



THE STATE OF JURISDICTIONAL SUSTAINABILITY

Preview of A Global Assessment

Jurisdictional approaches to sustainable development hold tremendous potential for advancing holistic, durable solutions to the intertwined issues of tropical deforestation, rural livelihoods, and food security. With many jurisdictional “experiments” underway around the world, the time is ripe for a systematic assessment.

Earth Innovation Institute (EII), the Center for International Forestry Research (CIFOR), and the Governors’ Climate and Forests Task Force (GCF-TF) are collaborating on a comprehensive study of these experiments across the Tropics to draw on early lessons. More specifically, the study evaluates progress towards low-emission, sustainable development, including goals and commitments, monitoring and reporting systems, multi-stakeholder governance platforms, and innovative policies and initiatives that are core elements of jurisdictional sustainability. The assessment also includes an in-depth analysis of deforestation and emissions (including drivers and agents of deforestation and forest degradation) and examines the potential implications of low-emission rural development (LED-R) strategies for future emission reductions. It also explores barriers to and opportunities for fostering jurisdictional sustainability.

This study focuses on 39 primarily first-level subnational political and administrative divisions (e.g., province, state, etc.) in 12 tropical countries. In 2017-18 we compiled secondary data and conducted interviews with key stakeholders in all jurisdictions on the themes described above. In several jurisdictions, we also implemented the Sustainable Landscapes Rating Tool (SLRT) of the Climate, Community and Biodiversity Alliance to assist in our assessment of jurisdictions’ progress towards LED-R.

The report includes analytical briefs about each jurisdiction, as well as an overall synthesis of jurisdictional sustainability across the Tropics. The full report will be published in September 2018, ahead of the Global Climate Action Summit and the Governors’ Climate & Forests Task Force Meeting in San Francisco, California.



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Jurisdictional sustainability: the successful transition to sustainable development—encompassing social, environmental and economic dimensions—across an entire political geography, such as a state, province, county, district or nation. Success is measured “wall-to-wall” across the entire jurisdiction and therefore encompasses the full range of activities, production systems, ecosystems and actors.

Jurisdictional approach: a type of integrated landscape management, with an important distinguishing feature: the landscape is defined by policy-relevant boundaries and the underlying strategy is designed to achieve a high level of governmental involvement.

Low-emission rural development (LED-R): a jurisdictional approach to sustainability, in which climate stability is an explicit goal, there is a focus on rural populations, and both environmental and development concerns are integrated at the scale of the entire jurisdiction.

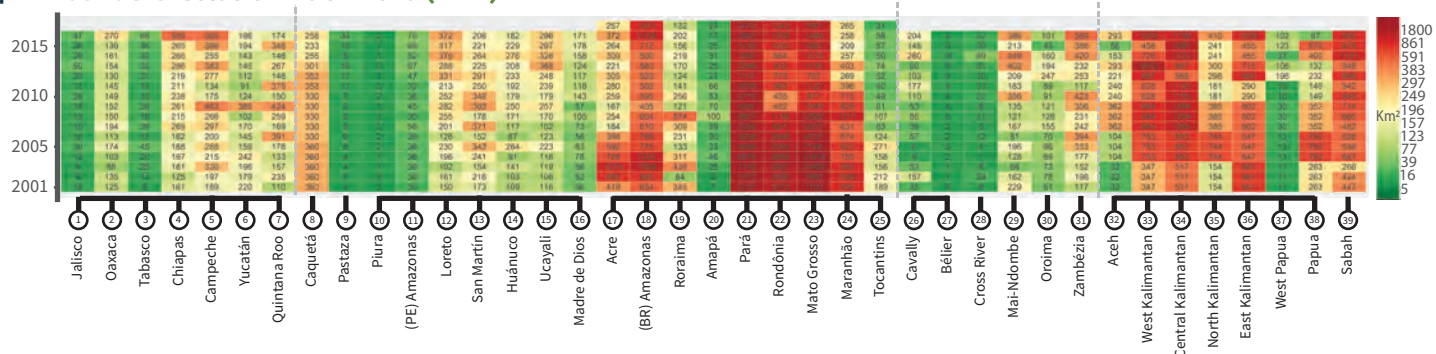
KEY TRENDS

- About half of the jurisdictions reduced deforestation below their FREL over the last five years. Brazilian states have reduced deforestation by 44% (7,893 km²) relative to their FREL.
- Annual deforestation increased over the last five years in 28 of the 39 jurisdictions by a median rate of 16 km² (0.03%) per year.
- Over the same period, GDP increased by an average of 6.33% in 34 jurisdictions. In almost all jurisdictions, economic growth (signaled by GDP) appears to be decoupled from deforestation.
- Jurisdictions could achieve deforestation carbon neutrality by 2027 if they reduce deforestation by 90% and commit to zero-net deforestation.

