CONSEQUENCES FOR CLIMATE AND BIOENERGY OF LAND SECTOR CARBON ACCOUNTING UNDER THE PARIS AGREEMENT

29-30 August 2018

Co-hosted by

IEA Bioenergy Task 38, IEA Bioenergy Task 43 and Swedish University of Agricultural Sciences (SLU)

Location: Ultuna Campus, SLU, Uppsala, Sweden
Building/Room: Ulls hus (LINK)/Room Q
Address: Almas Allé 8, Uppsala

Background

Annex I countries report on greenhouse gas emissions from land use, land use change and forestry (LULUCF/AFOLU) under the United Nations Framework Convention on Climate Change and the Kyoto Protocol. The accounting framework for the land use sector under the Paris Agreement has not yet been agreed upon, so it is timely to consider the accounting options and what could be learned from experience under the Kyoto Protocol. In the context of the European Union (EU), land use sector activities will be integrated in the 2030 GHG reduction targets, with the intent to provide incentives for climate friendly management of the forest and agricultural sector.

Forests are currently main contributors to the GHG sink of terrestrial ecosystems and at the same time main providers of biological resources to displace fossil resources, i.e. wood products and bioenergy. Land use sector accounting may significantly influence nations' opportunities to manage forests and other lands to enhance their carbon sink, fossil GHG displacement or both. There can be trade-offs between carbon sequestration, carbon stocks, and biomass production for energy and harvested wood products. There can also be trade-offs between short- and long-term climate objectives. Accounting rules can influence land management, which in turn can influence climate forcing.

To meet the intent and avoid unintended consequences it is crucial that accounting rules are devised with consideration of the impacts of land management on climate forcing, and that

they reflect the appropriate spatial and temporal scales. Further, they should create incentives for countries to take action and implement effective policies and measures.

Aim and scope

The aim of the workshop is to inform coming decisions on an accounting framework for the land use sector under the Paris Agreement, and to contribute to the further discussion and planning of climate and energy policies.

Specifically, the workshop will examine and discuss:

- How different land sector carbon accounting frameworks create incentives or disincentives to harvest biomass for bioenergy and/or biomass-based products.
- How different land sector carbon accounting frameworks influence forestry and other land management options towards build-up of land carbon stocks,
- How the implementation of reference levels in carbon accounting schemes influences land management options.

The scope of the workshop is global and it aims to present case studies and analyses from different regions, biomes, political and institutional contexts.

Suggested reading

The following documents are pertinent to the discussion (feel free to suggest additional items for the list):

Grassi G; Pilli R. 2017 Method applied by the JRC for projecting forest GHG emissions and removals based on the "continuation of current forest management". (JRC FRL report) https://ec.europa.eu/jrc/en/publication/projecting-eu-forest-carbon-net-emissions-line-continuation-forest-management-jrc-method

Kallio, et al 2018. Economic impacts of setting reference levels for the forest carbon sinks in the EU on the European forest sector. Forest Policy and Economics, 92, pp.193-201. https://www.sciencedirect.com/science/article/pii/S1389934117306202?via%3Dihub

Grassi, G., et al 2018. Wrong premises mislead the conclusions by Kallio et al. on forest reference levels in the EU. Forest Policy and Economics, 95, pp.10-12. https://authors.elsevier.com/a/1XP634y2D1OVF5

Agenda

29 August

13:00 – 14:00 **Arrival, lunch**

14:00 Welcome and introduction to the workshop (Johan Stendahl, Annette Cowie, Göran Berndes)

14:00 – 15:30

Theme: Paris agreement and bioenergy – opportunities and constraints

- *Possible effects of the proposed EU LULUCF regulation on the use of biomass for bioenergy* (Gert-Jan Nabuurs, Wageningen University)
- *How to incentivise the role of forests and forest-based resources from a climate perspective in the light of the Paris agreement* (Hans Petersson, SLU)
- *Quantification of GHG emissions of bioenergy in line with IPCC* (Sebastian Rüter, Thünen Institute)

15:00 Coffee Break

15:30 – 17:00

Theme: Forest reference levels and the consequences for bioenergy

- *Relationship between forest reference level and bioenergy* (Giacomo Grassi, JRC)
- *Greenhouse gas emissions and removals from the forest land category and harvested wood products in the United States* (Grant Domke, USDA Forest Service)
- *Implementation of the LULUCF-regulation in Sweden by adapting current models and NFI to calculate the FRL* (Mattias Lundblad, SLU)

19:00 Workshop dinner (Restaurant Villa Romana, Gamla torget 4, Google Maps LINK)

30 August

08:30 – 10:30

Theme: Gaps between research and policy in relation to accounting frameworks

- *Timing of release from harvested wood products, including biofuels, and the sensitivity of the resulting stock values to product parameters and decay dynamics* (Eric Marland, Appalachian State University)
- *Forest carbon accounting and bioenergy: what we don't know very well and what we think we know but we don't* (Robert Matthews, Forest Research)
- *Reference Scenarios involving Bio-based Product Systems and implications for land sector carbon accounting* (Keith Kline, Oak Ridge National Laboratory)
- *Political Footballs and Forest Potential in the Climate Policy Framework* (David Ellison, SLU)

10:30 Coffee Break

11:00 – 12:00 Discussion and conclusions

12:00 Lunch (end of main workshop)

13:00 – 18:00 Task 38 Business meeting