

# **Responses to Comments**

**on the**

**Draft Environmental Analysis**

**Prepared for the**

**Endorsement of the California Tropical  
Forestry Standard**

**California Air Resources Board  
1001 I Street  
Sacramento, California, 95814**

**Released November 9, 2018**

**to be considered at the**

**November 16, 2018 Board Hearing**

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## PREFACE

The California Air Resources Board (CARB) released a Draft Environmental Analysis (Draft EA) for the proposed Endorsement of the California Tropical Forestry Standard (Proposed Project) on September 14, 2018, for a 45-day public review and comment period that concluded October 29, 2018. During the public comment period for the Proposed Project, 76 unique comment letters were received.<sup>1</sup> Seven additional letters were received after the close of the comment period resulting in a total of 83 unique comment letters received on the Proposed Project, 11 of which were determined to raise significant environmental issues related to the analysis in the Draft EA and are responded to in this document.

CARB staff made minor modifications to the Draft EA to create the Final EA. To facilitate identifying modifications to the document, modified text is presented in the Final EA with ~~strike-through~~ for deletions and underline for additions. None of the modifications alter any of the types of foreseeable compliance responses evaluated or conclusions reached in the Draft EA, introduce new significant effects on the environment, or provide any significant new information requiring recirculation. As a result, these revisions do not require recirculation of the draft document pursuant to the California Environmental Quality Act (CEQA) Guidelines, California Code of Regulations, title 14, section 15088.5, before consideration by the Board.

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<sup>1</sup> Several of these letters were also submitted as part of action alerts by various environmental organizations (e.g., Amazon Watch, Center for Biological Diversity, Environmental Defense Fund, and Friends of the Earth). These various action alerts resulted in approximately 21,000 comments submitted into the public record.

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## **1. INTRODUCTION**

The California Air Resources Board (CARB) released a Draft Environmental Analysis (Draft EA) for the endorsement of California's Tropical Forestry Standard (Proposed Project) on September 14, 2018 for a 45-day public review and comment period that concluded October 29, 2018. CARB received numerous comment letters through the comment docket opened for the Proposed Project, including the Draft EA, during that time. All of the comment letters are available for viewing on the comment docket on the CARB website at:

<https://www.arb.ca.gov/lispub/comm/bccommlog.php?listname=tfs2018>

CARB staff carefully reviewed all comment letters received to determine which ones raised significant environmental issues related to the analysis in the Draft EA and require a written response under CARB's certified regulatory program implementing the California Environmental Quality Act (CEQA). This document includes CARB staff's written responses to that subset of comments, and will be provided to the Board for consideration prior to it taking final action on the Proposed Update.

The written responses include a brief summary of each comment, followed by the written response. The full comment letters, from which the comments responded to were extracted, are provided in Attachment A of this document. Although this document includes written responses only to those comments related to the Draft EA, all comment letters received were considered by staff and provided to the Board members for their consideration.

Following consideration of the comments received on the Draft EA and during the preparation of the responses to those comments, CARB revised the Draft EA to prepare the Final EA, which was released November 9, 2018.

### **1.1. Requirements for Responses to Comments**

These written responses to public comments on the Draft EA are prepared in accordance with CARB's certified regulatory program to comply with CEQA. CARB's certified regulations state:

California Code of Regulations, title 17 section 60007. Response to Environmental Assessment

(a) If comments are received during the evaluation process which raise significant environmental issues associated with the proposed action, the staff shall summarize and respond to the comments either orally or in a supplemental written report. Prior to taking final action on any proposal for which significant environmental issues have been raised, the decision maker shall approve a written response to each such issue.

Public Resources Code section 21091 also provides guidance on reviewing and responding to public comments in compliance with CEQA. While this section refers to environmental impact reports, proposed negative declarations, and mitigated negative

declarations, rather than an EA, it contains useful guidance for preparing a thorough and meaningful response to comments.

Public Resources Code section 21091, subdivision (d) states:

- (1) The lead agency shall consider comments it receives if those comments are received within the public review period.
- (2) (A) With respect to the consideration of comments received, the lead agency shall evaluate any comments on environmental issues that are received from persons who have reviewed the draft and shall prepare a written response pursuant to subparagraph (B). The lead agency may also respond to comments that are received after the close of the public review period.
- (B) The written response shall describe the disposition of each significant environmental issue that is raised by commenters. The responses shall be prepared consistent with section 15088 of Title 14 of the California Code of Regulations.

California Code of Regulations, title 14, section 15088 (CEQA Guidelines) also includes useful information and guidance for preparing a thorough and meaningful response to comments. It states, in relevant part, that specific comments and suggestions about the environmental analysis that are at variance from the lead agency's position must be addressed in detail with reasons why specific comments and suggestions were not accepted. Responses must reflect a good faith, reasoned analysis of the comments.

California Code of Regulations, title 14, section 15088 (a – c) states:

- (a) The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The Lead Agency shall respond to comments received during the noticed comment period and any extensions and may respond to late comments.
- (b) The lead agency shall provide a written proposed response to a public agency on comments made by that public agency at least 10 days prior to certifying an environmental impact report.
- (c) The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.

## **1.2. Comments Requiring Substantive Responses**

CARB is required to prepare written responses only to those comments that raise "significant environmental issues" associated with the proposed action, as outlined in



California Code of Regulations, title 17, section 60007(a). A total of 76 comment letters were submitted to the comment docket set up for the Proposed Project, including the Draft EA, and seven additional comment letters were received late after the close of the docket. Out of the 83 comments received, 11 comment letters were determined to include comments raising significant environmental issues related to the Draft EA and requiring a written response under CARB's certified regulatory program and CEQA. CARB staff was conservative and inclusive in determining which comments warranted a written response and even included comments that did not mention the Draft EA, but did raise an issue related to potential adverse impacts related to the Proposed Project.

Below is a list of all the comment letters that were received but not responded to in this document (Table 1-1). All comment letters were considered by CARB staff and provided to the Board members for their consideration. Responses are not provided to these comments in this document because CARB staff determined they do not raise significant environmental issues related to the Draft EA and do not require a response under CARB's certified regulatory program and CEQA. Furthermore, the Proposed Project is not subject to the requirements of the Administrative Procedures Act to prepare a Final Statement of Reasons with written responses to each issue, and there is no requirement in any other statute governing the preparation of the Proposed Project that requires CARB to prepare written responses to each issue raised related to the Proposed Project. Nonetheless, these comments are part of the record, were taken into consideration when CARB staff prepared the final Proposed Project, and were provided to Board members for their full consideration before taking action on the Proposed Project.

<b>Table 1-1: List of Comment Letters Requiring No Further Response</b>			
<b>Comment Number</b>	<b>Date</b>	<b>Name</b>	<b>Affiliation</b>
1	10/08/2018	Mundstock, David	
2	10/22/2018	Martin, Michael <sup>2</sup>	
4	10/26/2018	Is this Working?, Test	
5	10/26/2018	Snyder, Todd	
6	10/26/2018	Ferraez, Roberto	Campeche State, Mexico
7	10/26/2018	Mejia, Maria	Jalisco State, Mexico
8	10/26/2018	Rodriguez Gomez, Sayda Melina	Yucatan State, Mexico
9	10/26/2018	Hernandez Sanchez, Ricardo	Chiapas State, Mexico
10	10/26/2018	Juarez Cruz, Alfredo Aaron	Oaxaca State, Mexico
11	10/26/2018	Petrelli, Krista	

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<sup>2</sup> 6,685 action alert submissions

<b>Table 1-1: List of Comment Letters Requiring No Further Response</b>			
<b>Comment Number</b>	<b>Date</b>	<b>Name</b>	<b>Affiliation</b>
12	10/28/2018	Busch, Jonah	Earth Innovation Institute
14	10/28/2018	Lish, Christopher	
15	10/29/2018	Ekwu, Alice	Government of Cross River State
16	10/29/2018	Kubos, Antonio	Government of Pastaza, Ecuador
17	10/29/2018	DeSilva, Antonio Waldez Goes	Government of Amapa, Brazil
18	10/29/2018	Guillermo, Alfredo Arellano	Government of Quintana Roo, Mexico
19	10/29/2018	Baby, Andre Luis Torres	Government of Mato Grosso State, Brazil
20	10/29/2018	Mann, Carrie	Friends of the Earth <sup>3</sup>
21	10/29/2018	Duchelle, Amy	CIFOR
23	10/29/2018	McNeill, Charles	United Nations Environment
24	10/29/2018	Medeiros, Magaly	Government of Acre State, Brazil
25	10/29/2018	Karlstad, Heather	Shell Energy North America (US)
26	10/29/2018	Hamilton, Santiago Pereira	Secretary of Environment, Rondonia, Brazil
27	10/29/2018	Knowles, Cybele	Center for Biological Diversity <sup>4</sup>
28	10/29/2018	Pacheco Alvarez, Alvaro	Department of Caqueta
29	10/29/2018	Hilbk Guzman, Reynaldo	Regional Government of Piura
30	10/29/2018	Norieg Reategui, Victor Manuel	Regional Government of San Martin
31	10/29/2018	Dutra de Lima, Marcelo Jose	Government of Amazonas, Brazil
32	10/29/2018	Kaur, Harjot	UCLA School of Law
33	10/29/2018	Gambini Rupay, Manuel	Regional Government of Ucayali
34	10/29/2018	Furtado Alves, Flavia	Government of Roraima
36	10/29/2018	Seabright, Jeff	

<sup>3</sup> 5,703 nearly identical action alert submissions

<sup>4</sup> 2,280 submittals on very similar letters

<b>Table 1-1: List of Comment Letters Requiring No Further Response</b>			
<b>Comment Number</b>	<b>Date</b>	<b>Name</b>	<b>Affiliation</b>
38	10/29/2018	Schmidlehner, Michael	
40	10/29/2018	Plant, Pennie Opal	Idle No More SF Bay
41	10/29/2018	Smithies, Cassandra	Global Alliance against REDD
42	10/29/2018	Tau, Pamela	Asian American Community
43	10/29/2018	Bloomgarden, Eron	
44	10/29/2018	Hunter, Dawson	Conservation International
45	10/29/2018	Marks, Luan	
46	10/29/2018	Peugh, Jim	San Diego Audubon Society
48	10/29/2018	Antonioli, David	Verra
49	10/29/2018	Alva Ochoa, Ruben	Governor of Huanuco, Peru
50	10/29/2018	Navas del Aguila, Carlos	Governor of Amazonas, Peru
51	10/29/2018	Mellon, Cynthia	Climate Justice Alliance
52	10/29/2018	Salazr-Lopez Leila	Amazon Watch
53	10/29/2018	Coulibaly, Edwige Davy Wohary	
54	10/29/2018	Field, Christopher	Stanford University
55	10/29/2018	Leumer, Alexandra	The Nature Conservancy
56	10/29/2018	Leumer, Alexandra	The Nature Conservancy
57	10/29/2018	Smyth, Michael	Olam International
59	10/29/2018	Holtkamp, James	Holland & Hart LLP
60	10/29/2018	Clairs, Tim	United Nations Development Programme
61	10/29/2018	Shelby, Heather	Environmental Defense Fund <sup>5</sup>
62	10/29/2018	Withey, Lauren	UC Berkeley
63	10/29/2018	Browne, Jaron	Grassroots Global Justice Alliance
64	10/29/2018	Marvin, David	Salo Sciences, Inc.
66	10/29/2018	Tavares, Eduardo	GCF Brazil - Amapa
67	10/29/2018	Lee, Donna	
68	10/29/2018	Sullivan, Katie	IETA
70	10/29/2018	Melton, Jessica	PG&E

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<sup>5</sup> 6,310 identical action alert submittals

<b>Table 1-1: List of Comment Letters Requiring No Further Response</b>			
<b>Comment Number</b>	<b>Date</b>	<b>Name</b>	<b>Affiliation</b>
72	10/29/2018	Zaunbrecher, Virginiaor	UCLA – Center for Tropical Research
73	10/29/2018	Dahl-Jorgensen, Andreas	NICFI
74	10/29/2018	Rosenberger Haider, Laura	Sierra Club, CEJC
75	10/29/2018	McAfee, Kathy	San Francisco State University
76	10/29/2018	Pollet-Young, Christie	SCS Global Services, Inc.
77	10/29/2018	Medeiros, Magaly	
78	10/30/2018	McMahon, Janice	Environmental Services Inc.
79	10/30/2018	Durshinger, Leslie	Terra Global
80	10/30/2018	Wolf, Shaye	Center for Biological Diversity (References to Comment Letter 65)
81	10/30/2018	Rubens Pereira, Brito	Tocantins State, Brazil
82	10/30/2018	Coehlo, Marcelo De Araujo	Maranhao State, Brazil
83	11/8/2018	Tuttle, Andrea	Forest and Climate Policy

## 2. RESPONSES TO COMMENTS

The comment letters responded to in this document were coded by the order in which they were received. Table 2-1 provides the list of comment letters that contain substantive environmental comments. Responses to these comments are provided below. Comment letters, bracketed to indicate individual comments, are provided in Attachment A.

<b>Table 2-1: List of Comment Letters Receiving Responses</b>			
<b>Comment Number</b>	<b>Date</b>	<b>Name</b>	<b>Affiliation</b>
3	October 24, 2018	Saldamando, Alberto	Indigenous Environmental Network
13	October 28, 2018	Seymour, Frances	
22	October 29, 2018	Chan, Michelle	
35	October 29, 2018	Hughes, Gary	
39	October 29, 2018	Moas, Amy	Greenpeace
47	October 29, 2018	Lohmann, Larry	The Corner House
58	October 29, 2018	Documentary Projects	Documentary Projects
65	October 29, 2018	Wolf, Shaye	Center for Biological Diversity
69	October 29, 2018	Limon, Gladys	CEJA
71	October 29, 2018	McCain, Christina	Environmental Defense Fund
84	October 30, 2018	Jordan Hensley	State Water Resources Control Board

### **General Responses to Environmental Comments**

To the extent commenters are claiming deficiencies in the CEQA review, CARB re-states its prior disclaimers that the entire California Tropical Forest Standard (TFS) should be viewed as (1) not a “project” subject to CEQA, and (2) even if it were a “project” subject to CEQA, it would be exempt from CEQA. Nevertheless, as noted in the Draft EA, given the broad public interest in the TFS, CARB voluntarily chose to undertake a more detailed environmental analysis. (Draft EA at 5.)

The TFS is not a “project” subject to CEQA because it is not a commitment to a course of action. The TFS is a voluntary, stand-alone program that requires no action from any entity (indeed, CARB cannot commit agencies over which it lacks jurisdiction to any action). California would not reward any activity undertaken using the TFS. As noted, if CARB ever decides to incorporate the TFS into its Cap-and-Trade Program, it would undergo a full rulemaking process subject to the Administrative Procedure Act (APA) and CEQA, and would require a vote of the Board (which has never before considered

incorporating a tropical forest program into the Cap-and-Trade Program). Given that the endorsement of TFS is not linked in any way with the Cap-and-Trade Program, there would be no potential for any Cap-and-Trade related impacts as a result of endorsing the TFS.

Furthermore, even if the TFS were viewed as an “action” or “project” under CEQA, it should be exempt from CEQA’s requirements as an action taken by a regulatory agency for protection of the environment. (14 CCR § 15308.) That exemption provides:

Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for the protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption.

(14 CCR § 15308.) CARB is a regulatory agency undertaking an authorized activity for the purpose of protecting the environment (i.e., avoiding tropical forest degradation and deforestation). Nevertheless, as noted above and in the Draft EA, given the broad public interest in the TFS, CARB voluntarily chose to undertake a more detailed environmental analysis. (Draft EA at 5.) However, CARB did not need to do so, as the exemption applies to the TFS.

CARB also notes that some of the impacts claimed by commenters would occur outside the borders of California (and the United States), including claimed impacts to indigenous groups and from purported land clearing activities in other jurisdictions (CARB strongly disagrees with these claims, as discussed below). CARB is unaware of any case or law holding specifically that out-of-state and out-of-country impacts that do not affect California’s environment must be analyzed under CEQA. As such, CARB believes analysis of such impacts is not required by law. Notwithstanding, in an effort to promote transparency to the fullest extent possible, CARB prepared the Draft EA and these responses to comments, to the extent it was possible for CARB to do so. CARB’s decision to prepare those environmental documents should not be viewed as a concession that those documents are legally required. Any more detailed analysis regarding impacts in other jurisdictions would not be feasible, and would result in speculation, as CARB cannot know at this time which jurisdictions may implement programs under the TFS. Furthermore, CARB cannot guarantee the extent to which any other jurisdiction would implement its laws and take any actions needed to mitigate potential impacts, as disclosed in the Draft EA. Therefore, any further analysis of out-of-state impacts would be speculative, and it is not required by CEQA.

Additionally, several commenters submitted supporting or reference material in connection with their comments, including in connection with comment letters 38, 44, 75, and 80. CARB has reviewed and considered the submitted materials. No further specific environmental issues were raised regarding these materials as they may relate to the project. No further response is necessary.

The following two Master Responses address recurring themes within the comment letters received. These Master Responses are referenced within the individual responses, where applicable.

**Master Response 1: Response to Comments Raising Concerns on Displacement of Indigenous Peoples and the Rights of Indigenous Peoples**

**Comment:**

Multiple comments assert that the TFS will threaten the rights of indigenous peoples, placing forest peoples at risk of displacement and losing control of their territories, their cultures, and their ways of life.

The following response is crafted as a “master response” to these concerns, since several commenters’ concerns are similar. Furthermore, given the issues raised by these commenters involve a complex intersection of many factors, CARB believes a comprehensive response will more effectively address these concerns than addressing each comment individually.

**Response:**

As a threshold matter, this is not a CEQA concern. The commenters do not appear to raise an environmental concern, as effects to social groups, without a related environmental impact, are not environmental impacts under CEQA. (See 14 CCR § 15126(a), 15360, 15382.) Furthermore, as noted above in the General Responses to Environmental Comments, it remains unclear what level of CEQA analysis is required for effects that occur only internationally, and which do not affect California’s environment.

As a good faith effort to address the claims, even though they are not properly viewed as CEQA claims, CARB provides the following responses. CARB strongly disagrees with these claims. The TFS, and the analysis contained in the Draft EA, is premised on ensuring that any jurisdiction utilizing the TFS would need to include robust social and environmental safeguard requirements designed to increase recognition of rights to territory, lands, culture, and ways of life. The TFS is also designed to incentivize reductions in the very deforestation that often displaces indigenous peoples and local communities. In fact, the TFS states: “California or any other jurisdictions or programs that choose to use this standard will only assess those implementing jurisdictions which can demonstrate a strong commitment to and successful implementation of rigorous social and environmental safeguards within their sector-based crediting programs.” (TFS at p. 2.)

Specifically, CARB staff notes that the TFS sets forth criteria and incorporates international best practice requirements, including with respect to land tenure and land rights, and consultation and participation (including free, prior and informed consent), such that any jurisdiction seeking to meet the requirements of the California Tropical Forest Standard would need to undergo territorial governance assessments (see Chapters 3 and 10 of the California Tropical Forest Standard). The TFS incorporates requirements and principles from such international best practices as the United Nations Framework Convention on Climate Change Cancun Agreement, the United Nations Declaration on the Rights of Indigenous Peoples, the Green Climate Fund Indigenous



Peoples Policy (2018), and implementation requirements such as REDD+SES Version 2 (from 2012).

Moreover, revisions made based on multiple comments received on the Draft EA further strengthen these two chapters by incorporating additional guidance from the United Nations Development Program, International Finance Corporation, Forest Carbon Partnership Facility (Common Approach to Environmental and Social Safeguards, 2012), the Green Climate Fund's Mainstreaming Gender in Green Climate Fund Projects Manual (2017), and the Governors' Climate and Forests Task Force Guiding Principles for Collaboration and Partnership between Subnational Governments, Indigenous Peoples and Local Communities (GCF 2018). These principles further specify land rights recognition and important safeguards to ensure indigenous peoples were consulted (in a manner that adheres to the consultation requirements of the United Nations, including free, prior and informed consent) during and participated in the design and ongoing implementation of the jurisdiction's program. On the whole, the TFS – and the analysis in the Draft EA – ensures the recognition of indigenous rights and would not result in the displacement of indigenous peoples as claimed by the commenters.

**Master Response 2: Response to Comments Raising Concerns on Localized Impacts to Disadvantaged Communities from Offsets**

**Comment:**

Multiple comments also assert that offset crediting programs do not reduce global greenhouse gas (GHG) emissions because they allow polluters to keep polluting, and that this results in localized adverse air quality and health impacts in communities located near emitting sources in California. The comments cite to an updated paper by L. Cushing et al, entitled “Carbon Trading, Co-Pollutants, and Environmental Equity: Evidence from California’s Cap-and-Trade Program (2011-2015)” published in 2018. [This paper incorporates an additional year of data from a previous paper published in 2015.] At least one comment also asserts that Assembly Bill (AB) 197 requires direct emissions reductions in the State of California, and that allowing for international sector-based offset credits will violate the requirements of AB 197.

The following response is crafted as a “master response” to these concerns, since several commenters have similar concerns. Furthermore, given the issues raised by these commenters involve a complex intersection of many factors, CARB believes a comprehensive response will more effectively address these concerns than addressing each comment individually.

**Response:**

As noted in the Draft EA, the TFS is not proposing, nor would it result in, any new offset credits being eligible for use in the California Cap-and-Trade Program. As such, the claims related to offset credits within California are not sufficiently related to the Proposed Project to require further CEQA response. Notwithstanding this, CARB disagrees with the claims made in the comment, even to the extent they are meant to address CARB’s Cap-and-Trade Program. These same claims were addressed in Master Response 1 in the Response to Comments and Final Environmental Analysis for the Proposed Amendments to the California Cap on GHG Emissions and Market-Based Compliance Mechanisms in 2017 and were provided in the context of domestic compliance offset credits. The claims are a general concern related to the use of offsets more broadly and do not differ substantively when presented in the context of domestic offsets versus international offsets. The Draft EA referenced this document and analysis, which was incorporated by reference, and which is again set forth in this Master Response.

CARB’s endorsement of the TFS would have no connection to the Cap-and-Trade Program, and any such future connection would require a future rulemaking proceeding and a separate Board vote. Therefore, no response is necessary to comments concerning CARB’s Cap-and-Trade Program. Nevertheless, CARB provides the following responses regarding its Cap-and-Trade Program as a good faith effort to address commenters’ concerns.

CARB agrees that further reducing emissions and exposure to criteria and toxic air pollutant emissions is necessary to protect residents in disadvantaged communities, and is accounting for this need across its full range of programs. These communities have historically been located close to stationary and mobile sources of high concentrations of emissions. The Cap-and-Trade Program, as part of the suite of CARB programs, is only part of the State's response to air pollution. It is an economy-wide mechanism for limiting climate change-causing pollutants. It does not impact where people live, or where facilities are sited. The program promotes reductions in GHG emissions. It does not establish facility specific reduction requirements, but constrains emissions in the aggregate while providing compliance flexibility to achieve GHG reductions in a cost-effective manner. Other state programs focus more directly upon criteria and toxic pollutant reductions.

CARB takes the complex concerns raised by commenters seriously, and has given much consideration to these potential issues, as explained in greater detail in the following paragraphs. Commenters' concerns are the result of complex factors not directly related to the Cap-and-Trade Program or the TFS. In developing its Cap-and-Trade Program, CARB had to balance the specific factors indicated in AB 32 (i.e., Health and Safety Code § 38562(b)) in promulgating regulations to reduce GHG emissions, including, among other things, ensuring that activities undertaken to comply with the regulations do not disproportionately impact low-income communities, considering cost-effectiveness of these regulations, and minimizing emissions leakage. (See Health & Safety Code § 38562(b).) CARB analyses have shown the Cap-and-Trade Program offers the best option, when paired with other complementary measures, for achieving GHG emissions reductions pursuant to AB 32.<sup>6</sup>

### **Likelihood of localized emission increases**

CARB's endorsement of the TFS would have no connection to the Cap-and-Trade Program, and any such future connection would require a future rulemaking proceeding and a separate Board vote. Therefore, no response is necessary to comments concerning CARB's Cap-and-Trade Program. Nevertheless, CARB provides the following responses regarding its Cap-and-Trade Program as a good faith effort to address commenters' concerns.

Even if commenters were correct that the Cap-and-Trade Regulation has any role in increasing localized emissions at particular California facilities (they are not, as described below), and even if the TFS were eventually incorporated into the Cap-and-Trade Program (which would require a subsequent rulemaking proceeding and Board vote), the effect of the TFS on the overall compliance instruments market would be

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<sup>6</sup> See Proposed 2017 Climate Change Scoping Plan Update, at 31-53 (January 20, 2017), [https://www.arb.ca.gov/cc/scopingplan/2030sp\\_pp\\_final.pdf](https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf); First Update to the Climate Change Scoping Plan, at 86-88 (May 2014), [https://www.arb.ca.gov/cc/scopingplan/2013\\_update/first\\_update\\_climate\\_change\\_scoping\\_plan.pdf](https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf); Climate Change Scoping Plan (December 2008), at 15-23, [https://www.arb.ca.gov/cc/scopingplan/document/adopted\\_scoping\\_plan.pdf](https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf).

minimal. Offsets may currently only be used to meet up to 8 percent of a given Cap-and-Trade regulated entity's compliance obligation, an amount which is proposed to decrease to 4% for 2021-2025 emissions years, and 6% for 2026-2030 emissions years, as a result of a currently-pending CARB regulatory proposal. And, sector-based offset credits would be limited to half of the overall quantitative usage limit pursuant to existing regulatory language. In short, international sector-based forestry offsets would only be eligible for use for up to 2, 3, or 4 percent of an entity's compliance obligation, depending on the time period at issue and whether the proposed regulations are finalized in their currently-proposed form. This means sector-based offsets, such as those resulting from a future potential incorporation into the Cap-and-Trade Program (which, again, is not proposed here), would have a minimal effect on overall compliance under the Cap-and-Trade Program and be subject to offset usage limits.

Certain commenters contend that the Cap-and-Trade Program more generally has the potential to cause localized emissions increases in criteria and toxic pollutants that impact disadvantaged communities. In support of their contention, these commenters primarily refer to a September 2016 Research Brief entitled "A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program" and a subsequent revision thereto (collectively referred to herein as the "Research Brief").<sup>7</sup>

While such contentions are well beyond the scope of this proceeding, CARB responds to these concerns here to help clarify the record on these points. In the July 17, 2017 Final EA for its 2017 Cap-and-Trade Amendments (the "2017 EA"), CARB took a conservative approach in disclosing the potential for localized emissions increases in criteria and toxics pollutants due to facility modifications, new construction, or ground disturbance was possible, as well as increases from changes in operation in response to the Cap-and-Trade Program. Staff analyses demonstrated that these impacts are very unlikely; nonetheless, staff could not definitively dismiss the possibility that these impacts may occur at a subset of the many facilities in the Cap-and-Trade Program, given that there is inherent uncertainty in the degree of mitigation ultimately implemented to reduce the potentially significant impacts because the authority to determine project-level impacts and require project-level mitigation lies with the permitting agency for individual projects. Therefore, the 2017 EA took the very conservative approach of disclosing that impact as potentially significant and unavoidable. The 2017 EA also identified potentially significant air quality impacts related to activities that disturb the ground, such as construction projects or site preparation for tree planting to establish offset credits. The 2017 EA noted that such impacts are likely to be mitigated during project development, but are nonetheless possible. Nonetheless, based on analysis to date, CARB strongly disagrees with

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<sup>7</sup> Lara J. Cushing, Madeline Wander, Rachel Morello-Frosch, Manuel Pastor, Allen Zhu, and James Sadd, Research Brief: A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program (September 2016), available at [http://dornsife.usc.edu/assets/sites/242/docs/Climate\\_Equity\\_Brief\\_CA\\_Cap\\_and\\_Trade\\_Sept2016\\_FINAL2.pdf](http://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL2.pdf). See also L. Cushing et al, Carbon Trading, Co-Pollutants, and Environmental Equity: Evidence from California's Cap-and-Trade Program (2011-2015) (published 2018), available at <https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002604>.

commenters' contentions regarding the likelihood of localized emissions increases in criteria and toxic pollutants due to the implementation of the Cap-and-Trade Program. Indeed, the opposite effect is far more likely. As explained in greater detail in the 2017 EA, the coming years involve significantly more ambitious emissions reduction mandates, which are expected to produce dramatic reductions in GHG emissions and likely criteria pollutant<sup>8</sup> emissions across all sectors covered by the Cap-and-Trade Program.

Before considering how the commenters' contentions seek to rely on the Research Brief, it is important to consider the context under which the Research Brief was developed and the purposes for which it is designed. In the "Overview" section on page 1, the Research Brief disclaims that "[f]urther research is needed before firm policy conclusions can be drawn from this preliminary analysis." The Research Brief also notes that "[a]s regulated industries adapt to future reductions in the emissions cap, California is likely to see more reductions in localized GHG and co-pollutant emissions." (Research Brief at 10.) Therefore, the Research Brief does not identify adverse environmental impacts resulting from the Cap-and-Trade Program.

Moreover, and contrary to several commenters' contentions, the Research Brief *does not* conclude that localized emissions in disadvantaged communities are increasing *due to the Cap-and-Trade Program*. The overall thrust of the Research Brief is that more can be done through modifications to the Cap-and-Trade Program to *enhance benefits* to environmental justice communities. A CEQA analysis must identify and focus on the "significant environmental effects" of the proposed project. (Pub. Resources Code § 21100(b)(1); 14 CCR § 15126(a), 15143.) A significant effect on the environment is defined as "a substantial, or potentially substantial, *adverse* change in the environment." (Pub. Resources Code § 21068 [*italics added*].) By contrast, an action that simply foregoes some hypothetical benefits, as opposed to causing an increase above the environmental baseline, is not a CEQA impact because it does nothing to adversely change the existing environmental conditions that form the baseline. This distinction is critical to understand in considering commenters' contentions and the CEQA implications.

With regard to the initial conclusions of the Research Brief, it is important to note that the Research Brief states that it is a preliminary research effort only, the research brief does not consider more direct drivers of change in production activity that result in increases in criteria and toxic pollutants.

First, while noting some preliminary indications regarding increased emissions in certain industrial sectors and sources for the 2013-2014 period compared to the 2011-2012 period, the Research Brief does not account for several important macroeconomic and electricity sector causal factors that can help explain an increase in emissions during that period. In this regard, commenters' contention that the Research Brief shows that

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<sup>8</sup> "Criteria pollutants" refers to the pollutants for which U.S. EPA has established national ambient air quality standards, which are ground-level ozone, carbon monoxide (CO), particulate matter (PM), lead, sulfur dioxide (SO<sub>x</sub>), and nitrogen dioxide (NO<sub>x</sub>).

the Cap-and-Trade Program exacerbates localized pollution burdens reflects a misconception: commenters assume that, because emissions may have increased at some sources after promulgation of the Cap-and-Trade Regulation, then the Cap-and-Trade Regulation must have caused such emissions increase. However, the sequence of these events does not indicate causality.

Most importantly, the economy was still significantly affected by the Great Recession in 2011-2012. Depressed demand for goods and services, as well as labor market slack, meant that production was lower in the 2011-2012 period compared to the 2013-2014 period, regardless of the Cap-and-Trade Program. As a result, to the extent emissions increased on both facility and sector levels over the entire 2011 to 2014 period, such emissions increases were likely due to production returning to pre-recession levels, not the Cap-and-Trade Program. Additionally, electricity sector emissions may have increased in 2013-2014, compared to 2011-2012, because of increased dispatch of natural gas-fired power plants due to (1) decreased hydroelectricity production as a result of California's historic drought, which started after 2011 and (2) the closure of the San Onofre Nuclear Generating Station (SONGS) in 2012.

Other commenters on the 2017 EA referenced these economic factors to help explain emissions changes in various sectors, and in fact, have presented documentation showing that GHG emissions reductions have been slightly greater in disadvantaged areas (though the difference in emissions reductions between disadvantaged areas and other areas is not statistically significant).<sup>9</sup> Therefore, it is important to note that there is disagreement among the commenters in this proceeding regarding what the data shows to date.

Second, the Research Brief is based on limited data, which is inadequate to support a conclusion that the Cap-and-Trade Program has the potential to cause significant localized emissions increases. As recognized by the Office of Environmental Health and Hazard Assessment (OEHHA) in its February 2017 Initial Report on Tracking and Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities<sup>10</sup> (referred to herein as the "OEHHA Initial Report") discussed further below, limited data is available from which to draw conclusions at this point. The Cap-and-Trade Program is a relatively new program, with the first auction of emissions instruments in the program covering large industrial sources and electricity generation. In 2015, the program expanded to cover emissions from combustion of gasoline and diesel, as well as natural gas use in commercial and residential applications. The OEHHA Initial Report also notes there are complexities in trying to correlate GHGs with criteria and toxics emissions across industry and within sectors, although preliminary

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<sup>9</sup> Maximilian Auffhammer, Severin Borenstein, James Bushnell, Meredith Fowlie, and Kyle Meng, Comments on the California Cap on Greenhouse Gas Emissions and Market Based Compliance Measures (August 2017), available at <https://www.arb.ca.gov/lists/com-attach/214-capandtrade16-BmdWlqNgUmlEbQVo.pdf> (citing to Kyle Meng, "Is cap-and-trade causing more greenhouse gas emissions in disadvantaged communities" (April 2017), available at [https://www.dropbox.com/s/ka0a884oxkotxhj/Meng\\_CT\\_EJ.pdf?dl=1](https://www.dropbox.com/s/ka0a884oxkotxhj/Meng_CT_EJ.pdf?dl=1)).

