



BRIDGING GAPS BETWEEN POLICY-MAKING AND SCIENCE: THE CASE OF FOREST GHG ESTIMATES

Giacomo Grassi, European Commission, Joint Research Centre

Achieving the long-term temperature goal of the Paris Agreement (PA) requires more confidence in GHG estimates. What is not measured with confidence cannot be managed. To this regard, the PA includes an Enhanced Transparency Framework, to track countries' progress towards achieving their individual targets, and a periodic Global Stocktake to assess the countries' collective progress towards the long-term goals of the PA based on the best available science. This is a challenge and an opportunity for the scientific community. The challenge involves supporting country GHG inventories, which are at the basis of policy making, including through regular reviews of the latest science and methods and with independent verification of countries' GHG estimates. The opportunity is to improve the scientific understanding and to help build confidence on GHG estimates and their trends, therefore enabling to achieve the PA's ambitious goal.

The talk will assess the challenges and opportunities associated to the ≈ 3 GtCO₂e/y discrepancy in current global forest GHG estimates between country reports and scientific studies (e.g. IPCC AR5). This discrepancy is largely explained by conceptual differences in estimating the "anthropogenic" forest sinks between the GHG inventories community and the scientific community. While recognizing differences in scopes between these communities, reconciling large conceptual gaps in estimates is a necessity, because the Global Stocktake will be based on both country reports and IPCC reports. Ultimately, assessing the "balance between anthropogenic GHG emissions by sources and removals by sinks in the second half of this century", needed to reach the temperature goal of the PA, requires countries and science to speak the same language on what is "anthropogenic". The proposed way forward requires improving mutual understanding and cooperation between the GHG inventory compilers and the scientific community.