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# Key aspects for incentivizing land sector accounting rules under the Paris Agreement

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# Paris Agreement Work Programme

- In accordance to the Paris Agreement Work Programme all rules and procedures for the implementation of the Paris Agreement (PA) should be developed and adopted by the Conference of the Parties at its twenty-fourth session (December 2018) as the latest (decision 1/CP.22), including a robust accounting framework for the National Determined Contributions (NDC)
- Land sector is a cross-cutting issue in the PA, including:
  - Features of NDC;
  - Information to facilitate clarity, transparency and understanding of NDC;
  - **Accounting of NDC;**
  - Adaptation communication;
  - Transparency framework;
  - Global stocktake.

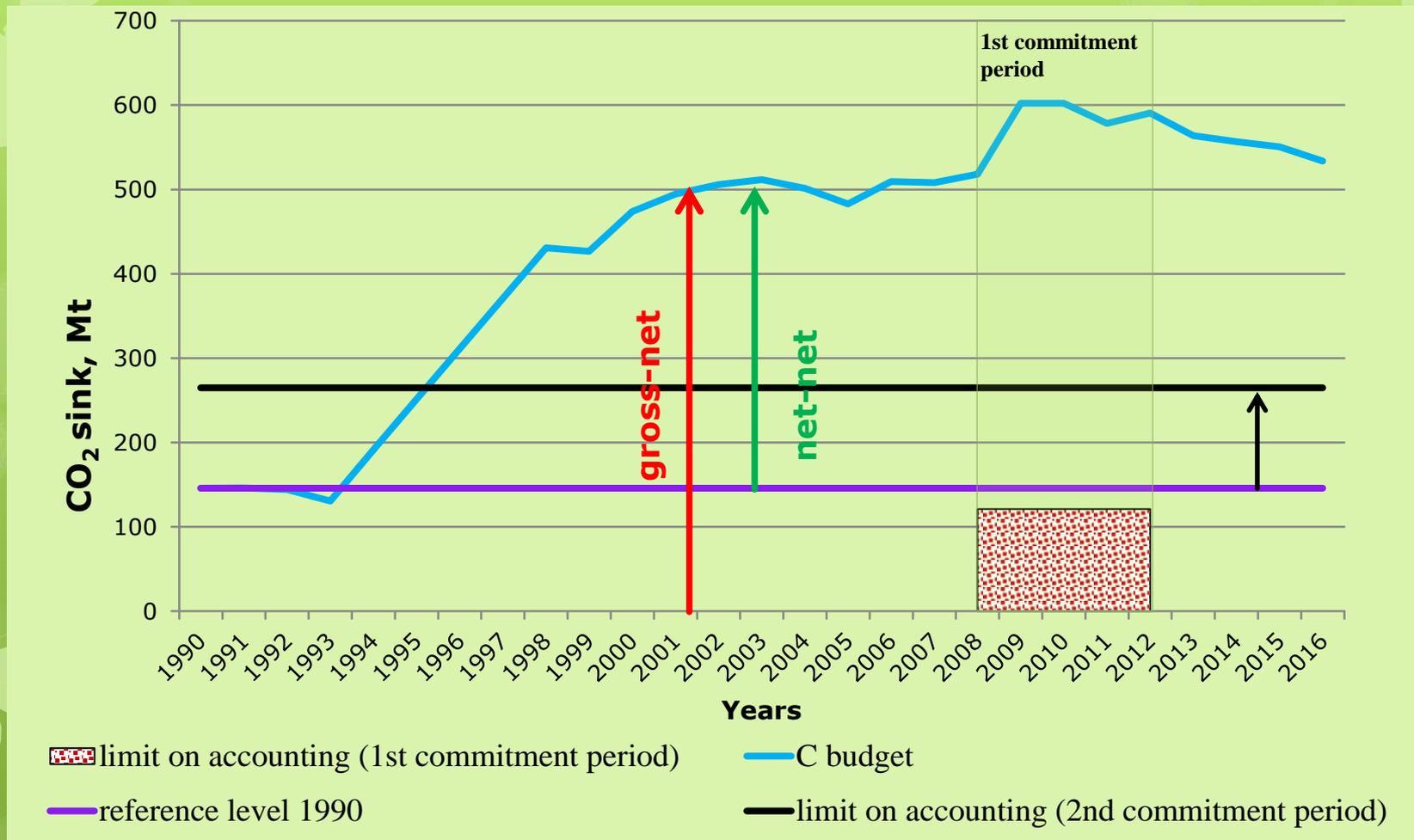
# Existing approaches to forest sector accounting under Kyoto protocol (KP) I