<sup>10</sup> Available at <https://oehha.ca.gov/environmental-justice/report/ab32-benefits>.

data review shows there may be some poor to moderate correlations in specific instances. Further, OEHHA observed that “[t]he key challenge in analyzing the benefits and impacts of climate-change programs on disadvantaged communities is acquiring adequate data. As discussed in this report, data on emissions of GHGs, criteria air pollutants and toxic air pollutants are collected by multiple entities under different programs and statutory mandates. Differences in reporting requirements across regulatory programs can complicate data analysis. In addition, toxic emissions data for many facilities are only updated every four years, further limiting conclusions that can be reached.”<sup>11</sup> Some specific challenges include matching facility identification numbers, coordinating data submittal requirements and methods, harmonizing reporting deadlines and frequency, and inconsistent quality assurance/quality control methods.<sup>12</sup> In summary, sufficient data is not available yet to fully analyze the correlation between GHG and criteria emissions from these types of facilities. As discussed throughout this response, CARB is continuing to work on filling these data gaps to more accurately analyze this potential issue as new data becomes available. See below for more information on current efforts to gather the necessary data.

In summary, as disclosed in the 2017 EA, CARB staff has concluded that localized air impacts are unlikely to result from the Cap-and-Trade Program – which, is not at issue in the proposed endorsement of the TFS. CARB agrees with the OEHHA Initial Report and the Research Brief on the need for better integration of criteria, toxics, and GHG emissions databases. This would further support transparency and the ability to conduct analyses to monitor and track how these pollutants change over time at large stationary sources, especially near disadvantaged communities. Further, the OEHHA Initial report and the Research Brief do not provide evidence that implementation of the Cap-and-Trade Program is contributing to increasing local air pollution, but they underscore the need to use all of the tools (e.g., enhanced planning, monitoring, and enforcement, new regulations, tighter permit limits) available to the State and local agencies to achieve further emissions reductions of toxic and criteria pollutants that are impacting communities. These needs are in the process of being addressed through the efforts described below.

Accordingly, CARB has worked, and continues to work, to develop processes and mechanisms for protecting communities against localized emissions increases, regardless of their cause, as described in the sections below.

### **Efforts to reduce criteria pollutant and toxics emissions**

As noted previously, commenters’ concern regarding criteria and toxic emissions in California have more to do with traditional air pollution regulation than CARB’s climate programs. As discussed above, local air districts, rather than CARB, have direct

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<sup>11</sup> OEHHA, Initial Report: Tracking and Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities (February 2017) at 49.

<sup>12</sup> ARB Staff Presentation: Informational Update on California’s Emission Inventories for Criteria Pollutants, Toxic Air Contaminants, and Greenhouse Gas Air Pollution, January 27, 2017. Available at <https://www.arb.ca.gov/board/books/2017/012717/17-1-3pres.pdf>.



authority to regulate criteria pollutant and toxic emissions from stationary sources. Nevertheless, for many decades, the State has implemented many policies and programs to address and reduce criteria and toxic air pollutants. As a result of these efforts, significant progress has been made in reducing diesel particulate matter (PM) and many other hazardous air pollutants. For example, and based on the CEPAM inventory (2016 SIP inventory tool V. 1.05), statewide NO<sub>x</sub> emissions have been reduced by 26 percent between 2012 and 2017, and diesel PM has been reduced by 50 percent over the same period.

CARB partners with air districts to address stationary emissions sources and adopts and implements State-level regulations to address sources of criteria and toxic air pollution, including mobile sources. The key air quality strategies being implemented by CARB include:

- **State Implementation Plans.** The 2016 State Strategy for the State Implementation Plan sets forth a comprehensive array of proposed control measures designed to achieve the emission reductions from mobile sources, fuels, stationary sources, and consumer products necessary to meet ozone and fine PM attainment deadlines established by the Clean Air Act.
- **Diesel Risk Reduction Plan.** As referenced in the 2010 ISOR to the Cap-and-Trade Regulation and the functional equivalent document incorporated by reference in the EA, California's Diesel Risk Reduction Plan recommends many control measures to reduce the risks associated with diesel PM and achieve a goal of 85 percent PM reduction by 2020. Diesel PM accounts for the majority of California's ambient air cancer risk.
- **Sustainable Freight Action Plan.** Executive Order B-32-15 required the development of an integrated Sustainable Freight Action Plan, which seeks to improve freight efficiency, transition to zero emission technologies, and increase competitiveness of California's freight system. This Action Plan was released in July 2016.
- **AB 32 Scoping Plan.** The original (2008), first update (2014), and 2017 Scoping Plan Update (2017)<sup>13</sup> contain the main proposed strategies California will use to reduce the GHGs that cause climate change and achieve the State's climate goals. Following new legislative direction in AB 197 (discussed below), the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan Update) estimates the toxic and criteria emissions reductions co-benefits expected of proposed scoping plan measures.

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<sup>13</sup> See 2017 Climate Change Scoping Plan Update (November 2017), available at [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).



- **AB 1807.** AB 1807 requires CARB to use certain criteria in prioritizing the identification and control of air toxics.
- **AB 2588 Air Toxics “Hot Spots” Program.** AB 2588 imposes air quality requirements on the state. The goals of the program are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.
- **SB 605 Short-Lived Climate Pollutant Plan.** In March 2017, CARB adopted a comprehensive short-lived climate pollutant strategy, which involves coordination with other state agencies and local air quality management and air pollution control districts to reduce emissions of short-lived climate pollutants. This strategy offers many localized air quality benefits, including reductions in volatile organic compound (VOC) emissions from oil and gas operations and livestock operations, as well as particulate matter reductions from incentives to replace woodstoves.

To support efforts to advance the State’s toxics program, OEHHA finalized a health risk assessment methodology on March 6, 2015.<sup>14</sup> In light of this, CARB is collaborating with air districts in the review of the existing toxics program under AB 2588 to strengthen the program.

#### **Responses to commenters’ other concerns regarding potential impacts to disadvantaged communities**

The commenters state that there are foregone benefits in reducing criteria and toxics air pollutants by deploying the Cap-and-Trade Program. As noted above, the Cap-and-Trade Program is designed to primarily address GHGs, not criteria and toxics air pollutants. However, to the extent actions are taken to improve onsite efficiency and reduce the combustion of fossil fuels, the Cap-and-Trade Program will likely drive GHG as well as criteria and toxic emission reductions co-benefits. The Research Brief discussed above and cited by the commenters states, “As regulated industries adapt to future reductions in the emissions cap, California is likely to see more reductions in localized GHG and co-pollutant emissions.” Indeed, the post-2020 annual emissions caps require deeper annual emissions reductions than what the Cap-and-Trade Program requires leading up to and including 2020.

At the same time, there are only a few years of data available for the Cap-and-Trade Program. Again, the authors for the Research Brief state, “Further research is needed before firm policy conclusions can be drawn from this preliminary analysis.” This is true of the subsequent revision to the Research Brief as well, which added in a fourth year of data. It is premature to draw conclusions that there are, or will be, no co-benefits

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<sup>14</sup> See OEHHA Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments 2015, <https://oehha.ca.gov/air/cnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>.

associated with the Cap-and-Trade Program at this time, as more data is needed to inform this type of analysis. To ensure transparency in how emissions are changing among covered entities, CARB makes available annually reported and verified GHG emissions data, issuance data for offsets that includes location and offset type, and how entities comply with the program with allowances and the use of offsets. This data will continue to be made publicly available as the program continues, fostering more informed analysis regarding emissions changes at both facility and regional levels.

In general, GHG emissions declined sharply during the Great Recession and slowly increased as the economy grew over the years immediately following the recession. It is important to note that the GHG emissions per capita and per dollar of Gross Domestic Product have declined over this same period of time—meaning the State’s economy is decarbonizing. Therefore, any GHG emissions increases at either the facility or sector-wide level have most likely resulted from the economic recovery (and are therefore properly viewed as part of the existing conditions), rather than from the Cap-and-Trade Program. Moreover, as indicated in the annually reported and verified GHG emissions data, GHG emissions have been declining statewide since the adoption of the Cap-and-Trade Program.<sup>15</sup>

With respect to comments specifically raised on the ability to utilize offset credits, even assuming the TFS were to result in new offsets being eligible for use in California, it is unclear how the location from which offset credits are generated relates to local pollutant reductions, since commenters do not identify the nature of any foregone local pollutant benefits from offsets coming from outside California. Moreover, and importantly, the CARB GHG Inventory, which is the primary tool used to track reductions to meet the statewide GHG targets established by AB 32 and Senate Bill (SB) 32, includes in-state smokestack, tailpipe, and emissions associated with imported power to serve California load. When comparing the actual GHG emissions that are covered under the Cap-and-Trade Program, which are not adjusted for offsets, covered entity emissions are under the caps in the program. And, as the Cap-and-Trade Program covers 80 percent of the GHG emissions in the State, given that the caps decline annually, and all offsets must be within a limited usage limit, there will be direct emissions reductions from those sources. These covered sources include large stationary facilities (manufacturing, refineries, power plants, and cement plants), mobile sources, and emissions associated with imported electricity to serve California load.

Additionally, AB 398 is pertinent to the concerns raised by commenters. AB 398 requires CARB to develop regulations reducing the quantitative usage limit for offsets, and requires that no more than one half of the quantitative usage limit could come from offsets that do not provide direct environmental benefits to the state, from the period of January 1, 2021 to December 31, 2030. AB 398 also calls for a Compliance Offsets Protocol Task Force to provide guidance to CARB in approving new offset protocols for the purpose of increasing offset projects with direct environmental benefits in the state while prioritizing disadvantaged communities, Native American or tribal lands, and rural

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<sup>15</sup> See California Air Resources Board Web page, Mandatory GHG Reporting – Reported Emissions, <https://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/ghg-reports.htm>.

and agricultural regions. CARB has commenced the APA process to amend the Cap-and-Trade Regulation pursuant to AB 398 as a separate action from the TFS.

With respect to the comments asserting that offsets are “questionable” and cannot accomplish the objective of being permanent and real, CARB strongly disagrees with these comments, while emphasizing again that no offsets are being proposed as part of the TFS. Under AB 32, all offsets utilized as part of the Cap-and-Trade Program must be real, additional, permanent, verifiable, quantifiable, and enforceable. CARB has developed rigorous offset quantification methods that incorporate the AB 32 criteria and ensure any offset issued and used in the Program meets these criteria. And the TFS, were it to be used in California, establishes similarly rigorous criteria to ensure these same AB 32 factors would be met. CARB’s method of implementing the statutory requirements with respect to offsets was upheld by the First District Court of Appeals in *Our Children’s Earth Foundation v. State Air Resources Board* (2015) 234 Cal. App. 4th 870.

### **Efforts to evaluate and understand emission impacts of Cap-and-Trade**

As noted above, the Cap-and-Trade Program is a highly effective way to achieve economy-wide GHG reductions. The Cap-and-Trade Program is not a focused tool to reduce criteria pollutant and toxics emissions at specific facilities, nor was CARB authorized to require facility-specific criteria pollutant and toxic emissions reductions by AB 32. Criteria pollutant emissions, and many toxics emissions, are regulated at the local (air district) level. Nevertheless, CARB and other state agencies have undertaken substantial efforts to analyze the potential for adverse localized air quality impacts, which have informed CARB’s proposed amendments. These efforts include:

- OEHHA analysis regarding potential localized impacts. In December 2015, the Governor issued a directive that OEHHA prepare a report analyzing the benefits and impacts of the GHG emissions limits adopted by CARB within disadvantaged communities, and directed OEHHA to continue updating that report every three years. In February 2017, OEHHA issued its Initial Report in response to this directive. This report concluded there are not enough emissions data available yet to allow for a comprehensive and conclusive analysis. (OEHHA Initial Report at 48.) However, OEHHA’s preliminary findings confirm that a disproportionate number of large industrial facilities are located in or very close to disadvantaged communities, and it identified paths forward to acquire a range of data needed to identify and track any emissions increases that could be attributable to the Cap-and-Trade Program. While the OEHHA Initial Report focused on the Cap-and-Trade Program, future reports will focus on the impacts of other climate programs on disadvantaged communities. (OEHHA Initial Report at 48-49.)
- CARB efforts to analyze criteria pollutants and toxic air contaminants with respect to greenhouse gas reduction measures. In 2011, as part of the original Cap-and-Trade Program rulemaking, CARB adopted an Adaptive Management Plan to help assess and address unlikely but potential localized air quality impacts resulting from the Cap-and-Trade Program. CARB convened a

Technical Workgroup consisting of industry, environmental justice, and academic representatives to evaluate the appropriate methodology to assess the impact of the Cap-and-Trade Program. CARB staff also analyzed compliance period data from covered facilities and found similar data concerns to OEHHA. With the advent of Assembly Bill 197 (described more fully below), CARB will have access to more complete data, and will continue to assess greenhouse gas reduction measures, including the Cap-and-Trade Program, and any potential impact on criteria pollutants or toxic air contaminant emissions.

- Integrated emissions data is now available. CARB has developed the CARB Pollution Mapping Tool<sup>16</sup> to help the public quickly and easily visualize the emission changes over time at facilities subject to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions; 17 California Code of Regulations (CCR) § 95100 et seq.) (MRR). This tool offers a highly customizable and user-friendly interface for visualizing data from 2008 to the most recent year for which data has been processed (currently 2016). The CARB Pollution Mapping Tool integrates pre-existing criteria pollutant data from the California Emissions Inventory Development and Reporting System (CEIDARS) and GHG emissions from mandatory reporting facilities. The GHG data is reported annually and uses statewide reporting methodologies, while the criteria pollutant emissions data is reported by air districts. CARB staff is working closely with air district staff regarding the criteria pollutant emissions data to identify facility emissions data trends across the time series (2008-2016). Additionally, pursuant to Assembly Bill 197 (discussed below), this tool has incorporated air toxics emissions data at the beginning of 2018.

With respect to the comments regarding AB 197, and as indicated in the Response to Comments and Final Environmental Analysis completed in 2017, the California legislature passed AB 197 in 2016. This bill, passed in conjunction with SB 32, requires an array of changes to how CARB is governed and overseen by the Legislature, how CARB considers and communicates emissions data (both at facility and regional levels), and adding transparency regarding the expected emissions benefits of new CARB measures. The elements of AB 197 include:

- A requirement that CARB make available, and update at least annually, on its Internet Web site the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants throughout the state broken down to a local and subcounty level for stationary sources and to at least a county level for mobile sources, and conduct monitoring in cooperation with other agencies to fulfill this requirement. (Health & Safety Code § 39607.)
- A requirement that CARB make available, and update at least annually, on its Internet Web site the emissions of greenhouse gases, criteria pollutants, and toxic air contaminants for each facility that reports to the state board and air

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<sup>16</sup> Available at [https://www.arb.ca.gov/ei/tools/pollution\\_map/](https://www.arb.ca.gov/ei/tools/pollution_map/).

districts. CARB is also required, at least once a year at a hearing of the Joint Legislative Committee on Climate Change Policies, to present an informational report on the reported emissions of greenhouse gases, criteria pollutants, and toxic air contaminants from all sectors covered by the scoping plan, including an evaluation of emission trends and a discussion of the factors that influence those trends. (Health & Safety Code § 38531.)

- A directive that CARB, when adopting rules and regulations to achieve greenhouse gas emissions reductions beyond the statewide greenhouse gas emissions limit, must follow the requirements of Health & Safety Code § 38562(b), consider the social costs of GHG emissions, and prioritize regulations that result in direct emission reductions at large stationary sources of GHG emissions, from mobile sources, and from other sources. (Health & Safety Code § 38562.5.)
- Measures to increase transparency regarding the effectiveness of new Scoping Plan measures, by requiring CARB to identify specified information for each proposed emissions reduction measure, including both the range of projected GHG emissions reductions and the range of traditional air pollution reductions that would result from the measure. (Health & Safety Code § 38562.7.)

In addition to the actions discussed above, other mechanisms are in place to address criteria pollutant and toxics emissions. These other actions will address both mobile and industrial sources, and will require coordination across multiple agencies:

- Achieve better integration of emissions and program data for GHGs, criteria pollutants, and toxics. CARB has enhanced its Pollution Mapping Tool to include toxics data, and to display multi-pollutant data for all sources at the county and sub-county level. CARB is also continuing to work to create an integrated inventory database system, and is investigating ways to harmonize the timing of data submittals and make data methodologies for criteria and toxic pollutants more consistent.<sup>17</sup>
- Continued analysis by OEHHA. Pursuant to the Governor's directive, OEHHA will continue to analyze the benefits and impacts of the GHG emissions limits adopted by CARB within disadvantaged communities with respect to programs adopted pursuant to AB 32. This analysis will include potential benefits and impacts in disadvantaged communities for other AB 32 programs outside of the Cap-and-Trade Program.
- CARB adopted the State SIP Strategy in March 2017, which lists a suite of measures CARB has committed to develop in the coming years. CARB's Mobile

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<sup>17</sup> See ARB Staff Presentation: Informational Update on California's Emission Inventories for Criteria Pollutants, Toxic Air Contaminants, and Greenhouse Gas Air Pollution, January 27, 2017. Available at <https://www.arb.ca.gov/board/books/2017/012717/17-1-3pres.pdf>.

Source Strategy and Sustainable Freight Strategy give further information and context regarding CARB's proposed upcoming statewide measures to transform the mobile source and freight sectors.

Additionally, newly-enacted AB 617 (Chapter 136, Statutes of 2017) directs and authorizes CARB to take several actions to reduce emissions and improve data reporting from facilities, air quality monitoring, and pollution reduction planning for communities affected by a high cumulative exposure burden. With regard to reporting, it requires CARB to develop a uniform statewide annual reporting system of criteria pollutants and toxic air contaminants for certain categories of stationary sources. As for monitoring, it required CARB to prepare a monitoring plan by October 1, 2018 to identify the highest priority locations around the state to deploy community air monitoring systems. By July 1, 2019, any district containing a high priority location selected by CARB would need to deploy a community air monitoring system for that location or locations. The districts would also have authority to require nearby facilities to deploy a fenceline monitoring system under certain conditions. Finally, with regard to emission reductions and planning, AB 617 also requires CARB to prepare, in consultation with numerous stakeholders (including environmental justice organizations), a statewide strategy to reduce emissions of toxic air contaminants and criteria air pollutants in communities affected by a high cumulative exposure burden. This strategy was required to be prepared by October 1, 2018. The Board approved AB 617 program requirements and community selection at the September 2018 Board hearing.

Based on the foregoing, CARB staff notes that it has begun the steps outlined in AB 197 and AB 617 through various programs administered by CARB. Since the TFS does not propose or result in the use of any new offset credits – or any change to the offset quantitative usage limit (which will be further restricted pursuant to AB 398 starting in 2021) – no further response is necessary.

### **Role of local air quality regulation**

In addressing the commenters' concerns, it is also critical to understand how air pollution and climate regulation are implemented in California. The Cap-and-Trade Program is an economy-wide mechanism for limiting climate change causing pollutants. It is neither the intent of the Cap-and-Trade Program nor the authorization of the underlying statute (i.e., AB 32) to regulate criteria pollutant and toxic emissions from specific stationary sources, although program effects on these emissions were considered during the design of the Regulation.<sup>18</sup> In general, CARB's statutory authority is limited to regulating mobile sources; CARB has direct authority to develop

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<sup>18</sup> AB 32 requires ARB to satisfy several requirements in adopting regulations under AB 32, including ensuring that activities undertaken to comply with the regulations do not disproportionately impact low-income communities; ensuring that activities undertaken pursuant to the regulations complement, and do not interfere with, efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminant emissions; and considering overall societal benefits, including reductions in other air pollutants, diversification of energy sources, and other benefits to the economy, environment, and public health. (See Health & Safety Code § 38562(b).)

stationary source rules for GHG emissions, but it is not a permitting agency. CARB does not have the authority to permit local stationary sources nor directly regulate their emissions of toxic air contaminants and criteria air pollutants. The primary authority to regulate toxic air contaminants and criteria air pollutants at stationary sources, including the criteria pollutant and toxics emissions of concern to the commenters, is vested in the local air districts and U.S. EPA. (See Health & Safety Code § 39002.) The air districts and U.S. EPA have the power to require stationary sources to obtain air quality permits, and to establish the specific emissions limitations applicable to each facility. CARB does consider matters of toxic risk through separate programs, and has endeavored to reduce toxic risk from industrial facilities throughout the State. As to criteria pollutants, CARB works with districts on air quality planning, and has approved district plans that will lead to attainment of state and federal air quality standards. As described elsewhere in this response, new legislation has also provided mechanisms for improving reporting, monitoring, and planning to address criteria pollutant and toxics emissions in high priority communities across the state.

In this context, Cap-and-Trade covered facilities of interest to commenters have their construction, modification, and operation permitted by the air districts consistent with state and federal criteria and toxic pollution standards. These permit limits, which must also be consistent with attainment planning, are designed to ensure that sources cannot emit above levels protective of public health. Actions related to AB 617 (described above) will further help reduce emissions at individual facilities.

It is, thus, important to be aware that any emissions increases of concern to the commenters would need to be authorized under the permits issued by the local air districts. Otherwise, the facilities would be in violation of their permit requirements. CARB cannot permit higher emissions at any facility, and cannot cause emissions to exceed permit limits; nor does CARB revise these permits as a general matter to decrease emissions of toxics and criteria pollutants. As noted above, the air districts have primary permitting authority over these facilities. Permitted emissions levels are set after permit review, in accordance with district regulation and statute. Major stationary sources, of the sort covered by the Cap-and-Trade Regulation, generally must control permitted levels of criteria pollutant emissions consistent with at least the Best Available Control Technology (BACT), as defined in permitting regulations. This BACT analysis, and related analyses, are designed to ensure continued public health protection, and Cap-and-Trade cannot legally cause sources to exceed these limits. CEQA review also may pertain, and the air districts may require certain high priority facilities to prepare health risk assessments with respect to hazardous substances. If a health risk assessment indicates a significant risk associated with the facility's emissions, the facility must conduct an airborne toxic risk reduction audit and develop a plan to implement airborne toxic risk reduction measures that will result in the reduction of emissions from the facility to a level below the significant risk level within five years.

Finally, recently enacted AB 617 also requires districts, via a public process, to adopt by January 1, 2019 an expedited schedule for implementing best available retrofit control technology (BARCT) for sources subject to the Cap-and-Trade Program. This schedule

will give the highest priority to those emission units that have not had the emissions-related conditions in their permits modified for the greatest period of time.



Comment Letter 3 10/24/2018	Saldamando, Alberto Indigenous Environmental Network
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**3-1:** This comment joins comment 65 and asserts that the Draft EA fails to meet the requirements of the California Environmental Quality Act. The comment also asserts that the Draft EA fails because an environmental analysis must first be done on California's Refinery Communities before any TFS is accepted.

**Response:** See Responses to Comment Letter 65 and Master Response 2. With respect to the portion of the comment demanding an environmental analysis of communities near refineries, CARB staff notes that it is unclear what this analysis would be or how it would relate to the Proposed Project. If the comment is referencing the use of offset credits, see Master Response 2. If the commenter is referencing other environmental impacts faced by communities living near refineries, those impacts would be separate and distinct from anything in the Proposed Project, even assuming the Proposed Project had localized impacts in California –which the Draft EA refutes.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

Comment Letter 13 10/28/2018	Seymour, Frances
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**13-1:** This comment states that critics of programs that reduce emissions from deforestation and degradation have not sufficiently recognized that such programs at the jurisdiction-scale guard against risks, including of leakage and reversals. The comment states that the advantages of a “jurisdictional approach” are described well in Chapter 2 of the Draft EA.

**Response:** Although the comment does not raise any environmental issue pertaining to the Draft EA, CARB appreciates the comment’s assessment of Chapter 2 of the Draft EA.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

Comment Letter 22 10/29/2018	Chan, Michelle
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**22-1:** The comment asserts that tropical forest offset projects face unique problems that make them unfit to offset industrial emissions. The comment states that the Draft EA outlines but does not adequately address these problems, which include problems of permanence and non-additionality. The comment states that allowing these offsets results in harm through increased emissions from industrial sectors and uncertain reductions due to temporary sequestration. The comment further states that because of these problems, no jurisdiction accepts tropical forest credits and therefore, allowing these credits in California's program would undermine the integrity of California's climate policy and violate the criteria of AB 32.

**Response:** See Master Response 2. With respect to the portion of the comment asserting that no other jurisdiction has accepted tropical forest credits, CARB staff notes that other jurisdictions and programs are actively assessing tropical forest credits, and a high bar set by California through the TFS is expected to assist those jurisdictions by providing a model to utilize. Furthermore, CARB's endorsement of the TFS would not allow credits into the California Cap-and-Trade Program.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

Comment Letter 35 10/29/2018	Hughes, Gary
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**35-1:** The comment asserts that the Draft EA is insufficient because it fails to assess the impacts of the potential for the International Civil Aviation Organization's (ICAO) Carbon Offsetting Reduction Scheme for International Aviation (CORSIA) of utilizing the California Tropical Forest Standard. The comment also asserts that failure to assess the ICAO CORSIA underlying design results in inadequate information for CARB to take action to endorse the Proposed Project.

**Response:** The Draft EA assesses the Proposed Project, which is designed as described in the Draft EA, to establish a rigorous set of criteria that existing and emerging emissions reduction programs, such as ICAO's CORSIA, could utilize to ensure the highest environmental standards. At this time, CARB cannot determine which programs may utilize the TFS, and as such, it would be too speculative to determine which programs would ultimately utilize the California Tropical Forest Standard. CARB takes no position on the design of these emerging programs, except to note that adherence to the criteria in the TFS would ensure higher levels of environmental stringency than may otherwise occur.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

Comment Letter 39 10/29/2018	Moas, Amy (Greenpeace)
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**39-1:** The commenter states that international offsets linked to California's Cap and Trade Program will worsen air quality in certain communities.

**Response:** See Response to Comment 65-8 and Master Response 2.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

Comment Letter 47 10/29/2018	Lohmann, Larry The Corner House
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**47-1:** The comment asserts that fossil and biotic carbon are incommensurable and that endorsement of the Proposed Project will worsen climate change through the use of offset credits. The comment states that the Draft EA conclusions do not acknowledge this incommensurability.

**Response:** CARB strongly disagrees with the comment. First, the Proposed Project will not result in any new offsets being eligible in California's program. See Master Response 2.

The recent IPCC Special Report (2018) identified reduced deforestation and afforestation as critical to limiting global mean warming to 1.5°C or less. Pathways to limit global warming identify forests as a key carbon dioxide removal method to compensate for emissions from other sources. Reduced emissions from biological sources such as avoided deforestation are completely fungible with fossil fuel emissions as they have the same climate forcing impact. Although no further response is required under CEQA to this type of comment, CARB staff rejects the claims made by the commenter, and in the interest of transparency and completeness, provides the following information.

CARB assessed the importance of incentivizing emissions reductions in forests through an offset credit program from the beginning of the California Cap-and-Trade Program design, including in the Functional Equivalent Document prepared for the Cap-and-Trade Regulation pursuant to CEQA in 2010 which is referenced in the Draft EA. California has enacted multiple efforts to address all emission sources, the need for which was highlighted by the recent IPCC report, as referenced by multiple commenters. These include existing programs to address emissions from the forest sector – through California Climate Investments of Cap-and-Trade auction proceeds, through the 2017 Scoping Plan Update including reducing natural and working land emissions within California, and the existing domestic offset program which has incentivized over a 110 million metric tons of GHG reductions in forests. These efforts recognize the commensurability of reductions in the forest sector to complement other emission reduction strategies.

**47-2:** The comment asserts that the assessment in the Draft EA that failure to endorse the Proposed Project will not result in efforts to reduce emissions from tropical deforestation assumes that local

communities in tropical jurisdictions are helpless and do not have emission reduction initiatives of their own.

**Response:**

The comment does not raise any environmental issue pertaining to the Draft EA. Rather, the commenter attempts to utilize the technical environmental assessment of the Draft EA to question the integrity of CARB. Although no further response is required under CEQA to this type of comment, CARB staff rejects the claims made by the commenter, and in the interest of transparency and completeness, provides the following information. The Draft EA provides an overview of the Proposed Project and an environmental analysis that compares the proposed actions to baseline conditions. CEQA states that the baseline for determining the significance of environmental impacts will normally be the existing conditions at the time the environmental review is initiated (see Cal. Code Regs., tit.14, § 15125 (a)). Therefore, significance determinations reflected in the Draft EA are based on a comparison of the potential environmental consequences of endorsing (or not) the Proposed Project within the existing context of tropical deforestation trends. As indicated in the Draft EA, endorsement of the TFS is expected to build confidence in financing efforts for efforts to reduce emissions from tropical deforestation at the jurisdiction scale. This financing confidence would also recognize the many existing efforts of indigenous peoples and local communities to continue protecting forests, within jurisdiction-scale programs. The findings of the Draft EA were simply that the failure to develop robust mechanisms to raise confidence in financing efforts will result in maintenance of baseline conditions – e.g., not spur the jurisdiction-scale efforts necessary to reduce emissions from tropical deforestation.

**47-3:**

The comment appears to be stating that because the Proposed Project and Draft EA assess criteria for programs that would recognize environmental service value from protecting forests that this represents an inherent racism in the California Tropical Forest Standard and Draft EA.

**Response:**

See Response to Comment 47-2.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

Comment Letter 58 10/29/2018	Documentary Projects Documentary Projects
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**58-1:** The comment states that a feasible alternative to the Proposed Project would be to require statutory enforcement of forest community resource tenure rights. The comment states that by failing to pursue this alternative as opposed to the Proposed Project, the Draft EA does not meet CEQA requirements.

**Response:** As indicated in the Draft EA, CEQA requires an alternatives analysis to determine whether or not different approaches to or variations of the project would reduce or eliminate significant project impacts, within the basic framework of the objectives, a principle that is consistent with CARB's program requirements. The range of alternatives is governed by the "rule of reason," which requires evaluation of only those alternatives "necessary to permit a reasoned choice" (14 CCR Section 15126.6 (f)). Further, an agency "need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative" (14 CCR Section 15126.6 (f)(3)). The analysis should focus on alternatives that are feasible and that take economic, environmental, social, and technological factors into account. Alternatives that are remote or speculative need not be discussed. Furthermore, the alternatives analyzed for a project should focus on reducing or avoiding significant environmental impacts associated with the project, as proposed.

With respect to the alternative suggested by the comment, CARB staff notes that California has no jurisdiction to require land titling in another country. As such, the comment does not propose an alternative that is feasible. Moreover, the suggested alternative would not meet the same objectives of the Proposed Project as outlined in the Draft EA. Notwithstanding this, CARB staff notes that the Proposed Project sets forth criteria, including with respect to land tenure and land rights, such that any jurisdiction seeking to meet the requirements of the California Tropical Forest Standard would need to undergo land tenure assessments (see Chapters 3 and 10 of the California Tropical Forest Standard). Moreover, revisions based on comments received further strengthen these two chapters by incorporating the Governors' Climate and Forests Task Force Guiding Principles for Collaboration and Partnership between Subnational Governments, Indigenous Peoples and Local Communities (GCF 2018). These principles further require land rights recognition and community forest management, as suggested by the commenter. See also Master Response 1.



**58-2:** The comment states that the Draft EA ignores direct and reasonably foreseeable indirect impacts related to GHG emissions and cultural resources. The comment states that the Draft EA findings of beneficial GHG impacts is incorrect because offsets do not reduce emissions. It states that the Draft EA finding of no adverse impacts to cultural resources and less-than-significant impacts to population and employment are incorrect because of various citations to individual statements and two articles (Milne, et al., Learning From 'Actually Existing' REDD+: A Synthesis of Ethnographic Findings. *Conservation and Society* (2018); Global Witness, At What Cost? (2018)).

**Response:** With respect to the portion of the comment on GHG benefits from offsets, see Master Response 2. With respect to the portion of the comment on cultural and population/employment impacts, see Master Response 1. With respect to the ethnographic article cited in the comment, CARB staff notes that the TFS is structured to incentivize the very local benefit flow and design sharing on the ground, at jurisdiction scale, that was recommended by the researchers (who also indicate in the article that “much of the evidence for this analysis has come from site-level, voluntary market schemes” (p. 10 of article). Moreover, regarding the portion of the comment citing to the Global Witness article, CARB staff notes that the Draft EA assesses the TFS, which would require – for any jurisdictions seeking to meet its criteria – protections of indigenous peoples and local communities. The comment references these articles and attempts to make a logical connection between several quotations and that somehow negating the analysis conducted in the Draft EA. However, the commenter ignores the actual design and criteria contained in the TFS, which is what the Draft EA analyzed. CARB staff believes the analysis in the Draft EA was adequate.

