



The Contributions of Forests and Land Use to Closing the Gigatonne Emissions Gap by 2020

As hopes now converge for a binding post-2020 climate agreement at COP21 (Paris) next year, we all need to remember that, in order to prevent global temperature increases of more than 1.5°C or even 2°C above pre-industrial levels, greenhouse gas (GHG) emissions need to peak before 2020.¹ Failure to do so means that global emissions would overshoot, and have to be brought down later, at much higher costs. Global GHG emissions were at 50 gigatonnes of CO₂-equivalent (Gt CO₂e) in 2010. That is already above the 44 Gt CO₂e benchmark set for 2020 if countries are to pursue the lowest-cost mitigation pathways².

We cannot afford to wait for the 2015 agreement on post-2020 actions while current global mitigation actions will leave us with an annual emissions gap of 8-12 Gt CO₂e by 2020.¹ Reductions in GHG emissions need to start now, to close that gap, or they will become increasingly expensive and risk greater, irreversible changes in the global climate and on the Earth's ecosystems. For such urgent action, as in any future climate deal, forests and land-use sectors have key roles to play.

Why is it essential to have urgent action on forests and land-use?

- Land-use, land-use change and forestry create nearly a quarter (**24%**) of all anthropogenic GHG emissions. About half of that derives from agriculture and livestock farming, the other half from deforestation and forest degradation³.
- **Forests and land-use remain by far the largest sources of GHG emissions in certain regions of the world**, notably Latin America, Central Africa, and Southeast Asia. In Brazil, over 61% of GHG emissions came from forests and farming activities in 2012⁴.
- The **global demand for land-based commodities** (e.g. timber, minerals, and agricultural commodities) continues to grow. As energy systems need reform in the face of climate change, those land-based production systems, too, require incentives to ensure forest conservation, reduced emissions, and non-carbon benefits.
- Mechanisms such as **REDD+** (Reducing Emissions from Deforestation and Forest Degradation) are well placed to help reduce emissions already in the 2015-2020 period, particularly if

¹ UNEP (2013). The Emissions Gap Report 2013: A UNEP Synthesis Report.
www.unep.org/emissionsgapreport2013/

² *ibid*

³ IPCC (2014). Climate Change 2014: Mitigation of Climate Change. Intergovernmental Panel on Climate Change, AR 5, Working Group III. <https://www.ipcc.ch/report/ar5/wg3/>

⁴ SEEG (2013). Estimativa de Emissões de Gases de Efeito Estufa no Brasil.
<http://seeg.observatoriodoclima.eco.br/index.php/cms/biblio/see/iddocumento/499>

interventions adopt a *landscape approach* and integrate it with broader strategies for sustainable land-use.

- Beyond avoided GHG emissions, sustainable land-use can also promote ecosystems that will work as **carbon sinks**, helping mitigate climate change in the long run.

What could be achieved, and what are the main barriers?

- **10-12 Gt CO₂e** are emitted each year from forests and agriculture¹. Targeted actions in key regions can deliver immediate emissions reductions for the interim 2015-2020 period and buy time for the necessary reforms in the energy sector to kick-in.
- In order to limit global warming to well below 2°C and to keep a 1.5°C limit viable, countries should commit to a target of Zero Net Deforestation and Degradation (ZNDD) and no related net greenhouse gas emissions by 2020. Delaying this target until 2030 would mean at least an additional 24 Gt CO₂ into the atmosphere, with very serious consequences to the global climate⁵.
- To achieve an objective of ZNDD by 2020, roughly **USD 30-53 billion per year** will be required⁶. This number is far above the **USD 6.8 billion pledged to REDD+ up to 2018** – let alone the small percentage of that which has actually been disbursed.⁷ But it is far less than the total **USD 544 billion** spent worldwide on fossil fuel subsidies in 2012.⁸ *Thus there is no lack, but misplacement of finance.*
- Lack of access to finance for forest conservation initiatives and sustainable land-use is therefore a key barrier to reducing deforestation. Businesses lack incentives for opting for sustainable practices, and local communities are often left to choose between poverty and (unsustainable) development.
- Institutions also pose key barriers, and there is an urgent need for clearer **land tenure** and **regulations on land-use rights** and **carbon ownership**.

How could the needs be met?

- **Condition agricultural finance to sustainability performance.** Agriculture and other land-use activities that cause deforestation rely heavily on tax breaks, public credit and other government incentives that can be changed. Some money can be earmarked exclusively for novel or traditional/ indigenous farming practices that keep forests standing and reduce emissions.
- **Downstream industries can limit the purchasing of land-based commodities** to those suppliers that abide by sustainability criteria. (This has been done successfully by the Brazilian Association of Vegetable Oil Industries with soybean).
- International mechanisms such as **REDD+** can provide key financial and organizational support for institutional reforms, forest conservation initiatives and sustainable economic activities in the developing world. This may prove essential to less developed countries which may have difficulty undertaking all necessary changes without support.

⁵ WWF (2011). Forests and Climate: REDD+ at a Crossroads. WWF Living Forests Report: Chapter 3. http://awsassets.panda.org/downloads/living_forests_chapter_3_2.pdf

⁶ IIASA in WWF (2011). Forests and Climate: REDD+ at a Crossroads. WWF Living Forests Report: Chapter 3. http://awsassets.panda.org/downloads/living_forests_chapter_3_2.pdf

⁷ UN-REDD (2013). How much finance for REDD+? Go-REDD+, Issue 26, November 2013.

⁸ International Energy Agency (2013). World Energy Outlook 2013 Factsheet. http://www.worldenergyoutlook.org/media/weowebiste/factsheets/WEO2013_Factsheets.pdf