A| Annual deforestation rate 2001-2016 (%)



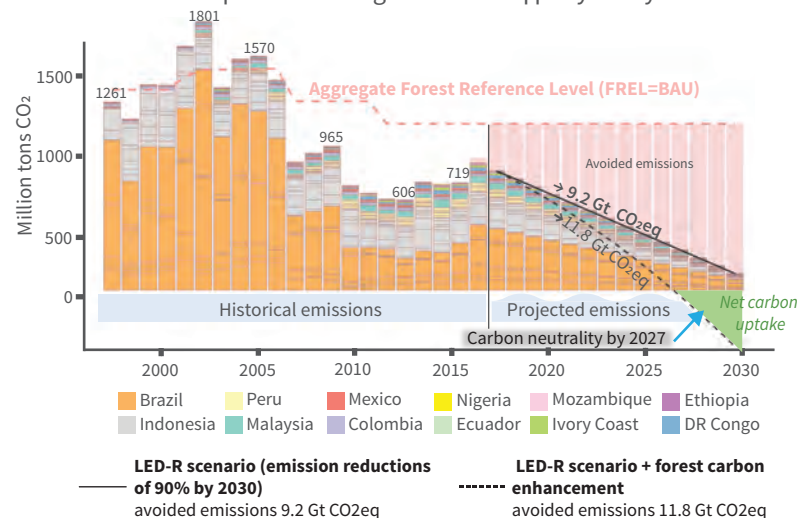
B| Annual deforestation 2001-2016 (km²)



A| B| Heatmaps showing annual deforestation (rate and total area, respectively) after 2001 in each of the 39 jurisdictions. Green tones indicate lower rates/amount of deforestation whereas red tones indicate higher rates/amounts. Together these heatmaps provide an overview of spatial and temporal magnitude and variation of deforestation across the jurisdictions. *Data source: national forest monitoring systems (Brazil, Colombia, Peru, Ecuador, Indonesia) and analysis of deforestation using Hansen/UMD/-Google/USGS/NASA data with postprocessing applied by EII for jurisdictions in other countries.*

Potential emissions reductions with 90% Reduction in Deforestation & Zero Net Deforestation by 2030

Under a LED-R scenario, we estimate that together the 39 jurisdictions could avoid a total of **9.2 Gt CO₂eq** between 2017 and 2030 by lowering their deforestation by 90% from historical forest reference emission levels. Additionally, under a carbon enhancement scenario (natural and human-induced regeneration of cleared and degraded forest), carbon neutrality could be achieved by 2027 with a net carbon uptake reaching 0.4 Gt CO₂eq per year by 2030 and total avoided emissions of **11.8 Gt CO₂eq**.



Methodology

Observed emissions (1990-2017) derived from annual deforestation and carbon emissions factors as defined by national FREL submitted to the UNFCCC. Included carbon pools are aboveground and belowground biomass, peat degradation, soil and litter as defined in each FREL.

BAU scenario projected using the deforestation trend defined by each FREL. Bar subdivisions represent jurisdictional contributions within a country. **LED-R scenario** projected with a reduction in deforestation of 90% by 2030 relative to the FREL baseline.

Carbon enhancement scenario considers 90% reduction in deforestation plus regeneration of degraded and cleared forest areas. Regenerating forest targets rely on subnational/national reforestation pledges and zero net deforestation. The forest regenerating area reaches 9.4 Mhas in 2030. In the 14 simulated years (2017-2030) regenerated forests reach 1/5 of the projected mature carbon stocks. Carbon increases linearly from year 1 to year 14 and the total carbon stock increases as the weighted distribution of the forest age and forested area over each year.

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