**58-3:** The comment states that a feasible alternative to the Proposed Project is presented in a World Bank working paper that promotes recognizing community tenure rights in order to better sequester carbon than through endorsement of the California Tropical Forest Standard.

**Response:** See Response to Comment 58-1 and Master Response 1.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

Comment Letter 65 10/29/2018	Wolf, Shaye Center for Biological Diversity
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**65-1:** The commenter states that tropical forest offsetting would exacerbate the dislocation of co-benefits from California, and would exacerbate environmental burdens, particularly in disadvantaged communities, particularly by allowing polluters in California to produce more greenhouse gas (GHG) emissions and co-pollutants by offsetting their emissions elsewhere. (p. 2)

**Response:** See Master Response 2. In addition, as noted in Master Response 2, the currently proposed TFS is not incorporated into the Cap-and-Trade Program. If CARB endorses the proposed TFS, it would do so with no commitment to incorporate it into the Cap-and-Trade Program. Any future incorporation or linkage would need to undergo APA and CEQA review, as it would have to be done via a regulatory amendment. Therefore, endorsement of the TFS would not have any potential to impact the compliance instrument market, and would not have any potential to influence emissions at any particular facility.

**65-2:** Commenter claims the TFS would threaten forest ecosystems by failing to address the drivers of deforestation. (p. 3)

**Response:** This comment does not raise any specific environmental concerns, and therefore no detailed response is necessary. CARB generally responds as follows. CARB disagrees with this comment. The entire purpose of the TFS is to reduce tropical forest degradation and deforestation. The TFS has been developed with the benefit of years of scientific study and expert consultation. It incorporates the most rigorous international standards and establishes a structure through which jurisdictions interested in meeting the criteria would have to undertake compliance responses that reduce drivers to be able to demonstrate a real and quantifiable reduction in deforestation. The Draft EA provides an assessment of reasonably foreseeable compliance responses, all of which would result in reducing drivers of deforestation. If a jurisdiction could not demonstrate a reduction in deforestation pursuant to the rigorous requirements of the TFS, then that jurisdiction would not receive any recognition through any incentive program that is utilizing the TFS.

**65-3:** Commenter claims tropical forest offsetting detracts from the necessary work of preventing emissions from extraction and burning of fossil fuels, and expresses concern that California continues to allow extraction and refining of fossil fuels within its borders. (p. 3.)

**Response:**

A ban on extraction, refining, and combustion of fossil fuels is far beyond the scope of the Proposed Project, which is an important, but incremental step in the fight against climate change. That fight is fought on many fronts, and the fact that other possible ways to reduce GHGs exist does not detract from the need to help preserve tropical forests. The needs to reduce petroleum consumption and protect tropical forests are not at all mutually exclusive; rather, they are complementary. As explained in the 2017 Scoping Plan Update, California's climate programs tackle the drivers of climate change on many separate, but related, fronts. A multi-faceted approach has been a core principle in California's climate policies since the beginning. Further, successful implementation of the 2017 Scoping Plan Update will reduce demand for on road fuels in California by 45 percent in 2030 relative to current levels.

Furthermore, commenter does not explain how banning oil extraction in the state with the most stringent environmental controls would prevent leakage to other jurisdictions with less controls, forcing oil imports from places requiring more transport-related emissions. Oil is a global commodity. Banning its extraction in California does not curtail the demand for that commodity in California or elsewhere in the world. Nevertheless, CARB has begun a process to explore how to address GHG emissions from the supply side of petroleum within the state, which involves looking at extraction and processing of crude within the state. It is worth noting that while this has been a concern expressed by some with respect to tropical forests as well, the TFS purposefully includes criteria to mitigate the type of leakage within and around any implementing jurisdiction – this would include increased efficiencies and production of certain commodities on already deforested land, with a corresponding decline in the deforestation rates.

It remains unclear if commenter's suggestion that California curb fossil fuel extraction instead of pursuing the TFS was intended to present a new project alternative. To the extent that it was, CARB responds as follows: banning fossil fuel extraction and combustion is a different project entirely than the proposed endorsement of a tropical forest standard. It would fail to meet most of the project objectives, including objectives 1, 2, 3, and 5. Furthermore, it presumably would not help avoid the project's identified significant impacts, one of which involves impacts to mineral resources as a result of limiting the availability of a mineral resource. (Banning petroleum extraction itself involves limiting the availability of a mineral resource.) Other potentially significant environmental impacts may also result from banning petroleum extraction and combustion, although an analysis of those potential impacts is

beyond the scope of this analysis, as CEQA does not require in-depth analysis of alternatives that fail to meet most of the project objectives.

**65-4:** Commenter sets forth various data points regarding the threat posed by climate change, and underscores the need to curb fossil fuel extraction and combustion in California. (p. 3-4)

**Response:** CARB shares commenter's concern regarding the threats posed by climate change, and agrees that reduced extraction and combustion of fossil fuels is part of the solution. See Response to Comment 65-3.

**65-5:** Commenter claims the TFS is not supported by an adequate EA, and claims the TFS is linked to other emissions trading programs and should have analyzed those programs as part of the Draft EA. Commenter also claims CARB is unsure of what type of "rulemaking" it is currently undertaking and whether it requires an EA. (p. 4)

**Response:** See response to comment 65-15. Additionally, CARB is not undertaking a rulemaking, and has not represented that it is doing so. Rather, CARB is considering endorsement of a standard that may be used by other jurisdictions, if they so choose. Regarding commenter's contention that CARB is unsure whether its proposed endorsement of this standard requires an EA in the first instance, this is due to a lack of clarity in the law, not due to a lack of consideration by CARB. See Master Response 1.

**65-6:** Commenter states the TFS should be rejected because it fails to incentivize reductions of GHG emissions from tropical deforestation, and suggests that similar forest carbon programs have fueled social conflict. (p. 5)

**Response:** CARB disagrees with this comment. See Responses to Comments 65-2, 65-11, and Master Response 1.

**65-7:** Commenter states that tropical forest offsets programs are vulnerable to leakage of forest-destroying activities both within and beyond partner jurisdictions. (p. 5) Commenter further states that encouraging the intensification of agriculture and livestock on cleared lands could have substantial negative social and environmental implications through expansion of land areas being cleared for crops and livestock, including forest clearing in neighboring jurisdictions. (p. 6)

**Response:** As noted in Response to Comment 65-3, the TFS includes criteria to mitigate against the type of leakage described by the

commenter. In particular, the TFS requires any jurisdiction seeking to meet it to minimize leakage (see Chapter 7 of the TFS). This must include a demonstration of the drivers, as well as methods to minimize leakage. The Draft EA included an assessment of the various compliance responses to the TFS, including through mitigation of leakage of deforestation to other jurisdictions outside the implementing jurisdiction. (See Chapter 2 of the Draft EA). While the assessment was not exhaustive, as CARB cannot determine which jurisdictions may utilize the TFS, it did include examples such as increasing sustainable cattle as well as agricultural production generally on already-degraded land, which allows for productivity of pasturelands to increase relative to output if the land were managed conventionally while deforestation does not expand to new areas – the Draft EA cited to research indicating this can and has been demonstrated. (Nepstad et al. 2014). An earlier commenter also noted that the jurisdiction-scale approach included in the TFS will mitigate against leakage. See Comment 13-1 and Response to Comment 13-1.

Regarding the comment on intensification of agricultural land, as discussed in the Draft EA, the TFS proposes to focus on making existing agricultural lands more efficient. Contrary to commenter's assertion, this would help satisfy increasing demand, while preserving forest land. Forest clearing is already occurring in the environmental baseline. The TFS would help reduce the existing level of deforestation. It is unclear why the commenter believes that intensification on existing cleared land (meaning, increased production to meet existing or increased demand) without increasing deforestation would result in forest clearing in neighboring jurisdictions. As indicated in the Draft EA, increasing sustainable cattle and agricultural production generally allows for productivity of pasturelands to increase relative to output if the land were managed conventionally. These types of practices would reduce unsustainable farming methods that rely on clearing of forest, and would therefore minimize potential leakage. In this context, even if a neighboring jurisdiction were to experience additional clearing (which is a speculative assumption), if existing (or even increased) demand for the agricultural or ranching product from the implementing jurisdiction were met by that implementing jurisdiction, this would not be an example of leakage and the TFS would still be incentivizing a reduction in deforestation.

**65-8:** Commenter states that the TFS fails to guarantee permanence of GHG reductions, due to a variety of factors including challenges relating to monitoring and verification.

- Response:** See Responses to Comments 22-1 and 65-10; see also Master Response 2 as it pertains to permanence concerns.
- 65-9:** Commenter states that the TFS lacks adequate safeguards to ensure that social and environmental harms do not occur. (p. 8)
- Response:** CARB disagrees with this comment. See Master Response 1.
- 65-10:** Commenter states that the remote location of many potential projects makes verification, monitoring, and enforcement of the projects difficult and unlikely to succeed. (p. 9)
- Response:** As the Draft EA and the TFS specify, an implementing jurisdiction would be required to demonstrate that third-party verification, monitoring of the implementation of safeguards, and public enforcement of these requirements is occurring. CARB staff notes that existing standards through the UNFCCC are already being implemented in some jurisdictions and demonstrate that such action is feasible. A number of comments submitted on the TFS which do not raise any environmental concerns with respect to the Draft EA, supported the fact that implementation of these social and environmental safeguards is feasible and beneficial. See for example, Comment letters 13, 21, 23, 24, 44, and 60.
- 65-11:** Commenter claims indigenous groups are likely to receive only “harassment, restrictions on land use, and blame for deforestation and climate change” as a result of a tropical forest standard. (p. 10)
- Response:** CARB disagrees with this comment. See Master Response 1. CARB notes that the Draft EA does disclose the potential for conflict with existing land use plans. This could be avoided if local jurisdictions appropriately revise their land use plans in light of future participation in the TFS. However, CARB lacks the legal authority to require that jurisdictions properly do this. Therefore, taking a conservative approach, CARB disclosed a potentially significant impact with regard to potential conflicts with land use plans.
- 65-12:** Commenter claims a tropical forest standard will cause environmental impacts in California by causing localized emissions increases,<sup>19</sup> largely in areas with environmental justice populations. (p. 11-12)

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<sup>19</sup> Specifically, commenter references benzene, formaldehyde, arsenic, nitrogen oxides, carbon monoxide, volatile organic compounds, and particulate matter.

**Response:** As discussed above, the proposed endorsement of the TFS would not involve any commitment to tie the TFS into the Cap-and-Trade Regulation. See General Responses to Comments, and Master Response 2. Simply put, the TFS has no potential to affect compliance responses under the Cap-and-Trade Program.

Commenters cite to research conducted by California researchers regarding the purported effects of the Cap-and-Trade Regulation generally on emissions levels at individual facilities. (p. 11-12.) In its responses to comments from the 2016 Cap-and-Trade Regulation amendments, CARB has previously addressed that research, noting several key scientific and economic limitations, as well as limitations in scope, that make it unable to demonstrate that the Cap-and-Trade Program is causing localized emissions increases from individual facilities.<sup>20</sup> The Responses to Comments from that rulemaking are hereby incorporated by reference. Master Response 2 also addresses this comment.

Finally, even if commenters were correct that the Cap-and-Trade Regulation has any role in increasing localized emissions at particular California facilities, and even if the TFS were eventually incorporated into the Cap-and-Trade Program (which would require a subsequent rulemaking proceeding and Board vote), the effect of the TFS on the overall compliance instruments market would be minimal. Offsets may currently only be used to meet up to 8 percent of a given Cap-and-Trade regulated entity's compliance obligation, an amount which is proposed to decrease to 4% for 2021-2025 emissions years, and 6% for 2026-2030 emissions years, as a result of a currently-pending CARB regulatory proposal. And, sector-based offset credits would be limited to half of the overall quantitative usage limit pursuant to existing regulatory language. In short, international sector-based forestry offsets would only be eligible for use from 2, 3, or 4 percent of an entity's compliance obligation, depending on the time period at issue and whether the proposed regulations are finalized in their currently-proposed form. This means sector-based offsets, such as those resulting from a future potential incorporation into the Cap-and-Trade Program (which, again, is not proposed here), would have a minimal effect on overall compliance under the Cap-and-Trade Program and would be subject to offset usage limits.

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<sup>20</sup> CARB, Response to Comments on the Draft Environmental Analysis for the Proposed Amendments to the California Cap on GHG Emissions and Market-Based Compliance Mechanisms and California's Compliance Plan for the Federal Clean Power Plan (July 17, 2017) (available at <https://www.arb.ca.gov/regact/2016/capandtrade16/finalrtc.pdf>) at 2-11 through 2-15.

**65-13:** The commenter states that the TFS does not include robust criteria for protecting biodiversity. (p. 13)

**Response:** CARB disagrees with the comment. As indicated in the Draft EA, reasonably foreseeable compliance responses to the TFS would result in increased protections of tropical forests, and thereby, of biodiversity (pp. 15, 43, 60). Moreover, the TFS requires consistency with REDD+SES as part of the Social and Environmental Safeguards provisions of Chapter 10, which include criteria that an implementing jurisdiction would need to demonstrate related to protecting biodiversity.

**65-14:** The commenter states that the TFS fails to fulfill its objective to meet long-term climate goals, and CARB should instead focus on measures to reduce in-state emissions, including phasing out fossil fuel production. (p. 13)

**Response:** CARB disagrees with these assertions. See Response to Comment 65-3.

**65-15:** Commenter states that the environmental analysis ignores potential compliance responses or programs that may incorporate the tropical forest standard or use it as a model, including International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and "other emerging programs", as well as California's Cap-and-Trade Program. Commenter states that deferring analysis of impacts of incorporating the tropical forest standard into the Cap-and-Trade Regulation obscures environmental impacts by essentially piecemealing the project. (p. 14-15.)

**Response:** See Response to Comment 35-1, above. Commenter has not noted any potential impacts from the CORSIA, and therefore CARB is unclear what additional analysis commenter is asking for. While other programs may seek to utilize the TFS as a model for level of rigor, or may participate in purchasing sector-based offsets, it is not proper to view the TFS as the cause of any impacts from those other programs using its credits as compliance instruments. CARB lacks authority to shape or design those other programs, and cannot speculate regarding all of the potential uses for offsets which may be generated under the TFS. CEQA does not require speculation, and CARB has already made a good faith effort by taking a conservative approach to address the impacts from a standard that would apply beyond California's borders, and which should be exempt under CEQA as an action for environmental preservation.



In response to commenter's claims regarding piecemeal environmental review, CARB responds that CARB decided to move forward with the TFS because it has substantial independent utility. Regardless of whether it is ultimately incorporated into the Cap-and-Trade Program (which remains highly uncertain at this point), the TFS is useful for many jurisdictions and international entities, and presents an opportunity to immediately facilitate preserving tropical forests, preventing destruction and degradation, and ensuring that GHG emissions remain sequestered. For more discussion on this point, see Draft EA at 2-3.

**65-16:** Commenter states that the Draft EA fails to analyze or mitigate impacts in California.

**Response:** See Master Response 2, above.

**65-17:** Commenter states the Draft EA's cumulative impacts analysis is inadequate because it relies on the Scoping Plan. (p. 16.)

**Response:** CARB disagrees with this comment. As noted above, the TFS would apply beyond California's borders, making it unclear whether CEQA's cumulative impacts analysis requirements even apply. Commenter has provided no support for their contention that such requirements do apply, or that CARB failed to meet any such requirements for analyzing cumulative impacts that occur outside the country. Furthermore, the proposed TFS should be exempt under CEQA as an action for environmental preservation. However, as noted above and in the Draft EA, CARB has prepared an EA in the interest of transparency.

Even assuming the traditional cumulative impacts analysis requirements apply here, CARB disagrees with commenter's claim that CARB simply relies on the 2017 Scoping Plan Update. While the cumulative impact analysis uses a summary of projections based on the Scoping Plan, it conducts its own cumulative impact analysis, considering the proposed TFS together with the summary of projections in the Scoping Plan. CARB views the summary of projections based on the Scoping Plan as the appropriate scope for the cumulative analysis here. The Scoping Plan analyzed the cumulative effects of all of California's key climate programs, which apply at a high level and cover diverse areas from high global warming potential substance control to fuel composition to land use planning to forest preservation. It also notes the threat posed by tropical degradation and the need to address it on a global scale. Therefore, the summary of projections from the 2017 Scoping Plan Update, and analysis thereof, is the proper basis for considering potential cumulative impacts from the TFS.

Furthermore, there is no precedent for developing a cumulative impact analysis for a voluntary, international standard for preserving tropical forests. Agencies are entitled to discretion in selecting an appropriate cumulative impacts assessment area, and no fixed standards apply to that determination. (*City of Long Beach v. Los Angeles Unified Sch. Dist.* (2009) 176 Cal.App.4<sup>th</sup> 889.) Commenters offer no help in clarifying what other similar international “projects” should be considered in such an analysis – particularly any projects that could lead to any cumulatively considerable impacts when combined with the TFS. While commenters claim elsewhere that the TFS would cause increased potential for localized impacts in California (which is incorrect), that is not an example of a cumulatively considerable impact. As noted above, the TFS would not have any potential to impact localized emissions in California, as it is not incorporated into California’s Cap-and-Trade Program. A cumulatively considerable impact is an impact which, when viewed in connection with the effects of other projects, is significant. (14 CCR 15065(a)(3).) Commenters have not identified any potential impacts from the TFS which, *when combined with other similar projects producing related impacts*, would be cumulatively considerable. (14 CCR § 15130(b)(1)(A).)

**65-18:**

Commenter states that the impacts analysis and mitigation measures discussion are inadequate because they do not look in detail at “the existing conditions, plans, and impacts in areas [CARB] anticipates the TFS will be used, such as in the airline sector, Acre, Brazil, and California’s own cap-and-trade program....” (p. 16-17) Commenter also claims the Draft EA fails to acknowledge or analyze “well-known impacts likely to arise from the TFS, given numerous examples and information on problems with applying REDD standards internationally....” (p. 17.)

**Response:**

See General Responses to Environmental Comments section, above; see also Responses to Comments 35-1 and 65-15.

In addition, it is unclear whether the commenter is seeking to assert that several examples of REDD projects – which is not what the TFS is proposing – render any other action to protect tropical forests through the use of rigorous jurisdiction-scale accounting mechanisms and any form of financial valuation of standing forests (and the actions to keep those forests standing) unworkable. If that is the assertion, CARB staff strongly disagrees with it. As described in detail in the Draft EA, the TFS seeks to implement a jurisdiction-scale approach that jurisdictions can aspire to meet, to result in reduced deforestation, protections for indigenous and local communities, and to do so in a transparent, verifiable, and permanent manner. See also Master Response 1, and Responses

to Comments 22-1, 65-2, 65-3, 65-4, 65-5, and 65-6. In addition, an earlier commenter also noted that the jurisdiction-scale approach would mitigate against many of the concerns raised related to project-scale (as opposed to jurisdiction-scale) efforts. See Comment 13-1 and Response to Comment 13-1.

**65-19:** Commenter claims the Draft EA alternatives analysis fails to provide a meaningful evaluation because it “provides no support for its assertions of the benefits and harms of each alternative.” Commenter also objects to the inclusion of an alternative that would not disincentivize mineral extraction. (p. 17-18.)

**Response:** CARB is unclear what commenter means by their statement that CARB “provides no support” for its assertions of the benefits and harms of each alternative. The proposed TFS, and the alternatives thereto, are high-level planning concepts, and there is limited precedent for conducting a CEQA analysis of such proposals. CARB has included a reasonable range of alternatives that address the potentially significant impacts which may result from the TFS, and has disclosed the reasonably foreseeable benefits and impacts of each alternative, to the extent it is possible to do so at this early high-level planning stage. Any more granular analysis would result in speculation.

Regarding the inclusion of an alternative that would not disincentivize mineral extraction, the purpose of an EIR’s discussion of alternatives and mitigation measures is to identify ways to reduce or avoid significant environmental effects. An EIR must focus on alternatives that can avoid or substantially lessen a project’s significant environmental effects. (14 CCR § 15126.6(a)-(b).) The Draft EA discloses that implementation of the TFS could inhibit the availability of mineral resources by restricting extraction activities on parcels participating in the TFS. (Draft EA at 28.) Given this has been identified as a potentially significant impact, CARB developed an alternative that would address it. As explained in the alternatives analysis, that alternative is not preferable to the proposed TFS, as it would fail to meet certain project objectives. Nevertheless, CARB included it as an alternative as a good faith effort to explore alternatives that would reduce or avoid the potential impact to mineral resources.

**65-20:** Commenter states that the CEQA exemption for regulatory action to protect the environment does not apply because there is a “reasonable possibility” that the TFS would harm the environment rather than protect it. (p. 19.)

**Response:** CARB disagrees with this comment, as it is contrary to both the evidence and common sense. Simply put, the TFS is a pure example of an action undertaken by a regulatory agency to assure protection of the environment. Nevertheless, as noted above and in the Draft EA, given the broad public interest in the TFS, CARB voluntarily chose to undertake a more detailed environmental analysis. (Draft EA at 5.) However, CARB did not need to do so, as the exemption applies to the TFS.

The exemption referenced by the commenter states:

Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption.

(14 CCR § 15308.) To summarize why this exemption applies, piece by piece: CARB is a regulatory agency. Undertaking a tropical forest standard is authorized by state statute (see for example Health & Safety Code, §§ 38510 and 38564). The primary purpose of the TFS is to protect the environment; as stated elsewhere in the record, the primary purpose<sup>21</sup> of endorsing the TFS is simple: to avoid tropical forest deforestation and degradation. (See TFS Chapter 1.1 and Draft EA Chapter 2) The process involves procedures for protection of the environment. (see TFS Chapters 3-15.) Finally, the TFS does not involve “construction activities” or “relaxation of standards allowing environmental degradation,” so the exception to the exemption does not apply. (14 CCR § 15308.)

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

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<sup>21</sup> Despite commenter’s misguided statements that the TFS’s primary purpose is to contain costs and allow more industrial activity in California, that claim is simply not correct. There is no link currently proposed to California’s Cap-and-Trade Program, and in endorsing the TFS, CARB would make no commitment to do so.

Comment Letter 69 10/29/2018	Limon, Gladys CEJA
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**69-1:** The comment states that allowing additional offsets would reduce in-state reductions and can exacerbate air quality in disadvantaged communities. The comment references a 2015 study by Lara Cushing and other researchers.

**Response:** See Master Response 2.

**69-2:** The comment states that CARB should examine other ways to reduce deforestation from the Proposed Project. Specifically, the comment states that CARB can examine banning imports of crude oil from the Amazon and other tropical forest areas of the world, and that CARB should focus on minimizing California's consumption of commodities like tropical hardwoods, paper, pulp, minerals, fossil fuels, and other commodities whose production drives tropical deforestation.

**Response:** The comment proposes banning imports and minimizing consumption of commodities as alternatives to the Proposed Project without reference to the authority or mandate of CARB. CARB does not have the legal authority to implement either of the alternatives proposed by the comment, nor is it clear that these actions, were they to occur, would meet any or all of the objectives of outlined in the Draft EA. Specifically, banning imports of crude or minimizing consumption of tropical forest commodities would not appear to ensure that those commodities would not be sold or that actions to reduce deforestation would actually occur. In particular, this alternative would not accomplish the larger-scale objective of jurisdiction-scale emission reductions, facilitating integrated GHG reduction programs, development of robust monitoring, reporting, and verification criteria of reduced deforestation, providing a replicable jurisdiction-scale model for addressing emissions from tropical deforestation, and it is not clear that this alternative would achieve the longer-term climate objectives in the same manner as the Proposed Project. See also Response to Comment 65-3. As such, this alternative would not satisfy the objectives stated in the Draft EA.

Notwithstanding this, CARB staff notes that multiple actions are necessary to reduce GHG emissions from tropical deforestation at the scale necessary to maintain global climate goals. The Draft EA and the California Tropical Forest Standard provide an accounting framework within which to recognize these multiple types of action for jurisdictions which meet the criteria for establishing rigorous reference levels and crediting baselines. This recognition could

take the form of inclusion in an emissions trading system, payment for ecosystem services, or preferential sourcing by a commodity company seeking to only source products that are sustainably produced. This type of recognition is in line with the suggested alternative of minimizing impacts of consumption of tropical forest commodities.

**69-3:**

The comment states that other feasible alternatives to the Proposed Project exist that achieve the same purpose and objectives as the Proposed Project. The comment references action taken recently by the California Public Employees Retirement System to adopt language that recognize deforestation and ecosystem degradation pose materials risks and includes direct acknowledgement of “free, prior and informed consent as a standard in relation to Indigenous Peoples.” The comment states that this is the type of alternative that CARB should examine as a better way to protect tropical forests.

**Response:**

This comment references action undertaken by the California Public Employees Retirement System (CALPERS) regarding recognizing risks from deforestation and acknowledging the need for free, prior and informed consent of indigenous peoples. CARB applauds this action undertaken by another state agency, as it is within the purview of CALPERS authority, similar to divestment initiatives. The comment does not indicate how such an alternative would accomplish the multiple objectives of the Proposed Project as outlined in the Draft EA, nor how CARB would be able to undertake a similar action. In particular, this alternative would not accomplish the larger-scale objective of jurisdiction-scale emission reductions, facilitating integrated GHG reduction programs, development of robust monitoring, reporting, and verification criteria of reduced deforestation providing a replicable jurisdiction-scale model for addressing emissions from tropical deforestation, and it is not clear that this alternative would achieve the longer-term climate objectives in the same manner as the Proposed Project. As such, this alternative would not satisfy the objectives stated in the Draft EA.

Notwithstanding this, CARB staff notes that the TFS incorporates criteria within Chapter 10 of the standard that would require the free, prior and informed consent of indigenous peoples, pursuant to the United Nations Framework Convention on Climate Change Cancun Safeguards (Annex 1 of the Cancun Agreement), and the standard has been revised to further bolster this requirement by the incorporation and adherence to the Governors’ Climate and Forests Task Force Guiding Principles for Collaboration and Partnership

between Subnational Governments, Indigenous Peoples and Local Communities (GCF 2018).

**69-4:** The comment states that other feasible alternatives to the Proposed Project exist that achieve the same purpose and objectives as the Proposed Project. The comment states that CARB should examine actions to improve the stewardship of forests in California, including addressing clear cutting, monoculture tree plantations, and other destructive forest management practices. The comment also states that these actions should assure long-term sustainability and effectiveness of existing protected areas by private, state, tribal, and federal lands.

**Response:** CARB staff agrees that action is required within California to address emissions from California forests. See Response to Comment 47-1, which notes the multiple actions through which California is addressing emissions from forests and other natural and working lands in California. It is unclear whether the commenter is asserting that these ongoing actions cannot occur in concert with other efforts, such as endorsement of the TFS. If that is the assertion, CARB staff strongly disagrees with the commenter. As indicated in the recent IPCC report referenced by the commenter, all of these actions must be undertaken together.

**69-5:** The comment states that other feasible alternatives to the Proposed Project exist that achieve the same purpose and objectives as the Proposed Project. The comment states that CARB should examine models that have been developed to protect indigenous communities such as the Green Climate Fund Indigenous People's Policy, which requires the incorporation of interests of indigenous peoples' rights and respect for enhanced rights to lands, territories and resources. The comment also states that CARB should consider an approach undertaken by Bolivia that does not rely on offsets but seeks better land use practices and prevention of biodiversity loss, deforestation, and degradation.

**Response:** CARB staff agrees with the commenter on the importance of protecting indigenous rights, and notes that the TFS already incorporates the Green Climate Fund Indigenous Peoples Policy. See also Master Response 1. With respect to whether incorporation of this policy is an alternative to the Proposed Project, CARB staff notes that it is unclear how merely utilizing the Green Climate Fund policy in and of itself without tying them to an implementable standard would meet the project objectives listed in the Draft EA. With regards to the approach developed by Bolivia, CARB staff agrees that mitigation and adaptation are critical elements that the global community must address. The Bolivian

approach focuses on ex ante, needs-based finance (meaning prior to reductions being demonstrated) financial agreements with the UNFCCC and a nation utilizing the Bolivian approach to support mitigation and adaptation activities related to sustainable forest management, whereby financing from the Green Climate Fund would go to the implementing nation. As this approach would not be premised on demonstrated (ex post) action to reduce emissions, it is unclear whether or how this approach would achieve the same objectives of facilitating integrated GHG reduction programs (Objective 1), establishing robust criteria for emissions trading systems to assess and potentially include jurisdiction-scale sector-based crediting programs (Objective 3) (in fact, the approach would seem to specifically not seek to achieve this objective), or providing a replicable jurisdiction-scale model (Objective 5) in the same manner as the Proposed Project. It is also unclear whether the approach would reduce or avoid the impacts identified in the EA related to minerals and land use planning. CARB staff is not offering any further view on this approach, except to note that California is not a party to the UNFCCC and does not have any authority in or ability to contribute to, or to direct funding from, the Green Climate Fund. As such, this type of approach would not be feasible under California law, and it would not meet the same project objectives as the Proposed Project. See also Response to Comment 58-1.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.



Comment Letter 71 10/29/2017	McCain, Christina Environmental Defense Fund
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**Comment 71-1:** The comment states that there is a reasonable argument that no Draft EA is required for the Proposed Project, but notes that completing a very thorough Draft EA was the right approach here. The comment further notes that the Proposed Project will not result in any direct changes or impacts in California, as the Proposed Project would not amend any regulation or result in any linkage or offset eligibility within California. The comment states that the Draft EA is helpful in providing transparency consistent with the spirit of CEQA.

**Response:** Although the comment does not raise any environmental issue pertaining to the Draft EA, CARB appreciates the comment's support for the Draft EA and the analysis contained therein.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

Comment Letter 84 10/22/2017	Jordan Hensley, State Water Resources Control Board
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**Comment 84-1:** The comment provides information regarding various water quality-related regulatory and permit requirements that generally may apply to projects taking place in California.

**Response:** CARB thanks the commenter for the information regarding the various water quality-related laws that may apply to projects in California. The California Tropical Forest Standard would specify criteria to assess jurisdictional sector-based offset crediting programs that reduce emissions from tropical deforestation for use by jurisdictions across the globe that are taking action to reduce GHG emissions from tropical deforestation. Any such GHG-reducing actions in connection with this Standard would occur in tropical forests in other countries. Therefore, CARB's endorsement of the Standard would not result in any construction or operational activities in California or any other activities that would have the potential to affect California's water resources.

The remainder of the comment letter does not raise significant environmental issues related to the Draft EA. The comments are noted and are being provided to the Board members for their consideration, but no further response to this letter is required.

**ATTACHMENT A**  
**COMMENT LETTERS**



3

## Indigenous Environmental Network

### Comments to the California Air Resources Board by the Indigenous Environmental Network

22 October 2018

The Indigenous Environmental Network (IEN) joins with the Center for Biological Diversity (CBD) comments on the failure of the Draft Environmental Analysis (EA) included in the California Tropical Forest Standard (CTFS). The EA does not meet the requirement of the California Environmental Quality Act. On this ground alone we would recommend to the California Air Resources Board (the Board) not approve the CTFS.

3-1

The recent Intergovernmental Panel on Climate Change (IPCC) emphasized that emission of greenhouse gases (GHG) must fall by 45% from 2010 levels by 2030 and reach "net zero" by 2040. Otherwise our Mother Earth will only get hotter faster.<sup>1</sup> Uncontrolled forest fires will become more frequent and more destructive at a faster rate. Throughout the world, extreme heat waves and drought will only worsen. Violent storms will grow more frequent and more intense. Coral reefs, fundamental to the ocean's food chain, will entirely disappear. As the IPCC states, the world's environment and its life sustaining capacity must be protected from fossil fuels. The world needs real and immediate emissions reductions as the only true solution to climate change if global warming, catastrophic to humanity, is to be survived. Yet California's Cap-and Trade and the proposed CTFS create a carbon lock-in and ensures continuing carbon emissions.

Worse, the CTFS imposes this proven false solution to climate change on forest-dwelling Indigenous Peoples, our major concern. We all believe and hope that the world's forests, both tropical and boreal, must be strengthened and allowed to thrive, and that the governance of forests should be left in the hands of those most able to achieve that end, Indigenous Peoples. But even though carbon markets do not work to reduce emissions, the CTFS invites hundreds-of-millions- or even billion-dollar carbon-trading schemes that will displace and/or coerce Indigenous Peoples to give up their self-determination and their control over their forests, with only the promise of their survival as peoples.

Profound and sufficient grounds exist for a denial of approval of the CTFS by the Board:

#### **Carbon Pricing Has Never Worked and Only Prolongs Dependence on Fossil Fuels**

In an effort to reduce emissions, carbon-pricing systems continue to be flagship mitigation schemes to address climate change. However, carbon pricing, including cap-and-trade, offsets and other forms of carbon pricing have repeatedly failed. Carbon credits, offsets, and carbon pricing have *never* worked in reducing carbon emissions in any part of the world.<sup>2</sup> In fact, emissions have increased in Europe since the adoption of the European Union's Emissions Trading

<sup>1</sup> [http://www.ipcc.ch/pdf/session48/pr\\_181008\\_P48\\_spm\\_en.pdf](http://www.ipcc.ch/pdf/session48/pr_181008_P48_spm_en.pdf)

<sup>2</sup> <https://www.alternet.org/environment/why-pollution-trading-will-never-be-climate-solution-california-or-anywhere-else>.

