Submission to California Air Resources Board on their proposed Tropical Forest Standard

The California Air Resource Board (CARB) has been developing the Tropical Forest Standard (TFS) over the last ten years as a set of standards for a forest-sector offset program that would allow polluters under an emissions cap to release GHGs in excess of their allowances by paying tropical jurisdictions that report reductions in their deforestation rates. It is written as a set of standards that the tropical jurisdiction (country or sub-national) would need to meet to be able to sell offset credits.

Adopting the TFS would put California on a questionable path to allow California polluters and big industry emitters to continue emitting greenhouse gas emissions by offsetting these emissions through credits sold by sub-national States in lieu of reducing tropical deforestation and degradation.

This submission on behalf of Global Forest Coalition (GFC)[1], questions the very decision to adopt a climate mitigation scheme which uses offsetting linked to ETS when two consecutive IPCC Reports clearly shows that our planet needs immediate and deep emission cuts and offsetting will not help in any way to limit the earth's temperature to 1.5 degree centigrade.

The board of directors of the Air Resources Board have the responsibility to make an informed decision regarding the endorsement of the TFS. This is a decision with ramifications that go far beyond the borders of the State of California. This decision is not to be taken lightly. Thus, in service to the board we provide this submission with information that is crucial for board of directors for their better understanding, and to fully comprehend the dangers to forests and communities represented by the TFS. It is our position that in considering the risks and threats embedded in the TFS model of markets-based climate policy that the board of directors must opt for rejection of the standard.

We also believe that in taking a closer look at important watermarks in international climate affairs, such as the recent IPCC Special Report, that rejection of the endorsement of TFS will be more comfortably embraced by board of directors. When considering the arguments, we put forth in our submission, we believe that board of directors will be compelled to reconsider the recommendation of ARB staff and to not endorse the TFS at the September 2019 board meeting.

Executive Summary

The Paris Agreement falls far short of what is needed.

The IPCC is clear: Offsets and emission trading will not lead to limiting the earth's temperature to 1.5 degree but will delay the climate actions to deeper emission cuts.

IPCC Special Report refers to limitations of REDD+ in that maladaptive actions could increase the risk of adverse climate-related outcomes, and that local benefits, especially for indigenous communities, will only be accrued if land tenure is respected and legally protected, which is not often the case.

[1] The Global Forest Coalition is world-wide coalition of 99 Indigenous Peoples' Organizations (IPOs) and Non-Governmental Organizations (NGOs) from 66 different countries that promotes rights-based, socially just and community governed forest conservation and restoration policies.

IPCC Special Report expressly indicates moving more towards real solutions grounded in rights based conservation approach, secure land tenure for communities, recognition of customary tenure, community mapping, redistribution, decentralisation of forest governance and policies that can address land rights and barriers to women's participation in sustainable land and forest management.

REDD+ (TFS) is insufficient to address real drivers of deforestation. Global agri-business and livestock industry are the driving force in forest loss and destruction and needs to be addressed directly.

Rights Resource Initiative study (2018) found that only 21 countries, representing less than 13% of the world's tropical and subtropical forest area, included clear commitments to implement community-based tenure or natural resource management strategies as part of their climate change mitigation plans or adaptation actions.

Today deforestation is increasing in many tropical countries, threatening livelihood, wildlife habitat and the very existence of the indigenous peoples and local communities. This alarming situation cannot be mitigated through offsets and REDD+ schemes.

To stop deforestation and reduce degradation of tropical forests, immediate climate action will require supporting ecosystems based solutions, keeping the primacy of indigenous peoples and communities, their traditional practices, governance, land rights and secured tenure rights over natural resources. There is an urgent need to mobilise support in evolving policies, legislations and adequate financial mechanism towards that end.

Air Resources Board can respond to that urgent need by choosing not to endorse the primacy of offsets and REDD+ through TFS and to instead support rights-based conservation. There is an imperative to reduce emissions from all sources, industrial and in the land sector. Offsets will not get the job done.

The Paris Agreement

Recalling relevant decisions of the Conference of the Parties, including decisions 1/CP.16, 2/CP.18, 1/CP.19 and 1/CP.20, the Paris Agreement *recognizes* that deep reductions in global emissions will be required in order to achieve the ultimate objective of the Convention and emphasizing the need for urgency in addressing climate change. The Agreement further acknowledges that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.