- 1<sup>st</sup> Commitment period (2008-2012):
  - mandatory accounting of afforestation, reforestation and deforestation activity (Art.3.3 KP)
  - voluntary accounting of forest management activity (Art. 3.4 KP)
  - full accounting of the net C balance in forest ecosystems (so-called "gross-net" approach) with the **absolute limit values (caps)** per each country as specified in the Appendix to the Decision 16/CMP.1.
- For the Russian Federation the limitation on the accounting is **33.0** Mt C/yr

# Existing approaches to forest sector accounting under KP II

- 2<sup>nd</sup> commitment period under KP (2013-2020):
  - mandatory accounting under Article 3.3 (afforestation, reforestation and deforestation)
  - mandatory accounting under Article 3.4 for forest management:
    - accounting by the difference between annual net C balance in managed forests and the reference level (so called «net-net» approach)
    - however, the accounting of net removals is a subject to **limitation of not more of 3.5% from assigned amounts** (GHG emissions in the base year without land sector) (Decision 2/CMP.7).
- In case of the Russian Federation the limit would be **32,1 Mt C/yr** (*Russia has no commitments in KP-II*)

# Accounting approaches under KP (example of the Russian Federation)



No one of the existing so far accounting principles provide incentives for further actions on conservation and enhancement of carbon sinks in forests.

# Why the Paris Agreement is different?

- PA goal in achieving climate neutrality (a balance between anthropogenic GHG emissions and removals) in the second half of this century
- Global stocktake process under PA: to assess a collective progress towards limiting a global temperature raise

