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Jason Gray, Manager, Market Monitoring Section California Air Resources Board California Environmental Protection Agency 1001 I St., Sacramento CA 95814

Submitted electronically at http://www.arb.ca.gov/lispub/comm2/bcsubform.php?listname=sectorbased4-ws&comm_period=1

Re: Concerns Regarding Proposed International Sector-based Offsets

Dear Mr. Gray,

On behalf of Friends of the Earth – United States (FOE-US) this letter is provided as comment on topics related to the proposed International Sector-based Offsets expansion of the California Cap-and-Trade Program, a proposal whose development resides under the authority of the California Air Resources Board (CARB). This letter will address a variety of the specific items discussed over the last three public workshops on this policy matter, as well as other relevant material that can inform the design of effective climate change mitigation policy in California. In this letter FOE-US shares concerns we have regarding what we anticipate to be inadequacies in the design of the proposed upcoming rulemaking for potential International Sector-based (International Forest) Offsets. In our view the furthering of this policy development would have a deleterious effect on California's relative prominence as a national and global climate leader.

FOE-US also wants to communicate in this instance that our concerns in regards to the potential inclusion of International Sector-based offsets in the Cap-and-Trade Program and in regards to the inadequacies of the International Forests offsets proposal should be understood within the context of an assertion of support for the success that the California Air Resource Board is having through complimentary measure program development. We believe it is important to recognize how CARB is advancing important climate change mitigation policy outside of the market-based compliance mechanism, and that policy is resulting in real, additional, quantifiable and permanent reductions in emissions here at home in California.

We strongly support the broad objectives of AB32, California's Global Warming Solutions Act. There is a lot that California can do to reduce our state's climate impact, and though it

may be past time for California to consider the passage of a more contemporary climate change mitigation legislation package, we see that much in AB32 does reduce climate impact as well or better than any other climate legislation we are aware of. We also strongly support the goals of reducing deforestation and forest degradation in the world's forests, both tropical and temperate. We are steadfast in our support for CARB taking a key role in forging a just and equitable transition to a low emissions economic development path, most especially here at home in California.

Our organization is honored that our membership includes many residents of the State of California who have a strong understanding of our responsibility to be accountable for the damage done to the global atmosphere by California and United States industry, as well as from consumption patterns in our state and nation. We have a strong stake in ensuring that any climate change mitigation policy developed in California is based on the best available science, will comprehensively address the root causes of the global climate crisis and the rising concentrations of greenhouse gases in the atmosphere, and does not inadvertently cause harm elsewhere – and this is precisely our fear regarding the Air Resources Board's pending consideration of rulemaking for including in the Cap-and-Trade Program International Sector-based Offset credits from sub-national jurisdictional level schemes of Reducing Emissions from Deforestation and Forest Degradation (REDD). Our fear that an expansion of Cap-and-Trade to include International Sector-based offsets will result in inadvertent harms and unintended consequences is based on our assessment that important information describing the negative human rights and environmental consequences of REDD and similar market-based incentive schemes is either not available to staff developing this policy proposal -- or is being ignored.

Essentially, our fear is that a "head-in-the-sand" mentality is the predominant mindset amongst the staff at Air Resources Board and other agencies that have a role in forwarding this policy proposal, as well as amongst many outspoken proponents of expanding Cap-and-Trade to include International Forest offsets. Such a "head-in-the-sand" mentality is resulting in a policy vision that is not based in an honest and fact based assessment of the on-the-ground reality of the governance and human rights crises that permeate a grand majority of the potential sub-national jurisdictions that are being considered for the provision of international forest based credits to the California carbon market. It is high time that serious attention be paid to the documented evidence that describes in detail the real social, political, environmental, and legal risks both in California and in potential partner jurisdictions that are associated with a reliance on growth in the California market-based compliance mechanism as a means of financing a rural development and forest carbon management program in tropical regions.

To that end we will draw attention in this letter to a select number of discussion topics. We believe that when provided the appropriate weight in a fair and balanced decision-making process this letter will provide substance to the argument that the proposal to expand the Cap-and-Trade program to include International Forest Offsets is contrary to the stated goals of CARB to respond to the mandate of AB 32 to develop effective climate change mitigation policy in California that will actually assist in averting the worst impacts of human-induced climate change.

Understanding Land Carbon Science

Much of the focus of recent workshops hosted by CARB related to the potential of expanding Cap-and-Trade with International Sector-based offsets has been on social and environmental safeguards. As important as discussion of the human rights and environmental justice implications of a California REDD program is for understanding the real social and reputational risks of a program of this nature, there are serious questions regarding the climate mitigation effectiveness of trading the burning of fossil fuels for tropical forest carbon management schemes with dubious outcomes on the ground.

Effective policy for mitigation against the worst impacts of climate change must recognize that the impacts of fossil fuel use are irreversible. Essentially, to design effective climate change mitigation policy that is founded in the basic concepts of land carbon science there is an urgent need to "decouple" the emissions from burning fossil fuels from the carbon cycles of land-based ecosystems such as forests. The climate science is clear: it is not possible to substitute needed reductions in fossil fuel use with the highly variable and temporarily fleeting carbon sequestration processes of the worlds forests and other land based ecosystems (Ajani, et al. 2013).

Understanding the role of past deforestation in carbon sequestration by forests is crucial to understanding the limits of forest offsets. Carbon dioxide removal by the land sector is essentially recapturing past emissions from land-use change or deforestation and therefore does not neutralize current or future fossil fuel emissions (Mackey, et al. 2013).