Scheme (EU-ETS).<sup>3</sup> Perversely, carbon pricing is an incentive for oil production and use, as polluters can offset carbon pollution with relatively cheap credits and pass the cost on to the consumers--fourteen cents of every gallon of gasoline sold in California pays for carbon credits. Upwards of 40% of the emissions reduction objectives outlined in the 2017 Scoping Plan are slated to come from the carbon market, while in fact emissions from the refinery sector and transportation in the state have either stayed exactly the same or actually risen.

The prestigious Nature Magazine, as early as 2017, warned that carbon markets should not be linked with markets in other jurisdictions,<sup>4</sup> precisely what the California Tropical Forest Standard intends. This article examines the failure of the European Union's Emissions Trading System (EU-ETS) as well as California's shared market with Quebec. The same failures apply to both: low demand and too many credits and plummeting prices.

The EU-ETS price fell from €25 to less than €10 per ton even after barring CDM credits in order to raise the price. Worse, as the Nature article points out:

"The most significant was a credit for destruction of the potent greenhouse gas HFC-23, a by-product in the manufacture of the refrigerant HCFC-22. The CDM had already unwittingly created a perverse incentive [fn. Omitted]: companies had been generating more HCFC-22 to capture offset credits from destroying HFC-23. Worse, when these credits were banned, they flooded the market as firms rushed to sell them before they became worthless. Businesses banked their other allowances, lowering demand further."

California's cap-and-trade fared no better. Originally priced at around \$22 per ton, credits in 2017 were priced at \$13, last priced at \$15 per ton of GHG emissions. In February of 2017 only 18% of available credits were sold. More recently, in the Los Angeles Times reported that since May of 2017, every allowance had been "snapped up," noting that the hoarding of credits now would subvert reductions of emissions in the future.<sup>5</sup>

It is no wonder that the Los Angeles South Coast Air Quality Management District (SCAQMD) decided to phase out RECLAIM, a carbon trading program that contributed to a rise of carbon emissions in Los Angeles County.

"Now, Angelenos can breathe a sigh of relief as the South Coast Air Quality Management District (SCAQMD) has decided to sunset a decades-old pollution credit-trading program that most everyone agrees is not working. Recently, the SCAQMD board of directors voted 7 to 6, to phase out a cap-and-trade program, known as the Regional Clean Air Incentives Market (RECLAIM) as part of its 15-year smog reduction plan. For two and a half decades, RECLAIM has allowed polluters to purchase credits swaps from communities with little pollution, instead of actually reducing emissions from polluting plants. It is not clear how quickly SCAQMD will scrap RECLAIM, but it will replace it with mandated cuts to pollution, which have been proven to work."<sup>6</sup>

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<sup>3</sup> [https://ec.europa.eu/clima/sites/clima/files/docs/0017/unregistered/the\\_corner\\_2\\_en.pdf](https://ec.europa.eu/clima/sites/clima/files/docs/0017/unregistered/the_corner_2_en.pdf)

<sup>4</sup> <https://www.nature.com/news/don-t-link-carbon-markets-1.21663>

<sup>5</sup> <http://www.latimes.com/business/hiltzik/la-fi-hiltzik-captrade-20180111-story.html>

<sup>6</sup> <https://www.laprogressive.com/reclaim-program-failed/>

It should be noted that RECLAIM was a closed market system, not linked to any market outside the jurisdiction. Not linking carbon markets produces the same results of growing emissions regardless of price; and carbon taxes fare no better even at \$573 a metric ton.<sup>7</sup>

Allowing polluters to continue to pollute in order to reduce their emissions makes no rational sense even in Southern California. Further, California is now linking its carbon market to other jurisdictions where prices will be undoubtedly cheaper. The price floor will eventually be undercut by cheaper credits.

Governor Brown's executive order concerning the protection of California's forests and this proposed Tropical Forest Standard will do little to curb the uncontrolled conflagrations in California and other Western states that are now part of our new "reality." Sequestered carbon has been and will be released in megatons. The solution offered by cap-and-trade is free credits so as not to affect the carbon market. In fact, these conflagrations only incentivize more forest offsets, more credits, and more pollution. Carbon pricing does not count wildfire-released carbon in carbon budgets. Those that live in those forests, public funds, and global warming are left holding the bag, as is humanity. But the hundreds of millions of dollars invested in Reducing Emissions from Deforestation and Forest Degradation (REDD+) are safe and fire free.

### **Carbon Pricing Creates Perverse Incentives for Continued Fossil Fuel Production and Use**

In California, crude oil production, throughput, and real emissions have increased in the refinery sector under cap-and-trade. The amount of crude oil entering into the refineries and their subsequent greenhouse gas emissions have increased as a result of carbon pricing. In 2017, California set a new record for foreign crude oil imports, sourcing crude extracted from endangered landscapes like Arctic Alaska. Last year, 1 in 6 barrels of oil refined in California came from the Western Amazon.

California's failure to regulate fracking and its cancer-causing, groundwater-polluting extraction is well known. The failure to regulate fracking not only ruins precious groundwater permanently, fracking is detrimental to human health and continues to lock us into a fossil-fuel economy. California is now one of the largest producers of dirty oil in the United States. This emissions-producing, dirty oil poisons the poor and people of color in nearby communities, both in the extraction and in the refinery processes.

Some say that carbon pricing, notwithstanding its failures, is a "start" to emission reductions. Given its perverse result of permitting even more carbon pollution in the face of a real and growing climate crisis, California should focus its efforts on emissions reductions and a transition to a fossil-fuel-free economy. A just and speedy transition will cost a great deal of money and impose hardship on many. But the climate catastrophes now cost a great deal of money and impose hardships on many. Billions have already been spent on hurricanes, hundreds of millions on the west's forest fires this year alone. We pay for climate change at the wrong end. As the IPCC and others have emphasized, we must face the necessary economic hardships now to avoid or at least ameliorate future catastrophic losses. Drought, forest fires, floods, rising sea levels, incredible losses of ocean and land biodiversity, ever-increasing violent storms and forest fires are as predictable now as oil spills. And carbon pricing, by allowing the GHG polluters to continue to pollute, can only worsen this "new reality."

Given cap-and-trade, in 2017, banks increased their investments in extreme fossil fuel infrastructure and production. Tar sands financing grew by 111 percent from 2016 to 2017, totaling \$98 billion. Arctic oil investments totaled \$5 billion

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<sup>7</sup> <https://foreignpolicy.com/2018/09/12/why-growth-cant-be-green/#> (also found at: <https://www.resilience.org/stories/2018-09-19/why-growth-cant-be-green>). See, also, <http://www.ienearth.org/wp-content/uploads/2017/11/Carbon-Pricing-A-Critical-Perspective-for-Community-Resistance-Online-Version.pdf>

from 2015 to 2017, led by BNP Paribas, Deutsche Bank, and CIBC. Ultra-deep-water oil investments totaled \$52 billion, led by JPMorgan Chase, HSBC, and Bank of America.<sup>8</sup> JP Morgan Chase and Blackrock are heavily invested in Amazon oil; JP Morgan Chase alone has almost \$133 million in combined debt and equity investments in GeoPark, Frontera, and the two parent companies of Andes Petroleum, thus supporting these companies' destructive oil activities in the Amazon rainforest.<sup>9</sup>

California should end its relationship with oil and cap-and-trade. As a *leader* in the struggle against global warming, real and immediate emissions reductions are required to ameliorate an already catastrophic future. California must, in keeping with prevailing science, take immediate steps to keep oil in the ground if saving and restoring tropical forests is really the aim.<sup>10</sup>

### **Carbon Measurements Are Problematic and Fraudulent**

Carbon emissions, carbon offset projects, REDD+ and the resulting schemes to commodify nature defy accurate accounting. There are inherent problems with attempting to measure and decide the many intangible facets of such enterprises, including the costs and damages of climate change and carbon offset project baselines, additionality, and leakage.

"Carbon emissions accounting fraud" has now entered the language of the accounting field,<sup>11</sup> acknowledging the problem. Even saying that there can be accurate and overarching carbon accounting standards for the industry is so far off the mark that it could be considered a form of fraud.<sup>12</sup>

### **A Just and Thorough Environmental Assessment (ES) Should First be Done on California's Refinery Communities Before Any REDD+ Standard is Accepted**

It is clear that REDD+ and cap-and-trade directly affect California communities even more directly than those that take place outside the United States. CARB and San Francisco Bay Area communities are well acquainted with the refineries in the East Bay and the struggle of local communities in Richmond, Martinez, and other affected communities to protect their health and well-being. Massive oil refineries for generations have profoundly affected the health and well-being of their elders and children, many of whom are condemned to early deaths, cancers, lifelong asthma, and other debilitating diseases. According to the latest data, Chevron facilities in California emitted more than 11 million metric tons of GHG emissions, making it the largest corporate climate polluter in the state. California communities' struggle now extends

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<sup>8</sup> [http://www.ran.org/wp-content/uploads/rainforestactionnetwork/pages/19540/attachments/original/1525099181/Banking\\_on\\_Climate\\_Change\\_2018\\_vW\\_EB.pdf?1525099181](http://www.ran.org/wp-content/uploads/rainforestactionnetwork/pages/19540/attachments/original/1525099181/Banking_on_Climate_Change_2018_vW_EB.pdf?1525099181)

<sup>9</sup> <https://amazonwatch.org/assets/files/2017-investing-in-amazon-destruction.pdf>.

<sup>10</sup> Lorne Stockman, "IEA Acknowledges Fossil Fuel Reserves Climate Crunch," Oil Change International (November 12, 2012): <http://priceofoil.org/2012/11/12/iea-acknowledges-fossil-fuel-reserves-climate-crunch>.

<sup>11</sup> Shamima Haque and Muhammad Azizul Islam, "Carbon Emission Accounting Fraud," in *Corporate Carbon and Climate Accounting*, ed. Stefan Schaltegger, Dimitar Zvezdov, Igor Alvarez Etcheberria, Maria Csutora, and Edeltraud Günther (Switzerland: Springer International Publishing, 2015), 243-257, [papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2771580](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2771580).

<sup>12</sup> Luan F. Makes Marks, 2016, "Trading on Thin Air: Fictive REDD+ Carbon Chaos in the World's Forests," <https://no-redd.com/trading-on-thin-air-fictive-redd-carbon-chaos-in-the-worlds-forests/>. See also: Frédéric Mousseau and Shannon Biggs, "The Darker Side of Green: Plantation Forestry and Carbon Violence in Uganda: The Case of Green Resources' Forestry-Based Carbon Markets," (Oakland, CA: The Oakland Institute, 2014), 3, <https://www.oaklandinstitute.org/darker-side-green>.

against oil giants like Phillips 66 and their plans for more than doubling the number of oil tankers delivering crude to serve the expansion of their refinery to process tar sands oil, even more deadly to the climate and to people. Canadian Indigenous Peoples continue to struggle against the Enbridge pipeline, the feeder of this dirtiest of oil. These communities not only defend their rights and well-being, they defend against climate change. Communities in other states and places like Houston, Texas and Louisiana's "cancer alley," as they defend their communities also contribute greatly to the struggle against global warming.

There is a growing solidarity with the Indigenous Peoples in the U.S. and Canada that maintain their defense of Sacred Water and Sacred Places. The defense of water at Standing Rock, North Dakota, and against the Dakota Access Pipeline did not die. Neither has the struggle against Enbridge. Solidarity has continued to be strengthened even after death of Berta Caceres, Goldman-prize winning, Indigenous Honduran leader, who was violently silenced to protect the interests of methane polluters. Indigenous Peoples are engaged in earnest defense of water and the Earth's lifegiving capacity throughout the world, including the U.S. and Canada. People, including forest-dwelling Indigenous Peoples, have rights, and they rise in defense of those individual and collective rights against oil and against global warming.

The failure of the Kyoto Protocol of 1997 has only delayed an adequate response to global warming. The details of the Paris Agreement, relying on voluntary "contributions" of emissions reductions are still mired in negotiations on the details of reporting. These "contributions," announced prior to the Conference of Parties of the UNFCCC in their Paris meeting of 2015, are only half of the emissions reductions necessary to keep global warming under 1.5° centigrade. The IPCC's most recent report indicates that without drastic reductions, we'll likely burn through the rest of the 1.5°C carbon budget within the next three to 10 years.<sup>13</sup>

All of these false starts only endanger our refineries' communities even more. Refinery emissions will not travel to Acre or Kalimantan. They will be right there in Richmond, Martinez, and Long Beach, poisoning the health and well-being of our own communities.

On this ground alone, the Board should deny approval of the CTFS.

### **Safeguards and Reality**

Yet, in spite of the evidence that carbon pricing does not work, carbon-market schemes like the Reducing Emissions from Deforestation and Forest Degradation (REDD+) consider the world's forests as carbon sinks and put a price on the carbon sequestered by trees. Not only has this drawn the attention of governments and financial institutions, it has led to forest land grabs and the violation of Indigenous rights.<sup>14</sup> REDD+ has also diverted attention away from the real causes of deforestation such as oil production, legal and illegal logging, palm oil and soya plantations, and cattle ranching. Many Indigenous Peoples, their organizations, and their supporters continue to maintain that REDD+ is a primary cause of delays in Indigenous land titling throughout the world.

In spite of the fact that natural forests, managed by Indigenous Peoples, regenerate on their own and that old growth is best at carbon sequestration, political and economic forces focus on their lands and territories for profit. As an example, the proposed CTFS cites the International Coalition for Sustainable Aviation (ICAO) plan for "reducing" the aviation industry's GHG emissions by investing in a global market-based carbon reduction scheme. ICAO plans to cap their emissions at 2020 levels by 2030 by investing in more efficient aircraft and technologies, as well as carbon trading. It is

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<sup>13</sup> <http://www.ipcc.ch/report/sr15/>

<sup>14</sup> <https://www.business-humanrights.org/en/lack-of-action-plans-to-protect-indigenous-peoples%E2%80%99-rights-revealed-in-report-on-13-govt-commitments-to-reduce-forest-emissions>.



not known what the level of emissions will be in 2020. Some estimate that the ICAO's plan could limit emissions by as much as 2.5 billion tons of carbon in the first 15 years.<sup>15</sup> Even if technologies could serve to reduce some emissions, even 1 billion tons of credits, at the current price of California credits, would amount to an over US \$13 Billion Dollar global market.

The stark reality for Indigenous Peoples is that for over 500 years, they have endured harsh and unfair treatment. The playing field is not level nor are they equals in negotiations with the powerful.

Governmental as well as business enterprises (such as carbon traders, banks, and oil companies) are given great leeway in determining from whom to seek and receive consent. Neighboring Indigenous Peoples share forests, their plants and medicines, their sacred areas, their wildlife and fish. Consent by those least affected is taken to mean consent by all. Consultations are, for many Indigenous Peoples faced with REDD+, equivalent to coercion and intimidation. Corruption is widespread; promises of benefit sharing rarely materialize and never compensate for what they have been forced to surrender. And an initial "no" is never binding. Colonialists have always been persistent. They keep coming back until they get what they want.

There is an ongoing power imbalance that Indigenous Peoples have endured since colonialism began. The way in which colonial and empirical power is enacted through REDD+ schemes becomes clear during the so-called consultation periods. Our Indigenous Peoples, faced with a REDD+ project, are subjected to economic and physical coercion, militarization, arrests, disappearances, and threats of death in order to secure their "consent."

REDD + continues to divide communities. Peace and harmony between communities, within communities and within families is being broken by promises; neighbors and relatives are now at odds. Thousands, even millions of dollars are dangled in front of people's eyes, and, as is common in all of humanity, greed and jealousy many times cloud reason. The reality is that the safeguards are just another hoop that needs be jumped through in order for business to prevail. And there are ways to avoid them entirely.

The UN Special Rapporteur on the rights of Indigenous Peoples, Victoria Tauli Corpuz, published a report<sup>16</sup> on so-called protected or conservation areas, a device used by governments to avoid Indigenous safeguards:

"Widespread allegations exist of human-rights abuses in protected areas [Fn. Omitted] and of the obstruction of justice by governments. And little has been done to retribute Indigenous Peoples and local communities for past human-rights violations, decriminalize customary practices in protected areas, or direct a greater share of conservation and climate financing (such as for reduced deforestation and forest degradation in developing countries—REDD+) to support the essential stewardship role of Indigenous Peoples and local communities."

In an article in Foreign Policy Magazine, Alexander Zaitchik describes the situation of the Cofán peoples living on their ancestral lands now a "protected area."<sup>17</sup> Relegated to guard the protected area, with their way of life, food security, and traditional practices prohibited by the state "owners,"

"... the Cofán are victims of a sort of green colonialism. Cayambe Coca and parks like it may have been founded with the best of intentions: to safeguard endangered biospheres. But the way these protected areas have been established and maintained has damaged the lives of the Indigenous Peoples who live within their borders,

<sup>15</sup> <https://www.edf.org/climate/aviation>

<sup>16</sup> [https://rightsandresources.org/en/publication/cornered-by-protected-areas/#.W8eGl\\_mP8cA](https://rightsandresources.org/en/publication/cornered-by-protected-areas/#.W8eGl_mP8cA)

<sup>17</sup> <https://foreignpolicy.com/2018/07/16/how-conservation-became-colonialism-environment-indigenous-people-ecuador-mining/>

forcing them into what is effectively a landlord-tenant relationship with the state that deprives them of control over their land. Because the local governments often lack the will or resources to prevent industry encroachment, many such arrangements also end up undermining their creators' explicit goal: conservation. This double failure is part of the complicated legacy of the modern conservation movement."

The economic and social pressures on Indigenous Peoples, forced to give up their traditional lifeways and livelihoods, and forced to join those who view the forest as a "collection of economic commodities ripe for economic gain" is described by Zaitchik as "Green Colonialism."

Zaitchik points out that international environmental NGOs are many times complicit. Citing the support of the World Wildlife Fund's (WWF) support of the Cameroons and state park where Forest Peoples (Pygmies) are persecuted by park guards for hunting and gathering on their ancestral lands, when reached for comment, WWF responded that they take these allegations seriously and "work[s] with formal and informal actors to raise any substantiated instances with relevant authorities"-- even though the relevant authorities are the source of the Forest Peoples' distress.

A key word in the CTFS proposed safeguard is "equivalent." Are mass meetings, cited by the Environmental Defense Fund (EDF) with apparent approval, equivalent to "consultations" such as those held in Acre, in the implementation of Acre's state forestry law? Is a definition of forests purely as "environmental assets" providing "environmental services" equivalent to respect for Indigenous lifeways and traditions? Is this not "conservation colonialism"?<sup>18</sup>

The search for "equivalents" by proponents of REDD+ will surely take on many forms and rationalizations. And unfortunately, the road to full acceptance of linkages and safeguards promised by the CTFS will be long and torturous and subject to great amounts of money politics.

## Conclusion

California's Global Climate Action Summit (GCAS) resulted in more of the same oil and growth business as usual. It proposed "new industries" for Acre<sup>19</sup> that will serve only to draw development, roads, settlers, and condom factories that will affect the pristine forests necessary for safe and secure Indigenous Peoples and their custody and care of their forests. Ten Amazonian governors issued their "San Francisco Declaration, the Commitment of Amazonian Governors to Implement Robust Actions against Climate Change and Deforestation in their Jurisdictions"<sup>20</sup> that promises only more "protected" conservation areas leading to this same result.

Worse, so-called "global business, government and agricultural leaders" announced plans "embracing land as a climate solution,"<sup>21</sup> promising land use and land use change that would entirely remove Indigenous Peoples from their historical and millenniums-old control of their habitat, their forests, their lifeways, their food security and sovereignty, as well as their spiritual and material relationship to their land. We would call this a "land grab." Others, like Foreign Policy Magazine, would describe it as "green colonialism." It is a desperate attempt at an even greater geographic scale promoting development with geo-engineering as a solution to global warming, all meant to allow polluters to pollute.

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<sup>18</sup> [https://www.edf.org/sites/default/files/Acre\\_Ready\\_for\\_REDD\\_EDF.pdf](https://www.edf.org/sites/default/files/Acre_Ready_for_REDD_EDF.pdf)

<sup>19</sup> <https://earthinnovation.org/publications/part-i-description-of-the-new-industries-and-cooperative-of-acre-state/>

<sup>20</sup> <https://earthinnovation.org/wp-content/uploads/2014/09/Declaracion-de-San-Francisco.pdf>

<sup>21</sup> <https://climatelandchallenge.org/>

What is needed is not more emissions business as usual, pretending emissions are hidden away in some far off Amazonian or Boreal forest while emitters are permitted to emit. Many are now calling for a paradigm shift, away from a false belief that the oil-dependent economies of the developed world can continue to prosper and continue to warm the earth while “reducing” emissions.

Jason Hickel, in Foreign Policy Magazine, poses the inherent contradictions in promoting growth and extraction and calls for a new way of thinking, a new paradigm that is required to avoid catastrophic climate change:

“Preventing that outcome will require a whole new paradigm. High taxes and technological innovation will help, but they’re not going to be enough. The only realistic shot humanity has at averting ecological collapse is to impose hard caps on resource use, as the economist Daniel O’Neill recently proposed. Such caps, enforced by national governments or by international treaties, could ensure that we do not extract more from the land and the seas than the Earth can safely regenerate. We could also ditch GDP as an indicator of economic success and adopt a more balanced measure like the genuine progress indicator (GPI), which accounts for pollution and natural asset depletion. Using GPI would help us maximize socially good outcomes while minimizing ecologically bad ones.

“But there’s no escaping the obvious conclusion. Ultimately, bringing our civilization back within planetary boundaries is going to require that we liberate ourselves from our dependence on economic growth—starting with rich nations. This might sound scarier than it really is. Ending growth doesn’t mean shutting down economic activity—it simply means that next year we can’t produce and consume more than we are doing this year. It might also mean shrinking certain sectors that are particularly damaging to our ecology and that are unnecessary for human flourishing.”<sup>22</sup>

Given the “catastrophic and ongoing failure of market economics to address climate change,” others have also called for a rejection of a market capitalism that has not worked or will never work to address global warming.<sup>23</sup>

Indigenous Peoples and their forests should not be subjected to vast, political, coercive, economic forces that fail to address the real causes of global warming. For that, California and the rest of the developed world desperately needs to re-examine its own economic priorities and totally unsustainable consumption. At stake is humanity’s survival, as well as the well-being of tropical forest dwelling Indigenous Peoples.

For the above stated reasons, the Tropical Forest Standards should be rejected by the California Air Resources Board.

Respectfully submitted,

*Tom B.K. Goldtooth*

Indigenous Environmental Network  
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<sup>22</sup> Ibid, fn. 7, Foreign Policy Magazine, “Why Growth Can’t be Green.”

<sup>23</sup> <http://kevinanderson.info/blog/wp-content/uploads/2012/08/Pre-edited-version-A-new-paradigm-for-climate-change-2012-.pdf>, published by Nature Magazine.

## Comments on Draft California Tropical Forest Standard

Frances Seymour

28 October 2018

I write in support of the proposed endorsement by the California Air Resources Board of the Draft California Tropical Forest Standard.

### The basis for comment:

For more than a decade, I have focused my professional attention on the issue of tropical forests and climate change, and am lead author of the 2016 book, *Why Forests? Why Now? The Science, Economics, and Politics of Tropical Forests and Climate Change*. Positions that I have held include Director General of the Center for International Forestry Research (CIFOR), Senior Fellow at the Center for Global Development (CGD), and Distinguished Senior Fellow at the World Resources Institute (WRI). I have also served as a consultant to the David and Lucile Packard Foundation, the Government of Norway, and the World Bank. The following comments draw on the knowledge and experience that I have accumulated through those professional engagements but are not made on behalf of and should not be construed to represent the positions of those organizations.

### General endorsement of the Draft Standard:

The Draft California Tropical Forest Standard represents an important milestone in global efforts to integrate land sector emissions and removals – and emissions from tropical forest loss in particular – into climate change mitigation efforts. The science behind these efforts, summarized in *Why Forests? Why Now?*, has only become stronger since the book's publication in 2016: [Griscom et al \(2017\)](#) estimated that the land sector offers up to 37% of cost-effective mitigation efforts needed before 2030, while a number of recent articles (summarized in [Harris and Wolosin, 2018](#)) have illuminated forests' many contributions to climate stability above and beyond carbon capture and storage.

Yet in the meantime, tropical tree cover loss has accelerated, with 2016 and 2017 [shattering](#) previous records. And the recent report by the Intergovernmental Panel on Climate Change ([IPCC, 2018](#)) makes clear that keeping global warming below 1.5 degrees Celsius will be impossible without conservation of the world's remaining forests and further enhancement of forest carbon stocks. It has never been more urgent to provide a signal to tropical forest jurisdictions that their efforts to protect and restore forests are recognized and may become eligible for financial reward. Since establishment of the [Governors' Climate and Forests Task Force](#) in 2008, leaders of tropical forest jurisdictions have looked to California for leadership in this area, as recently demonstrated through their Annual Meeting in conjunction with the Global Climate Action Summit in September 2018.

The objective of avoiding emissions from tropical deforestation was first incorporated into negotiations under the United Nations Framework Convention on Climate Change in 2007. Since then, public officials, scientists, and representatives of indigenous peoples, the private sector, civil society and other stakeholder groups have all contributed to elaborating a framework for reducing emissions from deforestation and forest degradation and enhancing the role of conservation, sustainable management

of forests and enhancement of forest carbon stocks in developing countries (REDD+) that was endorsed in the 2015 Paris Agreement.

The Draft California Tropical Forest Standard is the best available codification of the consensus on standards that has emerged from debates over REDD+ within the UNFCCC, financing mechanisms such as the Forest Carbon Partnership Facility's Carbon Fund, and various voluntary standard-setting initiatives, as well as in the context of dozens of national and sub-national REDD+ initiatives around the world.

It is my judgement that the Standard's criteria for assessing jurisdictional-scale programs that reduce emissions from tropical deforestation more than adequately address the risks that have been identified. Such risks are by far counterbalanced by the risks of no action, which include not only the exacerbation of climate instability caused by continued forest loss, but also the loss of forests' significant contributions to achieving many of the other Sustainable Development Goals agreed by the United Nations.

The Standard addresses risks to environmental integrity through measures to ensure robust crediting baselines, reference levels, and monitoring, and specific measures to assess and manage the risks of leakage and reversals. Many critics of REDD+ have not sufficiently recognized the degree to which implementation of REDD+ at the scale of entire jurisdictions (rather than individual projects) as negotiated under the UNFCCC itself guards against many of these risks. The advantages of the "jurisdictional approach" are described will in Chapter 2 of the draft Environmental Analysis of the Standard.

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The Standard also includes strong social and environmental safeguard requirements, bolstered by procedures to ensure transparency and public accountability for their implementation. One of the most important objectives of any effort to conserve tropical forests must be the protection of the rights of indigenous peoples, and some have asserted that REDD+ poses unacceptable risks to that objective. Yet a number of indigenous groups have cautiously embraced REDD+ as an instrument to advance their rights and welfare, and a recent Working Paper published by the Center for Global Development (Savedoff, 2018) suggests that the greatest threat to the interests of indigenous peoples is the failure to implement REDD+ in the face of rampant forest destruction.

Incorporation of tropical forests in the California's Cap-and-Trade Program would provide political leaders in forest-rich tropical jurisdictions with incentives to accelerate their efforts to protect forests, providing both global and local benefits. But whether or not tropical forests are eventually incorporated into the State's Cap-and-Trade Program, the Board's endorsement of the Standard would have ramifications far beyond the State of California. Other jurisdictions around the world, and international organizations such as the International Civil Aviation Organization (ICAO) are developing carbon offsetting and emissions trading regimes, and it is essential that they adopt rigorous standards for the inclusion of forest carbon credits. Endorsement of the California Standard would increase the likelihood that reduced emissions from tropical forests will be included appropriately in these other systems.

Further, over the last five years, many corporations – including those affiliated with the Consumer Goods Forum – have made commitments to deforestation-free supply chains for commodities such as beef, soy, and palm oil. Many such companies have announced or are considering a jurisdictional approach to preferential sourcing of forest-risk commodities. As a result, rigorous standards for

assessing jurisdictional-scale performance, and the complementary jurisdictional-scale REDD+ finance that such standards could release, have an even broader constituency, and could leverage additional private sector action to protect forests.

**Specific comments on the text of the Draft Standard:**

- The Draft Standard defines “native forest” as “forest occurring naturally in an area, as neither direct nor indirect consequences of recent human activity” (page 7). Significant areas of natural forests in the tropics have been affected by the management practices of indigenous and traditional communities, such as long-rotation swidden cultivation. In addition, “native forest” could be the result of human restoration efforts, such as the re-wetting of peatland forest to allow native vegetation to grow back. The remainder of the definition specifies the need for diversity of species and age classes, as well as the exclusion of monoculture and industrial plantations. As a result, I suggest that the phrase “as neither the direct nor indirect consequences of recent human activity” be deleted from the definition as unnecessary and to avoid confusion.
- The Draft Standard specifies in several places that implementing jurisdictions are “subnational”, defined as “a political subdivision of a country, typically taking the form of a state or province” (page 8). The subnational scale is indeed appropriate for larger countries such as Brazil and Indonesia. Yet smaller countries such as Ecuador have been developing national-scale REDD+ initiatives in anticipation of gaining access to international climate finance. I suggest that the Draft Standard be revised so as to clarify that jurisdictional programs implemented at the national scale could also be eligible for linkage, so that the Standard can have the widest possible application.



October 29, 2018

Mary Nichols  
Chair; California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

We, the undersigned organizations, urge the California Air Resources Board to reject consideration of the Tropical Forest Standard (TFS), which would lay the groundwork for accepting Reduced Emissions from Deforestation and Degradation (REDD) offset credits into California's carbon trading system.

Preservation of tropical forests is critical for conserving biodiversity; providing homes, cultural resources, and livelihoods for millions of people; and for protecting our global climate. But the TFS proposed by the California Air Resources Board is deeply misguided, would undermine the integrity of California's climate policies, and cause or perpetuate human rights abuses.

#### **Carbon offsets perpetuate pollution**

Opening the floodgates to tropical forest offsets encourages polluters to avoid reducing their emissions. At best, offsets create zero emissions reductions. Under California's carbon trading system, it actually enables an increase in industrial emissions by a far greater amount than otherwise allowed by AB32, California's landmark climate change law. This has significant health impacts for fence-line communities in California – the majority of whom are people of color -- who live near major greenhouse gas (GHG) emitters. When refineries and other facilities are allowed to continue emitting greenhouse gases, they also emit noxious co-pollutants, like particulate matter, nitrogen oxide, and other carcinogens. Thus, carbon offsets perpetuate pollution hotspots and environmental racism, which should be of grave concern to the ARB as an air pollution regulator.

#### **Tropical forest carbon offsets pose risks to Indigenous Peoples and human rights**

The Tropical Forest Standard has been created as a preliminary step to allowing REDD carbon offset credits into California's carbon trading system. REDD projects have a well-known and recorded history of contributing to illegal actions, violence, forced decision-making, land grabs, and other human rights abuses for many Indigenous groups and forest-dwelling people around the globe. Notably, these negative impacts tend to be associated with jurisdictions with weak governance, unclear land tenure laws, and political instability – characteristics common among many of California's potential partner jurisdictions, including in Brazil, Nigeria, and Indonesia. Although the TFS tries to address these concerns, ultimately REDD projects sow division amongst Indigenous Peoples in a context of intimidation, coercion, and grossly disproportionate economic power exerted by governments and corporations. It is practically impossible for ARB to monitor international forest offset programs in foreign jurisdictions to prevent these abuses and ensure compliance with the TFS's human rights standards.

#### **Tropical forest conservation projects are not suited for carbon offset credits**

While many problems exist with offsets in general, there are significant issues unique to REDD projects that make them broadly unfit to offset industrial emissions. Many of these problems are outlined, although not adequately addressed, in the TFS's environmental impact assessment, including the problems of permanence and non-additionality. Simply put, tropical forest carbon offsets allow *certain, permanent* harm (the emission of more GHGs from industrial sources) in exchange for hoped-for, *uncertain, temporary* carbon sequestration. Because these problems are so intractable, no

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jurisdiction in the world accepts REDD credits into its compliance market. Accepting REDD carbon offset credits would not only undermine the integrity of California's climate policy, but it would violate AB32's requirement that all emissions reductions be "real, additional, quantifiable, permanent, verifiable and enforceable."

Because of the reasons stated above, we strongly urge the ARB to reject consideration of the Tropical Forest Standard (TFS), and any attempts to accept REDD credits into California's carbon trading system.

If you have any questions, please contact Michelle Chan at [mchan@foe.org](mailto:mchan@foe.org).