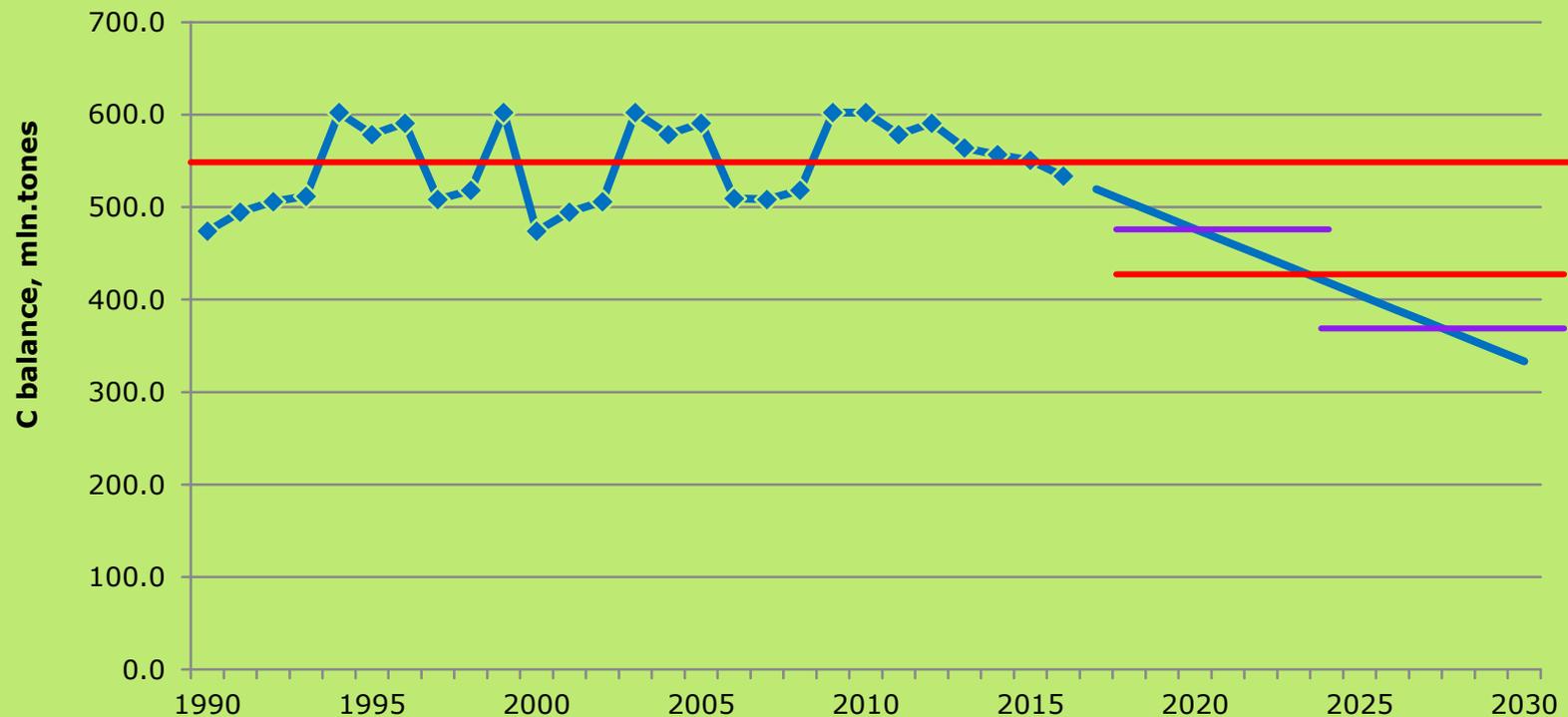


- Accounting of forests sinks “as atmosphere sees” **without any artificial limits** to ensure:
  - allow stakeholders to enhance actions on GHG emission reductions and increase of carbon sinks