The reality is that more than 50% of the world's forests have already been lost, that old growth (primary forest) forest continues to be lost at an alarming rate, and that in many instances soils have been so degraded that the recovery of forests is not a question of decades but of centuries. Forest protection, conservation, and restoration, in conjunction with the protection of cultures that have been stewarding the forest since time immemorial, is an imperative. Voices of alarm are arising around the planet due to the real dangers of policy makers confusing the imperative of forest conservation with the parallel but separate imperative of reducing our reliance on fossil fuels. We run the risk of wasting precious time if there is a continuance of the scientifically flawed assumption that we can "compensate" for our use of fossil fuels through the commercialization and trafficking of forest offsets that function in essence as cheap permits for ongoing and irreversible industrial fossil fuel emissions.

It is past time that CARB staff stop avoiding and ignoring the best available land carbon science, claiming that these questions have already been resolved. CARB staff must begin to address in real terms the scientific evidence that offsets are a fully inadequate climate change mitigation tool. CARB officials, by refusing to provide for a peer-reviewed scientific evaluation of the Cap-and-Trade Program that looks closely at contemporary carbon science and the inadequacies of offsetting, are perpetuating a climate change mitigation policy dynamic in which the policy is being determined by politics that are unduly influenced by polluting industry, and, consequently, is not being informed by the best available science.

Mexico: Politics, Realpolitik, and Narcopolítica

There is no question that the human rights and governance crisis in contemporary México is of grave concern. Civil society organizations from México have communicated their concern to the Air Resources Board about the lack of legitimacy of the governance structures in México. Particular concern has been raised in regards the absence of demonstrated concern by Mexican governmental institutions for protecting the human rights of Mexican citizens, evidenced by the repeated implication of federal, state, and municipal security forces in egregious human rights abuses throughout the country. Civil society representatives in México have explicitly questioned the appropriateness of California endeavoring to develop carbon-trading schemes with Mexican authorities until at the very least some of the most egregious recent violations of human rights can be clarified, including the crimes of the September 2014 case of Ayotzinapa, where 43 student activists were disappeared and in which the independent investigation of experts from the Inter-American Court of Human Rights has pointed to the need to closely investigate the probable role of federal police and the Mexican Army in the perpetuation and the cover-up of the crimes. A letter to the Air Resources Board Chair from Mexican civil society organizations has never received a response, and in conversation with CARB staff their concerns have been dismissed and downplayed.

While the Ayotzinapa case cited above is not linked in a direct way to the policy under discussion in California, such concerns about governance and human rights in Mexico are neither spurious nor irrelevant to the discussion, as noted recently by the Center for International Forestry Research¹ who have been looking at "multi-level government" contexts for REDD implementation in several countries, including México, and have discovered that an "abyss" exists between the stated objectives of REDD and the political reality in which programs are being implemented. Amongst issues flagged for concern by CIFOR investigators due to their negative impact undermining implementation of REDD in México are the weakening of processes for social ownership (the "ejido" system), emigration, a weak exchange rate, and ineffective local governments. We share these concerns about governance and the lack of perceived legitimacy of governmental institutions in México and we believe it is important that the Air Resources Board, in considering taking California down a path of international engagement, take such concerns into account well before developing joint policies with any jurisdiction.

Also identified by CIFOR researchers as a major challenge to REDD implementation in Mexico is the Mexican federal policy of subsidizing soy production, which makes it nearly impossible for REDD programs to compete economically with the growth of industrial agriculture. This highlights a long-standing critique of REDD that has been brought to the attention of CARB staff on multiple occasions: the fact that REDD does not address the economic motors of tropical deforestation such as commodity production and extraction for the global marketplace.

See REDD+ en México: Política, política, y más política by Tim Trench (http://blog.cifor.org/32443/redd-en-mexico-politica-y-mas-politica?fnl=es)

Of greater importance in regards to how California policy makers can learn from researchers studying the problems with REDD implementation is the conclusion of the researcher that it is "surprising" to learn how completely out of touch REDD proponents are with the realpolitik of contemporary México.

The researcher goes on to state:

"The increasing problems with insecurity and the loss of confidence in the democratic process are causing a legitimacy crisis in which every level of government has been questioned. In spite of this, REDD implementation continues, fulfilling international time frames and repeating universal discourses about participation, equality, and rights, which in the best of cases seem long term aspirations, and many times, simply, naïve.

In this last instance, this lack of realism is useless because it hides complex political questions and ignores persistent structural exclusions that will with time affect the implementation of REDD."

On repeated occasions stakeholders in California and in México opposed to including a version of REDD in California Cap-and-Trade have communicated with urgency that staff at CARB must become more attentive to the human rights and governance situation in México, and from that attention be more realistic about the contemporary reality in México, and how it is tied to the economic motors that drive forest destruction and social upheaval, whether it be global markets of soy, the trafficking of illegal timber, or the production and transshipment of narcotics to satisfy global markets for intoxicants. To endeavor to engage in rural development in México while ignoring or downplaying the *realpolitik of Narcopolítica* is naïve at best.

With this letter we again insist that real attention be paid to the evidence that accurately describes the social and reputational risk that permeate the proposal to expand California Cap-and-Trade to include any sort of sub-national jurisdictional REDD-based offset scheme in México. Naiveté on the part of California policy makers regarding the harsh on the ground realities of México will result in an inaccurate assessment of the risks at hand, inevitably laying the groundwork for disappointment, deception, and tragedy.

Acre: Best Case Scenario?

We believe that allowing for jurisdictional REDD-based offset credits to ostensibly meet California's emissions reduction targets within the Cap-and-Trade Program will have the perverse effect of both weakening AB32 in California and undermining the efforts of partner jurisdictions to protect their forests in ways that meet current best practices. As we have pointed out in our series of public comments submitted to both the ARB and the REDD Offsets Working Group (ROW), we believe that subnational REDD initiatives, especially

when financed primarily or wholly through offsets, will be inefficient, ineffective, and will lead to perverse outcomes.²

A number of recent reports by scholars, human rights groups, and civil society advocacy groups highlight the concerns we have, and we take this opportunity to respectfully reiterate the relevancy of these reports for your consideration.

As you know, in 2010, California signed an agreement with the states of Acre, Brazil and Chiapas, Mexico, whereby REDD and Payment for Environmental Services (PES) programs in the two tropical forest provinces would supply carbon offset credits to California to permit the state's industrial polluters to continue polluting while legally fulfilling emissions reduction targets. In the intervening years, a number of environmental policy advocates have been working tirelessly to court both ARB and California legislators to pursue the arrangement, and California policymakers have been meeting with officials from Acre, Chiapas, and other potential partner jurisdictions to explore the parameters of the partnership.

There has been ample information from indigenous peoples and their advocates in Chiapas showing that early attempts to implement REDD in Chiapas had the dramatic and foreseeable effect of exacerbating historic conflicts over land. Efforts to implement similar policies in Acre, in contrast, have been met largely with public acclaim, although civil society groups in that state did address serious concerns to California officials in 2013. Acre has taken prominence in the discussions regarding the potential linkage of California with Acre as a first formal linkage step to expanding the Cap-and-Trade Program with International Sector-based Offsets. Acre is presented to the California public as being a species of "best case scenario" for tropical forest linkage with California Cap-and-Trade due to the purported exceptional results from benefit sharing and rural development.

While Acre may have many characteristics that make it "best-in-class" among jurisdictions with regulatory frameworks that include Payment for Environmental Services schemes, and while Acre, as proponents have argued, needs a boost in financing to maintain the functionality of these frameworks, this does not wholly justify linkage with California, nor does it allay the concerns or satisfy the grievances of rights-holders. In the report, **The Green Economy, Forest Peoples and Territories: Rights Violations in the State of Acre**, a 26 page summary of a much larger set of findings published in 2015, the Brazilian Platform for Human, Economic, Social, Cultural and Environmental Rights describes 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.

Numerous testimonies taken in indigenous, peasant farmer and rubber-tapper communities show how private REDD projects and public PES projects have deepened

² See generally The Munden Project, "REDD and Forest Carbon: Market-based Critique and Recommendations." 2011; Karsenty and Ogolo, "Can 'fragile states' decide to reduce their deforestation? The inappropriate use of the theory of incentives with respect to the REDD mechanism," Forest Policy and Economics.2011; Karsenty, Alain, "What the (Carbon) Market Cannot Do", Perspective: Forests and Climate Change.CIRAD.2009

territorial conflicts, affected communities' ability to sustain their livelihoods, and violated international human rights conventions such as Convention 169 of the International Labor Organization, which Brazil has ratified; as well as national policies such as Brazil's National Policy for the Sustainable Development of Traditional Peoples and Communities.

The testimonies from Acre confirm concerns that economic incentives such as those proposed by jurisdictional REDD programs can deepen existing inequalities, by paying only paltry sums to the poorest people who tend to have the smallest impact on the forest, while hefty management fees are earned by project developers, technical middlemen, and large landowners.

A related impact is to undermine traditional approaches to forest management and to alienate forest-dwellers from their traditional activities. "We don't see land as income," one anonymous indigenous informant to the Acre report said. "Our bond with the land is sacred because it is where we come from and where we will return."

There is clearly a diverse array of voices regarding the success or failures of market-based incentive programs for promoting forest protection in Acre, and it is clear that there are those who support the programs and see actual and potential benefits, including indigenous peoples, rubber tappers and civil society groups. What is worrisome, however, is the fact that REDD proponents have been successful in making their voices heard, while critical voices have been shut out of the debate in Acre, and thus in California. Policy makers in California are thus in danger of making policy development decisions based on biased or incomplete information.

It is also known to CARB staff that misrepresentations were made by proponents of California Cap-and-Trade linkage with Acre at the April 28 Public Workshop regarding support by a well known progressive environmental organization in Brazil for California's proposed sector-based offset program. This misrepresentation brings into serious question the veracity of many reports of support for REDD in Acre, and demonstrates that, even in Acre, considered by CARB staff as the best potential linkage partner with California, REDD type incentive programs remain divisive and controversial.

In effect, the issues of governance and the apparent naiveté of CARB staff in its consideration of linkage to México similarly apply to the predisposal of CARB to promote linkage of the California carbon market with Acre. For instance, the political turmoil in Brazil is currently spilling over into a congressional effort to overturn the environmental and human rights safeguards that have been established by the Brazilian federal government over the last decades to ostensibly protect the people and the forests of the Amazon during infrastructure development and natural resource extraction.

This is a real and contemporary example of the political risk that is inherent with international aid and development diplomacy – yet the State of California is outside of its competencies and institutional capacity and as such is challenged to effectively navigate such complex and unstable international terrain. It is simply naïve on the part of CARB staff to continue down a path that is paved with only the stones of information that staff seem to

be predisposed to hear, while the conflicting information describing risks and pitfalls, though documented and reliable, is apparently cast aside. The apparent predisposal of CARB staff to move forward with linkage with Acre as an expansion of Cap-and-Trade regardless of available information that indicates that such a linkage is replete with political traps, predictable conflicts, and community controversy will contribute ultimately not only to human rights problems on the ground, but will also result in a failed climate change mitigation policy that does nothing to help us avert the worst impacts of human-induced climate change.

Academic Studies of Risks and Negative Impacts of REDD Ignored by CARB Staff

As stated above, one of our great concerns regarding a California REDD program for the trading of International Forest Offsets in California's carbon market is the impact that this can have on traditional knowledge and indigenous cultural traditions. There is a real and measurable threat that REDD implementation in forest dependent communities can undermine traditional approaches to forest management, and can alienate forest-dwellers from their traditional activities.