Sincerely,

Acción Ecológica, Ecuador  
AfrosRD, Dominican Republic  
All India Forum of Forest Movements, India  
Amigos de la Tierra, Spain  
Amigos de la Tierra Argentina  
ARA, Germany  
Asia Pacific Forum on Women, Law and Development, Thailand  
Associação 11 de Junho, Brazil  
Association Nigérienne des Scouts de l'Environnement (ANSEN), Niger  
Biofuelwatch, International  
California Communities Against Toxics, United States  
Censat Agua Viva- Amigos de la Tierra Colombia  
Center for Environment/Friends of the Earth Bosnia and Herzegovina  
Center for Sustainable Economy, United States  
CESTA, Amigos de la Tierra El Salvador  
Colectivo Sumaj Kawsay- Equipo de Investigación Ecología Política del Sur, Argentina  
Companhia de Jesus, Brazil  
Friends of the Earth Canada  
Friends of the Earth England, Wales and Northern Ireland, United Kingdom  
Friends of the Earth Finland  
Friends of the Earth Ghana  
Friends of the Earth International  
Friends of the Earth Spain  
Friends of the Earth U.S.  
Global Forest Coalition, International  
Green Delaware, United States  
groundWork, South Africa  
Heinrich Boell Stiftung North America  
Indian Social Action Forum – INSAF, India  
Institute for Agriculture and Trade Policy, United States  
Justiça Ambiental/Friends of the Earth Mozambique  
Les Amis de la Terre - Togo  
Local Clean Energy Alliance, United States  
Milieudefensie- Friends of the Earth Netherlands  
New York Climate Action Group, United States  
NGO Forum on ADB, Philippines

No REDD in Africa Network (NRAN), Africa-wide  
NOAH/Friends of the Earth Denmark  
Otros Mundos A.C., Mexico  
Passionist Center for Justice Peace and Integrity of Creation (PC-JPIC), Philippines  
Pastoral de la Tierra del Vicariato Apostólico de Yurimaguas, Perú  
Rainforest Action Network, United States  
Rainforest Resource and Development Centre (RRDC), Nigeria  
Re:Common, Italy  
Seventh Generation Fund for Indigenous Peoples, United States  
Social Development Integrated Centre (Social Action), Nigeria  
Texas Drought Project, United States  
The Corner House, United Kingdom  
Third World Network, Malaysia  
TierrActiva, Peru  
WRM - World Rainforest Movement, Uruguay  
Youths and Environmental Advocacy Centre (YEAC), Nigeria

cc:

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Dr. Alex Sherriffs  
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Assembly Speaker, Anthony Rendon  
Marie Liu  
Carrie Cornwell  
Assembly Member Eduardo Garcia

Assembly Member Autumn Burke

Assembly Member Jim Frazier

Senator Henry I. Stern

Senator Ben Hueso

Senator Nancy Skinner

CalEPA Secretary, Matthew Rodriguez

CalEPA EJ Officer, Yana Garcia

Attorney General's Office EJ team, Arsenio Mataka

October 29, 2018

Chair Mary Nichols  
California Air Resources Board  
1001 I St, Sacramento CA 95814

*Submitted electronically via*  
[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: Failure to properly evaluate implications of endorsement of California Tropical Forest Standard violates the California Environmental Quality Act**

Esteemed Chair Nichols:

This letter is provided as brief comment on the California Air Resources Board (CARB) draft "Criteria for Assessing Jurisdictional-scale Programs that Reduce Emissions from Tropical Deforestation" under the heading of the draft California Tropical Forest Standard (CTFS) and the accompanying Draft Environmental Analysis (Draft EA). The directors of CARB must reject the request by CARB staff for endorsement of the CTFS due to the failure to adequately assess the impacts of an endorsement of this standard. Besides the obvious absurdity of California, a state with no tropical forest ecosystems anywhere within the border of the jurisdiction, deeming itself the authority under which a "standard" regarding pollution trading based on the commodification of carbon from tropical forests should be advanced, the effort by staff to request an endorsement of a standard for use within an emissions trading system for the global aviation industry without defining, describing or evaluating the impacts of that emissions trading system in any way whatsoever is a policy overreach that far exceeds the mandate of the California Air Resources Board to address climate pollution within the state. To endorse this standard at this point in time with such inadequate information and evaluation would be extremely irresponsible and acutely exacerbates the risks presented by an already extremely high-risk policy proposal.

***Failure to Address, Discuss, Describe, Define or Otherwise Assess the ICAO CORSIA Scheme in the Draft EA is Grounds to Refuse Endorsement***

The CTFS is presented as a tool to be used in emissions trading systems. The future potential use of the CTFS in the California Cap-and-Trade Program (Western Climate Initiative, Inc.) is mentioned in the framing of the CTFS, but also mentioned is the International Civil Aeronautical Organization's Carbon Offsetting Reduction Scheme for International Aviation (ICAO CORSIA). Remarkably enough, there is absolutely no effort to even describe in the most basic terms the ICAO CORSIA scheme within the available documentation. This failure to provide the most basic of information regarding ICAO CORSIA demonstrates that the draft documentation for the CTFS is deficient in scientific and technical terms. There are many serious and well-founded environmental and scientific concerns regarding the ICAO CORSIA scheme, yet the

draft documentation fails to provide the most basic information about this emissions trading scheme for which the endorsement of the CTFS is meant to serve. Thus directors have insufficient information for endorsing the standard and for understanding the implications of the endorsement of the standard.

A primary and overriding design feature that should be of tremendous concern to CARB directors is that the proposed ICAO CORSIA emissions trading system has no declining cap on emissions, and in fact is designed to allow real emissions from aviation to grow without any limit, with the intent to ostensibly "offset" this growth in emissions with emissions trading that would allow for the use of credits from tropical forest-based carbon credit projects and programs. The design of this emissions trading system must at a minimum be evaluated in order that the CARB directors have the necessary information to begin to understand what the implications are of endorsement of the CTFS.

The failure of the draft documentation and most particularly the Draft EA to even rudimentarily describe the ICAO CORSIA scheme in the most basic terms gives CARB directors no choice but to reject endorsement of the standard, because the endorsement of the CTFS would implicitly offer endorsement of the ICAO CORSIA scheme to "grow and offset" emissions - yet the CARB directors have no information whatsoever to evaluate the scientific underpinnings and environmental integrity of the ICAO CORSIA scheme. For CARB to put their stamp of approval on a tropical forest-based offset standard for use in a global emissions trading system for supposedly addressing the climate impact of the global aviation industry without having even discussed or defined the terms and design of that emissions trading system is irresponsible and greatly exceeds the authority of CARB as a California state agency. For this reason alone the endorsement of the CTFS must be rejected.

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### ***Carbon Offsets Undermine Real Innovation and Will Make Things Worse***

It is unfortunate, tragic and irresponsible that in this era of egregious climate science denial that CARB directors, staff and especially the Chair remain hypnotized by the scientifically dubious utilization of carbon offsetting as a climate change mitigation tool. The ongoing reliance on and proposed use of carbon offsets in various elements of California climate policy is without scientific legitimacy and is dangerously misleading. The insinuation in the framing of the CTFS that this standard could be used for the aviation carbon offsetting plans to compensate for planned growth in emissions perpetuates on a global scale the rampant disrespect for fundamental climate science that is embodied in the California fantasy about the land sector and especially forests to be able to make up for the climate damage from the ongoing extraction and burning of fossil fuels. Informed analysis concludes that offsetting is worse than doing nothing because it almost certainly contributes to a net increase in the absolute rate of global emissions growth. It may look good on paper, but in the atmosphere such Enron carbon accounting is totally irrelevant, as it is a spurious argument that offsets reduce emissions to levels at or before those that would have transpired had the activity being offset not occurred.

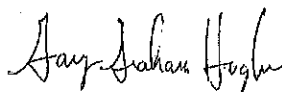
A central problem with carbon offsetting is that the false promise of carbon neutrality triggers a rebound away from meaningful mitigation and towards the ongoing reliance on and development of further high carbon infrastructures at a time when a rapid and drastic transition needs to be undertaken by human society away from a high carbon economy. When offsetting is deemed to have equivalence with real emissions reductions at the source the incentive to move to lower carbon technologies, behaviors and practices is reduced accordingly. As we have already seen in California, carbon offsetting militates against market signals to improve low carbon travel and technologies, while politically facilitating the ongoing pursuit of capital-intensive development of high-carbon infrastructure.

To be clear, the fundamental premise behind the California Tropical Forest Standard, the idea that it is possible to "neutralize" the emissions from burning fossil fuels with carbon sequestration or avoided emissions in forest ecosystems, is based on erroneous assumptions and irredeemably flawed science regarding the atmospheric impacts of human disruption of global carbon cycles. Fundamental land carbon science is clear in describing how fossil fuel emissions are essentially a one-way injection of carbon into the atmosphere and cannot be compensated for by the land sector in any meaningful way. In this age of egregious climate science denial, it remains exceptionally dangerous that the State of California and the proponents of including CTFS/REDD-based offsets in emissions trading systems such as the ICAO CORSIA or the California Cap-and-Trade Program continue perpetuating a scientifically questionable policy proposal and as such from their pulpit perpetuate a nefarious species of exceptionally dangerous soft climate science denial. It is necessary for the State of California to finally move on from this high risk and dubious scheme, and as such it is essential that the CARB directors reject the endorsement that CARB staff are requesting of the California Tropical Forest Standard.

### ***Conclusion***

Due to the lack of adequate analysis and the failure of CARB staff to provide the CARB directors with the necessary information to understand the implications and potential impacts of an endorsement of the CTFS it is necessary for CARB directors to reject endorsement of the standard.

Respectfully,



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October 29, 2018

Chair Mary Nichols  
California Air Resources Board  
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Sacramento, California  
Electronic submittal: <http://www.arb.ca.gov/lispub/comm/bclist.php>

Re: Draft California Tropical Forest Standard

Dear California Air Resource Board:

Greenpeace USA would like to formally express our opposition to the Draft California Tropical Forest Standard (Draft Standard) and the specific criteria California Air Resources Board (CARB) has set forth for linking a jurisdictional sector-based crediting program to reduce emissions from tropical deforestation with an emissions trading scheme. Greenpeace USA employs scientists and issue experts in our quest to protect forests, oceans, our climate and our democracy. Millions of people around the world have taken action with Greenpeace offices in a shared quest for a green and peaceful world. Greenpeace's evaluation of the proposal is grounded in both impacts we are observing in state as well as what Greenpeace offices have documented *in situ* in tropical forest regions where tropical forest carbon offset projects have been attempted.

We urge CARB to abandon the Draft Standard and finally halt development of any elements of a future international, sector-based forestry offset program, especially for linkage with California's cap and trade program. Instead attention should be devoted to urgently and dramatically reduce emissions at the source and transition California to a clean energy economy. This letter outlines the numerous reasons why the Draft Standard must not be allowed to move forward.

**Offsets of any kind are counterproductive to the urgent action needed on climate change**

The IPCC Special Report on Global Warming of 1.5°C, released on October 8, 2018, establishes that urgent, dramatic and unprecedented changes to all aspects of our society is needed now, if the planet has any hope of avoiding the catastrophic impacts of climate change.<sup>1</sup> This level of urgency is fundamentally noncompliant with the concept of carbon emission offsets of any kind, but especially to jurisdictional international forest offsets. The best scientists in the world are telling us in no uncertain terms that we need to dramatically curb greenhouse gas emissions AND immediately bring down deforestation rates around the world. We do not have the luxury to choose between the two. We cannot simply allow polluters to keep on polluting and hope that forests in a far away place will make that ok. The numbers just do not add up. They don't add up for California and they don't add up globally.

<sup>1</sup> Intergovernmental Panel on Climate Change. (2018). Climate Change of 1.5 Degree Celsius. <http://www.ipcc.ch/report/sr15/>



## **Jurisdictional forestry offset projects are unlikely to ever actually secure lasting climate benefits**

While offsets as a whole are inherently problematic to the goal of avoiding catastrophic climate change, jurisdictional forestry offset projects have a number of unique, significant and yet unsolved issues. CARB staff has been working on developing this standard for nearly a decade, but there is a reason it has taken so long and why no one else in the world has done it yet. It is complex, including elements related to sector-based crediting program scope, reference levels, crediting baselines, reporting requirements, reversals, leakage risk, credit tracking, verification, and social and environmental safeguards. Many of these issues are tackled in the Draft Standard, but not adequately addressed. Many of the the alleged 'solutions' to these issues, as proposed in the Draft Standard, have been tried and to date have done very little to actually resolve the fundamental and inherent problems with forestry offset projects. And even if real solutions were found to these complexities, forestry offset projects do nothing to address the real drivers of deforestation and do nothing to combat natural forest disturbances, such as fires, droughts and pests, that can overwhelm and invalidate any human-induced emission reduction actions.

There has yet to be one forestry offset project proven to reduce greenhouse gas emissions with permanence, additionality and no leakage, while CARB seems to ignore the countless examples of the inadequacies of forest offset projects to date. Even the project previously heralded as exemplary by CARB in your 2015 white paper,<sup>2</sup> the Uddar Meanchey project in Cambodia, has since been extensively documented to have failed to meet objectives, to the point that private company partners no longer will buy its credits.<sup>3</sup>

Ultimately, end-of-pipe greenhouse gas emissions are certainties with permanent harm, while forest carbon credits are uncertain, often temporary, and rife with other intractable problems. No jurisdiction in the world accepts forestry credits into its compliance market, and there is a very real reason for this. In the end, the aggregation of projects that have failed to deliver real climate benefits deems further development of these projects to simply be unsound public policy.

## **International offsets exacerbate environmental harms on the most disadvantaged communities in California.**

Even if CARB will not immediately be able to link its jurisdiction-scale forestry programs to California's cap and trade, that is clearly the ultimate intent. The first sentence of the Draft

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<sup>2</sup>California Air Resources Board. (2015). Staff White Paper: Scoping next steps for evaluating the potential role of sector-based offset credits under the California Cap-and-trade Program, including from jurisdictional 'reducing emissions from deforestation and degradation' programs. <https://www.arb.ca.gov/cc/capandtrade/sectorbasedoffsets/ARB%20Staff%20White%20Paper%20Sector-Based%20Offset%20Credits.pdf>

<sup>3</sup> Fern. (2017). Unearned Credit: why aviation industry forest offsets are doomed to fail. [https://fern.org/sites/default/files/news-pdf/Unearned%20Credit\\_0.pdf](https://fern.org/sites/default/files/news-pdf/Unearned%20Credit_0.pdf)

Standard admits the goal is to link sector based projects with “an emissions trading system (ETS), such as California’s Cap-and-Trade Program.”<sup>4</sup>

Allowing an international offset program will by definition increase emissions in California by allowing big polluters to release more greenhouse gases and other pollutants. A July 2018 peer reviewed, scientific journal article evaluated the impacts of California’s Cap and Trade Program and it found that after it was implemented, most regulated local facilities, not only increased their greenhouse gas emissions, but a majority also increased their particulate matter, volatile organic compounds and air toxic emissions during this time period.<sup>5</sup>

In regular evaluations of air quality in the US, cities in California overwhelmingly are found at the tops of the lists for different pollutants.<sup>6</sup> International offsets linked to California’s Cap and Trade Program will only make many of these communities’ bad air quality even worse. Local residents will pay the highest price as human health impacts from air quality are well documented.<sup>7</sup>

These impacts however are not shared equally. The same peer reviewed scientific article evaluating California’s Cap and Trade, also found that the neighborhoods closest to the facilities that increased their greenhouse gas and co-pollutant emissions after Cap and Trade was implemented, had higher proportions of people of color, and higher proportions of poorer, less educated, and linguistically isolated residents, as compared to neighborhoods further away from these facilities.<sup>8</sup>

The result is clear. The Draft Standard when linked to any emissions trading system, including California’s Cap and Trade Program, will disproportionately impact disadvantaged communities. In Richmond for example, an incredible majority of the people living within a kilometre of Chevron’s refinery are people of color. Thus the vast majority of the people that Chevron’s increased pollution will impact, will be people of color. And that’s exactly what environmental racism looks like.

It is time for California to become a real leader on climate and public health issues rather than one seeking to provide its most polluting industries with yet another loophole to continue to perpetuate very real harm on local disadvantaged communities and to our global climate.

<sup>4</sup> California Air Resources Board. (2018) California Tropical Forest Standard, Page 3.

[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)

<sup>5</sup> L. Cushing, et. al. (2018). *Carbon Trading, Co-Pollutants, and Environmental Equity: Evidence from California's Cap-and-Trade Program (2011-2015)*. PLoS Med 15(7).

<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002604#sec016>

<sup>6</sup> American Lung Association. (2018). State of the Air 2018. [http://www.lung.org/local-content/california/documents/state-of-the-air/2018/sota-2018\\_ca\\_most-polluted.pdf](http://www.lung.org/local-content/california/documents/state-of-the-air/2018/sota-2018_ca_most-polluted.pdf)

<sup>7</sup> Environmental Protection Agency. (n.d.). Managing Air Quality - Human Health, Environmental and Economic Assessments.

<https://www.epa.gov/air-quality-management-process/managing-air-quality-human-health-environmental-and-economic>

<sup>8</sup> L. Cushing, et. al. (2018). *Carbon Trading, Co-Pollutants, and Environmental Equity: Evidence from California's Cap-and-Trade Program (2011-2015)*. PLoS Med 15(7).

<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002604#sec016>

**The Draft Standard means local communities and Indigenous People will face enormous impacts at best and human rights violations at worst.**

Real world implementation of projects aimed at reducing emissions from deforestation and degradation has been taking place around the world for almost a decade. The risks to local communities and Indigenous Peoples in the locations of these projects is not theoretical, it is proven. These projects have brought coercion, violence, lost livelihoods, reduced food security, restrictions from traditionally and culturally important lands and forced evictions.<sup>9</sup> The displacement these projects can bring to local and indigenous communities carries enormous human consequences.<sup>10</sup>

Now, CARB has attempted to include some social and environmental safeguards into the Draft Standard to mitigate these well documented impacts, however they are far too vague, weak and hard to enforce, rendering them unable to mitigate the very real risk of human rights abuses.

The vague requirement for consultation in the Draft Standard is nowhere near the fundamental and internationally recognized right that Indigenous People and local communities have to Free Prior and Informed Consent (FPIC). Briefing local people about the project, setting up a website and getting input on design is not the same thing as formally requiring that local people are not only informed, but are done so free of coercion and that they can give or withhold their consent to changes on their land. All of the criteria outlined in the Draft Standard are well intentioned, but are fundamentally flawed without the paramount status of consent.

However it is important to point out that even if CARB were to amend the social and environmental safeguards to include FPIC and other more clear and stringent requirements, there would still be unacceptable levels of risk of corruption, conflicts of interest and human rights abuses that California certainly cannot police. How will social safeguards of any strength be enforced and monitored by each jurisdiction? The remote forest locations for these projects at a very minimum will make monitoring, enforcement and verification nearly impossible. Not to mention that true local participation and empowerment could only come from ideal local governance processes and a history of fundamentally open and participatory land-use planning processes at the national level; not once have such conditions been in place during the implementation of a forest offset project and it is impossible to believe they will in the future.

At the heart of it, the Draft Standard is really about altering human activity, which then must be monitored and enforced for decades – even generations – if the promised carbon storage is to be delivered. Even with the best safeguards, local, Indigenous and forest dwelling people will face

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<sup>9</sup> World Rainforest Movement. (2015). REDD: A Collection of Conflicts, Contradictions and Lies. [https://wrm.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict\\_Contradictions\\_Lies\\_expanded.pdf](https://wrm.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict_Contradictions_Lies_expanded.pdf)

<sup>10</sup> Friends of the Earth. (2017). REDD+, The Carbon Market and California-Acre-Chiapas Cooperation: Legalizing Mechanisms of Dispossession. [https://www.foei.org/wp-content/uploads/2018/01/REDD\\_The-carbon-market-and-the-California-Acre-Chiapas-cooperation.pdf](https://www.foei.org/wp-content/uploads/2018/01/REDD_The-carbon-market-and-the-California-Acre-Chiapas-cooperation.pdf);

disruption to their ways of life, cultural practices, and traditional livelihoods, all so that companies can keep polluting.

CARB and the State of California have not done enough to ensure that the Draft Standard will facilitate real and meaningful social and environmental safeguards. Instead, the Draft Standard tries to pass off vague language as substantive protections that are doomed to fail. CARB and the State of California has ignored inconvenient facts to continue to pursue international offsets. If ever human rights abuses are a reasonable risk stemming from a California policy, then we are doing something very wrong.

## Conclusion

For all of these reasons, we urge CARB to abandon the Draft Standard and once and for all halt development of any elements of a future international, sector-based forestry offset program, especially for linkage with California's cap and trade program or any other emissions trading system. CARB should immediately shift attention to urgently and dramatically reduce carbon emissions at the source and transition California to a clean energy economy. And to be clear, Greenpeace fully supports other global efforts to reduce deforestation and forest degradation, as well as calls for reforestation. If protection of the forest is a goal, there are real tested concepts that are working today.

Sincerely,



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## Comments for the California Air Resources Board (CARB) on the California Tropical Forest Standard and Draft Environmental Analysis

29 October 2018

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The Corner House

<http://www.thecornerhouse.org.uk/resources/results/taxonomy:14>

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A hypothetical scientist competent in climatology, forestry and the theory of risk and uncertainty, but innocent of the political economy of carbon markets and climate negotiations, would have good reason to be astounded by the draft for a California Tropical Forest Standard (TFS) now being presented for public comment, as well as by the Draft Environmental Analysis (EA) on its proposed endorsement.

Such a scientist could be excused for running out of patience midway through these texts and simply suggesting that CARB staff and consultants, including Jason Gray, go back to school to educate themselves about, at a bare minimum:

1. The well-established *climatological* incommensurability of fossil and biotic carbon (Falkowski et al. 2000; Dooley 2014), which precludes the possibility of a scientific defense of the equivalences on which the exchange system mooted by the TFS would have to be founded. In practical terms, this incommensurability makes it inevitable that endorsement of the TFS and its application of to the California carbon trading system would *worsen* climate change, with effects in California itself as elsewhere – an outcome contrary to, and unacknowledged by, the conclusions of the draft EA.

2. The nature of climate change uncertainty, political uncertainty, financial uncertainty, and management uncertainty (p. 20) and their irreducibility to calculable, economizable, “buffer”-able (pp. 15-16, 19, 25; Draft EA, pp. 11, 59, 98) “risk” of the failure of the above equivalences (“reversals” [sic] fixable by “uncertainty deductions” [sic], etc.) (Wagner and Weitzmann 2018, Molina 2018, Read 2017, Anderson 2012, Weitzman 2011, Lohmann 2010).

3. The racism inherent both in the TFS’s concept of “reference level” (pp. 4-7, 9-14, 16, 23; Draft EA, p. 59) and in its unilateral imposition of a contested “white” conception of forests as passive nonhuman resources for producing the cheapest (most “cost-effective” [CARB, “Notice of Public Meeting to Consider Endorsement of the California Tropical Forest Standard”, pp. 1,3]) pollution rights allowing regulated California industries to burn fossil fuels as long as possible. The particular kind of racism encapsulated in the concept of “reference level” is repeated on p. 59 of the Draft EA for the TFS, which states that a California policy scenario in which the TFS was not endorsed “would not result in efforts to reduce emissions from tropical deforestation” – in other words, that what the EA draft calls “local communities” must be assumed to be helpless in the face of “existing economic conditions” favoring deforestation, since *ex hypothesi* they lack forest conservation initiatives of their own that are robust enough to develop meaningfully in the absence of a production line for generating pollution rights for industry. This representation of tropical “local communities” as a quantifiably static background (ensuring a calculable “reference level”) devoid of their own historical initiative simply reproduces discredited colonial-era mythologies of “the natives” as an unchanging, “traditional” mass awaiting the dynamic interventions of history-making Western “modernity” (Lohmann 2016a). The second racist assumption, that all forests, including those targeted by incipient offset programs in Mexico, Brazil and

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elsewhere, are “white” forests – that is, rentable *resources* for fabricating environmental services – as opposed to what Casey Camp Horinek refers to as “*sources*” – is also pervasive throughout the TFS and draft EA (Hage 2017; Lohmann 2016b). This double dose of racism in the TFS, among its other effects, impedes possibilities for effective climate action insofar as it blocks the road of inquiry and discussion. This again flies in the face of the message that the draft EA attempts to advance.

47-3  
Cont.

To our hypothetical naive, impartial scientist, it might therefore seem that CARB, despite a decade of learning opportunities, simply remains ignorant of the science regarding forest offsets, perhaps merely having been innocently misled by a troop of interested consultants, technicians and politicians.

However, I would incline to a more charitable view. Having observed the disconnect between empirical research and offset theory in numerous other contexts as well over the past 20 years of analyzing carbon markets, I’m well aware of the institutional forces that can pre-commit state bodies to wishing away realities such as those sketched above as if they were “flaws” that were somehow “remediable” through more work (see, e.g., <http://www.thecornerhouse.org.uk/resource/comments-california-air-resources-board-white-paper-sector-based-offset-credits>).

So let me take the trouble to translate the scientific lessons that CARB’s TFS fails to heed into frank political terms that may get through more readily to CARB’s staff and board.

Increasingly, CARB-promoted schemes of carbon pricing and trading are being legitimized through an imagined contrast with the reactionary stances of the Donald Trump regime regarding climate change. Recent emotional, not to say mawkish, public speeches by Governor Brown, while content-lite, make much of the comparative right-on heroism of California’s government in recognizing and responding to the threats of global warming, even if they do tend to be accompanied by brutalist outbursts against critics (“let’s put *you* in the ground” [<http://inthesetimes.com/article/20688/jerry-brown-cop23-climate-un-bloomberg-fracking-cap-trade-it-takes-roots>])).

But the contempt for knowledge and research that shows up in the record of both CARB’s carbon trading advocacy and in Trump’s climate policies suggests that this PR tactic is headed for a rude debunking. Let me suggest three ways in which it is growing increasingly obvious that CARB’s TFS and Trump’s approach in fact complement each other in impeding effective climate change action.

**Climate science denialism.** Which is the more deeply implicated in the denial of climate science, Trump’s climate doctrine or CARB’s draft TFS? Of course, Trump and CARB are engaged in very different types of denialism. Trump’s regime flaunts a frank disrespect for inconvenient climate modelling – a disrespect that differs sharply from CARB’s praiseworthy acceptance of climatological consensus, since CARB limits its science denialism to issues such as those mentioned above. But how much of a practical difference does this distinction make? Both Trump’s denial of a link between fossil fuel extraction and global warming and CARB’s commitment to the fraudulent science making possible the manufacture of cheap pollution rights enabling fossil-fuelled industries to avoid structural change function to support an identical end: delay.

**Environmental racism.** Trump advocates the dismantling of environmental regulation because it is challenging for industry, especially at a time of profit crisis, to be discouraged from freely dumping pollution in black and brown bodies as well as in water, land and air. CARB, on the other hand, promotes a “command and commodify” type of regulation (Rea 2017) whose cheapness requires a type of accounting methodology that would be nonfunctional without the racism concealed in concepts such as “reference level”. Again, there is a significant distinction here, but what difference does this

distinction make in practice? CARB's policy concentrates pollutants in the bodies of fenceline communities just as effectively as does Trump's policy, while adding racist "green grabbing" (Fairhead et al. 2012) initiatives in countries in the global South into the mix as well.

**Commitment to extending the historical life of fossil fuels.** The point of many of Trump's policies is to keep fossil fuel use going as long as possible, as cheaply as possible. Is the point of the TFS any different? Since the 1960s, the paramount reason that forest offsets, particularly tropical forest offsets, have been advocated by economic theorists is precisely that they are reputedly one of the cheapest methods of extending fossil fuel extraction and use as long as possible, regardless of the ultimate consequences. The TFS falls into place as one more means toward this goal. Here again the difference between Trump and CARB appears to be one of tactics, not of objectives. In the end, the two share a bottomless contempt for the public and its concerns about climate change, regardless of their different expressions. When this contempt will come back to bite CARB, and how painfully, is still an open question (the recent demonstrations in San Francisco against CARB's work may be one prefiguration), but it is only a matter of time.

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**From:** Documentary Projects  
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California Tropical Forest Standard and the Draft EA Problems and Alternatives Utilizing California Air Resources Board ("CARB") Tropical Forest Standards (TFS) to promote & accredit AB398 REDD+ (REDD) carbon offsets in Acre, Brazil without stipulating and enforcing forest people's customary rights presents grave political risks for California, forest people, and REDD offset schemes. The existing standards required by CARB's TFS, as discussed below, either in combination or independently, do not contain criteria that are sufficient to ensure the enforcement of vital social safeguards; therefore the TFS should be rejected. The TFS is linked to the REDD agreement, CA's International Sector-based Offsets program, and jurisdiction's sector plan. The TFS, its linked plans, and social safeguards do not require enforcement of human rights and customary and statutory resource rights for forest peoples prior to REDD funding or accrediting REDD forest offsets.

All of the social standards cited by California's International Sector-based Offsets program, jurisdiction's sector plan, and TFS are qualified by non binding terms such as "participate... respect...promote...support...address, and...recognize"; none require that resource rights, customary rights, and human rights be statutory, monitored, or enforced prior to the CARB's accreditation of Acre's forest offsets.

The TFS states, "[T]he implementing jurisdiction must demonstrate the following: "To ensure that forest-dependent communities and other representative stakeholder groups participate in the development of the sector plan and receive direct benefits as a result of the plan, [and] the implementing jurisdiction's sector plan must include social and environmental safeguards that are equivalent to the principles and criteria specified in the REDD+SES Version 2 (REDD+SES 2012)". The TFS text is not binding in its linkage to REDD+SES 2012. REDD+SES Version 2 qualifies rights with non binding language: "recognize....respect... promote". Since REDD+SES 2012 language qualifying rights is non binding, the qualified rights are not enforceable. The other social & environmental standards referenced in the TFS are the: World Bank's Social and Environmental Framework (World Bank 2016), Climate, Community and Biodiversity Standards Version 3.1 (VCS Association 2017), ISEAL Social and Environmental Standards Code of Good Practice Version 2.0 (ISEAL Alliance 2018). These standards are also non binding or enforceable in regard to the rights they qualify.

The underlying REDD agreement is also non binding. The REDD agreement text only "requests" that REDD participants "address", "tenure issues," "forest governance," and "safeguards" for marginalized and traditional forest people. Would REDD promoters or Air Resources Chair, Mary Nichols, sign an agreement that only

"addressed" their family's property rights or human rights without the legal requirement to enforce those rights? And what if those supporters also lived in a remote forest in the Amazon without legal or practical means to enforce those rights?

Yet those who could benefit from creating & trading forest offsets without losing their personal rights laud this language. Ricardo Hernandez Sanchez, representing Mexico's state of Chiapas, commented to CARB, "We urge you to take this next step and commend you for releasing a draft of the California Tropical Forest Standards. This draft sets a gold standard for ensuring that reductions from the forest sector must be achieved through a process which ensures environmental integrity and safeguards the rights and livelihoods of indigenous peoples and local communities."

His statement is typical of the State & NGO bureaucracies developing REDD, which have received most of the REDD funding with no loss of their personal rights.

"Learning From 'Actually Existing' REDD+: A Synthesis of Ethnographic Findings" By Sarah Milnea et al. on page 9 & 10 states: "[S]ubstantial REDD+ funding ... has been invested mainly in the development of REDD+ bureaucracies and national strategies, rather than in the rewarding of forest-users..." and "[T]he potentially adverse consequences of state-driven REDD+ implementation... provides no guarantee of emissions reductions, given potential issues with corruption, elite-backed resource grabbing, and new or exacerbated land conflicts."

Jorge Furagaro Kuetgaje, climate coordinator for COICA, the Indigenous People of the Amazon Basin, stated, "For us to continue to conserve the tropical forests we need to have strong rights to those forests. Death should not be the price we pay for playing our part in preventing the emissions that fuel climate change." Brazil's newly elected President recently promised, "not an inch more of indigenous land."

In an article entitled "At What Cost?", Global Witness wrote on July 24, 2018, "Of the 207 [environmental and land] defenders murdered last year, a vast majority of them hailed from Latin America, which remains the most dangerous region for defenders, accounting for 60% of those killed in 2017. Brazil saw 57 murders alone - the worst year on record anywhere in the world... REDD is not necessarily a driver of violence in Brazil. But REDD does nothing to address the power imbalance between agribusinesses and their political backers on one side, and indigenous peoples, quilombolas (descendants of Afro-Brazilian slaves), and small-scale farmers on the other." These are some of the reasonably foreseeable indirect "adverse impacts" of REDD.

California Environmental Quality Act (CEQA) requires that TFS use "feasible alternatives or mitigation measures [that] are able to substantially lessen the significant environmental effects of the project." Requiring the statutory enforcement of forest community resource tenure rights has less social risk than what CARB is proposing, sequesters carbon more cost effectively than REDD carbon offsets, & makes REDD programs (if they are pursued) more likely to meet their goals. Therefore TFS should not be used as a framework for a future regulatory amendment process to be incorporated into the Cap-and-Trade Regulation and conduct linkage

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findings pursuant to SB1018, as it does not meet CEQA's requirement.

