

Ideas to Action: Independent research for global prosperity

Board of Directors

 Lawrence Summers Chair Nancy Birdsall President Edward Scott Chair Emeritus Timothy D. Adams Qazi Munir Alam C. Fred Bergsten Henrietta Holsman Fore Tony Fratto David F. Gordon Brad Horwitz Donald Kaberuka Kassahun Kebede · · Anne Krueger Susan B. Levine John Lipsky Mark Malloch-Brown • Edward E. McNally Robert Mosbacher, Jr. Ngozi Okonjo-Iweala Bobby J. Pittman • • Adam S. Posen Dina Habib Powell Rachel Pritzker Smita Singh Toni G. Verstandig Maureen White

Member of Executive
Committee

•• Ex officio member

Support for ARB staff thinking on technical design elements of sectoral crediting for tropical forests under AB32

Jonah Busch, Ph.D. Senior Fellow, Center for Global Development (jbusch@cgdev.org) Berkeley, CA. April 5, 2016.

Dear Air Resources Board staff,

Thank you for the opportunity to comment on the ARB Staff Technical Paper of March 18, 2016¹ and the ARB slideshow presentation of March 22, 2016.²

I applaud and support the Air Resources Board staff in moving forward on technical design elements for sectoral crediting for tropical forests under AB32. Sound technical rules are necessary to ensure confidence by all stakeholders in the integrity of the credits used by regulated companies in California to offset their greenhouse gas emissions. By setting high standards for other states and provinces to follow, California can once again lead in the global effort against climate change.³

When it comes to developing rules for sectoral credits for tropical forests, there are important but surmountable design challenges. Fortunately there are many ways to get these issues right. The technical paper and slideshow show that ARB staff are considering the right issues and appear well on track to addressing these issues sensibly.

As ARB staff proceed thoughtfully in developing rules, they can draw upon several useful resources:

- The recommendations of the REDD Offsets Working Group⁴
- The Methodological Framework of the Forest Carbon Partnership Facility (FCPF) Carbon Fund⁵
- Bilateral agreements between tropical forest countries and states and European countries
 - Brazil and Norway⁶
 - Guyana and Norway⁷
 - Acre (Brazil) and Germany⁸
- The Jurisdictional and Nested REDD+ (JNR) Framework of the Verified Carbon Standards (VCS)⁹

www.cgdev.org



Ideas to Action: Independent research for global prosperity

Regarding specific technical design elements, ARB may consider the following feedback:

Scope: It is sensible to include activities that can be monitored using current technology (i.e. reductions in emissions from deforestation; potentially reductions in emissions from forest degradation) while leaving the door open to including at a later date activities that may be monitored with emerging technology (i.e. removals by forest growth).¹⁰

Crediting pathway: Partner states should issue, track, and sell credits. Partner states should be granted broad latitude to design their programs for reducing deforestation, including the ability to determine whether and how nested projects are potentially eligible, subject to California standards.

Reference Level: Historical annual emissions averaged over 10 consecutive years is an acceptable reference level and is consistent with Brazil's Amazon Fund and the FCPF Carbon Fund approach for most programs. In the future, ARB should consider allowing the use of upwardadjusted (e.g. projected) reference levels to accommodate states with high carbon stocks, historically low deforestation, and high deforestation threat.¹¹

Carbon pools: Including aboveground biomass only is acceptable. In the future, including soils would be especially pertinent for tropical jurisdictions containing large areas of peat (e.g. Indonesia).

Crediting baseline: Establishing a crediting baseline slightly below the reference level to leverage partner states' own efforts to reduce emissions is acceptable, though not necessary. Caution is warranted—setting a crediting baseline too far below the reference level would dilute financial benefits to partner states that reduce emissions, undermining their incentive to participate.

Monitoring: ARB should develop quality standards rather than specifying a detailed set of procedures for measuring emissions. Several tropical counties (e.g. Brazil, Mexico) already employ sophisticated and reliable systems for measuring deforestation which can be leveraged and built upon.

Reporting: Creating general quality standards for reporting is acceptable. Requiring reporting at the end of each compliance period (e.g. every three years) would be sensible, with interim reporting potentially allowable to enable interim crediting.

Uncertainty: Small deductions or withholding of credits for more-uncertain emission reductions are acceptable, though not necessary. This so-called "conservativeness approach" would incentivize investments in improved monitoring capabilities.¹²

I would be happy to discuss any of the above issues with ARB staff in greater detail, if useful.

www.cgdev.org



Ideas to Action: Independent research for global prosperity

Jonah Busch, Ph.D. is an environmental economist and a Senior Fellow at the Center for Global Development. He is the author of 15 peer-reviewed articles on reducing emissions from tropical deforestation in academic journals including the Proceedings of the National Academy of Sciences, Climatic Change, and Environmental Research Letters. He served as Special Advisor to the President of Guyana during its negotiation of a bilateral agreement with Norway and as a Technical Advisor to the Carbon Fund during the negotiation of its Methodological Framework.

¹ "Evaluation of the Potential for International Sector-Based Offset Credits in California's Cap-and-Trade Program." ARB Staff Technical Paper, March 18, 2016.

³ See: "Eight Reasons for California to Lead on Climate and Tropical Forests." Jonah Busch, Center for Global Development blog. <u>http://www.cgdev.org/blog/eight-reasons-california-lead-climate-and-tropical-forests</u>

- ⁴ http://www.arb.ca.gov/cc/capandtrade/sectorbasedoffsets/row-final-recommendations.pdf
- ⁵ http://www.forestcarbonpartnership.org/carbon-fund-methodological-framework

⁶ https://www.norad.no/en/front/countries/latin-america/brazil/

⁷ <u>http://www.lcds.gov.gy/norway-partnership</u>

⁹ <u>http://www.v-c-s.org/JNR</u>

¹⁰ See: "Measurement and monitoring needs, capabilities and potential for addressing reduced emissions from deforestation and forest degradation under REDD+" Scott Goetz et al., *Environmental Research Letters* 2016 http://iopscience.iop.org/article/10.1088/1748-9326/10/12/123001

1¹ See: "Comparing climate and cost impacts of reference levels for reducing emissions from deforestation" Jonah Busch et al., *Environmental Research Letters* 2009. <u>http://iopscience.iop.org/article/10.1088/1748-9326/4/4/044006/meta</u>

¹² See: "Addressing uncertainty upstream or downstream of accounting for emissions reductions from deforestation and forest degradation." Johanne Pelletier et al., *Climatic Change* 2015 http://link.springer.com/article/10.1007/s10584-015-1352-z

² "Ongoing Evaluation of the Potential for Sector-Based Offset Credits in California's Cap-and-Trade Program." ARB Staff Slideshow, Marc 22, 2016.

⁸ <u>https://www.giz.de/en/worldwide/33356.html</u>