# Key aspects for accounting principles - I

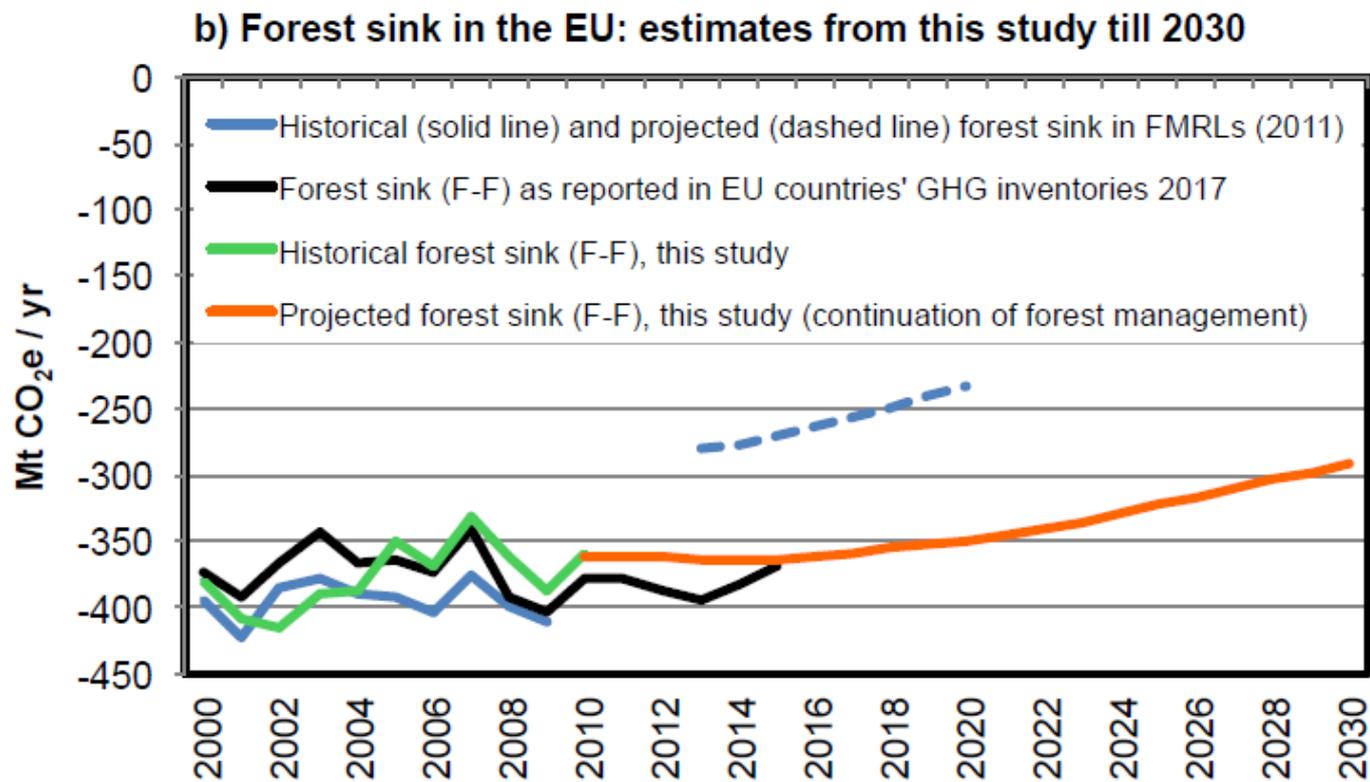


- Set up a forest reference level:
  - Historical or projected (forward-looking baseline) – depending on available data and best option for incentives
  - Based on the age structure dynamic and current management practices in forests (to exclude legacy effects from the accounting) – incentives for actions in forests with decreasing removal trend due to aging (most boreal forests)



# But avoid cheating and overestimations

(Grassi et al., 2018)



# Key aspects for accounting principles - II

- Exclude from the accounting:
  - non-anthropogenic emissions and removals (use of “managed land” proxy on a national scale) - further incentives for countries to increase managed land area, e.g. creation of new forests (afforestation) and development of the forest protection network on previously unmanaged lands
  - emissions from extreme weather events (and subsequent GHG removals) – in order to manage high permanence risks of actions in forests (+ development of the national insurance systems)

# Key aspects for accounting principles - III

- Single common approach for HWPs (to provide proper incentives for countries to better manage harvested wood products on their territory)
  - IPCC (2006) provides 4 valid approaches
    - Instantaneous oxidation (default) – *no incentives (energy use or HWPs use would be same)*
    - Production approach (agreed under KP-II) considers fate of all produced wood in the country (domestically consumed and exported) – *incentives at the stage of harvesting and partly at processing stage (proper incentive to the use of wood as HWP storage instead of energy although disincentives wood import)*
    - Stock change approach consider domestically consumed and imported HWPs - *incentives at the processing stage and partly at harvesting (proper incentive to the use of wood as HWP storage instead of energy although disincentives wood export)*
    - Atmospheric flow – consider all flows between HWPs and the atmosphere within the territory of the country - *incentives at all stages of wood management (proper incentive to the use of wood as HWP storage doesn't impact import/export)*

# Key aspects for accounting principles - IV

- Accounting of all C pools – *incentives for conservation of C stocks in forest soils*
  - Accounting of mitigation co-benefits resulting from adaptation measures in forests in accordance to the Art. 4.7 of the PA - *further stimulate adaptation, biodiversity conservation, sustainable forest management*
  - Accounting for global stocktake should be the same as accounting of NDC
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- Common principles for land sector accounting under PA, however flexible enough to accommodate national circumstances (for example for the reference level)

# Questions/answers

- 1. What is the focus of your research and why is it important for climate, bioeconomy or people? **To define main principles for incentivizing actions on GHG emission reductions and increase of sinks in boreal forests**
- 2. Did your research identify key challenges (threats or risks) to maintain the critical values of boreal and mountain ecosystems? **The challenge to maintain the level of annual carbon sequestration in terms of boreal forest aging**
- 3. What would be your suggestion to address these challenges? **No limits on accounting and managing a permanence risks**



Thank you!