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cont.

The CARB "NOTICE OF AVAILABILITY AND PUBLIC COMMENT PERIOD FOR THE CALIFORNIA TROPICAL FOREST STANDARD AND DRAFT ENVIRONMENTAL ANALYSIS" stated:

The Draft EA provides an analysis of both the beneficial and adverse impacts and feasible mitigation measures for the reasonably foreseeable compliance responses associated with the proposed standard.

Using a conservative approach for determining the significance of potential environmental impacts, the California Tropical Forest Standard is anticipated to result in the following beneficial and adverse impacts: beneficial impacts to air quality and greenhouse gas emissions (for emphasis); no adverse impacts to aesthetics, biological resources, cultural resources, energy demand, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, recreation, utilities and service systems; less-than-significant impacts to aesthetics, agriculture and forestry, population, employment and housing, public services, and transportation and traffic; and potentially significant and unavoidable adverse impacts to land use and planning related to local land use plans for non-forest uses and to mineral resources.

This analysis ignores direct and reasonably foreseeable indirect impacts. It states that there are "beneficial impacts ... greenhouse gas emissions:" despite the fact that offsets do not reduce these emissions per Sarah Milnea et al & simple logic. The EA states that there are "...no adverse impacts to...cultural resources" & "less-than-significant impacts to ...population, employment..." despite the contrary representations of experts like Global Witness, Jorge Furagaro Kuetgaje, and Sarah Milnea et al. The EA is incorrect; therefore the TFS has not been adequately analyzed & should not proceed.

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The following World Bank working paper presents "feasible alternatives or mitigation measures [that] are able to substantially lessen the significant environmental effects..." of incorporating the TFS into the Cap-and-Trade Regulation. World Bank SOCIAL DEVELOPMENT WORKING PAPERS Paper No. 120/December 2009 stated, "[T]he cost range of recognizing community tenure rights (average \$3.31/ha) is several times lower than the yearly costs estimates for.... an international REDD scheme (\$400/ha/year to \$20,000/ha/year)." "...a relatively insignificant investment in recognizing tenure rights has the potential to significantly improve the world's carbon sequestration and management capacity...prioritizing policies and actions aimed at recognizing forest community tenure rights can be a cost-effective step to improve the likelihood that REDD programs meet their goals." California should promote the titling & enforcement of "forest community tenure rights" if it wants to sequester carbon in Tropical forests, and not through the unenforceable TFS & Cap-and-Trade Regulation.

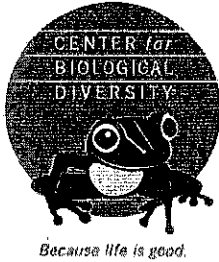
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Thus, accrediting AB398 REDD carbon offsets in Acre, Brazil, through California's Cap-and-Trade system does not decrease emissions, but presents the dangers of lowering the cost of polluting while threatening the rights of forest peoples. As the

world's fifth largest economy, California's response to the REDD program and climate chaos is likely to set a global precedent; therefore, CARB should abandon Brazilian AB398 REDD carbon offsets to avoid negative social impact and political risk in California & Brazil, as well as adding to global warming. California should craft regulations that will end fossil fuel combustion, reduce California's deforestation footprint, provide direct benefits to California communities, and deliver the large-scale, rapid GHG reductions needed to avoid the worst climate catastrophes. California could continue trendsetting by promoting the rule of law and reducing global warming in one stroke.

Submitted by Documentary Projects

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*Submitted via online portal at:*

[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)

October 29, 2018

Jason Gray  
Cap-and-Trade Program, Branch Chief  
California Air Resources Board  
Sacramento, CA

**Re: 2018 Proposed Tropical Forest Carbon Standard**

Dear Mr. Gray:

The Center for Biological Diversity ("Center"), Friends of the Earth ("FOE"), and Indigenous Environmental Network ("IEN") respectfully submit the following comments on the Draft Tropical Forest Standard ("TFS") and accompanying Draft Environmental Analysis ("Draft EA").

The Center is a non-profit organization with more than one million members and online activists, including over 150,000 members and supporters in California. The Center's mission is to ensure the preservation, protection and restoration of biodiversity, native species, ecosystems, public lands and waters, and public health. In furtherance of these goals, the Center's Climate Law Institute seeks to reduce U.S. greenhouse gas emissions and other air pollution to protect biological diversity, the environment, and human health and welfare. Specific objectives include securing protections for species threatened by global warming, ensuring compliance with applicable law in order to reduce greenhouse gas emissions and other air pollution, and educating and mobilizing the public on global warming and air quality issues.

Friends of the Earth-United States (FOE) is a non-profit advocacy organization with offices in Washington D.C., Berkeley, California, and Raleigh-Durham, North Carolina, with more than one-and-a-half million members and online activists, and over 100,000 supporters in California. Friends of the Earth has been active in environmental advocacy in California for decades; notable efforts have included successful public campaigns to remove nuclear power from the state's energy portfolio; advocacy to reduce the climate footprint of school lunch programs; and advocacy against offshore oil extraction and the expansion of the state's oil refineries. In 2018 we successfully worked with the California Public Employees' Retirement

System to revise the agency's Sustainability and Governance Principles to recognize deforestation, biodiversity loss, land rights risks, and Indigenous Peoples' rights to Free, Prior and Informed Consent as significant issues for investment management, in an effort to reduce California's role in driving deforestation and ecosystem degradation both within and beyond our state's borders. As a member of Friends of the Earth International, a federation of environmental organizations in 74 countries, FOE-US has an extensive history working across borders and jurisdictions; our approach is deeply informed by our close partnerships with member groups in tropical forest countries.

Indigenous Environmental Network (IEN) is an alliance of Indigenous Peoples whose Shared **Mission** is to **Protect the Sacredness of Earth Mother** from contamination & exploitation by Respecting and Adhering to **Indigenous Knowledge** and **Natural Law**.

The Center, FOE, and IEN request that CARB *reject* the TFS. We agree with the California Air Resources Board ("CARB") that tropical deforestation is a serious problem. Halting and reversing tropical deforestation is critical to preserving tropical ecosystems, as critical components of the world's weather systems, and as substantial carbon stores, as well as for the people and amazing wildlife that live there. Also, California, as the world's fifth largest economy and with our own state's history of deforestation, development, and greenhouse gas emissions, is responsible for a substantial portion of current and historic climate pollution and ecological degradation.

It is troubling, however, that CARB is continuing to push an international forest offsets program, which ignores the well-documented concerns and objections from environmental justice and indigenous rights groups, and the extensive evidence on harms in the peer-reviewed academic literature. CARB's Environmental Justice Advisory Committee (EJAC) has explicitly and repeatedly urged the state not to pursue or include REDD offsets in California's cap-and-trade program.<sup>1</sup> A coalition of 21 environmental justice organizations, indigenous rights groups, and other leaders has objected to an international forest offsets program in comments submitted on May 13, 2016. Moreover, California does not have the same expertise as the UN for effective implementation of rural development projects, and it is troubling that CARB assumes that it can perform better with a challenging international development dynamic than the UN.

In addition and in particular, CARB should reject the TFS for the reasons explained below. These include, but are not limited to:

- Tropical forest offsetting would exacerbate the dislocation of co-benefits from California, and would exacerbate environmental burdens, particularly in disadvantaged communities. It could harm California communities by allowing polluters in California to produce more greenhouse gas ("GHG")—and co-pollutants—by purportedly offsetting their GHG emissions elsewhere.

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<sup>1</sup> California Air Resources Board Environmental Justice Advisory Committee. "Comments on the Proposed AB 32 Scoping Plan." April 11, 2014; California Air Resources Board – 2017 Scoping Plan, Appendix A, AB 32 Environmental Justice Advisory Committee (EJAC) Recommendations, November 2017 ("Do not pursue or include reducing emissions from deforestation and forest degradation (REDD) international offsets in the Scoping Plan.").

- Tropical forest offsetting does not work to decrease GHG emissions or prevent tropical deforestation. Such programs fail to ensure additionality, are vulnerable to leakage, and threaten forest ecosystems by failing to address the drivers of deforestation.<sup>2</sup> They further pose serious threats to indigenous rights. The TFS does not provide enforceable measures to prevent these harms, especially as CARB sees it being adopted by other jurisdictions, many of which either may not have high environmental standards or strong enforcement mechanisms.
- Tropical forest offsetting detracts from the necessary work of preventing emissions from their largest source: extraction and burning of fossil fuels.

Specifically with regard to the last point, we are perplexed that California continues to allow extraction and refining of dirty fossil fuels within its jurisdiction—especially in and near communities of color—while it spends its time tweaking a program that is inefficient at best, and destructive at worst, and which exacerbates harms to California communities.

A recent 2018 report from the Intergovernmental Panel on Climate Change (IPCC) highlights the necessity of limiting warming to 1.5°C, rather than the Paris Agreement's 2°C, to avoid catastrophic impacts to people and life on Earth.<sup>3</sup> According to the IPCC's analysis, the damages that would occur at 2°C warming compared with 1.5°C include more deadly heatwaves, drought and flooding; 10 centimeters of additional sea level rise within this century, exposing 10 million more people to flooding; a greater risk of triggering the collapse of the Greenland and Antarctic ice sheets with resulting multi-meter sea level rise; dramatically increased species extinction risk, including a doubling of the number of vertebrate and plant species losing more than half their range, and the virtual elimination of coral reefs; 1.5 to 2.5 million more square kilometers of thawing permafrost area with the associated release of methane, a potent greenhouse gas; a tenfold increase in the probability of ice-free Arctic summers; a higher risk of heat-related and ozone-related deaths and the increased spread of mosquito-borne diseases such as malaria and dengue fever; reduced yields and lower nutritional value of staple crops like corn, rice, and wheat; a doubling of the number of people exposed to climate-change induced increases in water stress; and up to several hundred million more people exposed to climate-related risks and susceptible to poverty by 2050.<sup>4</sup> In order to avoid these catastrophic consequences, the 2018 IPCC report provided a carbon budget for a 66 percent probability of limiting warming to 1.5°C, estimated at 420 GtCO<sub>2</sub> and 570 GtCO<sub>2</sub> depending on the temperature dataset used, from January 2018 onwards.<sup>5</sup> At the current emissions rate, this carbon budget would be expended in just 10 to

<sup>2</sup> As Dr. Barbara Haya of the Berkeley Energy & Climate Institute has explained in a previous rulemaking, there are many factors that affect deforestation rates, many of which are beyond the scope of an international forest offsets program, such as soy and beef moratoriums, changes in global commodity prices, and jurisdictional policy regardless of an offsetting program. Barbara Haya, Research Fellow, Berkeley Energy & Climate Institute, University of California, Berkeley. Comments on California's proposed REDD program and linkage with Acre, Brazil, submitted June 4, 2016, at 4. Available at <https://www.arb.ca.gov/lists/com-attach/34-sectorbased4-ws-UDgGYVwkWGoLUgBj.pdf>. (Hereinafter, "Haya, June 4, 2016.")

<sup>3</sup> IPCC [Intergovernmental Panel on Climate Change], Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (October 6, 2018), available at <http://www.ipcc.ch/report/sr15/>.

<sup>4</sup> *Id.* at Summary for Policymakers.

<sup>5</sup> IPCC [Intergovernmental Panel on Climate Change], Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission



14 years, underscoring the urgent need for immediate, transformative global action for a just transition from fossil fuel use to clean energy.<sup>6</sup> Simply put, CARB should be focusing on immediate, comprehensive measures that will end fossil fuel extraction and combustion *in California*, which is critical for staying below 1.5°C of warming and avoiding the worst damages from climate change.

Moreover, CARB should reject the TFS because it is not supported by an adequate or informative environmental analysis. The Draft Environmental Analysis ("EA" or "Draft EA") should be prepared to inform CARB's decision-making on this matter, regardless of whether CARB believes it was "required" by this project. Once CARB endorses this standard, it foresees it being used for airline offsetting, by emissions trading programs in other jurisdictions, and/or by linking to California's cap-and-trade program; however, the Draft EA either barely touches on these contingencies or ignores them completely. Even if a public process must occur before these future events, a) there is no guarantee all of them will include their own environmental analyses, and b) CARB should not move forward with endorsing a standard without a comprehensive understanding of its potential impacts. Indeed, it is clear that CARB is unsure of what type of "rulemaking" it is currently undertaking, including whether it even merits an EA, which means this process and the TFS' implications and impacts are even more confusing and concerning to the public.

Thus, for the reasons set forth herein, CARB should reject the TFS, and focus its time and effort on immediate, proven, and comprehensive measures and programs that will end fossil fuel emissions and keep global warming under 1.5°C.

#### **I. The TFS Should be Rejected Because It Fails to Meet Many of Its Primary Objectives.**

##### **a. The Project Fails to Fulfill its Objective to Incentivize Reductions of GHG Emissions from Tropical Deforestation.**

The Draft EA states that a primary objective of the TFS is to incentivize reductions of GHG emissions from tropical deforestation.<sup>7</sup> However, the goal of protecting tropical forests is fundamentally different from the primary goal of a carbon offset market, which is to reduce the cost to industrial polluters for complying with the requirements of California's greenhouse gas pollution laws. Importantly, research shows that market-based international forest offset trading programs have not proven to be an effective way to reduce GHG emissions from deforestation, and the TFS does not overcome these short-comings.

Evidence from existing REDD programs indicates that they are not effective in reducing deforestation. A 2017 meta-analysis of deforestation rates that analyzed 23 subnational REDD+ initiatives in Brazil, Peru, Cameroon, Tanzania, Indonesia and Vietnam concluded that REDD programs were not effective in reducing deforestation: "we find overall minimal impact of

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pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (October 6, 2018), <http://www.ipcc.ch/report/sr15/>.

<sup>6</sup> *Id.*

<sup>7</sup> Draft EA at 10.

REDD+ in reducing deforestation on the ground thus far.”<sup>8</sup> Similarly, an analysis of REDD+ programs in Indonesia found only “mixed” results for carbon sequestration.<sup>9</sup>

A key reason that offset programs such as REDD are not effective is because they fail to address the main drivers of deforestation, such as large-scale commercial agriculture, cattle ranching, timber harvesting, and conflicts over land and resources.<sup>10</sup> As summarized by ethnographic research by Milne et al. (2018), “many REDD+ schemes appear to have fueled social conflict while having limited success in addressing the drivers of forest loss and degradation,” finding that “REDD+ in the course of implementation maps onto local power structures and political economies, rendering it blunt as tool for change.”<sup>11</sup>

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**b. The Project Fails to Fulfill its Objective to “Establish Robust Criteria for Emissions Trading Systems to Assess, and Potentially Include, Jurisdiction-Scale Programs that Reduce GHG Emissions from Tropical Deforestation.”**

As detailed below, the TFS fails to fulfil its objective to “establish robust criteria” for “emissions trading systems to assess, and potentially include, jurisdiction-scale programs that reduce GHG emissions from tropical deforestation.”<sup>12</sup> The TFS criteria will not prevent leakage or ensure additionality and permanence.

**i. The International Forest Offsets Program Proposed by the TFS is Highly Vulnerable to Leakage, Particularly Interstate Leakage Within the Same Country and International Leakage to Other Tropical Forest Regions.**

The International Forest Offsets program proposed by the TFS is vulnerable to leakage of forest-destroying activities both within and beyond partner jurisdictions. Leakage – which refers to the increase of deforestation activities outside the partner jurisdiction in response to reductions within the partner jurisdiction, including both activity shifting leakage and market shifting leakage – is very difficult to monitor and mitigate. The Draft EA acknowledges that leakage could result in the TFS failing to “lead to real reductions or sequestration from the perspective of the atmosphere.”<sup>13</sup> However, the TFS’s requirements are inadequate to monitor or prevent leakage, particularly interstate leakage within the same country and international leakage to other tropical forest regions.

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The TFS’s mechanisms for detecting, managing and mitigating leakage are vague, and include a single requirement that is focused within partner jurisdiction boundaries: “a demonstration that drivers, agents, and causes of deforestation are directly addressed by the

<sup>8</sup> Bos, A.B. et al., Comparing methods for assessing the effectiveness of subnational REDD+ initiatives, 12 Environmental Research Letters 074007 (2017).

<sup>9</sup> Enrici, A.M. & K. Hubacek, Challenges for REDD+ in Indonesia: a case study of three project sites, 23 Ecology and Society 7 (2018).

<sup>10</sup> Osborne, T. et al., Indigenous Peoples and REDD+: A Critical Perspective, Indigenous People’s Bicultural Climate Change Assessment Initiative, November 2014.

<sup>11</sup> Milne, S. et al., Learning from ‘Actually Existing’ REDD+: A Synthesis of Ethnographic Findings, Conservation and Society (2018).

<sup>12</sup> Draft EA at 10.

<sup>13</sup> Draft EA at 11.

program *within the implementing jurisdiction's geographic boundaries*," with two suggested options for fulfilling this requirement: demonstrating (1) business-as-usual or accelerated production of crops and livestock (two of the commodities that can drive deforestation) within the partner jurisdiction, or (2) no increase in production of extractive industry within the partner jurisdiction, accompanied by lower deforestation and forest degradation rates.<sup>14</sup>

However, simply showing business-as-usual or increased production of crops and livestock within a partner jurisdiction (or alternately no increase in extractive industry production within a partner jurisdiction) does not prove that leakage is not occurring beyond that jurisdiction. The displacement of forest-destroying activities from inside to outside implementing jurisdictions could still be occurring, where "farmers, ranchers, agribusinesses, developers or logging companies that face restrictions on access to forest land through a REDD+ program in one state tend to seek land in neighboring states, or elsewhere in the nation where the REDD+ program is operating, because of their familiarity with the laws, institutions, and culture of that nation."<sup>15</sup>

Furthermore, encouraging the intensification (i.e., "accelerated" rate of production) of agriculture and livestock on cleared lands could have substantial negative social and environmental implications for local communities and the surrounding forest. In the Brazilian Amazon and elsewhere, the intensification of agricultural land use due to tightened regulation of deforestation and agronomic practices had led the expansion of land areas being cleared for crops and livestock, including forest clearing in neighboring jurisdictions: "Common to all analyses is the evidence that intensification of profitable land uses tends to enhance its spread rather than to confine it spatially, regardless of the mix of drivers (Hecht 2005; Morton et al. 2008; Rudel et al. 2009; DeFries, Rudel, and Hansen 2010)."<sup>16</sup>

To prevent this, it would surely not be sufficient in many jurisdictions to simply require that local environmental laws not be violated, as states where substantial deforestation is occurring generally do not have either high environmental standards or strong enforcement mechanisms.<sup>17</sup> In addition, it would be extremely difficult to monitor such non-forest activities outside of forest project boundaries, across the partner state's economy.

## **ii. The International Forest Offsets Program Proposed by the TFS Carries a High Risk of Crediting Non-Additional Activities.**

The baseline level of deforestation, or "reference level," must guarantee that credits generated by reducing deforestation and degradation relative to that baseline are additional to what would have occurred in the absence of an offsets program. However, setting baseline "reference levels" for crediting is problematic because there are many factors that affect deforestation rates. Evidence indicates that past deforestation rates do not accurately indicate

<sup>14</sup> TFS at 15-16.

<sup>15</sup> ROW at 34.

<sup>16</sup> Oliveira, G. & S. Hecht, Sacred groves, sacrifice zones and soy production: globalization, intensification and neo-nature in South America, 43 Journal of Peasant Studies 251 (2016).

<sup>17</sup> Milne, S. et al., Learning from 'Actually Existing' REDD+: A Synthesis of Ethnographic Findings, Conservation and Society (2018).

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cont.

current and future deforestation rates, which are influenced by many different social and economic factors within the jurisdiction, by the larger market for goods driving deforestation, and by national and state-level policies and efforts. Moreover, a recent single year with an exceptionally high rate of deforestation could dramatically lower the baseline, allowing partner jurisdictions to produce forest offsets of no real carbon benefit.

In comments submitted to ARB in June 2016 on the proposed REDD program and linkage with Acre, Dr. Barbara Haya of the Berkeley Energy & Climate Institute presented the results of an analysis of ARB's proposal to set the crediting baseline at 10% below the average rate of deforestation within a state during the previous ten years<sup>18</sup>—the approach that has been adopted by the TFS.<sup>19</sup> Haya compared the ten-year average deforestation rate (2001-2010) to the period from 2011-2015. Of the 102 jurisdictions that Haya assessed, thirteen showed a drop in deforestation rates by greater than 10%, meaning that an international forest offsets program hypothetically initiated in 2011 with a crediting baseline equal to 10% below the average rates during the previous 10 years would have generated credits without any further action, resulting in non-additional crediting. In Acre, average deforestation rates during the 2011-2015 period were 15% lower than the 2001-2010 average, meaning, again, that linkage with Acre over this period would have generated offsets that had no real carbon benefit. To reiterate this point, a ten-year historical average does not represent current trends under recently implemented deforestation programs within the Brazilian state of Acre, which is being considered for linking in CA-REDD. As Haya describes in her comments:

For example, in Brazil, reductions have been affected by the soy and beef moratoriums catalyzed by international NGOs, national Brazil policy, state-level policy and programs, and changes in global commodity prices... It is difficult to assess the extent to which deforestation rates were affected by any one of these factors. Second, the Brazilian government and Acre have decided to make forest protection a priority for a range of reasons, not just for the global climate benefits. Brazil has also committed to reducing its deforestation rate as a part of its commitments under the UN Paris climate accords (in their INDC). They are also receiving funds from governments internationally to help pay for these efforts, including from Norway as mentioned above. An effective REDD program is hard to carry out and requires substantial political will to be successful. The sale of REDD credits can help pay for, and provide legitimacy for, a government to carry out a program they wish to carry out. But if those payments are the main motivation for a REDD program, that REDD program is bound to fail; the political will would not likely be sufficient for an effective REDD program that preserves forests for the long run rather than just lowering emissions for a short period of time. For all of these reasons, *REDD credits would not be considered additional as offset credits.*"

Other analyses have similarly shown that the baseline "reference level" varies significantly depending on the reference time period that is chosen, and can lead to non-additionality. For example, Mertz et al. (2018) found that forest reference levels are highly

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<sup>18</sup> Haya, June 4, 2016.

<sup>19</sup> TFS at 12-14.

sensitive to the reference period chosen, and therefore “demonstrating additionality of REDD+ in fast developing areas is difficult.”<sup>20</sup> Another study found that “depending upon the baseline approach used, the total credited emissions avoided ranged over two orders of magnitude for the same quantity of actual emissions reductions.”<sup>21</sup> These studies show that the reference levels proposed by the TFS do not provide sufficient certainty to deliver robust and additional carbon credits for compliance purposes.

### **iii. The International Forest Offsets Program Proposed by the TFS Does Not Guarantee Permanence In Carbon Emissions Reductions.**

In the TFS, “permanence” means that emissions reductions from “efforts to reduce tropical deforestation and/or degradation must not be reversed and must endure for at least 100 years.”<sup>22</sup> This is problematic in several regards. First, to stay within the carbon budget for avoiding the worst damages from climate change, projects with truly permanent carbon emissions reductions should be prioritized. Instead, tropical forest offset programs exchange *certain, permanent* carbon benefits that would be achieved by avoided fossil fuel emissions for hoped-for uncertain, temporary carbon sequestration in speculative international forest projects.<sup>23</sup>

Second, there is nothing to demonstrate that CARB or partner jurisdictions have the capacity to monitor and manage an array of international forest offset projects over the course of an entire century, particularly given the extreme social, political and environmental disruption that is projected under even best-case global warming scenarios.

Third, it is unlikely that revenues from California offset credit sales can compete over time with the opportunity values of many non-forest land uses. Rising agricultural land values and commodity prices – a plausible result of growing global land and food scarcity – could easily swamp regulatory efforts, such as the TFS, that depend on markets in greenhouse-gas offsets.

Finally, the TFS’s proposed response to the permanence problem is inadequate. A buffer pool of credits would reduce total revenues from credit sales and could quickly become insufficient under many scenarios, such as an increase in commodity prices from competing land uses (for crops, livestock, timber, etc), economic changes, and political changes and upheaval.

### **c. The TFS Fails to “Ensure Rigorous Social and Environmental Safeguards.”**

The Draft EA states that the TFS will “ensure rigorous social and environmental safeguards” through its “minimum social and environmental safeguards requirements.”<sup>24</sup> However, as detailed below, there is extensive evidence that, in practice, tropical forest offset programs, like that proposed by the TFS, repeatedly fail to safeguard Indigenous Peoples and

<sup>20</sup> Mertz, O. et al., Uncertainty in establishing forest reference levels and predicting future forest-based carbon stocks for REDD+, 13 Journal of Land Use Science 1 (2018).

<sup>21</sup> Griscom B, et al., Sensitivity of amount and distribution of tropical forest carbon credits depending on baseline rules, 12 Environ Sci Policy 897 (2009).

<sup>22</sup> TFS at 7.

<sup>23</sup> Mackey, B. et al., Untangling the confusion around land carbon science and climate change mitigation policy, 3 Nature Climate Change 552 (2013).

<sup>24</sup> Draft EA at 12.

have resulted in a disturbing history of human rights violations, even when social safeguards are reportedly in place. Furthermore, the TFS's requirements do nothing to protect California communities, particularly low-income communities and communities of color, who will be harmed by the implementation of an international offset program that allows California's big polluters to release more air pollution into their communities. The TFS also provides no real protections for forest biodiversity.

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cont.

**i. Harms to Indigenous Communities: Threats of Human Rights Violations Against Indigenous Peoples from the Proposed International Forest Offset Programs.**

CARB asserts that the TFS will "ensure rigorous social and environmental safeguards" for indigenous peoples through the minimum requirements outlined in Chapter 10.<sup>25</sup> While these requirements may sound good on paper, CARB has ignores the extensive evidence that REDD programs do not safeguard Indigenous Peoples in practice and have led to human rights violations, even when social safeguards are reportedly in place.

CARB must confront the vast body of evidence showing that REDD programs have an extensively documented history of human rights violations of Indigenous and forest-dependent communities, including land grabs; exclusion from forests and restrictions on resource access; coercion; institutional violence; lack of meaningful participation including failure to obtain Free, Prior, Informed Consent; forced decision-making; lack of equitable benefit-sharing; and imprisonment for continuing cultural practices on the land. Indigenous Peoples are put at risk of displacement and loss of control of their forests, their way of life, cultures, food security, and sovereignty. This is not surprisingly given that the market linkages proposed by CARB subject Indigenous Peoples to inequitable power structures.

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These widespread human rights violations clearly show that there are inherent inadequacies in the social safeguards of REDD+SES and that the social safeguard framework of the TFS is insufficient. The remote location of many potential projects makes verification, monitoring and enforcement of the projects extremely difficult and unlikely to succeed. This means even if a project claims to meet all of CARB's social safeguards, there is no way to ensure human rights violations are not happening on the ground. In short, no amount of fine-tuning by CARB staff will arrive at a version that will provide assurances that the TFS will be immune to human rights violations.

CARB must not approve the TFS without confronting the evidence from numerous reports and studies documenting harms to indigenous communities from market-based REDD-type forest offsets programs, including but not limited to:

- A World Rainforest Movement report examining 14 REDD and PES projects around the world which documented extensive human rights abuses to forest-dwelling peoples: "In many cases communities were never asked whether they consented to the forest carbon project...Where REDD project plans were presented to communities...what the villagers

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<sup>25</sup> TFS at 18-19.

got in return was mainly harassment, restrictions on land use, and blame for deforestation and climate change.”<sup>26</sup>

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- A comprehensive report from the Indigenous People's Biocultural Climate Change Assessment Initiative (IPCCA), with case studies in seven countries, showing that market-based approaches can neither fully respect and protect human rights nor conserve forests over the long term.<sup>27</sup>
- A report from the Brazilian Platform for Human, Economic, Social, Cultural and Environmental Rights describing Acre as a state suffering extreme inequality, deepened by a lack of information about green economy projects, which results in communities being coerced to accept "top-down" proposals as substitutes for a lack of public policies to address basic needs.<sup>28</sup>
- A 2016 study from Madagascar showing that existing social safeguards are not being fulfilled: "This research shows that existing safeguard commitments are not always being fulfilled and those implementing social safeguards in REDD+ should not continue with business as usual."<sup>29</sup>
- Recent research showing that REDD programs do not increase the well-being or income sufficiency of indigenous groups:
  - A comprehensive review by Sunderlin et al. (2017) on the degree of success in meeting well-being and income goals examined in six countries (Brazil, Peru, Cameroon, Tanzania, Indonesia, Vietnam) at 22 initiatives, 149 villages, and approximately 4000 households, finding that "REDD+ has not contributed significantly to perceived well-being and income sufficiency."<sup>30</sup>
  - A study by Shrestha et al. (2017) in Nepal concluding that "economic contribution of the REDD+ payment to the household economy is very nominal and is insufficient to invest in livelihood enhancement activities."<sup>31</sup>
- Recent research showing that REDD programs typically fail to obtain meaningful Free, Prior, Informed Consent, and do not allow meaningful participation in planning or implementation:

<sup>26</sup> World Rainforest Movement, REDD: A Collection of Conflicts, Contradictions and Lies, February 2015.

<sup>27</sup> Osborne, T. et al., Indigenous Peoples and REDD+: A Critical Perspective, Indigenous People's Biocultural Climate Change Assessment Initiative, November 2014.

<sup>28</sup> DHESCA Brasil, The Green Economy, Forest Peoples and Territories: Rights Violations in the State of Acre (2014).

<sup>29</sup> Poudyal, M. et al., Can REDD+ social safeguards reach the 'right' people? Lessons from Madagascar, 37 Global Environmental Change 31 (2016).

<sup>30</sup> Sunderlin, W.D. et al., REDD+ contribution to well-being and income is marginal: the perspectives of local stakeholders, 8 Forests 125 (2017).

<sup>31</sup> Shrestha, S. et al., Contribution of REDD+ payments to the economy of rural households in Nepal, 88 Applied Geography 151 (2017).

- Research by Samndong et al. (2018) in the Democratic Republic of Congo finding that community participation was “characterized as ‘tokenism’ whereby the communities were consulted and informed, but never achieved managerial power or influence over the REDD+ pilot project. The decision for the communities to join REDD+ was not democratic and the information provided during the process of introducing REDD+ was not sufficient for the communities to make an informed decision to join or not.”<sup>32</sup>
- Research by Spiric et al. (2017) finding that Mexico’s REDD+ readiness process had “low level of input legitimacy in so far as that the federal government environment agencies concentrate most decision-making power and key land-use sectors and local people’s representatives are absent in decision-making forums.” The study also found that REDD policy documents were dominated by the positions of government agencies and international conservation organizations, while the positions of civil society organizations and academics were partly or not at all reflected.<sup>33</sup>
- Research documenting violence to Indigenous Peoples: A study by Howson (2018) in Kalimantan, Indonesia, concluding that “REDD+ is accelerating the very violence and environmentally destructive behaviours it claims to discourage.”<sup>34</sup>

## ii. Harms to California Communities: An International Forest Offset Program Will Exacerbate Environmental Justice Problems in California.

An international forest offset program would enable California refineries and other industrial polluters to continue to emit harmful greenhouse gases and co-pollutants into neighboring communities – predominantly low-income communities and communities of color – which would worsen California’s health and environmental justice crisis. The TFS does nothing to address or minimize these unacceptable harms to California’s communities that would result from the proposed project.

In California, studies have documented that industrial facilities with heavy emissions such as refineries, cement factories, gas and electricity production facilities are disproportionately located in communities of color and lower-income communities, and that these communities bear disproportionate air pollution burdens.<sup>35</sup> With an international forest offset program, some industrial polluters will emit more greenhouse gas pollution and co-pollutants, and for longer, than they would otherwise be allowed to in the absence of those offsets. Already overburdened communities living in some of the most polluted air basins in California would face added harms from this additional pollution. Harmful pollutants emitted by California refineries that cause serious health harms include known cancer-causing chemicals

<sup>32</sup> Samndong, R.A., The participation illusion: Questioning community participation in a REDD+ pilot project in the Democratic Republic of Congo, 20 International Forestry Review 390 (2018).

<sup>33</sup> Spiric, J. et al., A dominant voice amidst not enough people: analyzing the legitimacy of Mexico’s REDD+ readiness process, 7 Forests 313 (2017).

<sup>34</sup> Howson, P., Slippery violence in the REDD+ forests of Central Kalimantan, Indonesia, 16 Conservation and Society 136 (2018).

