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California Air Resources Board
1001 I Street
Sacramento, CA 95814

Joint comment letter from 108 social and conservation scientists on California's proposed Tropical Forest Standard (TFS)

Dear CARB Board and staff,

We are geographers and other social and conservation scientists writing to express our concern that the California Air Resources Board's (CARB's) proposed credit-based Tropical Forest Standard (TFS) poses serious risks of harm to forest-communities and to the integrity of California's climate policy. We have performed field-based or technical research on REDD+ pilot programs, carbon offsets, Payments for Ecosystem Services (PES), and forest conservation. We commend California's progress toward reducing its greenhouse-gas (GHG) emissions and CARB's recognition of the damages from tropical deforestation to earth's climate and biodiversity. However, we are concerned that CARB has failed to take account of the extensive literature documenting the environmental ineffectiveness and negative social impacts of tropical forest offsetting and its implications for carbon-trading linkages with jurisdictions in developing countries.

Our own research has convinced us of the risks that the TFS would pose to forest-dwelling people. The TFS approach also contributes to the adverse environmental justice effects that offsets are having in California. Moreover, it is impossible to ensure that avoidance of GHG emissions at tropical forest offsetting sites is "*real, additional, quantifiable, permanent, verifiable and enforceable*" as required by California law for any carbon trading mechanism. Adopting the TFS is unlikely to slow tropical deforestation for reasons we list below, among others.

Case studies of REDD+ and PES around the world by ourselves and others document how these programs have very often constrained the access of forest-dependent communities to land and forest resources, curtailed livelihoods with minimal compensation, undermined common-property forms of forest governance, and replaced indigenous conservation values and practices with expectations of payment. While some forest-dwelling groups have received short-term material benefits from REDD+ projects, such projects have provided "greenwashing" cover for destructive mining and expansion of export-agriculture plantations, and in some cases entailed violent repression or dispossession of entire communities.

REDD+ and other PES projects are implemented in forests where people live, often spaces with long histories of contestation, exploitation, and dispossession resulting from immense inequalities between forest communities, local elites, and extractive industries. In this context, work against deforestation in these regions risks causing harm and requires

deep understanding of the local context that comes from presence on the ground and trust-based relationships built over time. This cannot be accomplished with a program that measures rates of deforestation at arms length, while depending on the competence and integrity of public officials in distant places.

Social and environmental safeguards have been established with the intention of ensuring that such projects do not cause harm. However, core safeguards under the UN-REDD Programme lack specificity and legal authority and are framed in some of the weakest language in international law. Further, mandated social and environmental safeguards often fail to avoid harm due to the inherent subjectivity and conflicts of interest of project managers and consultants hired to determine whether safeguard requirements have been met. It is easy to check “consultation,” and “prior and informed consent” boxes by holding a publicly announced meeting without effectively informing communities of the full consequences for them of the proposed project or incorporating community decisions into project plans. Extremely poor-quality consultation is commonplace and the record of REDD+ is replete with conflicts, scandals, and self-dealing by officials and local elites.

Some have argued that this large set of case studies on REDD+ pilot projects is irrelevant to jurisdictional REDD, but the types of interventions discussed in this literature, such as establishment of conservation areas, regulations restricting land use, and payments to farmers and forest-dwellers for changing their practices, are precisely the types of activities that would be included in jurisdictional REDD programs. Therefore, the harms described in the above-mentioned studies of REDD projects and programs are entirely germane to the proposed TFS.

An international forest sector offset program risks weakening California’s climate targets with credits whose benefits are not verifiable, risk reversal, and do not meet the other requirements of California law.

First, it is important to remember that offsets using forest-carbon credits would not *reduce* emissions, but would simply legalize a portion of the continued emissions by the capped sectors in exchange for *hoped-for* avoidance of emissions from deforestation and forest degradation. Offsets, in this way, perpetuate environmental injustice. The use of offsets in California has allowed continued and even increased emissions of the toxic co-pollutants released alongside GHGs, particularly from refineries and other large facilities that are the main users of CARB-approved offsets and that are located disproportionately in low-income neighborhoods.

Further, *leakage* from conservation jurisdictions is inevitable and impractical to detect or fully quantify. Leakage occurs when reduced availability of an asset (such as cleared land) or production of a commodity (such as beef, timber or minerals) in one place creates an incentive for increased production elsewhere, in a different community, jurisdiction, or country. Confirming that production remains at least constant does not mean that leakage is not shifting deforestation to neighboring or even distant jurisdictions and countries. Monitoring and accounting for or avoiding leakage involves accounting for many interrelated effects that are highly uncertain, including the already increasing production of beef and animal feed, increased lifecycle emissions from beef and crop intensification, and price effects on commodity production and consumption and on land use. The recommendation that TFS credit-generating programs should welcome “production of crops and livestock at

a business-as-usual rate or accelerated rate” as an indication that leakage has not occurred encourages the single most environmentally destructive form of agriculture, confined beef production, and the nearly-as-unsustainable cultivation of maize and soy animal feeds. It is prohibitively difficult to trace and quantify the carbon footprints of the increased feed and other inputs used in intensification of beef and crop production. Moreover, significant research in Amazonia has shown that soy and other agricultural intensification can lead to increased deforestation when agricultural entrepreneurs invest profits from increased per-hectare yields in expanding their production area. Given the intractability of leakage prevention and accounting, California cannot ensure that offsets-financed conservation programs are resulting in net environmental gain.

Furthermore, the difficulty of confirming *additionality* poses a substantial risk. Past experience assessing additionality from international projects is very poor. The large majority of offset projects under international climate agreements are non-additional. Similarly, studies of REDD+ and PES projects, the types of projects that could be included in a nested approach, have shown that landholders seeking offset credits can contend falsely that they plan to cut forests in order to receive payments to not do so. Estimating the effects of a jurisdictional REDD program on emissions is even more difficult than for projects. It is nearly impossible to quantify the land-use change in a sub-national jurisdiction that results from payments by California offset users. For example, in Brazil, past reductions and recent increases have been affected by national government policy changes, soy and beef moratoriums catalyzed by international NGOs, changes in global commodity prices, and European government programs providing incentives to reduce deforestation but not based on carbon trading. It is not possible to disentangle the effects of California’s offset program from the range of other factors affecting land use change in a single jurisdiction.

In addition, *permanence* cannot be guaranteed, not even the less-than-permanent promise of 100 years of sequestration required under current California policy. A reduction in industrial emissions is effectively a reduction in absolute permanent emissions, but any benefit from sequestering carbon in forests can easily be reversed by fire, political shifts leading to policy reversals such as those happening in Brazil, commodity price increases in export agriculture, or expansion of extractive industries. The climate effects of putatively identical amounts of fossil-fuel carbon and carbon sequestered in trees or soils are not equivalent. If fossil fuels remain below ground they will never add to global warming, but carbon stored in vegetation risks contributing to atmospheric GHGs, and is especially likely to do so where the major drivers of deforestation are not effectively addressed. In Amazonia these threats include large-scale soy and palm oil production, cattle ranching, logging, hydroelectric dams, mining, oil drilling, and roads. Such lucrative activities have higher opportunity costs with which carbon-credit and offset markets, given low and volatile prices, cannot compete.

Finally, CARB’s proposed TFS, meant to be a model for linkage to California’s cap-and-trade system as well as for linkages among other systems and jurisdictions, fails to meet California requirements which restrict linkage to programs of *equivalent stringency and enforceability*. The purpose of a linkage is for two jurisdictions that have taken on targets of similar stringency to work together to meet those targets at lower cost for both parties, on a path towards deep long-term reductions. California has a binding cap but the linked jurisdiction is not required to have one. California’s cap-and-trade program covers its

industrial sectors, whereas the proposed TFS is in the forest sector with risk of much greater reversals than can be compensated for by buffer stocks or quantitative estimates of uncertainty as a basis for an “uncertainty deduction”. While California has adopted laws committing to long-term emissions reductions, cooperating jurisdictions would have to demonstrate structural commitments to reform their forest, agricultural, and mineral sectors in ways that the TFS does not require and that would depend upon comprehensive policy change at and beyond the national level.

We reiterate here our understanding of the unacceptably high risk that California’s proposed TFS poses to the integrity of California’s global warming efforts and to forest communities. Now that California policy has begun to make progress toward reducing GHG emissions from the state, strengthening and enforcing the successful parts of that policy is the most important thing CARB can do to contribute to the health of tropical forests and address the pressing dangers detailed in the new IPCC report.

Most sincerely,

Dr. Kathleen McAfee, Professor, International Relations, San Francisco State University, San Francisco, CA, kmcafee@sfsu.edu*

Dr. Barbara Haya, Research Fellow, Center for Environmental Public Policy, University of California, Berkeley, bhaya@berkeley.edu*

Dr. Tracey Osborne, Associate Professor, School of Geography and Development, University of Arizona, tosborne@email.arizona.edu*

Dr. Janis B. Alcorn, Adjunct Professor, Natural Resources Institute, University of Manitoba; Director, Country & Regional Programs, Rights and Resources Initiative, Washington DC; former Deputy Director of the USAID Project: Forest Carbon, Markets, and Communities.

Dr. Miguel Alexiades, Senior Lecturer, School of Anthropology and Conservation, University of Kent, Canterbury, Kent, United Kingdom

Dr. Elina Andersson, Researcher, Lund University Centre for Sustainability Studies, Sweden

Dr. Robert Andolina, Associate Professor and Director, International Studies, Seattle University, Seattle, WA

Dr. Adeniyi Asiyambi, Researcher, Department of Politics, University of Sheffield, UK

Dr. Andrea Babon, Senior Research Fellow, Institute for Human Security, La Trobe University, Melbourne, Australia

Dr. Ian Baird, Associate Professor, Geography, University of Wisconsin-Madison

Dr. Teo Ballvé, Assistant Professor, Department of Geography, Colgate University, Hamilton, NY

Dr. Thomas Bassett, Professor Emeritus, Department of Geography & GIS, University of Illinois at Urbana-Champaign, IL

Dr. Betsy Beymer-Farris, Director of the Environmental and Sustainability Studies Program, Geography, University of Kentucky, Lexington, Kentucky

Dr. Grete Benjaminsen, Researcher, Norwegian University of Life Sciences, Norway

Dr. Tor A. Benjaminsen, Professor, Department of International Environment and Development Studies, Norwegian University of Life Sciences, Norway

Dr. Patrick Bigger, Lecturer, Lancaster Environment Center, Lancaster University, UK

Dr. Patrick Bond, Distinguished Professor of Political Economy, School of Governance, University of the Witwatersrand, Johannesburg, South Africa

Dr. Libby Blanchard, Affiliated Post-Doctoral Research Scholar, Conservation Research Institute, Geography, University of Cambridge, UK

Jessica Breitfeller, PhD Student, Anthropology, University of Maryland, College Park, MD

Andrea Brock, Lecturer, International Relations, University of Sussex, Brighton, UK

Dr. Janette Bulkan, Assistant Professor, Forest Resources Management, Faculty of Forestry, University of British Columbia, Vancouver, Canada

Dr. Wil Burns, Co-Director, Institute for Carbon Removal Law & Policy, American University, Washington, DC

Dr. Wim Carton, Assistant Professor, Center for Sustainability Studies, Lund University, Sweden

Dr. Jennifer J. Casolo, Researcher and Advisor, Vice Presidency of Research and Advocacy, Universidad Rafael Landívar, Guatemala

Dr. M. Jahi Chappell, Senior Research Fellow, Centre for Agroecology, Water and Resilience, Coventry University, United Kingdom

Dr. Esteve Corbera, Professor, Institute of Environmental Science and Technology, Universitat Autònoma de Barcelona, Spain

Dr. Luisa Cortesi, Postdoc, Anthropology, Science and Technologies, Cornell University, Ithaca, NY

Dr. Hanne Cottyn, Postdoctoral Fellow, Department of History, Ghent University, Belgium

Dr. Neil M. Dawson, Senior Research Associate, School of International Development, University of East Anglia, Norwich, UK

Dr. Jessica Dempsey, Associate Professor, Geography, University of British Columbia, Vancouver, Canada

Audrey Denvir, PhD Student, Geography and the Environment, University of Texas at Austin

Dr. Julia Dehm, Lecturer, School of Law, La Trobe University, Australia

Dr. Wolfram Dressler, Professor, Geography, University of Melbourne, Australia

Professor Rosaleen Duffy, Professor, Politics, University of Sheffield, UK

Dr. Michael B. Dwyer, Associated Senior Research Scientist, Center for Development and Environment, University of Bern, Switzerland

Professor James Fairhead, Professor of Anthropology, University of Sussex, Falmer, Brighton

Dr. Mary Finley-Brook, Associate Professor, Department of Geography and the Environment, University of Richmond, Richmond, VA

Dr. Shirley J. Fiske, Research Professor, Department of Anthropology, University of Maryland, College Park, Maryland

Dr. Forrest Fleischman, Assistant Professor, Forest Resources, University of Minnesota, Twin Cities, St. Paul, MN

