



Emmett Institute on Climate Change and the Environment

SCHOOL OF LAW  
405 Hilgard Ave.  
LOS ANGELES, CALIFORNIA 90095-1476

October 29, 2018

Mr. Richard W. Corey  
Executive Officer  
Air Resources Board  
1001 I Street  
Sacramento, California 95814

*via electronic submittal to*

[https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=tfs2018&comm\\_period=N](https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=tfs2018&comm_period=N)

RE: Proposed California Tropical Forest Standard

Dear Mr. Corey:

The Emmett Institute on Climate Change and the Environment at UCLA School of Law respectfully submits this letter in support of the California Air Resources Board (CARB)'s proposed Tropical Forest Standard ("Standard"). The Emmett Institute is a leading law school center focused on climate change and other critical environmental issues, and serves as a source of environmental legal scholarship, nonpartisan expertise, and policy analysis. We conclude that approving this Standard presents an opportunity for CARB to lead the world in tropical forest protection and conservation. Tropical forest protection is an indispensable strategy for fighting climate change, protecting public health, preserving biodiversity, and protecting and enhancing the livelihoods of forest-dependent peoples. With this Standard, California can establish a high-quality global model for assessing international forest offsets and signal to jurisdictions across the world that protecting forests is critically important.

It is well documented that preserving and maintaining the world's tropical forests and natural lands are critical to global public health and to fighting climate change. Tropical forests sequester carbon from the atmosphere, thereby mitigating climate change and harmful air pollution.<sup>1</sup> Tropical forests also actively cool the atmosphere; the Amazon rainforest, for example, cools the air by pumping approximately 8 trillion tons of water into the atmosphere

---

<sup>1</sup> See, e.g., Britton B. Stephens et. al, *Weak Northern and Strong Tropical Land Carbon Uptake from Vertical Profiles of Atmospheric CO<sub>2</sub>*, 316 Science 1732 (June 22, 2007), available at <http://www.cgd.ucar.edu/events/20130729/files/Stephens-Gurney-et-al-2007.pdf>.

annually.<sup>2</sup> The failure to decrease tropical deforestation and degradation would be catastrophic for forest biodiversity and, as a result, carbon sequestration.<sup>3</sup> Tropical soils depend on tree biodiversity to sequester carbon effectively, and this ability diminishes as biodiversity diminishes.<sup>4</sup> When tropical forests are harmed and degraded, carbon sequestration is subsequently diminished by harm to trees as well as soils.<sup>5</sup> In this way, tropical deforestation and degradation have become among the largest sources of carbon emissions, releasing more global greenhouse gas emissions annually than the global transportation sector.<sup>6</sup> The recent Intergovernmental Panel on Climate Change report reflects the immense importance of tropical forest management practices, indicating with high confidence that deforestation and degradation pose “profound challenges” for sustainability of human settlements, food, livestock feed, and other important ecosystem services.<sup>7</sup>

California’s proposed Standard would create criteria for CARB to use in assessing jurisdiction-scale programs that reduce emissions from tropical deforestation. CARB would apply these criteria when determining whether such programs are appropriate for linking with California’s Cap-and-Trade Program. The Standard defines requirements related to, for example, robust regulatory development processes, public participation processes, and participatory management processes.<sup>8</sup> Importantly, the Standard does not, itself, create any linkages with other jurisdictions or allow for the recognition of any forest offsets. Rather, it defines the process and substance of CARB’s future consideration of such linkages.

We write in support of the Standard for these additional reasons.

---

<sup>2</sup> See Danel C. Nepstad et. al, *Interactions among Amazon land use, forests and climate: Prospects for a near-term forest tipping point*, 363 *Philosophical Transactions of the Royal Society B* 1498 (May 27, 2008), available at <http://rstb.royalsocietypublishing.org/content/363/1498/1737.short>.

<sup>3</sup> See generally William F. Laurance et. al, *Letter: Averting biodiversity collapse in tropical forest protected areas*, 489 *Nature* 290 (Sept. 2012), available at <https://www.nature.com/articles/nature11318.pdf?origin=ppub>.

<sup>4</sup> See Daniel E. Bunker, et. al, *Species Loss and Aboveground Carbon Storage in a Tropical Forest*, 310 *Science* 5750, 1029 (Nov. 11, 2005), available at <http://science.sciencemag.org/content/310/5750/1029>.

<sup>5</sup> See William F. Laurance and G. Bruce Williamson, *Positive Feedbacks among Forest Fragmentation, Drought, and Climate Change in the Amazon*, 15 *Conservation Biology* 6 (Jan. 12, 2002), available at <https://onlinelibrary.wiley.com/doi/full/10.1046/j.1523-1739.2001.01093.x>.