<sup>35</sup> Pastor, M., et al., Minding the climate gap: what’s at stake if California’s climate law isn’t done right and right away, Program for Environmental and Regional Equity, University of Southern California, Los Angeles (2010).



like benzene, formaldehyde, and arsenic; smog-forming chemicals like nitrogen oxides, carbon monoxide, and volatile organic compounds; and particulate matter that causes lung and heart problems.<sup>36</sup>

CARB must consider the harms from an international offsets program to California communities who will bear the burden. This is particularly critical in light of new research by Cushing et al. (2018) confirming that California's cap and trade program is perpetuating environmental health inequities in the state because it is incentivizing carbon offsets instead of local emissions reductions at the regulated facilities:

Our results indicate that, thus far, California's cap-and-trade program has not yielded improvements in environmental equity with respect to health-damaging co-pollutant emissions.<sup>37</sup>

Notably, the study found that the majority of regulated facilities reported higher annual average local GHG emissions since the initiation of carbon trading over the 2011-2015 study period when data were available, and that communities of color and low-income communities were more likely to experience increases in greenhouse gases and co-pollutants from regulated facilities:

We found that facilities regulated under California's cap-and-trade program are disproportionately located in economically disadvantaged neighborhoods with higher proportions of residents of color, and that the quantities of co-pollutant emissions from these facilities were correlated with GHG emissions through time. Moreover, the majority (52%) of regulated facilities reported higher annual average local (in-state) GHG emissions since the initiation of trading. Neighborhoods that experienced increases in annual average GHG and co-pollutant emissions from regulated facilities nearby after trading began had higher proportions of people of color and poor, less educated, and linguistically isolated residents, compared to neighborhoods that experienced decreases in GHGs.

Importantly, the study recommended policies that incentivize local emissions reduction, rather than carbon offset projects which perpetuate the environmental justice crisis:

The incorporation of additional policy and regulatory elements that incentivize more local emission reductions in disadvantaged communities could enhance the local air quality and environmental equity benefits of California's climate change mitigation efforts.

<sup>36</sup> Office of Environmental Health Hazard Assessment, Analysis of Refinery Chemical Emissions and Health Effects, (Draft September 2017), <https://oehha.ca.gov/air/analysis-refinery-chemical-emissions-and-health-effects>; <https://oehha.ca.gov/media/downloads/faqs/refinerychemicalsreport092717.pdf>

<sup>37</sup> Cushing, L. et al., Carbon trading, co-pollutants, and environmental equity: Evidence from California's cap and trade program (2011-2015), 15 PLoS Med e1002604 (2018) ("Cushing, 2018").

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cont.

**iii. Harms to Tropical Forests: The TFS Does Not Reduce the Drivers of Deforestation or Include Adequate Safeguards for Forest Biodiversity.**

The TFS does not include robust criteria for environmental safeguards to protect tropical forests and their biodiversity. As detailed above, the TFS does not reduce demand for the commodities that drive deforestation and forest degradation, such as palm, soy, wood, pulp, and cattle, and REDD+ programs to date have not been effective in reducing deforestation. Furthermore, revenues from carbon offsets would not necessarily be directed to fund programs that directly counteract deforestation, as the distribution of revenue is at the discretion of the partner jurisdiction, presumably with the consent of the participating communities.

The TFS program does not include robust criteria for protecting biodiversity such as quantitative requirements for the maintenance of species diversity, forest structure, and canopy cover, nor mechanisms to ensure these criteria will be enforced in practice. This is particularly troubling because a 2016 review found that REDD programs have not been effective in implementing biodiversity safeguards, resulting in potentially poor outcomes for biodiversity: “Our review suggests that the current lack of guidance on how to implement the UNFCCC biodiversity safeguards in REDD+ could lead to mixed and potentially poor performance from national REDD+ initiatives.”<sup>38</sup> In this review, Panfil et al. (2016) examined how 80 existing REDD+ projects are addressing biodiversity issues, and found that projects lacked specific goals and logical links between goals, project interventions, and monitoring, suggesting “that the projects will have difficulty achieving and measuring biodiversity impacts.” The study concluded that “in practice, REDD+ is likely to have variable outcomes for biodiversity, depending on how biodiversity goals are articulated, implemented, and monitored.”

**d. The TFS Fails to Fulfill its Objective to Meet Long-Term Climate Objectives.**

CARB asserts that a tropical forest offsets program will help the state meet its long-term climate objectives.<sup>39</sup> However, subnational REDD initiatives financed through offsets have proven to be ineffective and inefficient at reducing GHG emissions. Carbon offset programs are a poor use of state staff time and financial resources and a dangerous distraction from the strategies that do work: ending fossil fuel production and use. Given the urgency for immediate, effective action to reduce carbon emissions from fossil fuels, as underscored by dire warnings of the recently released IPCC report on *Global Warming of 1.5°C*, CARB should show its commitment to meeting the state’s climate goals by implementing stronger emissions reductions in our own state that really matter, specifically, phasing out the state’s fossil fuel production, a rapid transition to zero-emission vehicles, and a just transition to 100% clean energy.<sup>40</sup> These measures would protect the health and wellbeing of all Californians, especially members of already over-burdened communities.

<sup>38</sup> Panfil, S. N. & C.A. Harvey, REDD+ and Biodiversity Conservation: A Review of the Biodiversity Goals, Monitoring Methods, and Impacts of 80 REDD+ Projects, 9 Conservation Letters 143 (2016).

<sup>39</sup> Draft EA at 12.

<sup>40</sup> Oil Change International, *The Sky’s Limit California: Why the Paris Climate Goals Demand That California Lead in a Managed Decline of Oil Extraction* (May 2018); Center for Biological Diversity, *Oil Stain: How Dirty Crude Undercuts California’s Climate Progress* (Nov. 2017).

## II. The TFS Should Be Rejected Because the EA is Inadequate and Fails to Inform This Decision-making or Provide a Model for Other Programs.

### a. The EA Ignores Potential Compliance Responses or Programs That May Incorporate the TFS or Use It as a Model.

CARB states that it intends for this standard to be used as a model for “other GHG emissions mitigation programs such as the International Civil Aviation Organization’s (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and other emerging programs.”<sup>41</sup> It could also be used as a model for “other emission mitigation programs and emission trading systems that are seeking to assess and potentially include jurisdiction-scale programs that reduce emissions from tropical deforestation and thereby incentivize substantial greenhouse gas (GHG) emission reductions caused by tropical deforestation.”<sup>42</sup> Furthermore, while this proceeding does not formally incorporate the TFS into the state’s cap-and-trade program, it is clear that CARB anticipates this could happen in the near future.<sup>43</sup>

All of these are reasonably foreseeable results of CARB endorsing the TFS, yet the Draft EA fails to analyze their potential environmental consequences. The EA must address not only a project’s direct effects, but also the reasonably foreseeable indirect effects, and the effects of foreseeable activities that will occur as a result of the project.<sup>44</sup> The EA must identify and analyze both direct effects of a project and the “indirect or secondary effects” – those effects which are caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable.<sup>45</sup> This is particularly true since CARB anticipates that *other* jurisdictions potentially without environmental review requirements may adopt the TFS—and even may rely on this EA to determine the environmental consequences of doing so.<sup>46</sup> Thus, CARB must analyze the foreseeable environmental impacts of the very compliance responses it anticipates may happen (including use by ICAO for aviation offsets, use by other emission trading systems, linkage to cap-and-trade, and so on) *before* deciding whether to endorse the standard. Otherwise, the EA essentially becomes a make-work exercise that fails to inform this and future decision-making, and CARB will be endorsing a standard without fully understanding its implications.<sup>47</sup> For this reason, CARB should now reject the TFS; it simply does not have enough information on which to base its decision.

<sup>41</sup> Draft EA at 2.

<sup>42</sup> Id. at 1.

<sup>43</sup> Id. at 2. See also, CARB, Proposed Scoping Plan at 29, fn 40: “ARB staff identified the jurisdictional program in Acre, Brazil, as a program that is ready to be considered for linkage with California, and has committed to proposing regulatory standards for assessing tropical forestry programs and to proposing linkage with the program in Acre as part of a future rulemaking process.” Available at: [https://www.arb.ca.gov/cc/scopingplan/2030sp\\_pp\\_final.pdf](https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf).

<sup>44</sup> Public Resources Code § 21065; Cal. Code Regs., tit. 14, § 15378, subd. (a) (“CEQA Guidelines”).

<sup>45</sup> CEQA Guidelines, §§ 15358, subd. (a)(2); 15126.2, subd. (a); 15064, subd. (d)(2), (3); *Laurel Heights Improvement Ass’n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 396 (“*Laurel Heights*”).

<sup>46</sup> See Draft EA at 19, stating that one reason for preparing the EA is precisely because CARB knows the TFS will be used by other jurisdictions. Even if other jurisdictions must go through a public process for creating crediting programs (TFS, ch. 3(b), (c)), it is unclear how this will be enforced, or that these processes will necessarily include robust environmental review processes at all.

<sup>47</sup> The consequence of failing to comply with CEQA’s substantive mandates that foreseeable impacts be analyzed and mitigated is not only that the environment is left at risk, but also that Californians are denied the benefits of informed self-government. (*Laurel Heights*, 47 Cal.3d at p. 392.)

Furthermore, the EA should analyze the impacts—even if on a programmatic level—of these foreseeable actions, even if the TFS would only be used in some cases after a future rulemaking with a separate EA, such as with respect to linkage with cap-and-trade. CARB states that this EA provides a “programmatic” level of analysis,<sup>48</sup> indicating that a future, project-specific EA may rely on, or tier from, this programmatic EA.<sup>49</sup> However, given the EA’s failure to include foreseeable compliance responses, and its cursory and inadequate analysis as described below, CARB must not rely on this EA in any future rulemakings. Indeed, what this frustrating two-stage process (endorsement of the TFS, then adopting into regulation such as cap-and-trade) appears to do is to submerge or hide environmental impacts “by chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences.”<sup>50</sup> CEQA does not allow this.

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Because CARB is proposing to endorse a TFS that it anticipates will be used as a model for future trading programs—in this or other jurisdictions—without having a real understanding of the potential impacts, and because—as explained in Section I above—there are significant unanalyzed impacts, CARB should reject the TFS.

**b. The EA Provides a Superficial and Internally Inconsistent Analysis of Impacts and Therefore Fails to Propose Mitigation Measures for Those Impacts.**

**i. The Draft EA Fails to Analyze or Mitigate Impacts in California.**

The Draft EA specifically declines to analyze impacts in California. Indeed, the EA states: “essentially all impacts that could result from the Proposed Project would take place outside the United States. . . .”<sup>51</sup> This assertion is not accurate. For instance, there will be significant impacts to the air quality of California communities, particularly disadvantaged communities already suffering from disproportionate amounts of air pollution under the state’s current cap-and-trade program, from the use of an offset program that allows California industrial facilities to continue polluting by purchasing emissions offsets created elsewhere. Cushing et al. (2018) found that rather than investing in green projects within the state, an astounding seventy-five percent of offset credits went towards projects outside of California.<sup>52</sup> Meanwhile, from 2011-2015, disadvantaged communities within California experienced *increases in both GHG emissions and co-pollutant emissions* from regulated facilities disproportionately located in their neighborhoods.<sup>53</sup> Incentivizing out-of-state projects while actively harming California’s disadvantaged communities undermines the intent of AB 398.<sup>54</sup> The EA’s failure to discuss these impacts renders it inadequate to support the TFS.

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<sup>48</sup> See e.g., Draft EA at 6.

<sup>49</sup> Public Resources Code §§ 21068.5, 21094, subd. (a), (b).

<sup>50</sup> *Bozung v. Local Agency Formation Comm.* (1975) 13 Cal.3d 263, 284; see also *Orinda Ass’n v. Board of Supervisors* (1986) 182 Cal.App.3d 1145, 1171 quoting *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188, 195-196; Guidelines, §§ 15126.2, subd. (a); 15378, subd. (a).

<sup>51</sup> Draft EA at 5.

<sup>52</sup> Cushing, 2018.

<sup>53</sup> *Ibid.*

<sup>54</sup> Note that the Office of the Senate Floor Analyses stated its understanding that, of the offset credits allowed, AB 398 “[r]equires 50% of all offsets to be *in California*.” See Senate Floor Analysis for AB 398 at 5 (emphasis added).

## **ii. The EA's Cumulative Impacts Analysis is Inadequate.**

CARB's cumulative impacts analysis for the TFS is apparently taken from the EA for California's 2017 Scoping Plan. This is bizarre for several reasons, and serves to highlight further contradictions and inadequacies in the rest of the impacts analysis.

The 2017 Scoping Plan EA looked at U.S. (and Canada) forest offset programs and impacts, but not at (other) international programs or impacts. Therefore, the Scoping Plan EA cannot substitute for a cumulative impacts analysis on the TFS project in this (TFS) EA. Despite the TFS EA's statement to the contrary,<sup>55</sup> the Scoping Plan EA does not provide any analysis on which the TFS EA can rely. Moreover, the *specific* impacts analysis in the TFS EA looks only at *international* impacts, as explained above. By "relying" on the Scoping Plan EA, which only looked at *domestic* impacts, for its *cumulative* impacts analysis, the TFS EA makes entirely opposite and contradictory assumptions about where impacts will occur.

Further highlighting the incongruity between the cumulative and specific impacts analyses, none of the compliance responses listed in the TFS EA cumulative impacts section (from the Scoping Plan EA)<sup>56</sup> are evaluated in the Draft EA's specific impacts analysis. Further, the TFS EA does not provide any context for evaluating the impacts of this particular decision on the TFS in relation to (or in addition to) those compliance responses in the cumulative impacts section. It simply regurgitates some of the generalized impacts identified in the Scoping Plan EA, and nothing more. Because of lack of any analysis of the TFS's impacts in conjunction with other compliance responses in the cumulative impacts analysis, the Draft EA's purported cumulative impacts analysis is of no use in determining whether CARB should endorse the TFS.

## **iii. The EA's Impacts Analysis and Therefore Mitigations Measures are Inadequate.**

The EA's analysis of impacts—and proposed mitigation measures—is hardly an analysis at all. Each sector cuts and pastes identical assumptions that are provided without support. For instance, every single sector relies on the same word-for-word assumption that:

Implementation of the Proposed Project could result in planning efforts and implementation of actions within external jurisdictions that reduce deforestation. The reasonably foreseeable changes to land uses would effectively limit degradation of the existing environment and would be intended to result in: forest protection, forest management and forest production processing and marketing, and increased sustainable agriculture, ranching, silviculture, and agroforestry activities associated with the restoration of degraded areas, so as to value forests and reduce pressure for deforestation of new areas.

<sup>55</sup> "The 2017 Scoping Plan EA, which referenced the potential development of a jurisdictional sector-based crediting approach to address emissions from tropical deforestation, provided a program level review of significant adverse impacts associated with the reasonably foreseeable compliance responses that appeared most likely to occur because of implementing the recommended measures." (Draft EA, p. 34.)

<sup>56</sup> Draft EA at 34 et seq.

The EA lacks substantial evidence—or any evidence—to support these assertions. Rather, as explained in Section I above, there is significant evidence that undermines them—demonstrating that a REDD-type offset program could in fact harm forest ecosystems. The Draft EA entirely ignores such evidence.

The resulting superficial and unsupported analysis results in similarly superficial and unhelpful conclusions about potential impacts and suggested mitigation. For instance, the assumption that the TFS will stem deforestation results in the meaningless conclusion that land use and planning impacts are potentially significant because, in order to avoid the impact, local jurisdictions would need to have in place land use plans “adopted for the purpose of avoiding or mitigating an environmental effect,” but “it is not certain [the jurisdictions] would do so.” The mitigation measure is of little help since “CARB lacks jurisdiction to ensure [an acceptable land use plan] is implemented.” Instead of preparing a Draft EA that provides no actual insight, CARB could have prepared one that looked at the existing conditions, plans, and impacts in areas it anticipates this TFS will be used, such as in the airline sector, Acre, Brazil, and California’s own cap-and-trade program. Such an analysis, for instance one that looks at existing land use and deforestation plans in Brazil, would have been significantly more useful to CARB’s decision-making.

Furthermore, the EA fails to acknowledge or analyze well-known impacts likely to arise from the TFS, given numerous examples and information on problems with applying REDD standards internationally, as described in Section I above. These include, among many others, harms to indigenous communities, failures of forest offset programs to guarantee GHG reductions, and harm to forest ecosystems from leakage and other drivers.

Overall, the internally inconsistent assumptions in the EA’s impacts analysis, the lack of any substantial evidence supporting various assertions that impacts will not be significant, the lack of analysis of many foreseeable compliance responses or harms to California communities, the lack of enforceability of mitigation measures, and the boilerplate descriptions of the benefits of the program to forests despite evidence to the contrary, cause this EA to be wholly inadequate to support a decision adopting a TFS. CARB must reject it.

### **c. The EA Alternatives Analysis Fails to Provide a Meaningful Evaluation.**

The alternatives analysis is the “the core of an EIR.”<sup>57</sup> An agency “may not approve a proposed project if feasible alternatives exist that would substantially lessen its significant effects.”<sup>58</sup> Therefore, lead agencies must examine a reasonable range of alternatives that feasibly meet most of the project’s basic objectives while avoiding or substantially reducing the significant effects of the project, even if these alternatives “would impede to some degree the attainment of the project objectives, or would be more costly.”<sup>59</sup> The examination of alternatives

<sup>57</sup> *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 564.

<sup>58</sup> *Save Panoche Valley v. San Benito County*, 217 Cal. App. 4th 503, 521 (2013) (citations omitted); *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 730-31, 733 (“A major function of the EIR is to ensure thorough assessment of all reasonable alternatives to proposed projects by those responsible for the decision” (citation omitted)).

<sup>59</sup> CEQA Guidelines, § 15126.6(a), (b).



must “include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project.”<sup>60</sup> “An inadequate discussion of alternatives constitutes an abuse of discretion.”<sup>61</sup>

Here, the alternatives analysis fails to provide a meaningful analysis of the alternatives. As with the impacts analysis, it provides no support for its assertions of the benefits and harms of each alternative. For example, CARB states that its “no project” alternative would result in deforestation without providing any basis for making that assumption. To the contrary, as provided in sections I.b.2 and I.c.3 above, there are many examples that show that REDD programs are not necessarily additional to existing programs within countries to reduce deforestation, and that REDD programs fails to address the drivers of deforestation. CARB confronts none of these examples or studies in its EA, instead relying on broad conjectures without evidence.

Additionally, the EA is supposed to provide a reasonable range of alternatives that meet most of the project’s objectives, yet the analysis includes an alternative that on its face fails to meet five of the six objectives: endorse a standard that does not seek to disincentivize mineral extraction (Alternative 3). Five of the six objectives relate to reducing GHG emissions, climate change, and increasing social and environmental safeguards. At the same time, mineral extraction is one of the primary sources and drivers of GHG emissions, climate change, and social and environmental injuries. A 2016 global analysis found that the carbon emissions that would be emitted from burning the oil, gas, and coal in the world’s *currently operating* fields and mines would fully exhaust and exceed the carbon budgets consistent with staying below 1.5°C or 2°C.<sup>62</sup> Further, the reserves in currently operating oil and gas fields alone, even excluding coal mines, would lead to warming beyond 1.5°C. An important conclusion of the analysis is that *most* of the existing oil and gas fields and coal mines will need to be closed before their reserves are fully extracted in order to limit warming to 1.5 degrees.<sup>63</sup> Some existing fields and mines will need to be closed to limit warming to 2 degrees.<sup>64</sup> In short, there is no room in the carbon budget for *new* fossil fuel extraction *anywhere*.<sup>65</sup> Additionally, most of the world’s existing oil and gas fields and coal mines will need to be closed before their reserves are fully extracted to meet a 1.5°C target. **There is, therefore, no justification for CARB to advance a climate change standard alternative that would not disincentivize mineral extraction.**

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<sup>60</sup> CEQA Guidelines, § 15126.6(d).

<sup>61</sup> *Kings County Farm Bureau*, 221 Cal.App.3d at 731, citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.App.3d 376, 404-406.

<sup>62</sup> Oil Change International, *The Sky’s Limit: Why the Paris Climate Goals Require a Managed Decline of Fossil Fuel Production* (September 2016), available at <http://priceofoil.org/2016/09/22/the-skys-limit-report/>.

<sup>63</sup> Oil Change International, *The Sky’s Limit California: Why the Paris Climate Goals Demand That California Lead in a Managed Decline of Oil Extraction*, May 2018, at 7, 13, available at <http://priceofoil.org/ca-skys-limit>.

<sup>64</sup> Oil Change International, *The Sky’s Limit: Why the Paris Climate Goals Require a Managed Decline of Fossil Fuel Production* (September 2016) at 5, 7.

<sup>65</sup> This conclusion was reinforced by the IPCC Fifth Assessment Report which estimated that global fossil fuel reserves exceed the remaining carbon budget (from 2011 onward) for staying below 2°C (a target incompatible with the Paris Agreement) by 4 to 7 times, while fossil fuel resources exceed the carbon budget for 2°C by 31 to 50 times. See Bruckner, Thomas et al., 2014: Energy Systems. In: *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press (2014), [http://ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc\\_wg3\\_ar5\\_chapter7.pdf](http://ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_chapter7.pdf) at Table 7.2.

**d. The CEQA Exemption for Regulatory Action Taken to Protect the Environment Does Not Apply.**

CARB states that “even if viewed as a ‘project’ under a conservative lens, [the TFS] is appropriately considered exempt from CEQA as an action taken by a regulatory agency for protection of the environment. (See 14 CCR Section 15308.)”<sup>66</sup> Where there is a reasonable possibility that a project or activity may have a significant effect on the environment, an exemption is improper.<sup>67</sup> CARB’s assertions that its TFS will have a beneficial effect on forests and on the climate are little more than speculation, with no substantial evidence to support them. To the contrary, as described in Section I above, there is ample evidence that REDD-type programs fail to protect forest ecosystems and do little to stem GHG emissions. CARB must engage with these studies and examples, and cannot simply claim an exemption without any evidence that its action will, in fact, protect the environment.

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**Conclusion**

In general, the TFS remains deeply problematic, and CARB’s proposal to endorse the TFS without having fully addressed the many pitfalls raised herein, by indigenous rights groups, and by environmental justice communities is troubling. We request that CARB reject the TFS, and focus instead on crafting regulations that will end fossil fuel extraction and combustion, reduce California’s deforestation footprint, provide direct benefits to California communities, and deliver the large-scale, rapid GHG reductions needed to avoid the worst climate catastrophes.

Please do not hesitate to contact us with any questions.

Sincerely,

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<sup>66</sup> Draft EA at 5.

<sup>67</sup> *Wildlife Alive v. Chickering*, (1976) 18 Cal. 3d 190.



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October 29, 2018

Chair Mary Nichols  
California Air Resources Board  
1001 I Street  
Sacramento, California

*Re: Reject Draft California Tropical Forest Standard*

Dear Chair Mary Nichols and Members of the California Air Resources Board:

On behalf of the 29 undersigned organizations, we write to express our opposition to the proposed “Criteria for Assessing Jurisdiction-Scale Programs that Reduce Emissions from Tropical Deforestation” (hereinafter “Draft Standard”). Our organizations’ leadership from low-income Latino, Asian American and Pacific Islanders, African American and immigrant communities have decades of experience reducing pollution in our neighborhoods and are fierce advocates for climate solutions. This Draft Standard is a fundamentally flawed approach that will not ensure a reduction in greenhouse gas emissions and is likely to perpetuate environmental injustices abroad and in California. Many environmental justice communities in California have family in tropical forest regions of Mexico, Central and South America, and Asia and fully understand the conditions that cause deforestation, displacement and political repression.

We urge the California Air Resources Board (“CARB”) to reject the Draft Standard, and we further urge CARB to halt developing any international, sector-based offset program for the cap and trade program. CARB should instead focus on other potential policies that can help protect tropical rain forests while not perpetuating injustices abroad and in California.

### **1. Offsets Can Exacerbate Environmental Justice Issues in California.**

Although CARB is not proposing to link the Draft Standard to California’s cap and trade program at this time, CARB appears to anticipate proposing this program as an offset program in the future. There seems to be little other reason to create a “standard.” Indeed, CARB states one of the objectives of the Draft Standard is to: “[e]stablish robust criteria for emissions trading to assess, and potentially include, jurisdiction-scale programs that reduce GHG emissions from tropical deforestation.”<sup>1</sup> There are several problems with CARB linking this Draft Standard to California and providing additional offsets in the cap and trade program.

#### Exacerbating Environmental Injustice in California

Proposing a new international offset program will likely exacerbate environmental justice issues in California by requiring less in-state reductions. It is firmly established that California has some of the worst air quality in the country. The American Lung Association’s State of the Air 2018 report found that California cities include eight of the top-ten worst cities for ozone, the seven worst cities for year-round particle pollution, and seven of the top-ten worst cities for

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<sup>1</sup> Final Draft Environmental Assessment, p. 58.

short-term particle pollution.<sup>2</sup> No other state has as many polluted cities. Consequently, each ton of pollution matters, especially in communities that breathe some of the worst air in the country.

#### Offsets Reduce In-State Emissions Reductions and Worsen Air Quality

Allowing additional offsets, which reduces in-state reductions, can exacerbate the already-poor air quality in disadvantaged communities. The July 20, 2018 research article entitled: "Carbon trading, co-pollutants, and environmental equity: Evidence from California's cap-and-trade program (2011-2015)" written by Lara Cushing, Dan Blaustein-Rejto, Madeline Wantner, Manual Pastor, James Sadd, Allen Zhu, and Rachel Morello-Frosch illustrates the importance of real GHG reductions for the state's most disadvantaged communities.<sup>3</sup> This peer-reviewed journal article makes the following key findings:

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- Facilities regulated under California's cap-and-trade program are disproportionately located in disadvantaged neighborhoods.<sup>4</sup>
- Most regulated facilities increased their local GHG emissions after implementation of cap-and-trade. A majority of facilities also increased their annual average PM2.5, VOC, and air toxics emissions during this time period.<sup>5</sup>
- GHGs and hazardous co-pollutants emitted by facilities regulated under California's cap-and-trade program were positively correlated when comparing across facilities.<sup>6</sup>
- Since California's cap-and-trade program began, neighborhoods that experienced increases in annual average GHG and co-pollutant emissions from regulated facilities nearby had higher proportions of people of color and poor, less educated, and linguistically isolated residents, compared to neighborhoods that experienced decreases in GHGs.<sup>7</sup>

As highlighted in this peer-reviewed research, low-income communities and communities of color are disproportionately located near the state's largest GHG sources. Thus, our state's ability to curb GHGs and slow climate change has a direct impact on the state's disadvantaged communities. Sources need to actually reduce GHGs to mitigate these impacts and ensure that cap and trade does not disproportionately hurt the state's most disadvantaged communities.

This July 20, 2018 peer-reviewed research article also found that offsets can undercut emission reduction efforts and environmental equity goals. In particular, it found that:

Facilities owned by companies that used offsets emitted significantly higher levels of GHGs than those owned by companies that did not use offsets. For example, the 10

<sup>2</sup> American Lung Association, State of the Air 2018, [http://www.lung.org/local-content/california/documents/state-of-the-air/2018/sota-2018\\_ca\\_\\_most-polluted.pdf](http://www.lung.org/local-content/california/documents/state-of-the-air/2018/sota-2018_ca__most-polluted.pdf)

<sup>3</sup> L. Cushing, et. al, *Carbon Trading, Co-Pollutants, and Environmental Equity: Evidence from California's Cap-and-Trade Program (2011-2015)*, <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002604#sec016>

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

companies using the most offset credits during the first compliance period were responsible for 82% of offsets surrendered and 43% of total covered GHG emissions.<sup>8</sup>

#### Inconsistency with Existing Law

Proposing a new international offset program is also inconsistent with AB 398's required reduction of the use of offsets and requirement that CARB increase the offsets tied to in-state direct environmental benefits. Specifically, AB 398 reduces the amount of allowable offsets from the previous amount of 8% of an entity's compliance burden to no more than 4% from 2021-2025 and no more than 6% from 2026-2030.<sup>9</sup> AB 398 further requires that at least half of the offsets must provide direct environmental benefits in the state.<sup>10</sup> AB 398 also establishes a task force with the propose of "increasing offset projects with direct environmental benefits in the state while prioritizing disadvantaged communities, Native American or tribal lands, and rural and agricultural regions."<sup>11</sup>

New offsets are also inconsistent with AB 197, which requires CARB to prioritize direct emissions reductions. Specifically, section 38562.5 requires CARB to prioritize both of the following:

- (a) Emission reduction rules and regulations that result in direct emission reductions at large stationary sources of greenhouse gas emissions sources and direct emission reductions from mobile sources.
- (b) Emission reduction rules and regulations that result in direct emission reductions from sources other than those specified in subdivision (a).<sup>12</sup>

Creating a new international offset program is thus also inconsistent with AB 197's requirement to prioritize direct emission reductions.

## **2. The Draft Standard Creates an Unnecessary Risk of Human Rights Abuses for Forest Dwelling People Around the World.**

Although the Draft Standard claims to include social and environmental safeguards,<sup>13</sup> the provisions not only fail to protect against the potential for human rights abuses that can occur and have occurred as a result of tropical forest offset programs, but create social and environmental dangers themselves. Tropical forest offset programs have a history of contributing to illegal actions, coercion, violence, and land grabs for indigenous peoples, forest dwelling communities, and citizens around the globe.<sup>14</sup>

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<sup>8</sup> *Id.*

<sup>9</sup> Cal. Health & Safety Code § 38562(c)(2)(E).

<sup>10</sup> Cal. Health & Safety Code § 38562(c)(2)(E).

<sup>11</sup> Cal. Health & Safety Code § 38591.1(a).

<sup>12</sup> Cal. Health & Safety Code § 38562.5.

<sup>13</sup> CARB states that one of the objectives of the project is to "[e]nsure rigorous social and environmental safeguards." Draft Final Environmental Assessment, p. 58.

<sup>14</sup> See, e.g., Friends of the Earth, REDD+, *The Carbon Market and California-Acre-Chiapas Cooperation: Legalizing Mechanisms of Dispossession* (June 2017), <https://www.foei.org/wp->

### Placing Harm on Forest Dwelling Communities

The Draft Standard's proposed social and environmental safeguards fail to protect against the risk to forest dwelling communities for several reasons. First, the vague requirement for consultation does not appear to provide any more protection than the previously problematic REDD requirements. Simply consulting with indigenous communities in the process and allowing participation in the design does not mean that indigenous communities will ultimately be protected nor does it ensure that their input will even be considered in the development of a program.<sup>15</sup> Consultation is a minimum requirement that ensures mere notice and some level of dialogue.

Indigenous communities have been forced from their homelands, as forests have been privatized.<sup>16</sup> Experiences with international forest offset programs on the ground illustrates a consistent failure to secure communities' rights to their homelands.<sup>17</sup> This type of forced eviction impacts all aspects of life. An indigenous forest dwelling community in Kenya called the Sengwer, which was forced from their land in the name of conservation of the forest, "reported that they live in constant fear of repeated forced evictions through home burnings, and arrests."<sup>18</sup> An indigenous community from a tropical forest in Indonesia reported similar types of fears.<sup>19</sup> Members of the Sengwer community who did leave faced "economically precarious conditions, having been evicted but not having received compensation."<sup>20</sup> Similarly, members of an indigenous community in Indonesia who left face harsh realities including the loss of their livelihood and homes.<sup>21</sup> The forced evictions also impacted cultural practices and caused an

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content/uploads/2018/01/REDD\_The-carbon-market-and-the-California-Acre-Chiapas-cooperation.pdf; see also World Rainforest Movement, *REDD: A Collection of Conflicts, Contradictions and Lies* (Feb. 2015), [https://wrn.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict\\_Contradictions\\_Lies\\_expanded.pdf](https://wrn.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict_Contradictions_Lies_expanded.pdf)

<sup>15</sup> See Draft Standard, Chapter 10, pp. 18-19.

<sup>16</sup> [https://www.foodandwaterwatch.org/sites/default/files/bad\\_trade\\_ib\\_apr\\_2013.pdf](https://www.foodandwaterwatch.org/sites/default/files/bad_trade_ib_apr_2013.pdf) (citing sources).

<sup>17</sup> See World Rainforest Movement, *REDD: A Collection of Conflicts, Contradictions and Lies* (Feb. 2015), [https://wrn.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict\\_Contradictions\\_Lies\\_expanded.pdf](https://wrn.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict_Contradictions_Lies_expanded.pdf) at p. 5-6.

<sup>18</sup> Amnesty International, *Families Torn Apart Forced Evictions of Indigenous People in Embobut Forest, Kenya*, p. 8,

<https://www.amnesty.org/download/Documents/AFR3283402018ENGLISH.PDF>

<sup>19</sup> Human Rights Abuses and Land Conflicts in the PT Asiatic Persada Concession in Jambi, <http://www.forestpeoples.org/sites/default/files/publication/2011/11/final-report-pt-ap-nov-2011-low-res-1.pdf>

<sup>20</sup> Amnesty International, *Families Torn Apart Forced Evictions of Indigenous People in Embobut Forest, Kenya*, p. 8,

<https://www.amnesty.org/download/Documents/AFR3283402018ENGLISH.PDF>

<sup>21</sup> Human Rights Abuses and Land Conflicts in the PT Asiatic Persada Concession in Jambi, <http://www.forestpeoples.org/sites/default/files/publication/2011/11/final-report-pt-ap-nov-2011-low-res-1.pdf>

erosion of financial autonomy of women.<sup>22</sup> Other indigenous communities throughout the world have also been forced from their homelands in the name of conserving the forests through forest offsets.<sup>23</sup> This displacement carries enormous housing, security, and health consequences.<sup>24</sup> The vague consultation requirement in the Draft Standard does not prevent these types of human rights abuses from occurring, and it can instead be used as a guise to provide the semblance that the rights of indigenous communities were respected.