This is among the conclusions of another comprehensive report from the Indigenous People's Biocultural Climate Change Assessment Initiative (IPCCA). The report Indigenous Peoples and REDD+: A Critical Perspective calls into question the use of market mechanisms such as REDD for delivering conservation and community "co-benefits". The report documents cases in seven countries, and shows that market-based approaches, however technically savvy, can neither fully respect and protect human rights nor conserve forests over the long term. This report has been made available to CARB staff on repeated occasions, but to the moment it is a reliable source of information to which CARB staff has failed to refer when ostensibly evaluating whether or not to proceed forward with an expansion of California Cap-and-Trade with International Sector-based Offsets. Notably, the report contains a number of proposals for alternative incentives for reducing deforestation and forest degradation while upholding rights.

Another collection of REDD case studies from the World Rainforest Movement, **A gallery of conflicts**, **contradictions and lies**, (which has been submitted to CARB on numerous occasions) examines 14 REDD and PES projects around the world, and, as the title indicates, finds them deeply troubling.

"In many cases," the report says, "communities were never asked whether they consented to the forest carbon project...Where REDD project plans were presented to communities...what the villagers got in return was mainly harassment, restrictions on land use, and blame for deforestation and climate change."

This report, from one of the most respected grassroots forest and forest people's protection organizations on the American continent, has never yet been cited or included in any of the presentation materials provided by CARB to inform the public regarding the costs and benefits of a potential REDD-based offsets program in California Cap-and-Trade.

Importantly, these reports show that the imposition of REDD projects in tropical countries is scarcely softened by the variety of third-party certification schemes on the market, such as the private sector Voluntary Carbon Standard (VCS), or the business-and NGO-led Climate, Community and Biodiversity standard (CCB). Numerous projects certified through these standards have, according to the documentation in the enclosed reports, failed to ensure protection for equity and human rights or failed to conservation objectives, or, in many cases, both. These failures, of course, ripple towards a failure of the climate part as well, given their basis in offsetting. These failures also indicate that these social safeguard frameworks are insufficient, and that no amount of fine-tuning by CARB staff will arrive at a version that will provide assurances that a California REDD scheme will be immune to human rights violations.

These failures are important to consider in light of the current CARB staff-led discussion for the development of the proposal for California's REDD program. The ROW report on which CARB staff relies states that "while the primary goal of jurisdictional REDD+ programs is to achieve real reductions in greenhouse gas emissions from the forest sector, well-designed REDD+ programs with appropriate safeguards can generate additional social and environmental benefits and provide a viable pathway to sustainable, equitable low-carbon rural development." This indicates a dangerous tendency to treat social equity merely as a co-benefit rather than a necessary precondition – a concern that should be taken very seriously in view of the negative human rights impacts already documented in the enclosed reports. This is also an important point to take into account when evaluating the framework applied by CARB staff in assessing the actual conditions on the ground in potential partner jurisdictions.

We understand and appreciate that CARB is undertaking considerable effort to develop a methodology that provides a "high bar" for the actual sale of forest-sector based carbon offsets into California's market and thus hopes to avoid past mistakes and to transform REDD into a set of policies that will be truly beneficial for rights-holders -- but we are not convinced. CARB's optimism would be laudable, if not for the fact that it is dangerous.

Confusing Preconditions with Objectives

The issues of land tenancy and legally binding rights to land and a forest base for forest dependent communities and cultures are intrinsic to discussions regarding the implementation of REDD on the ground in potential partner jurisdictions. Just as there has been a conflation of equating donor supported/financed REDD programs with the promise of California Cap-and-Trade offset-financed REDD programs in possible partner jurisdictions, there has been another conflation that we find troubling and misleading. In the course of the public debate several instances have been raised where positive REDD project implementation has occurred; notably, all of these instances are drawn from communities where the issues of land tenancy and legally binding rights to land had been resolved before REDD implementation was begun. But these cases have, de facto, been

³ ROW Recommendations, p. 45

conflated with instances where it is suggested that REDD project implementation will actually *result in* the acquiring of rights and a clarification of land tenancy issues.

If there is any lesson to be drawn from these instances, it is the imperative that CARB staff begin to explicitly require that legally binding land rights and land title exist and be held by affected communities as a measurable and verifiable pre-condition before any potential linkage of a possible partner jurisdictions be considered. It is essential that the issue of land tenancy clarification be defined as a necessary pre-condition, and crucial to note that without clear land tenancy, it is unlikely, based on the evidence of past REDD implementation, that such aspirations can be achieved. This is especially true in jurisdictions where serious questions of governance, access to democratic processes, and respect for human rights are at stake.

The importance of legally binding land tenancy rights is increasingly clear as global trade agreements are pursued that do indeed have legally binding clauses regarding critical issues such as investor-state dispute resolution and intellectual property rights. This context of legally binding international trade agreements is a crucially important dynamic to explore when discussing social safeguards for any potential sub-national jurisdictional REDD offsets credit program implementation – especially when investor state dispute resolution is already recognized as a threat to domestic environmental regulation. Legal frameworks governing intellectual property dynamics can and will be a part of future carbon trading schemes, and could, in theory, lead to inadvertent outcomes that are contrary to proposed climate change mitigation policy objectives. While the analysis required to cite such a scenario is beyond the scope of these comments, we suggest that CARB itself consider undertaking a legal analysis of potential cases where voluntary social and environmental safeguards may be challenged or contravened by mandatory intellectual property and trade regimes.

REDD Social Safeguards Are Inherently Inadequate

The social safeguards for REDD implementation, as practiced either by the UN, the World Bank, or private interests, received substantial discussion in the April 28 public workshop hosted by CARB. What CARB officials failed to explain is that social safeguards have continued to be very problematic, even with the immense amount of attention the social risks of REDD have received over the past decade. A recent study from Madagascar published in the March 2016 edition of the *Journal of Environmental Change* shows quantitatively that existing social safeguards are not being fulfilled and argues that those who are implementing REDD should not continue with "business as usual" (Poudyal 2016). This academic article is but one more example of peer reviewed scientific evidence that exposes the inherent inadequacies in the social safeguards of REDD. It seems absurd that, since California does not have the same expertise as the UN for effective implementation of rural development projects, that there is an assumption that California can perform better with a challenging international development dynamic that has been nothing short of permanent trial and tribulation for the UN.

It is for this reason that an article published in the February 2016 edition of *The International Journal of Human Rights* emphasizes that there is an immediate need to provide the structure for a community-based human rights impact assessment of REDD implementation, including legally binding mechanisms for the filing of complaints and effective application of justice in the case of violations (Raftapoulos 2016). The article states "in the context of the climate change crisis, formulating a specific link between human rights and climate change mitigation strategies such as REDD+ is highly pertinent if they are to have a positive impact at a local level." The interest in linking existing human rights protections frameworks with climate change mitigation strategies is based on the assessment that without legally binding guarantees any paradigm for social and environmental safeguards remains little more than magical aspirational thinking, especially when taken into consideration with a realistic and fact based assessment of the realities of governance, violations of human rights, and abuse of power in many if not all of the potential partner jurisdictions suggested for possible linkage with California Cap-and-Trade.

We contend that it is not within the realm of expertise of the California Air Resources Board to attempt to "fine-tune" social safeguards structures developed by other institutions to attempt to ameliorate the negative impacts of REDD implementation in hopes that what California aspires to establish in terms of social and environmental safeguards can be more effective than those efforts of institutions such as the World Bank or the United Nations. The State of California does not have a corps of staff that is working on international development issues, nor does California have a diplomatic corps or a ministry of foreign affairs that would be capable of responding in real time to the multitude of challenges, including investigating and prosecuting egregious rights violations, that may arise during the implementation of programs of this nature.

In frank language, California Air Resources Board staff appear to want to wash the state's hands of future liability for rights violations by retreating from project implementation to a "sub-national jurisdictional linkage" scheme that will provide a layer of plausible deniability insurance to the state when human rights and social safeguards violations inevitably occur in partner jurisdictions. With no bottom line accountability and no legally binding means by which to resolve grievances and investigate possible abuses, there is no guarantee that any social safeguards framework developed for a California REDD scheme will be anything more than aspirational. It is pure hubris that the State of California believes that it can do better than the United Nations and other global institutions at providing protections to affected communities in tropical forest regions, especially when the traumatic and desperate conditions of inadequate governance and human rights protections on the ground in potential partner jurisdictions continue to be overlooked, downplayed, and diminished by CARB staff.

Misuse of Cap-and-Trade As An Environmental Management Tool

What has also been discouraging when tracking CARB staff discussion of the potential development of an International Sector-based Offset Program is the perversion of the original philosophy behind the utilization of Cap-and-Trade as a tool for pollution management. There is a strange and incoherent focus on cost containment as a justification for the development of a REDD program that will facilitate the provision of more offset credits for the California carbon market. This is a question of simple supply and demand in which, ostensibly, by providing more units (offsets) to the market that supply will keep up with demand and that the unit cost of the offset will be contained. Yet, this is totally contrary to the purported manner by which a market-based pollution control mechanism is meant to operate. The basic premise of the utilization of a cap-and-trade device for pollution control is based upon the concept that as the cost of the pollution permit rises in price the polluter will find that it is more economical to reduce pollution at the source instead of purchasing allowances or offsets on the market.

The push to create more offsets for the California carbon market through the establishment of an International Forest offsets program has been described in many instances by CARB staff as an effort to control costs – which hints not at the market being allowed to do what the market should do (make pollution reduction at the source cheaper than the purchase of offset credits) but more at a manipulation of the market that will facilitate a polluter in California being able to cheaply "offset" their ongoing industrial pollution as opposed to actually reducing the pollution at the source. This market manipulation promoted by CARB staff combined with the scientifically indefensible promotion of offsets as a climate change mitigation policy completely undermines what are the commonly understood principles of the utilization of a cap-and-trade scheme as an environmental management and pollution reduction tool. This predisposal to allow for manipulation of supply of credits on the carbon market in California runs contrary to the stated purpose of the market-based compliance mechanism in AB 32.

We find it of grave concern that for all intents and purposes CARB staff seem to be more interested in protecting the financial wellbeing of the companies that are relying on offsets to ostensibly comply with regulations as opposed to letting a finite and supply-constrained market do the work that the market should do, allowing the price of credits to rise, and through market forces compel a polluting entity to do what California residents and global citizens most need California polluters to do: to achieve real, quantifiable, additional and permanent emissions reductions at the source.

Hope is Not a Risk Management Tool

In numerous instances we have heard CARB staff and other agency officials state that they would like to see California put a "stamp of approval" on a methodology that they "hope" will not result in human rights violations and that they "hope" will achieve climate change mitigation objectives. Hope, however, is not a viable risk management tool.

Perhaps a mountain climbing metaphor will work to communicate the inadequacy of hope as a risk management tool. In the mountains a guide takes full responsibility for the safety and well being of their group. This includes assessing the risks, and taking the appropriate steps to manage that risk and protect against the consequences of said risk. For a mountain guide it is understood that if the guides find themselves in a situation where they are "hoping" that a client does not "fall" -- because the consequences of the fall will be grave -- then the guides have failed in their job. There are means by which the consequences of a fall can be fully mitigated or avoided; this is why rope and safety systems for mountain climbing have been developed, and why information is constantly gathered by the mountain traveler to assist in reading and assessing the dangers of terrain, route, and weather.

When information regarding risk is ignored or inadequately processed, and the guide ends up "hoping" that a fall does not take place in conditions that are dangerous and inappropriate for travel, the result can be accidents, injury, and even death. This is a metaphorical means of describing not only what the responsibilities are of CARB staff for guiding California residents through this process, in terms of CARB being the guide who has bottom line responsibility for managing risk, but also of discussing the manner in which CARB staff have been fully ignoring the signs of weather, terrain, route, and the human interactions that provide evidence that the risk of an accident is high. There are numerous instances in mountain climbing when the best technique for managing risk is to abandon the push to the summit. It is in this context that when CARB staff and other California REDD proponents speak of their "hopes" that a viable framework for the International Sector-based Offsets can be designed because it is "hoped" that the worst social impacts from past REDD implementation can be avoided during the development of a California REDD-based offsets program, we can say that CARB staff are failing to fully manage the risks inherent in such a program.

There is also an ethical question, in that the consequences of risk management mistakes will be born by the poorest and most vulnerable, that being those affected communities on the ground, as opposed to say, CARB staff or REDD proponents in California. It is ethically questionable to decide that certain risks are worth running if it is other people who will pay the price for the inadvertent outcomes of failed risk management. As such, we fear that the probability of inadvertent harms is much higher than CARB staff will acknowledge, and that in resorting to "hopes" that the program can be made to function successfully that CARB staff are fully mismanaging the risk of their proposed program. Let us be absolutely clear: violations of rights, cultural tragedies, and environmental reversals are an assured outcome when risk management is based upon "hope."

Conclusion

Our conclusion is that after many years of receiving quality peer-reviewed and academically rigorous information describing the inadequacies and dangers of carbon-centric forest management schemes financed by offsets and based on the REDD methodology, CARB staff continue to dismiss and ignore the signals of exceptional risk that are associated with the proposal to expand California Cap-and-Trade with International

Sector-based Offsets. This risky proposal is further undermined by the erroneous assumptions regarding the effectiveness of offsets in assisting in averting the worst potential impacts of human-induced climate change. As such, we state again that it is the position of our organization that it is in the best interest of California and the residents of our state, and of the citizens of the world that continue to be negatively affected by the global climate impacts of our polluting industry, that the California Air Resources Board abandon the proposal to include International Forest Offsets in the California market-based compliance mechanism, and focus scarce and valuable public resources on pursuing the development of policy that will actually result in real, quantifiable, verifiable, additional, and permanent emissions reductions here at home. There is no more time to waste.

Respectfully,

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SELECT REFERENCES

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GEOCARBON and BIOCARBON: Understanding land carbon science to inform the development of effective climate policy in California

The California Air Resources Board is rushing forward with a proposal to expand the California Cap-and-Trade Program to include International Sector-based Offset Credits. This proposal would permit emissions from the industrial burning of fossil fuels by polluters in California to be offset, under the auspices of the Global Warming Solutions Act of 2006, by carbon credits based on avoided deforestation in tropical regions. This proposal, known by the United Nations acronym of REDD (Reduced Emissions from Deforestation and forest Degradation), is highly controversial due to severe concerns in past implementation of REDD regarding human rights, land tenancy, and economic justice, as it is often the most marginalized people who find their way of life, and survival, impacted by the program.

As important as discussion of the environmental justice implications of REDD are for California residents and decision makers, there are serious questions regarding the climate change mitigation effectiveness of trading the burning of fossil fuels for tropical forest management schemes with dubious outcomes on the ground. To understand a fundamental reason why REDD is the wrong direction for California to take for addressing ongoing industrial emissions in the state requires an examination of contemporary carbon science.

Even if all the world's original old growth tropical rainforests could be restored to their original pristine state it would only potentially compensate for significantly less than two decades of current fossil fuel use.

Note that recovery of the original old growth forests of the world is a fantastic and unlikely scenario. The reality is that more than 50% of the world's forests have already been lost, old growth forest continues to be lost at an alarming rate, and that in many instances soils have been so degraded that the recovery of forests is not a question of decades but centuries. In California forest loss due to logging, subdivision, and conversion for development continues to be an acute problem. Industrial forestry practices in California continue to rely on clearcut logging and the intensive use of pesticides and fossil fuels.

Forest protection, conservation, and restoration are an imperative, with a special emphasis on the need to eliminate and reduce future forest loss.

Effective policy for mitigating the worst impacts of climate change <u>must also recognize that</u> the <u>impacts of fossil fuel use are irreversible</u>. Essentially, it is not possible to substitute needed reductions in fossil fuel use with the highly variable and temporally fleeting carbon sequestration processes of the worlds forests and other land based ecosystems and economic activities.

Voices of alarm are arising around the planet due to the real dangers of policy makers confusing the imperative of forest conservation with the parallel but separate imperative of reducing our reliance on fossil fuels. We run the risk of wasting precious time if there is a continuance of the scientifically flawed assumption that we can "compensate" for our use of fossil fuels through the use of forest offsets.

SOURCES: Mackey, et al. (2013) Untangling the Confusion around land carbon science and climate change mitigation policy Nature Climate Change 3

Ajani, et al. (2013) Comprehensive carbon stock and flow accounting: A national framework to support climate change mitigation policy *Ecological Economics* 89

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Understanding the difference between **geocarbon** and **biocarbo**n is essential for the development of effective climate policy.

Carbon reservoirs in the geosphere are known as *geocarbon*. Primary reservoirs of geocarbon are stored in highly stable sedimentary rocks and deep ocean sediments, as well as the highly stable deposits of coal, oil, and gas that human industry extracts and mobilizes for many uses, including burning as fossil fuels. The cause of mobilization of geocarbon is almost entirely due to human activities, remaining highly stable until subject to human extraction, and requiring zero cost to maintain in place. Geocarbon has been stabilized for hundreds of millions of years, and once stabilized has remained in specific deposit locations.

Carbon reservoirs in the biosphere are known as *biocarbon*. Primary reservoirs of biocarbon are the world's marine and terrestrial ecosystems, and include the original old growth forest of the world, of which more than 50% has been lost. Biocarbon is located across the entire landscape and requires extensive investment for funding ongoing ecosystem management. Permanence in storage of sequestered biocarbon is elusive and even contrary to ecological succession processes. Biocarbon stocks vary temporally and spatially and are subject to numerous natural processes that further mobilize biocarbon stocks, complicating accounting and making statistically reliable estimation difficult. The best available science suggests that a firewall is needed between accounting for geocarbon and biocarbon. An increasingly substantial body of evidence shows that they are not interchangeable for climate change mitigation purposes.

Distinguishing between geocarbon and biocarbon is essential to developing climate change mitigation policy that will assist in averting the worst impacts of climate change. The expansion of California Cap-and-Trade to include international tropical forest offsets is a perpetuation of policy that is not based on the best available science.

Understanding the role of past deforestation in carbon sequestration by forests is crucial to understanding the limits of forest offsets

CO2 removal by the land sector is essentially recapturing past emissions due to land use or land-use change and therefore does not neutralize fossil fuel emissions. In California we can imagine this by conceptualizing the liquidation of the original ancient redwood temperate rainforest ecosystem, widely recognized as one of the most carbon dense forest ecosystems on the planet, and understanding exactly how much of the original carbon stock was lost. As such, carbon sequestration in the redwoods of California, as important as forest restoration is for California landscapes and human communities, is not compensating for ongoing fossil fuel use – it is simply restoring severely degraded carbon stocks that were lost to indiscriminate logging practices and the loss of 97% of the original ancient redwood forest. Forest based carbon sequestration is inherently limited by the carbon carrying capacities of different forest ecosystems, many of which have already been severely degraded. Even if we returned all forests to their original pristine state it would only compensate for less than two decades of fossil fuel emissions.

Halting the proposed expansion of California Cap-and-Trade to include REDD based offsets is a critical step in correcting the flawed climate science that currently underpins a significant amount of current California climate policy.

Ajani, et al. (2013) Comprehensive carbon stock and flow accounting: A national framework to support climate change mitigation policy *Ecological Economics* 89



REDD: Conflicts, Contradictions, and Lies

To expand California Cap-and-Trade into REDD-based offsets is socially unjust, economically inequitable, and environmentally dubious.

The California Air Resources Board is rushing forward with a proposal to expand California Cap-and-Trade to include International Sector-based Offset Credits. This proposal would permit emissions from the industrial burning of fossil fuels by polluters in California to be offset, under the auspices of the Global Warming Solutions Act of 2006, by carbon credits based on avoided deforestation in tropical regions. This proposal, known by the United Nations acronym of REDD (Reduced Emissions from Deforestation and forest Degradation), is highly controversial due to severe concerns in past implementation regarding human rights, land tenancy, and economic justice, as it is often the most marginalized people who find their way of life, and survival, impacted by the program. The following are some of the most important findings from a World Rainforest Movement report regarding REDD conflicts that was published in February 2015.

REDD offsets: 10 years of controversies and conflicts

Despite many years of debate about REDD, the controversies over how to integrate forests into an international climate change regime remain as severe and as acute as ever. A tremendous amount of time and resources have been invested in how to make forests fit into a carbon market—with a serious lack of progress on designing a plan to actually tackle the underlying causes of deforestation: the production and extraction of commodities and resources such as timber, palm oil, petroleum, coal, and minerals, as well as major infrastructure projects such as hydroelectric dams, highways, and pipelines. REDD projects often occur in remote, hard to reach places where access to information and decision making processes can be difficult or even impossible. These conditions have been shown to enable the suppression of critical voices that articulate concerns about livelihood impacts, violations of human rights, lack of transparency, and cultural survival.

REDD offsets: A risk to rights

Unresolved conflicts between the state, corporations and forest communities over customary rights to territories and ownership of forests are common throughout the regions where REDD initiatives are implemented. Land tenure, particularly in relation to forests, is inherently complex, social and political. REDD risks undermining existing and future rights to territories. Even where land title or customary rights might be recognized on paper, implementation of REDD projects - especially those that generate carbon credits - is likely to lead to forest peoples effectively losing the control over their territories that a title document might initially grant. Tradable REDD credits are a form of property title. Those who own the credit do not need to own the land nor the trees on the land. What they do own is the right to restrict traditional use practices on the land; to monitor what is happening in the territory and to gain access to the territory at any time they choose as long as they own the carbon credit. Often, the obligations that communities or families enter into are not clearly explained or are described in ambiguous terms that can easily be misinterpreted.



REDD fuels conflict in and among communities

Another recurring feature of REDD initiatives is that when they arrive in communities, they risk fuelling conflicts over access to land; provoking violence against community members; generating conflict within communities over a project motivated by a cause from the outside. Another disturbing effect of REDD on communities arises from many projects relying on community members to patrol and report to REDD project proponents on violations of REDD project rules, in particular opening of new forest gardens or other activities that are considered to cause deforestation and thus prohibited by REDD project rules. This criminalization of traditional practices by a state authority protecting a contractual obligation to a financial device (the carbon credit) is both at the heart of the internal conflicts that can be exacerbated by the outside force of REDD on communities, and the cultural risk that REDD presents to traditional knowledge and forms of self-governance.

REDD offsets: Immoral and unjust

REDD projects, and carbon offsets in general, raise an ethical problem: the burden to reduce what are essentially sustenance emissions linked to a very low-carbon way of life falls to the poorest members of society who have very little scope with which to adapt. REDD offsets generated by those who have contributed the least to the climate crisis and are pushed to alter the land use that provides their sustenance allow the most affluent members of society, who have a historic responsibility for climate change, to pay their way out of the responsibility to change the lifestyle. Expanding California Cap-and-Trade to include REDD-based offsets is an unfortunate perpetuation of global climate injustice where the most vulnerable to the impacts of climate disruption also become the most vulnerable to the heavy-handed impacts of international climate change policy.

REDD unjustly blames deforestation and global climate change on shifting cultivation and small-scale peasant farming

Another disturbing trend in REDD is blaming deforestation on villagers who practice shifting cultivation and small-scale peasant farming. But the assumption that "slash-and-burn' agriculture is the main driver of deforestation' is both prejudiced and inaccurate. Shifting cultivation plays a central role in the social fabric and is often enshrined in the legal or customary fabric of ascertaining forest use rights. There is a growing body of evidence that associates traditional agriculture with long-term protection of biodiversity and ethnobotanical knowledge. Whether intentional or not, those who put the blame for deforestation on small-scale agriculture regularly overlook these complexities.

REDD misses the big picture of destruction

Those perpetuating the myth of shifting cultivation as a key driver of deforestation blame small-scale farming at the same time that they remain largely silent about the real drivers of forest loss—and climate change—the production and extraction of commodities and resources that are consumed on the global market, with a disproportionate amount of these commodities and resources headed to the richest societies in the world, such as California.

<u>Notes on Sourcing:</u> *REDD: A Collection of Conflicts, Controversies and Lies* is a briefing report authored by Jutta Kill of the World Rainforest Movement, based in Montevideo, Uruguay. Published in February 2015. Website: http://www.wrm.org.uy



Why Expanding Cap-and-Trade With REDD-based Offset Credits Is The Wrong Choice For California Climate Policy

To expand California Cap-and-Trade into REDD-based offsets is socially unjust, economically inequitable, and environmentally dubious.

The California Air Resources Board (CARB) is proposing a socially and environmentally risky expansion of the California Cap-and-Trade Program into International Sector-based Offsets. The intent is the design of a legally complicated and diplomatically arduous subnational jurisdictional linkage program linking California with states and provinces in tropical forest nations to create a carbon based financial mechanism. This financial device will allow the trading in the California carbon market of carbon credits based on supposed carbon sequestration and avoided deforestation in these tropical forest regions. This scheme is a market-based conservation concept that has been defined as a "fad" by some of the world's foremost forest conservation scientists, and is known by the United Nations acronym of REDD—Reduced Emissions from Deforestation and forest Degradation.

REDD is globally a hugely controversial program that has polarized and divided conservation scientists, climate policy makers, rural communities, and indigenous organizations in tropical forest regions around the world. Conflicts regarding restrictions on access to democratic decision-making, the failure to apply the internationally recognized right of Free and Prior Informed Consent of Indigenous Peoples, and the unequal distribution of benefits are examples of problems that perpetually plague REDD implementation in forests around the world.

Foremost of social justice problems with REDD are conflicts regarding land tenancy and land title. Land rights conflicts directly relate to threats to food and economic security for rural people in forest regions who find their subsistence lifestyle threatened and irrevocably changed by top-down conservation projects that limit access to their land base.

To include REDD in California Cap-and-Trade puts California in the midst of tricky foreign policy terrain that is replete with very serious human rights violations and complicated questions of governance, access to democracy, and the protection of indigenous cultures whose traditional knowledge are critical to identifying effective responses to the climate crisis.

Social safeguards are inherently inadequate

The social safeguards around REDD have continued to be proven very problematic even with the immense amount of attention the social risks of REDD have received over the past decade. A recent study from Madagascar published in the March 2016 edition of the *Journal of Environmental Change* shows quantitatively that existing social safeguards are not being fulfilled and that those who are implementing REDD should not continue with "business as usual." This academic article is but one example of the peer reviewed scientific evidence that exposes inadequacies in the social safeguards of REDD. Comment provided to CARB regarding the International Sector-based Offsets proposal also includes academic material that highlights the extremely high social risk associated with the potential inclusion of REDD in an expanded California Cap-and-Trade Program.



California REDD reliance on remote sensing undermines capacity building in affected forest communities

The technical and methodological structure of the potential California sub-national jurisdictional REDD proposal is also socially unjust, with the very real risk of elusive financial benefits from linkage with California never reaching the communities in question. The heavy reliance on sophisticated and extremely expensive remote sensing technology and methodologies keeps monitoring and verification resources in the hands of Northern academics and experts at the expense of building local community and regional level capacity for forest management, information sharing, and governance.

California REDD diverts resources from tackling underlying causes of deforestation

Nearly 10 years after the conception of the program the controversies surrounding how to integrate REDD into international climate change mitigation regimes remain acute and severe. Substantial amounts of time, labor and financial resources have been spent on designing the financial mechanisms associated with REDD, diverting resources from tackling the underlying causes of forest loss, such as commodity production and resource extraction to meet demand on the global market.

California REDD jeopardizes traditional knowledge

The climate policy prioritization on REDD in California repeats a global pattern of shifting debate away from the main driver of the climate crisis: the burning of fossil fuels and commodity consumption in Northern countries. In too many instances the REDD debate has been characterized by the false analysis that vilifies subsistence agriculture as a driving force of deforestation, and therefore climate change, diverting attention from the irreversible burning of fossil fuels. The result on the ground in tropical regions is that this false analysis jeopardizes ways of life and traditional knowledge that are increasingly understood to be the foundation of truly effective policies to halt deforestation in tropical regions.

California REDD and women in affected communities

Very little information is available regarding the impact of REDD on women in the communities where REDD projects have been implemented. In many places where REDD projects take place women depend on access to forests in particular for providing for their families. It is that question of forest access and cultural survival that is most controversial when discussing human rights and REDD. Women and children are considered the most vulnerable of the vulnerable in those communities at highest risk of impact from global climate disruption, including on the front lines in tropical forest regions.

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