legitimacy for reporting zero can only be sustained by making solid proof of sustainability and carbon neutrality (in the science sense of the term) of wood sources that are being used
  - In this case, reporting zero emissions for biomass burning would always be a political artefact favouring a particular technology

# Thank you

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