Dr. Robert Fletcher, Associate Professor, Sociology of Development and Change Group, Wageningen University, The Netherlands

Dr. Timothy Forsyth, Professor, Department of International Development, London School of Economics and Political Science, London

Dr. Fabrina Furtado, Professor, Development of Agriculture and Society, Federal Rural University of Rio de Janeiro (UFRRJ), Brazil

Dr. Eva Garrouette, Research Associate Professor, Department of Sociology, Boston College, Chestnut Hill, MA

Dr. Josh Gellers, Associate Professor, Political Science and Public Administration, University of North Florida, Jacksonville, FL

Dr. Lauren Gifford, Researcher, Center for Science and Technology Policy Research, University of Colorado, Boulder

Dr. Paul G. Harris, Chair Professor of Global and Environmental Studies, Education University of Hong Kong

Dr. Julianne A. Hazlewood, Lecturer, Environmental Studies and Rachel Carson College, University of California, Santa Cruz

Dr. Jonas Hein, Post-doctoral Researcher, Institute of Geography, Kiel University, Germany

Dr. Abby Hickcox, Instructor, Arts & Sciences Honors Program, University of Colorado, Boulder

Dr. Usman Isyaku, Lecturer, Geography and Environmental Management, Ahmadu Bello University Zaria, Nigeria

Dr. Audrey J. Joslin, Assistant Professor, Department of Geography, Kansas State University, Manhattan, KS

Mira Käkönen, Doctoral Candidate, Development Studies, University of Helsinki, Finland

Dr. Prakash Kashwan, Associate Professor, Political Science, University of Connecticut, Storrs, Connecticut

Dr. Lisa C. Kelley, Assistant Professor, Geography & Environment, University of Hawai'i-Mānoa, Honolulu, HI

Dr. Vijay Kolinjivadi, Post-doctoral Fellow, Institut des Sciences de la Forêt tempérée (ISFORT), University of Québec, Montréal, Canada

Dr. Richard Lane, Postdoctoral Researcher, Copernicus Institute for Sustainable Development, Utrecht University, The Netherlands

Dr. David Lansing, Associate Professor, Geography and Environmental Systems, University of Maryland Baltimore County, Baltimore, MD

Sophie Rose Lewis, PhD candidate, Department of Forest Resources Management, University of British Columbia, Vancouver, Canada

Dr. Tania Li, Professor, Anthropology, University of Toronto, Canada

Dr. Diana Liverman, Regents Professor, School of Geography and Development, University of Arizona, Tucson

Will Lock, Doctoral Researcher, International Development, University of Sussex, UK

Dr. Jens Lund, Professor, Department of Food and Resource Economics, University of Copenhagen, Frederiksberg, Denmark

Mathew Bukhi Mabele, PhD candidate, Geography, University of Zürich, Switzerland

Raquel Sofia Rodrigues Rosa Machaqueiro, PhD candidate, Anthropology, George Washington University, Washington, DC

Dr. Sango Mahanty, Associate Professor, Resources, Environment & Development, Crawford School of Public Policy, Australian National University, Canberra, Australia

Dr. Sarah Milne, Lecturer, Crawford School of Public Policy, Australian National University, Canberra, Australia

Dr. Tad Mutersbaugh, Professor, Geography, University of Kentucky, Lexington, Kentucky

Dr. Benjamin Neimark, Senior Lecturer, Lancaster Environment Centre, Lancaster University, Lancaster, UK

Dr. Adrian Nel, Senior Lecturer, Geography, University of Kwazulu-Natal, South Africa

Professor Peter Newell, Professor, International Relations, University of Sussex, UK

Dr. Gustavo de L. T. Oliveira, Assistant Professor, Department of Global and International Studies, University of California, Irvine, CA

Dr. Jonathan Otto, Lecturer, Arts Studies in Research and Writing, University of British Columbia, Vancouver, Canada

Dr. Stephanie Paladino, Researcher/Consultant, MeroLek Research, Athens, Georgia

Dr. Maya Pasgaard, Postdoc, Geography, University of Copenhagen, Denmark

Dr. Rebecca Pearse, Lecturer, Department of Political Economy, University of Sydney, Australia

Dr. Eric Perramond, Professor, Environmental Studies & Southwest Studies, Colorado College, Colorado Springs

Dr. Nancy Peluso, Henry J. Vaux Distinguished Professor of Forest Policy, Department of Environmental, Science, Policy, and Management, University of California, Berkeley

Dr. Manuela Picq, Visiting Associate Professor, Political Science, Amherst College, Amherst, MA and Professor of International Relations at Universidad San Francisco de Quito (USFQ), Ecuador

Dr. Jacques Pollini, Research Associate, The Institutional Canopy of Conservation (I-CAN): Governance & Environmentality, Department of Anthropology, McGill University, Montréal, Quebec, Canada

Professor Scott Prudham, Professor, Geography and Planning, School of the Environment, University of Toronto, Canada

Dr. O. Sarobidy Rakotonarivo, Postdoctoral Researcher, Biological and Environmental Sciences, University of Stirling, UK

Dr. Jesse Ribot, Professor, School of International Service, American University, Washington, DC

Dr. Cecilia Salinas, Head of Studies, International Studies and Interpreting, Oslo Metropolitan University, Norway

Dr. J. P. Sapinski, Assistant Professor, Environmental Studies, Université de Moncton, New Brunswick, Canada

Dr. Heike Schroeder, Associate Professor, School of International Development, University of East Anglia, Norwich, UK

Dr. Abidah Setyowati, Research Fellow, School of Regulation and Global Governance, Australian National University

Dr. Evan Shenkin, Lecturer, International Studies, University of Oregon, Eugene, OR

Dr. Claudia Puerta Silva, Professor, Departamento de Antropología, Facultad de ciencias sociales y humanas, Universidad de Antioquia, Medellín, Colombia

Will Shattuck, PhD candidate, Geography, University of Wisconsin-Madison, Madison, WI

Dr. Neera Singh, Associate Professor, Geography & Planning, University of Toronto, Canada

Dr. Doreen Stabinsky, Professor, Global Environmental Politics, College of the Atlantic, Bar Harbor, Maine

Dr. Kira Sullivan-Wiley, Post-doctoral Associate, Pardee Center, Boston University, Boston, MA

Dr. Hanne Svarstad, Professor, Development Studies - LUI-IST, Oslo Metropolitan University, Norway

Dr. Timothy Trench, Professor, Postgraduate Program in Regional Rural Development, Centros Regionales, Universidad Autónoma Chapingo, San Cristóbal de Las Casas, Mexico

Dr. Gert Themba Van Hecken, Assistant Professor, Institute of Development Policy, University of Antwerp, Belgium

Dr. Sara Peña Valderrama, Honorary Research Fellow, Anthropology, Durham University, San Sebastian, Spain and Durham, United Kingdom

Dr. Peter Vandergeest, Professor, Geography, York University, Toronto, Ontario, Canada

Dr. John Vandermeer, Asa Grey Distinguished University Professor of Ecology and Evolutionary Biology, Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI

Dr. Stefano Varese, Professor in Native American Studies, Director of Indigenous Research Center of the Americas, University of California, Davis

Dr. Joel Wainwright, Professor, Geography, Ohio State University, Columbus OH

Dr. Johannes Waldmüller, Professor, Political Science and International Relations, Universidad de Las Américas, Quito, Ecuador

Dr. Michael J. Watts, Emeritus Professor, Geography and Development Studies, University of California, Berkeley

Dr. Meredith Welch-Devine, Director of Interdisciplinary and Innovative Initiatives, Graduate School, University of Georgia, Athens, Georgia

Dr. Benjamin G. Wisner Jr, Professor, Institute for Risk and Disaster Reduction, University College London, GB

Lauren Withey, PhD Candidate, Department of Environmental Science, Policy, and Management, University of California, Berkeley

Dr. Hannah Wittman, Professor, Institute for Resources, Environment and Sustainability, University of British Columbia, Vancouver, BC, Canada

Dr. Antang Yamo, Enseignant-Chercheur, Anthropologie, Université de Yaoundé 1, Yaoundé, Cameroun

Dr. Laura Zanotti, Associate Professor, Department of Anthropology, Purdue University, West Lafayette, IN

* - corresponding signers

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- “A truly broad vision for REDD+ – as expressed in the national strategy – will depend on changes in the political sphere, but this process can be slow. There is formal progress around REDD+, with ambitious commitments to tackle deforestation and forest degradation, legal frameworks are being gradually harmonized and different sectors are sitting at the same table more frequently. But the government’s economic program and structural reforms to the energy sector point to an agenda that prioritizes extractive activities over environmental concerns and is thus not ultimately compatible with REDD+ goals.”
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