<sup>6</sup> See Harald Winkler, *Emerging lessons on designing and implementing mitigation actions in five developing countries*, 6 *Climate and Development* 1 (Mar. 26, 2014), available at <https://rsa.tandfonline.com/doi/abs/10.1080/17565529.2014.892315>.

<sup>7</sup> See Intergovernmental Panel on Climate Change, *Global Warming of 1.5 C – Summary for Policymakers*, at SPM-22 (Oct. 6, 2018), available at [http://report.ipcc.ch/sr15/pdf/sr15\\_spm\\_final.pdf](http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf).

<sup>8</sup> See Draft California Tropical Forest Standard, CARB, Ch. 1.2 and 3 (Sept. 5, 2018), available at [https://www.arb.ca.gov/cc/ghgsectors/tropicalforests/draft\\_ca\\_tropical\\_forest\\_standard.pdf](https://www.arb.ca.gov/cc/ghgsectors/tropicalforests/draft_ca_tropical_forest_standard.pdf) (hereinafter “Standard”).

First, the Standard allows California to use its status as a global climate leader and its unparalleled regulatory capacity to advance efforts to preserve tropical forests. As the world's fifth-largest economy and the originator of one of the world's most robust emissions trading systems, California can create a *de facto* global standard for tropical forest offsets. By adopting a standard that is high-quality, workable, simple, and conservative, California strengthens global efforts to preserve forests. It also sends a strong signal to jurisdictions around the globe about the importance of protecting natural lands.

This is especially true because California is not creating its Standard in isolation, but is instead utilizing best practices developed by leading national and international tropical forest conservation institutions to ensure consistency across standards and platforms. For example, under the proposed Standard, reference levels for emissions caused by tropical deforestation and degradation must be developed consistent with methodologies established by the Intergovernmental Panel on Climate Change, which emphasize transparency and best available historical annual deforestation rates.<sup>9</sup> Sector plans must submit documentation indicating alignment with social and environmental safeguard criteria specified in the Reducing Emissions from Deforestation and Forest Degradation program's 2012 Social and Environmental Standards (REDD+SES Version 2).<sup>10</sup> Finally, all of the Standard's criteria were developed in consideration of international standards from the World Bank's Forest Carbon Partnership Facility and Carbon Fund, recommendations from the REDD Offset Working Group, and member states and provinces of the Governor's Climate and Forests Task Force.<sup>11</sup>

Second, adopting a Tropical Forest Standard will benefit California and the entities regulated within the state's cap-and-trade program by creating an important price containment pathway. Reducing tropical deforestation is one of the most effective ways to fight climate change, and it is also one of the least expensive ways to reduce global emissions. By setting up frameworks now for considering offsets from this sector, California is anticipating that the demand for low-cost, high-quality offsets may grow significantly over time, especially after 2020. Indeed, the existence of low-cost, high-quality offsets may become increasingly important for maintaining political support for California's climate policies as the state's emissions targets tighten. It therefore makes sense for California to create a pathway for considering, on a jurisdiction-by-jurisdiction basis, whether this sector can provide such offsets.

Third, the benefits of approving this Standard come with very few risks to California or to the integrity of its climate policies. While the Standard establishes a set of criteria that CARB must consider before accepting tropical forest offsets within a sector-based crediting program, it does not yet allow for the recognition of any such offsets. The Standard alone does not establish

---

<sup>9</sup> See Standard, Ch. 4; see also Standard, Ch. 1.2(a) (defining "reference level").

<sup>10</sup> See Standard, Ch. 3(c)(4).

<sup>11</sup> See Standard, Ch. 1.1(b).

any linkage with any jurisdiction allowing for the trade of forest offsets. CARB is careful to note that this Standard only provides criteria for assessing subnational jurisdictions interested in trading tropical forest offsets in the future, rather than creating a new link itself: “The purpose of the California Tropical Forest Standard is to establish robust criteria against which to assess jurisdictions seeking to link their sector-based crediting programs that reduce emissions from tropical deforestation with an emissions trading system (ETS)...”.<sup>12</sup>

Before any tropical forest sector-based offsets could be accepted, CARB and the California governor would have to take the many additional steps required by law to establish a link with another ETS, similar to the multi-step processes California has previously undertaken in linking with Ontario and Quebec. Specifically, CARB would evaluate particular jurisdictions’ sector plans for readiness, assessing whether each program includes, *inter alia*, the following:

- a transparent methodology for developing its reference levels, crediting period, and crediting baselines;
- robust monitoring, reporting, and verification tools, including legal, policy, and procedural mechanisms;
- methods of assessing and minimizing leakage;
- methods for designing a offset crediting program that demonstrates public participation of forest-dependent and local communities;
- minimum requirements for third-party verification of quantified emissions reductions;
- methods for ensuring the permanence of emissions reductions;
- public and online access to credit registry, emissions data, verification, and safeguards reports;
- requirements for any nested projects within its sector-based crediting program; and
- methods for retiring and transitioning offset credits.<sup>13</sup>

Only upon finding each of these criteria would CARB then request that the Governor make four specific findings before approving a linkage between the agency and another jurisdiction. Those findings are:

- (1) The jurisdiction with which the state agency proposes to link has adopted program requirements for greenhouse gas reductions, including, but not limited to, requirements

---

<sup>12</sup> Standard, Ch. 1.1(a). CARB establishes in this Standard that such “links” or “linkages” have discrete legal requirements. A “link” is defined as “the approval of compliance instruments from a sector-based crediting program for use in an ETS. In the California Context, this would be conducted pursuant to the requirements of Subarticle 12 of the California Cap-and-Trade Regulation.” Standard Ch. 1.2(a). This regulation requires that such linkages are only approved after the Governor has made the findings set forth in Government Code Section 12984(f), referring to the four findings the Governor must make prior to establishing a link. *See* Cal. Code Regs. tit. 17, § 95941, 12984(f) (2017).

<sup>13</sup> *See* Standard, Ch. 1.1(c); see also Standard, Summary of California Tropical Forest Standard.

for offsets, that are equivalent to or stricter than those required by Division 25.5 (commencing with Section 38500) of the Health and Safety Code.

- (2) Under the proposed linkage, the State of California is able to enforce Division 25.5 (commencing with Section 38500) of the Health and Safety Code and related statutes, against any entity subject to regulation under those statutes, and against any entity located within the linking jurisdiction to the maximum extent permitted under the United States and California Constitutions.
- (3) The proposed linkage provides for enforcement of applicable laws by the state agency or by the linking jurisdiction of program requirements that are equivalent to or stricter than those required by Division 25.5 (commencing with Section 38500) of the Health and Safety Code.
- (4) The proposed linkage and any related participation of the State of California in Western Climate Initiative, Incorporated, shall not impose any significant liability on the state or any state agency for any failure associated with the linkage.<sup>14</sup>

Even once a particular linkage is approved, the Standard would not increase the total number of offsets that may be used for compliance purposes within the cap-and-trade program. Regulated entities may only purchase offsets equivalent to 8% of their compliance obligations, an amount that decreases post-2020, with additional restrictions that require a set percentage of offsets to deliver direct environmental benefits to the state.<sup>15</sup> The Standard would not change or expand these limits.

Finally, approving this Standard provides an important global benefit even if California establishes no linkages with other jurisdictions and never trades in tropical forest offsets. It will stand as a high-quality model for other jurisdictions and sector-based offset programs at a time when such models are more needed than ever—and, in so doing, will improve tropical forest management practices around the world.

For these reasons, the Emmett Institute supports action by CARB to approve the Tropical Forest Standard in light of its significant benefits compared with relatively minimal costs. We believe this Standard presents an opportunity for CARB to lead the world in tropical forest protection and conservation, which has the potential to yield immense public health and environmental benefits.

Respectfully submitted,

---

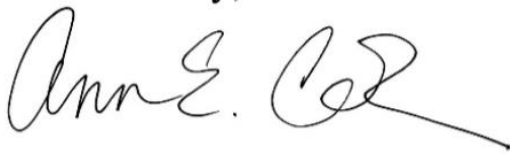
<sup>14</sup> Cal. Code Regs. tit. 17, § 12894(f) (2017).

<sup>15</sup> See Cal. Code Regs. tit. 17, § 95856(h)(1)(A) (2017) (pre-2020 offset requirements); see also Cal. Health & Safety Code § 38562(c)(2)(E)(i) (2017) (post-2020 offset requirements).



---

Cara Horowitz  
Andrew Sabin Family Foundation Co-Executive Director  
Emmett Institute on Climate Change and the Environment  
UCLA School of Law



---

Ann Carlson  
Shirley Shapiro Professor of Environmental Law  
Faculty Co-Director, Emmett Institute on Climate Change and the Environment  
UCLA School of Law

---

Harjot Kaur  
Emmett/Frankel Fellow in Environmental Law & Policy  
Emmett Institute on Climate Change and the Environment  
UCLA School of Law