The Paris Agreement emphasizes the urgent need to address the significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels.

The Agreement n*otes* with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2 ˚C scenarios but rather lead to a projected level of 55 gigatonnes in 2030, and *also notes* that much greater emission reduction efforts will be required than those associated with the

intended nationally determined contributions in order to hold the increase in the global average temperature to below 2 ˚C above pre-industrial levels by reducing emissions to 40 gigatonnes or to 1.5 ˚C above pre-industrial levels.

IPCC Special Report on Global Warming of 1.5 ˚C

The Intergovernmental Panel on Climate Change was mandated by the Paris Agreement to provide a special report in 2018 on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways.

In the Approved Summary for Policy Makers released by the IPCC on October 08, 2018, the report clearly shows that "Limiting global warming requires limiting the total cumulative global anthropogenic emissions of CO2 since the preindustrial period, i.e. staying within a total carbon budget." By the end of 2017, anthropogenic CO2 emissions since the preindustrial period are estimated to have reduced the total carbon budget for 1.5°C by approximately 2200 ± 320 GtCO2. The remaining carbon budget is being depleted by current emissions of 42 ± 3 GtCO2 per year. The choice of the measure of global temperature affects the estimated remaining carbon budget. The Special Report provides an estimate of the remaining carbon budget of 580 GtCO2 for a 50% probability of limiting warming to 1.5°C, and 420 GtCO2 for a 66% probability.

The Special Report also made projections of lowering CO2 emissions from industry in pathways limiting global warming to 1.5°C with no or limited overshoot. to about 75–90% (interquartile range) in 2050 relative to 2010. The electricity generation share of gas is projected to be approximately 8% (3–11% interquartile range) of global electricity in 2050, while the use of coal shows a steep reduction in all pathways and should be reduced to close to 0% (0–2%) of electricity. Renewables are projected to supply 70–85% (interquartile range) of electricity in 2050.

Pathways that limit global warming to 1.5°C with no or limited overshoot show clear emission reductions by 2030. All (but one) show a decline in global greenhouse gas emissions to below 35 GtCO2eq yr-1 in 2030, and half of available pathways fall within the 25–30 GtCO2eq yr-1 range (interquartile range), a 40–50% reduction from 2010 levels. The Special Report on 1.5 degree emphatically states that lower the emissions in 2030, the lower the challenge in limiting global warming to 1.5°C after 2030 with no or limited overshoot. The challenges from delayed actions to reduce greenhouse gas emissions include the risk of cost escalation, lock-in in carbon-emitting infrastructure, stranded assets, and reduced flexibility in future response options in the medium to long-term. And therefore concludes:
Avoiding overshoot and reliance on future large-scale deployment of carbon dioxide removal (CDR) can only be achieved if global CO2 emissions start to decline well before 2030.

It is thus amply clear from the IPCC's Special Report that with the need to immediate emission reductions keeping in mind the threshold of 1.5 degrees and the year 2030 as a half way mark, the opportunity to play with offsets is severely restricted and limited. Offsets and emission trading will not lead to limiting the earth's temperature to 1.5 degree but will delay the climate actions to deeper emission cuts.

Limitations of REDD+

Biomass stocks in tropical, subtropical, temperate and boreal biomes currently hold 1085, 194, 176, 190 Gt CO2, respectively. Conservation and restoration can enhance these natural carbon sinks. Recent studies explore options for conservation, restoration and improved land management estimating up to 23 GtCO2. In this context, **IPCC Special Report points out that restoration and**

management activities need not be limited to REDD+ and locally adapted implementation may keep costs low, capitalise on co-benefits and ensure consideration of competing for socio-economic goals.

It further says that "half of the estimated potential can be achieved at <100 USD/tCO2; a third of the cost-effective potential <10 USD/tCO2. Variation of costs in projects aiming to reduce emissions from deforestation is high when considering opportunity and transaction costs.

There are indications that land tenure has a positive impact on aspects of governance improvements which are supportive of conservation. Local benefits, especially for indigenous communities, will only be accrued if land tenure is respected and legally protected, which is not often the case. It is being argued in the IPCC Report that although payments for reduced rates of deforestation may benefit the poor, the most vulnerable populations could have limited, uneven access and face lower opportunity costs from deforestation.

Referring to REDD+ and such offset schemes, the Report states that maladaptive actions could increase the risk of adverse climate-related outcomes, for example, biofuel targets could lead to indirect land use change and influence local food security, through a shift in land use abroad in response to increased domestic biofuel demand, increasing global GHG emissions, rather than decreasing it.

<u>IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security and Greenhouse gas fluxes in Terrestrial Ecosystems</u>

Comparing response options, this Special Report on Land includes the conservation of high-carbon ecosystems such as peatlands, wetlands, rangelands, mangroves and forests as examples that provide immediate impacts while afforestation and reforestation as well as the restoration of high-carbon ecosystems, agroforestry, and the reclamation of degraded soils provides decades of delayed impact.

The Report also points out that: "Land based options that deliver carbon sequestration in soil or vegetation, such as afforestation, reforestation, agroforestry, soil carbon management on mineral soils, or carbon storage in harvested wood products do not continue to sequester carbon indefinitely. Peatlands, however, can continue to sequester carbon for centuries."

When vegetation matures or when vegetation and soil carbon reservoirs reach saturation, the annual removal of CO2 from the atmosphere declines towards zero, while carbon stocks can be maintained. However, accumulated carbon in vegetation and soils is at risk from future loss (or sink reversal) triggered by disturbances such as flood, drought, fire, or pest outbreaks, or future poor management.

This Special Report from IPCC released recently on August 8, 2019 expressly indicates moving more towards real solutions grounded in rights based conservation approach, secure land tenure for communities, recognition of customary tenure, community mapping, redistribution, decentralisation of forest governance and policies that can address land rights and barriers to women's participation in sustainable land and forest management.

<u>Addressing drivers of deforestation and degradation</u>

The issue of addressing deforestation and degradation cannot be addressed by ignoring the consequences and huge impact of large-scale cattle ranching, meat industry and agri-business, soy

crops, palm oil plantations and the extractive industries. Globally, the impacts of the international trade in beef makes it the biggest culprit in deforestation, as forests and other ecosystems are cleared to make way for cattle pastures. Add to this the impacts of the industrial animal feedstock sector, which turns forests and other lands into vast expanses of monoculture genetically-modified crops to feed factory farmed animals.

Beef is the worst internationally-traded commodity when it comes to deforestation and impacts on forests. For example, **between 1990 and 2005, clearing forests to make way for cattle pasture was responsible for 71% of deforestation in seven Latin American countries, home to vitally important and precious tropical forests.**[2]

Case studies from Argentina, Brazil, Chile, Mexico and Paraguay highlight how big agribusiness is given free-reign over land and the lives of peasant farmers and Indigenous Peoples in Latin America because of the vast political support it receives. A case study on North Kivu, Democratic Republic of the Congo, shows how imported models of large-scale cattle rearing conflict with traditional alternatives and cause deforestation of tropical forests in Africa.

Brazil's industrial livestock farming model is incompatible with agroecological systems, as it is the largest driver of deforestation and biodiversity loss. Land use change on the scale seen in Brazil compromises the flow of the humid Amazonian air masses to the Center-South region of the country. At the same time, the loss of native forests and disruption to hydrological cycles exacerbates the impacts of climate change.

The expansion of livestock farming into the Cerrado, its margins and then into the Amazon is also directly related to land use change from cattle pastures to monocultures, especially soybeans. **Since the 1980s and increasingly today, the expansion of the soy frontier from South to Central Brazil has continually shifted pastures North towards the Amazon, where pasture areas increased by more than 500% between 1985 and 2017, growing from 8.7 to 44.4 million hectares and causing the deforestation of 34.7 million hectares of land. In the Cerrado during the same period, 17.9 million hectares of native vegetation (forest and savanna) was converted to pasture, and 8.7 million hectares of pasture was in turn converted to annual or permanent crops, or to a mosaic of agriculture.**[3]

The current forest fire in the Amazonas of Brazil is, therefore, not unconnected and driven by the agri-business model whereas the same country has been rewarded with a REDD+ project by the GCF exposing the underbelly of such offset schemes and the argument of permanence in REDD+.

Support for ecosystems-based solutions and rights based community led approaches are key to reduce and halt deforestation and degradation

While some level of removal of atmospheric carbon is inevitably required for the 1.5°C goal, due to historical and committed emissions, it is critical to limit this removal to the lowest amount possible, by restricting future greenhouse gas (GHG) emissions. **Ecosystem-based solutions can offer immediate, accessible, cost-effective and equitable strategies for meeting the 1.5°C temperature goal**.[4]

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[2] https://globalforestcoalition.org/forest-cover-58/

[3] ibid

[4] Dooley Kate, Stabinsky Doreen, Missing Pathways to 1.5°C, 2018, CLARA, 2018, climatelandambitionrightsalliance.org/report

When the protection and restoration of natural sinks is achieved through the stewardship of Indigenous Peoples and local communities, securing collective land and forest rights represents a far more equitable and cost-effective way to achieve climate mitigation targets.

These climate actions rely on respecting principles of ecosystem integrity to promote the greatest biodiversity and ecosystem resilience possible, and on securing the land rights and other human rights of indigenous and rural communities.

According to Rights and Resources Initiative (2015), **more than half of the world's land area is under the claims of customary land users, yet Indigenous Peoples and local communities legally own just 10% of the world's land.** The RRI 2018 report points out that at least 22% of the total carbon stored in tropical and subtropical forests lies in collectively managed lands, a third of which is found in areas where Indigenous Peoples and local communities lack legal recognition.[5] It is thus imperative in the context of global efforts to protect the world's remaining forests and combat deforestation and degradation to secure collective tenure rights, recognise traditional community land and forest management and governance practices as most cost effective, sustainable and equitable strategies.

The findings of The Community Conservation Resilience Initiative (CCRI), a bottom up participatory assessment of more than 68 communities from 22 countries across continents, indicate that **protecting biodiversity and ecosystems could be significantly enhanced by bolstering the traditional knowledge and practices of the people that rely on those places and resources the most: indigenous peoples and local communities.**[6]

Uncertain land tenure and land and resource grabbing, conflicts between formal and customary land and territorial rights, lack of involvement in decision-making processes and lack of political support for conservation **are some of the key threats that act as barriers for communities to conserve forests and biodiversity.**

It was found that between 2000 and 2012, deforestation rates inside community-owned forests in the Amazon region of Colombia and Brazil were three and seven times lower than rates outside, respectively, community management reduced both deforestation and forest carbon emissions in Bolivia, Brazil and Colombia.[7]

In 2015 the rights of Indigenous Peoples and local communities were recognised in both the Paris Agreement and the 2030 Agenda for Sustainable Development. Yet despite this progress, **only 21 countries, representing less than 13% of the world's tropical and subtropical forest area, included clear commitments to implement community-based tenure or natural resource management strategies as part of their climate change mitigation plans or adaptation actions.**

Today deforestation is increasing in many tropical countries, threatening livelihood, wildlife habitat and the very existence of the indigenous peoples and local communities, and increasing emissions by the day. This alarming situation cannot be mitigated through offsets and REDD+ schemes.

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[5] Rights and Resources Initiative (2018) *A Global Baseline of Carbon Storage in Collective Lands: Indigenous and local community contributions to climate action*. Washington, DC. Available from: https://rightsandresources.org/en/publication/globalcarbonbaseline2018/#.W7sqXy9L0dU

[6] **https://globalforestcoalition.org/ccri-reports/**

[7] Dooley Kate, Stabinsky Doreen, Missing Pathways to 1.5°C, 2018, CLARA, 2018, climatelandambitionrightsalliance.org/report

We need to drastically lower emissions – both from the industrial sectors – the fossil fuel industry and cut back on deforestation – addressing the corporate malpractices of the global agri-business and livestock industry.

To stop deforestation and reduce degradation of tropical forests, our immediate climate action will be to support ecosystems based solutions keeping the primacy of indigenous peoples and communities, their traditional practices, governance, land rights and secured tenure rights over natural resources. There is an urgent need to channelise support towards evolving policies, legislations and adequate financial mechanism towards that end. The Air Resources board directors can best respond to that urgent need by choosing to not endorse the primacy of the market and the TFS, and to instead support rights based conservation and the imperative to drastically reduce emissions from all sources.