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cont.

#### Weak Human Rights Protections

In addition, the Draft Standard provides that a jurisdiction “may” consult the Green Climate Fund Indigenous People’s Policy.<sup>25</sup> This criterion is meaningless. Merely stating that it is permissive to “consult” the policy does little to respect or protect human rights. The policy itself requires more than consultation—it requires incorporation of the interests of indigenous peoples’ rights as well as respect and enhancement of the rights of indigenous peoples to their lands, territories and resources.<sup>26</sup> Following a policy like the Green Climate Fund Indigenous People’s Policy is an essential first step to ensure that human rights abuses do not continue to occur.

Problematically, the Draft Standard also fails to require concrete substantive protections beyond the previously proposed REDD provisions. Without any clear protections for communities, it is unclear how the Draft Standard will ensure any additional protections for forest-dwelling communities to prevent human rights abuses. Publishing reports on a website,<sup>27</sup> for example, is not helpful if there is no requirement to protect the human rights of indigenous communities in the first place.

#### Vague and Unclear Verification Protocols

Furthermore, although the Draft Standard appropriately requires third-party verification of the social and environmental safeguards,<sup>28</sup> it says nothing about the safeguards themselves, again begging the question. Neither does it provide that the verification include community input or that the verification process determine whether a community is being negatively impacted by the

<sup>22</sup> Amnesty International, *Families Torn Apart Forced Evictions of Indigenous People in Embobut Forest, Kenya*, p. 8,

<https://www.amnesty.org/download/Documents/AFR3283402018ENGLISH.PDF>

<sup>23</sup> World Rainforest Movement, *REDD: A Collection of Conflicts, Contradictions and Lies* (Feb. 2015), [https://wrm.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict\\_Contradictions\\_Lies\\_expanded.pdf](https://wrm.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict_Contradictions_Lies_expanded.pdf)

<sup>24</sup> See, e.g., Friends of the Earth, REDD+, *The Carbon Market and California-Acre-Chiapas Cooperation: Legalizing Mechanisms of Dispossession* (June 2017), [https://www.foei.org/wp-content/uploads/2018/01/REDD\\_The-carbon-market-and-the-California-Acre-Chiapas-cooperation.pdf](https://www.foei.org/wp-content/uploads/2018/01/REDD_The-carbon-market-and-the-California-Acre-Chiapas-cooperation.pdf); World Rainforest Movement, *REDD: A Collection of Conflicts, Contradictions and Lies* (Feb. 2015), [https://wrm.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict\\_Contradictions\\_Lies\\_expanded.pdf](https://wrm.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict_Contradictions_Lies_expanded.pdf)

<sup>25</sup> Draft Standard, Chapter 10(a), p. 18.

<sup>26</sup> [https://www.greenclimate.fund/documents/20182/574763/GCF\\_policy\\_-\\_Indigenous\\_Peoples\\_Policy.pdf/6af04791-f88e-4c8a-8115-32315a3e4042](https://www.greenclimate.fund/documents/20182/574763/GCF_policy_-_Indigenous_Peoples_Policy.pdf/6af04791-f88e-4c8a-8115-32315a3e4042)

<sup>27</sup> See Draft Standard, Chapter 10(c), p. 19.

<sup>28</sup> Draft Standard, Chapter 10(e), p. 19.

program. Many forest offset projects certified as providing social benefits or even awarded silver or gold distinctions have had devastating impacts on forest-dwelling communities.<sup>29</sup> Without concrete substantive requirements, the verification process cannot protect forest-dwelling communities impacted by this Draft Standard.

Finally, the Draft Standard fails to consider how an implementing jurisdiction could enforce or monitor social and environmental safeguards. Clearly, safeguards matter only if they can be enforced and if there are consequences for violations. Due to the remote location of potential projects, verification, monitoring, and enforcement of projects will be extremely difficult to succeed. The Draft Standard even fails to require reporting of social and environmental protections in the annual report,<sup>30</sup> or, as described above, require that the verification process examine what is happening on the ground. Given this, even if a proposed project claims to meet all of the social and environmental safeguards, the Draft Standard fails to provide a way to ensure that human rights abuses are not continuing to occur.

In light of the risk of devastating human rights abuses created by international forest offset programs, the State of California has a heavy duty to ensure that any such "standard" ensure real, meaningful social and environmental safeguards. Instead, however, the Draft Standard includes elements that only thinly cloak it with positive language. The standard's vague and procedural language, without substantive protections, rings hollow. Given these issues with the Draft Standard, we believe that it creates a reasonably foreseeable risk of human rights abuses to indigenous communities. CARB should not move forward with this problematic approach.

### **3. The Draft Standard Should Be Rejected Because There Are Better Alternatives to Protect Tropical Rainforests.**

The Final Draft Environmental Assessment states that the Draft Standard is "intended to generate environmental benefits pertaining to agriculture and forestry resources (through improved forest management) and GHG emission reductions."<sup>31</sup> We share CARB's desire to ensure tropical forests are protected as a key strategy to reduce climate change. However, the Draft Standard does not provide a mechanism to accomplish this goal. Alarming, CARB has not evaluated other potential alternatives for protecting tropical forests that can protect communities while reducing GHGs.

#### Optimize California's Purchasing Power

CARB should examine other ways to reduce deforestation by limiting the purchase of material from the Amazon. In particular, CARB can examine the following:

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<sup>29</sup> World Rainforest Movement, *REDD: A Collection of Conflicts, Contradictions and Lies* (Feb. 2015), [https://wrm.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict\\_Contradictions\\_Lies\\_expanded.pdf](https://wrm.org.uy/wp-content/uploads/2014/12/REDD-A-Collection-of-Conflict_Contradictions_Lies_expanded.pdf)

<sup>30</sup> See Draft Standard, Chapter 10(d), p. 19 (stating that the annual report "may" include an update of social and environmental safeguards).

<sup>31</sup> Final Draft Environmental Assessment, p. 1.

- Banning imports of crude oil from the Amazon and other sensitive and globally important tropical forest areas. Oil production in the Amazon is a driver of deforestation in the Amazon.
- Minimize California's consumption of commodities whose production are drivers of tropical deforestation. This includes tropical hardwoods, paper, pulp, minerals, fossil fuels, and other commodities produced and extracted from tropical rainforest areas.

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cont.

#### Fully Exhaust In-State Options First

Other feasible alternatives exist that can meet the primary purpose and objective of the project of benefiting agriculture and forestry resources and GHG emission reductions. In fact, the State recently took a positive step to protecting tropical forests when it added material risks from deforestation as part of the evaluation for investment for its employee retirement account. The California Public Employee's Retirement System adopted language that recognizes that deforestation and ecosystem degradation pose material risks and includes a direct acknowledgement of "free, prior and informed consent as a standard in relation to Indigenous People's rights."<sup>32</sup> This is an example of the type of alternatives that CARB should be examining as a better way to help protect tropical forests.

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In addition, CARB should examine potential actions to improve the stewardship of its own forests. Some examples of actions it could examine include reigning in clear-cutting and monoculture tree plantations and other destructive forest management practices, and assuring the long-term sustainability and effectiveness of existing protected areas on private, state, tribal and federal lands.

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Furthermore, CARB should also examine other models that have been developed to protect indigenous communities. As described above, the Green Climate Fund Indigenous People's Policy requires incorporation of the interests of indigenous peoples' rights as well as respect and enhancement of the rights of indigenous peoples to their lands, territories and resources.<sup>33</sup> In addition, CARB should consider the "Joint Mitigation and Adaptation Mechanism for the Integral and Sustainable Management of Forests and Mother Earth."<sup>34</sup> This approach, which was developed by Bolivia, does not rely on offsets but rather seeks better land use practices and prevention of biodiversity loss, deforestation and degradation. This approach should be examined as a potential way to both protect indigenous communities and prevent deforestation.

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<sup>32</sup> CalPERS, *Governance and Sustainability Principles*, <https://www.calpers.ca.gov/docs/forms-publications/governance-and-sustainability-principles.pdf>

<sup>33</sup> Green Climate Fund, *Indigenous Peoples Policy*, [https://www.greenclimate.fund/documents/20182/574763/GCF\\_policy\\_-\\_Indigenous\\_Peoples\\_Policy.pdf/6af04791-f88e-4c8a-8115-32315a3e4042](https://www.greenclimate.fund/documents/20182/574763/GCF_policy_-_Indigenous_Peoples_Policy.pdf/6af04791-f88e-4c8a-8115-32315a3e4042)

<sup>34</sup> See *Joint Mitigation and Adaptation Mechanism for the Integral and Sustainable Management of Forests and Mother Earth*,

[https://unfccc.int/files/cooperation\\_and\\_support/financial\\_mechanism/standing\\_committee/application/pdf/annex\\_2.\\_implementation\\_joint\\_mitigation.pdf](https://unfccc.int/files/cooperation_and_support/financial_mechanism/standing_committee/application/pdf/annex_2._implementation_joint_mitigation.pdf)



#### **4. CARB Should Meaningfully Engage International Community Leaders and the California Environmental Justice Community To Develop an Alternative Proposal.**

Any proposal to consider tropical forests is likely to significantly impact indigenous and environmental justice communities abroad and in California. As such, we request CARB to meaningfully consult with indigenous and environmental justice communities when developing an alternative proposal.

The Green Climate Fund's Indigenous People's Policy defines meaningful consultation as:

a two-way process, that: (a) begins early in the project planning process to gather initial views on the project proposal and inform project design; (b) encourages stakeholder feedback, particularly as a way of informing project design and engagement by stakeholders in the identification and mitigation of environmental and social risks and impacts; (c) continues on an ongoing basis, as risks and impacts arise; (d) is based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful and easily accessible information in a timeframe that enables meaningful consultations with stakeholders in a culturally appropriate format, in relevant local language(s) and is understandable to stakeholders; (e) considers and responds to feedback; (f) supports active and inclusive engagement with project affected parties; (g) is free of external manipulation, interference, coercion, discrimination, and intimidation; and (h) is documented and disclosed.<sup>35</sup>

We request that CARB should model meaningful consultation during the development of an alternative standard that protects environmental justice and indigenous communities and document how it integrates the input of impacted communities in the design of this alternative.

#### **CONCLUSION**

For all of these reasons, we urge CARB to not move forward with the Draft Standard, and we further urge CARB to not develop any international, sector-based offset programs for the cap and trade program. CARB should focus on other potential policies that can help protect tropical rain forests while not perpetuating injustices abroad and in California.

Sincerely,

Gladys Limón, Executive Director  
California Environmental Justice Alliance

Parin Shah, Senior Strategist  
Asian Pacific Environmental Network

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<sup>35</sup> Green Climate Fund, *Indigenous Peoples Policy*,  
[https://www.greenclimate.fund/documents/20182/574763/GCF\\_policy\\_-\\_Indigenous\\_Peoples\\_Policy.pdf/6af04791-f88e-4c8a-8115-32315a3e4042](https://www.greenclimate.fund/documents/20182/574763/GCF_policy_-_Indigenous_Peoples_Policy.pdf/6af04791-f88e-4c8a-8115-32315a3e4042)

Tom Frantz, President  
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Allen Hernandez, Executive Director  
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Caroline Farrell, Executive Director  
Center on Race, Poverty & the Environment

Kevin D. Hamilton, RRT, Chief Executive Officer  
Central California Asthma Collaborative

Maricela Morales MA, Executive Director  
Central Coast Alliance United for a Sustainable Economy (CAUSE)

Pamela Tau Lee, Chairperson  
Chinese Progressive Association

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Climate Hawks Vote

Bill Magavern, Policy Director  
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Deborah Silvey, Board Chair  
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Orson Aguilar, President  
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Kemba Shakur, Director  
Urban Releaf

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John Gioia  
Dr. John Balmes  
Dr. Alex Sherriffs  
Assemblymember Eduardo Garcia  
Senator Ricardo Lara

Phil Serna  
Judy Mitchell  
Sandra Berg  
Daniel Sperling  
Barbara Riordan  
Ron Roberts  
John Eisenhut  
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October 29, 2018

Hon. Mary Nichols, Chair  
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[https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=ct2018&comm\\_period=A](https://www.arb.ca.gov/lispub/comm/bcsubform.php?listname=ct2018&comm_period=A)

Re: Support for Proposed California Tropical Forest Standard

Dear Chair Nichols,

We thank CARB for the opportunity to comment on this very important proposal of a California Tropical Forest Standard. **EDF strongly endorses the draft Standard and supports its adoption by the California Air Resources Board.** While technical in nature, the implications of an official California Standard on tropical forests are difficult to overstate. After a decade of painstaking work on this front by California – in partnership with tropical forest jurisdictions and stakeholders - it is a critical moment for California to move forward in leveraging its global leadership to promote the reduction of greenhouse gas emissions from the cutting and burning of tropical forests.

Cutting and burning tropical forests is not only a threat to biodiversity and millions of people who depend on tropical forests for their livelihoods and cultures, but also contributes between 16-19% of annual global greenhouse gas emissions.<sup>1</sup> That means that decimating tropical

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<sup>1</sup> Seymour, Seymour and Jonah Busch. (2016). *Why Forests? Why Now? The Science, Economics of Tropical Forests and Climate Change*. Center for Global Development. Washington, DC. Estimates range put the contribution of tropical forests in the range of 17-33% of global greenhouse gas emissions. R. A. Houghton, B. Byers, A. A. Nassikas,

forests exceeds the greenhouse gas emissions of all the cars, trucks, and ships in the world every single year. The recent report from Intergovernmental Panel on Climate Change indicates that avoiding the most catastrophic consequences of climate change requires turning back the current global trajectory on emissions within the next handful of years. By absolute necessity, the world must address the loss of tropical forests. They represent one of the single greatest opportunities to turn the corner on greenhouse gas emissions within the next decade and put the world on a path toward climate safety. California is a global leader that is uniquely positioned to address this need. The state can set a standard for carbon markets that demands both stringent requirements for demonstrating environmental integrity, as well as develop program design and implementation that engages and benefits indigenous and other traditional communities who both use and safeguard forests.

While the positive impacts of this Standard go far beyond California alone, it is important to note that California's cap-and-trade program itself could provide a critical flow of incentives to targeted, high-quality jurisdictional programs to reduce deforestation. A California Tropical Forest Standard has tremendous potential to influence, not only tropical forest jurisdictions, but also existing and emerging markets globally. In this way, California's action would amplify the impact of its climate program globally. Further, while the Standard's adoption is not a regulatory action, if such credits were allowed into California's cap-and-trade program in the future, they would be limited to the 2% of credits allowed which are not subject to the Direct Environmental Benefit requirement. However, it would still be a significant incentive for some jurisdictions with programs that could demonstrate sufficient rigor. That action could leverage gains in emissions reductions from tropical forests around the world that far exceed the offset quantity that could be credited in California's system.

EDF would also like to commend CARB for staff's work on the Environmental Analysis (EA) associated with the Tropical Forest Standard. As the EA itself lays out, there is a reasonable argument that no Environmental Analysis was actually required under the California Environmental Protection Act (CEQA). Nevertheless, we believe completing this very thorough EA, using conservative assumptions, was the right approach given the important nature of the current effort. The current proposed Board endorsement of the Tropical Forest Standard will not result in any direct changes or impacts to the cap-and-trade program or any other regulatory program and will also not result in a California linkage. Therefore, the current EA provides a window into staff's thinking about potential environmental impacts of a Tropical Forest Standard that might be incorporated into California's program in the future. Ideally, this will allow a transparent dialogue with stakeholders that can ensure CARB is able to produce a robust Environmental Analysis should the agency take any direct regulatory action like including

a Tropical Forest Standard offset in the cap-and-trade regulation or linking with a jurisdiction that could provide Tropical Forest Standard Credits. We believe this effort is consistent with the spirit of CEQA which is about transparency and exploration of opportunities to mitigate any significant environmental impacts. It is also consistent with CARB's approach to stakeholder outreach – particularly in the complex cap-and-trade arena -- which emphasizes early and meaningful engagement with stakeholders even before official regulatory action is taken by the agency.

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cont.

Below we would like to highlight a few key features of the proposed Standard itself, many of which EDF has commented on in the past, and which we believe contribute to the proposed Standard's overall strength and comprehensiveness.

Program Scale: Foremost, we want to emphasize that a jurisdictional approach recognizes aggregate reductions achieved below the level of a baseline of emissions across the entire region. Thus, a jurisdictional program to address deforestation with a rigorously set baseline is analogous to an ambitiously set and enforced cap under a cap-and-trade program at the level of a whole state such as California or Quebec. Because the proposed Standard takes a jurisdictional-level approach, it provides similar assurance of additionality, consideration of leakage, and ability to manage risks of non-permanence. Such an approach to crediting emissions reductions from tropical forests is conservative from the start. In addition, as we highlight below, there are further mechanisms in the proposed Standard that build in additional layers of assurance of the sectoral crediting program's integrity – both for emissions reductions and social and environmental safeguards.

Program Scope: EDF supports the Standard's proposal to credit emissions reductions from both reduced deforestation and degradation within jurisdictional programs that demonstrate comprehensive measurement and accounting of those sources of emissions across their forest sector. This is because degradation can, in some cases, contribute significantly to overall forest sector emissions<sup>2</sup> and we commend CARB for including in throughout the proposed Standard as a potentially significant source of emissions. In the case of any potential future linkage between any market and specific jurisdiction, the relative contribution of degradation to overall jurisdictional forest emissions should thus be examined as part of a "key category" analysis in line with IPCC good practice guidelines as already required in Chapter 8(a) of the proposed Standard. Such an examination on a case-by-case basis should determine whether accounting of and crediting for degradation emissions is necessary for a robust assessment of forest

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<sup>2</sup> A. Baccini, W. Walker, L. Carvalho, M. Farina, D. Sulla-Menashe, R. A. Houghton, Tropical forests are a net carbon source based on aboveground measurements of gain and loss. *Science*. 358, 230-234 (2017).



sector emissions. Many jurisdictions with programs to reduce deforestation emissions are also undertaking efforts for carbon stock enhancement of natural forests. These efforts, while recognized by the proposed Standard, are not currently proposed for crediting. We encourage CARB to move toward the development of robust criteria for crediting carbon stock enhancement of natural forests in the future. However, for clarity and consistency in the current proposal, we recommend removal of the words "or enhanced sequestration" from Chapter 6, part (a).

Reference Levels: EDF strongly endorses the Standard's proposed approach that the initial reference level should be set based on historical deforestation emissions across the entire forest sector in a given partner jurisdiction. This eliminates hypothetical projections of deforestation trends in a given jurisdiction, and instead incentivizes programs that have adopted deforestation reduction targets that will reduce deforestation emissions against measurable historical levels and ensures additionality. This is another key feature of the proposed Standard that contributes fundamentally to its strength and significance as a model. We agree that a ten-year historical time period is adequate to capture year-to-year variability in deforestation rates, while reflecting the recent policy and economic context within which the program is being implemented.

We also commend CARB for drafting a Standard which provides jurisdictions with the flexibility to include nested projects within their programs. When it comes to requirements for project-level baselines, we agree that the jurisdiction's sector plan should include a procedure for ensuring project baselines "that reflects and fits within the jurisdiction's reference level," (Chapter 15(b)). However, we think the requirement for a "historical average baseline" for projects is unnecessary and could preclude nested projects that provide effective incentives for conserving forests in areas with historically low rates of deforestation. As a result, we suggest deleting the reference to "historical average baseline" in Chapter 15(b) to enable a jurisdiction to tailor its program to best meet its needs and desired benefit-sharing arrangements.

Crediting Baselines: EDF supports the Standard's proposal that the crediting baseline should start at a minimum of 10% below the reference level and decline over time at pre-determined intervals. The Standard's proposal of having the crediting baseline adjust every five years is also sound. However, we suggest that updating of the crediting baseline occur on a predetermined trajectory (either linear or step-wise) set between the jurisdiction's initial reference level and an ambitious target. This will strengthen the proposed baseline approach even more, by further ensuring additionality, as well as providing jurisdictions predictability based on performance and incentivizing overall ambition. What defines an "ambitious" target is, again, a

determination that can be made case-by-case, given individual jurisdictional circumstances at the time an individual linkage is being developed. However, a potential metric for high ambition that we recommend would be to achieve (close to) zero gross deforestation and degradation (and, eventually negative emissions including restoration and reforestation).

EDF is also supportive of the approach in the proposed Standard in setting clear requirements that emissions reductions credited by any carbon market from a sector-based crediting program for tropical forests be transparently accounted for and retired from the sector-based crediting program, so as to avoid double counting. This is critical both directly between a subnational sector-based crediting program and any carbon market purchasing those emissions reductions, as well as between the subnational jurisdiction and any national accounting systems. Avoiding double counting has important implications for the integrity of country commitments through National Determined Contributions and the commitments of the Paris Agreement.

Leakage: Monitoring of emissions and crediting reductions relative to a baseline at a jurisdictional scale are the best approaches for accounting for any potential leakage (shifts) in deforestation within the jurisdiction. As such, the approach of the proposed Standard, because of its jurisdictional nature, is already highly comprehensive in addressing the potential for leakage. However, we applaud CARB's proposal to also address the potential for emissions leakage outside a jurisdiction's borders. We previously recommended that CARB could establish simple yet effective approaches to ensure that forest protection efforts within a jurisdiction are effectively addressing the root causes of deforestation. Chiefly, these are pressures to expand agriculture in an unsustainable manner to avoid shifting these pressures to other locations outside the jurisdiction. As we have suggested before, the best way to do this is to ensure that the jurisdiction is maintaining or increasing, rather than suppressing, agricultural and forestry output at the same time that encroachment on forest areas is being controlled. This is precisely the approach taken in the Standard, which incentivizes jurisdictions to take a comprehensive look at both economic development and deforestation drivers and takes a highly conservative approach in terms of crediting emissions reductions. As we also suggested, the Global Commodity Leakage Module: Effective Area Approach of the Jurisdictional and Nested REDD+ Standard from Verra could be a model for implementing this approach.

Permanence and Reversal Risk: EDF supports the approach outlined in the proposed Standard to ensure permanence of greenhouse gas reductions from tropical forests and address reversal risk. We view both as sound and, in fact, highly conservative. Our view

is thus that the permanence approach outlined in the Standard is very comprehensive for three main reasons: First, jurisdiction-wide accounting is itself the best insurance mechanism, as it will pool the risk of reversals due to fires and other risks across the entire jurisdiction. Second, a robust emissions reduction strategy must break the historical link between energy output and economic growth and increased emissions. As noted above, a jurisdictional approach to reducing deforestation that reduces emissions while maintaining or increasing production of the drivers of deforestation, as is outlined in the Leakage section of the proposed Standard, is also of central importance to identify risk of non-permanence. Addressing these drivers of deforestation at a jurisdictional scale also helps to ensure permanence of reductions and reduce reversal risk.

As CARB has proposed in the Standard, to the extent that there is a potential risk that some reductions achieved might be reversed later (as is possible in any emissions reduction program, regardless of the sector) it is important that CARB establish rules for ensuring that any potential reversal can be effectively mitigated. EDF supports the proposed approach of establishing a jurisdictional buffer pool of credits, which would serve as a backstop to any reversal of credited emissions reductions, such that the environmental integrity of the program is always maintained. The proposed contribution to the buffer pool of 10% of total emissions credited is a prudent approach, but one which strikes a balance between guaranteeing environmental integrity over the long-term, while still providing ample financial incentives to jurisdictions engaging with an ETS. While the 10% contribution to the buffer is a conservative approach in the initial years of a linkage, after a certain period of time has elapsed such that the total buffer pool has built up, it would not be unreasonable to gradually enable the release of some of the past credits placed in the buffer pool, as long as reversals have been avoided. This would reward the jurisdiction with additional incentives for good performance and reflect the fact that drivers of deforestation in the tropical forest jurisdiction were addressed such that the risk of reversing the initial reductions has been reduced.

MRV: In the decade since California began contemplating the potential for designing rules to credit jurisdictional sector-based programs to reduce deforestation, forest carbon measurement and monitoring tools have only grown more sophisticated and cost-effective. The technology exists in multiple platforms and combined approaches to measure both deforestation and degradation emissions with tremendous accuracy, as well as monitor land use change remotely through an array of available satellite imagery, both at high resolution and at scale. Because of the broad range of potential high-quality methods, EDF believes the Standard's approach in not calling for precise

methodologies and/or technologies, is practical and effective. As long as the methodologies used are consistent with the IPCC, this approach will allow jurisdictions to capitalize on the forest monitoring systems that are most appropriate for their local circumstances, while still assuring the necessary rigor to meet California's standards.

**Social Safeguards:** The proposed Standard's emphasis on social safeguards to ensure the consultation and inclusion of forest communities, as well as transparent and equitable distribution of benefits is critically important. While the decision to reduce deforestation or emissions at a jurisdictional scale is a prerogative of government, forest communities must be included in, and benefit from, the development and implementation of forest policies and programs if these are to be effective. They are key partners in the effort to mitigate deforestation emissions and develop sustainable approaches to the conservation and use of forests that ensure their current and future well-being.

Consultative development of programs to reduce deforestation bringing all stakeholders to the table results in better informed policy and more successful outcomes. The required "sector plan," described in detail in Chapter 3, requires a tropical forest jurisdiction to describe in detail and document, not only the individual components of its sectoral crediting program in terms of its legal and policy framework, its individual initiatives and components, and its technical methodologies, but also information on how its program was designed in a public and participatory consultation process with stakeholders and communities affected by its implementation. A major strength of the Standard's requirements, in addition to the individual technical areas discussed below, are its rigorous requirements for transparency, public consultation (particularly of forest communities), and public availability of information.

While implementation of robust community consultation and collaborative development of program and benefit distribution plans can be challenging and take time, they are critical to a program's overall success and integrity. Existing models of robust and collaborative consultation processes that enable equitable and effective distribution of benefits to support forest communities exist in many instances. Many existing efforts can serve as potential models, but perhaps none so powerfully and directly applicable as in the state of Acre, Brazil.

Acre's state Incentive System for Environmental Services (SISA) program has established a system of social and environmental safeguards that is exemplary and carries certifications from both REDD+ SES and the Climate, Community, and Biodiversity Alliance (CCBA). While Acre's model and the standards set by these certification bodies provide excellent guidelines, individual jurisdictions may be able to demonstrate

rigorous standards that do not necessarily carry these particular certifications. As such, we endorse the prudent approach of the proposed Standard, which points to specific standards such as the REDD+ SES as guidelines, but allows some flexibility for jurisdictions to demonstrate the establishment and implementation of an equivalently rigorous mechanism for implementing and monitoring these safeguards.

Third party verification of social safeguards, as required by the proposed Standard, is an important component that strengthens its overall approach. EDF commends CARB for ensuring that third party verification, from appropriately qualified verifiers, is included as a requirement in the Standard. One important potential addition to the Standard overall, in recognition of its important efforts to ensure the inclusion of indigenous forest communities in the development of sector-based crediting programs, could be to include reference to the recently adopted Guiding Principles of Collaboration and Partnerships between Subnational Governments, Indigenous Peoples and Local Communities.<sup>3</sup> These Principles were drafted and unanimously adopted in September, 2018 by the Governors' Climate and Forest (GCF) Task Force along with 18 Indigenous and Local Community representative organizations. Because California is a founding member of the GCF Task Force, inclusion of the Guiding Principles, in addition to the rigorous requirements spelled out in the draft Standard provides important clarity on the State's commitment to them.

EDF unequivocally supports the proposed California Tropical Forest Standard and we encourage the California Air Resources Board to adopt it now. This Standard overall is comprehensive, rigorous, and is urgently needed. Regardless of whether, or how many, jurisdictions may be prepared to meet the rigorous requirements of the proposed Standard today, its impacts will be important and far reaching. The adoption of this Standard will send a powerful signal to tropical forest jurisdictions around the world that robust, high-quality programs to reduce deforestation and forest degradation can and will be rewarded by carbon markets.

The proposed Tropical Forest Standard, if adopted, could serve as a globally trusted standard that strikes a much-needed balance between stringency and rigor in key features necessary to ensure integrity and transparency, with the flexibility that is required to apply these rigorous requirements effectively in differing local contexts. Consistent with CARB's clear definition of International Sector-Based Offsets in its original regulatory language in 2008, the Standard takes a whole-sector, jurisdictional-level approach to crediting emissions reductions from reducing tropical deforestation and degradation. This is a critical feature of the current proposal, which will ensure real additional reductions at scale in partner jurisdictions and

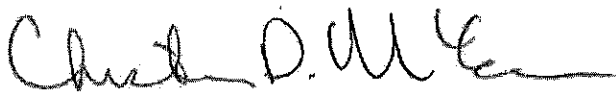
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<sup>3</sup>[https://static1.squarespace.com/static/5896200f414fb57d26f3d600/t/5b915dc2f950b735d57ee294/1536253379182/Principles\\_ENGL\\_V8.pdf](https://static1.squarespace.com/static/5896200f414fb57d26f3d600/t/5b915dc2f950b735d57ee294/1536253379182/Principles_ENGL_V8.pdf)

incentivize comprehensive approaches based on a long-term vision for solving the deforestation problem. By matching the scale of incentives for ambitious programs to reduce emissions from tropical forests with the scale of the problem of emissions from deforestation, California's Tropical Forest Standard has the potential to alter the dangerous pathway on which the world is currently set.

Again, thank you for the opportunity to express our views on this important initiative and we are looking forward to continued work with CARB in developing a future regulatory measure based on the California Tropical Forest Standard.

Sincerely,

A handwritten signature in black ink, appearing to read 'Christina McCain', with a long horizontal flourish extending to the right.

Christina McCain, PhD  
Director, Latin America Climate





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EDMUND G. BROWN JR.  
GOVERNOR

MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION



## Central Valley Regional Water Quality Control Board

22 October 2018

Rebecca Fancher  
California Air Resources Board  
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### COMMENTS TO REQUEST FOR REVIEW FOR THE ENDORSEMENT OF THE CALIFORNIA TROPICAL FOREST STANDARD PROJECT, SCH# 2018092037, STATEWIDE COUNTIES

Pursuant to the State Clearinghouse's 14 September 2018 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review* for the Endorsement of the California Tropical Forest Standard Project, located in Statewide Counties.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

#### I. Regulatory Setting

##### Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments

KARL E. LONGLEY ScD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

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only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:  
[http://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/).

### **Antidegradation Considerations**

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at:  
[http://www.waterboards.ca.gov/centralvalleywater\\_issues/basin\\_plans/sacsjr.pdf](http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf)

In part it states:

*Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*

*This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

## **II. Permitting Requirements**

### **Construction Storm Water General Permit**

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan

(SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml).

**Phase I and II Municipal Separate Storm Sewer System (MS4) Permits<sup>1</sup>**

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/municipal\\_permits/](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/).

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/phase\\_ii\\_municipal.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml)

**Industrial Storm Water General Permit**

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/water\\_issues/storm\\_water/industrial\\_general\\_permits/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml).

**Clean Water Act Section 404 Permit**

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure

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<sup>1</sup> Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Wildlife for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

**Clean Water Act Section 401 Permit – Water Quality Certification**

If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

**Waste Discharge Requirements – Discharges to Waters of the State**

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:  
[http://www.waterboards.ca.gov/centralvalley/help/business\\_help/permit2.shtml](http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml).

**Dewatering Permit**

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0003.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf)

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

[http://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/waivers/r5-2013-0145\\_res.pdf](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf)

**Regulatory Compliance for Commercially Irrigated Agriculture**

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: [http://www.waterboards.ca.gov/centralvalley/water\\_issues/irrigated\\_lands/for\\_growers/apply\\_coalition\\_group/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/for_growers/apply_coalition_group/index.shtml) or contact water board staff at (916) 464-4611 or via email at [IrrLands@waterboards.ca.gov](mailto:IrrLands@waterboards.ca.gov).
2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100.** Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently \$1,084 + \$6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at [IrrLands@waterboards.ca.gov](mailto:IrrLands@waterboards.ca.gov).

**Low or Limited Threat General NPDES Permit**

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water*

(Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:  
[http://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2013-0074.pdf](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf)

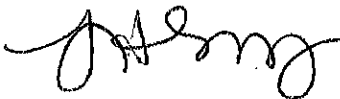
For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:  
[http://www.waterboards.ca.gov/centralvalley/board\\_decisions/adopted\\_orders/general\\_orders/r5-2013-0073.pdf](http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf)

#### **NPDES Permit**

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:  
[http://www.waterboards.ca.gov/centralvalley/help/business\\_help/permit3.shtml](http://www.waterboards.ca.gov/centralvalley/help/business_help/permit3.shtml)

If you have questions regarding these comments, please contact me at (916) 464-4812 or [Jordan.Hensley@waterboards.ca.gov](mailto:Jordan.Hensley@waterboards.ca.gov).



Jordan Hensley  
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento