

**Friends of the Earth US • Greenpeace • International Forum on Globalization  
Rainforest Action Network**

August 11, 2011

Chairman Mary Nichols  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

*Submitted to ARB Rulemaking Docket at <http://www.arb.ca.gov/lispub/comm/bclist.php>*

**Re: Comments on the 15-Day Rulemaking Package and Changes Made to the Initial Proposed Regulation**

Dear Chairman Nichols and Members of the Board:

Friends of the Earth US, Greenpeace, the International Forum on Globalization, and Rainforest Action Network submit these comments regarding the 15-Day Rulemaking Package for the adoption of a proposed California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, including Compliance Offset Protocols.

We offer these comments to enhance the integrity of California's climate policies, preserve environmental and market integrity, as well as protect the human rights of Californians and those who may be impacted by these policies in developing countries.

As a preliminary matter, we note that it is inappropriate for the ARB to move ahead with amendments to, or approval of, these regulations. The ongoing litigation by environmental justice groups under the California Environmental Quality Act raises legitimate concerns regarding the harm of implementing a cap and trade program on California's environment and vulnerable, overburdened communities across the state. As noted by plaintiffs in the case and as we note below, the original regulation failed to meet the criteria set out by AB 32 for market-based compliance mechanisms, and the modifications do not cure these defects. In general, we find that the amendments offered as part of the 15-Day Rulemaking Package do not ensure either environmental or financial market integrity within the proposed cap and trade rules. Below we identify what are, in our opinion, some of the most egregious problems with the current regulations. The ARB should take this opportunity to perform a meaningful and comprehensive alternatives analysis rather than moving forward with the same program at issue in the litigation.

**1. Continued Reliance on Offsets Undermines Environmental Integrity and Endangers Local Communities**

The current rulemaking package fails to ensure that activities undertaken to comply with the regulations do not disproportionately impact low-income communities. Communities already

burdened by dangerously high concentrations of carbon co-pollutant from power plants, refineries, and other industrial sources will likely experience increased air pollution and toxic hotspots. Their toxic burden will be particularly exacerbated by California's heavy reliance on carbon offsets. A University of California study looked at six types of air pollutants and found that under a scenario which allows 50% of offsets to be sourced out of state, California's air pollution would actually increase in five out of six pollution categories.<sup>1</sup> Such offset loopholes deprive California of the environmental, economic and public health co-benefits that a carbon cap purportedly provides.

These concerns, among others, prompted a group of organizations and individuals to sue the ARB in 2009, arguing that the agency failed to analyze and consider alternatives to cap and trade before proceeding with implementing AB 32.<sup>2</sup>

## **2. Cap and Trade Systems Are Difficult to Regulate; Open to Fraud and Manipulation**

As the Legislative Analyst's Office (LAO) has found, the State of California lacks authority to effectively regulate markets arising from a cap and trade system. The LAO stated, "ARB has no experience in regulating [trading of compliance instruments in the spot market], and its lack of technical expertise and institutional knowledge of such matters increases the chance that market manipulation could go undetected, in spite of any monitoring efforts that it puts in place."<sup>3</sup>

Indeed, spot markets have been the center of the European Union Emissions Trading Scheme's (EU ETS) most serious scandals, including a VAT tax fraud scheme that Europol estimated to be worth €5 billion,<sup>4</sup> and the theft of some 3 million carbon allowances national carbon registries earlier this year. The registry theft scandal forced the closure of the EU carbon spot market for several weeks, and prompted European authorities to re-double their efforts to bring stricter security and oversight to the system.

Although the European Commission has approved some new registry rules, it has not yet decided upon an approach for regulating carbon spot markets. Likewise, the United States Commodity Futures Trading Corporation has not developed carbon spot market regulations. In

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<sup>1</sup> Roland-Holst, David, "Carbon Emission Offsets and Criteria Pollutants: A California Assessment," Center for Energy, Resources and Economic Sustainability, University of California, March 2009 at [http://www.ucsus.org/assets/documents/global\\_warming/Offsets-and-Criteria-Pollutants.pdf](http://www.ucsus.org/assets/documents/global_warming/Offsets-and-Criteria-Pollutants.pdf).

<sup>2</sup> On March 18, 2011, Superior Court Judge Ernest Goldsmith ruled that the ARB approved the plan to implement AB 32 prior to completing the required environmental review, and that the board failed to adequately consider alternatives to cap and trade. The court also ordered ARB to halt development of a cap and trade program until ARB complied with CEQA. ARB has since appealed the ruling and the court decided to allow ARB to continue work on developing a cap and trade program while the issue of whether ARB violated CEQA undergoes the appeal process.

<sup>3</sup> Legislative Analyst's Office. "Cap-and-Trade Market Issues" Presented to: Senate Select Committee on the Environment, the Economy, and Climate Change Hon. Fran Pavley, Chair. June 29, 2011. Accessed July 28, 2011: [http://www.lao.ca.gov/handouts/resources/2011/Cap\\_and\\_Trade\\_Market\\_Issues\\_062911.pdf](http://www.lao.ca.gov/handouts/resources/2011/Cap_and_Trade_Market_Issues_062911.pdf).

<sup>4</sup> Europol, "Further Investigations into VAT Fraud Linked to the Carbon Emissions Trading System," 28 December 2010 at <https://www.europol.europa.eu/content/press/further-investigations-vat-fraud-linked-carbon-emissions-trading-system-641>.

the words of a 2011 CFTC report, “No set of laws currently exist that apply a comprehensive regulatory regime – such as that which exists for derivatives – specifically to secondary market trading of carbon allowances and offsets. Thus, for the most part, absent specific action by Congress, a secondary market for carbon allowances and offsets may operate outside the routine oversight of any market regulator.”<sup>5</sup>

Simply put, there is currently a regulatory gap for carbon spot markets; and as evidenced by this year’s EU ETS scandal, authorities have had little success so far in regulating large carbon markets. ARB’s current rulemaking includes general provisions prohibiting fraud, manipulation and gaming but has provided very little detail in way of enhancing carbon market oversight. For example, ARB should include detailed provisions for preventing insider trading, which is a particular risk for carbon markets. ARB should also set rules to deter excessive speculation, such as setting higher position limits, barring financial speculators from bidding in auctions, and prohibiting long-only passive investment in carbon. It should also ensure that regulators actively coordinate between markets, for example coordinating surveillance in the offset origination market with that in the secondary markets, and ensuring that those monitoring carbon markets work with those monitoring energy markets.

Although the ARB must strengthen carbon market oversight provisions, ultimately the best way to ensure market and environmental integrity is to re-evaluate the cap and trade system itself and design it in ways that inherently reduce the opportunities for gaming, fraud, and excessive speculation. As noted in a 2009 Friends of the Earth report, “In general, the more that ‘bells and whistles’ are included in carbon market design — strategic reserves, trigger prices, offsets, banking, borrowing, free allocations, etc. — the more chances there are to game the system. Therefore, a prudent rule of thumb is to design carbon markets to be as simple as possible.”<sup>6</sup> Similarly, the LAO pointed out, “In general, the more complex the markets are, the more challenging it will be to regulate them, and the more susceptible they become to manipulation and fraudulent activity.” The LAO concluded that “The cap-and-trade system as designed by ARB is particularly complex.”

The most important step ARB could take to ensuring the environmental effectiveness of AB 32 is to adopt a radically simpler way to price carbon (through a carbon tax, for example) or make the cap and trade program dramatically smaller and simpler.

### **3. General Requirements for Compliance Offset Protocols and Credit are Insufficient**

**Section 95972** of the rule identifies general requirements for compliance offset protocols. While these requirements, in principle, would assist in ensuring environmental integrity of compliance offset credit generated through approved protocols, we see no assurances that these principles are being met in either domestic offset protocols (see Section 7) or in ongoing

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<sup>5</sup> Interagency Working Group for the Study of Oversight of Carbon Markets, “Report on the Oversight of Existing and Prospective Carbon Markets,” January 18, 2011 at [http://www.cftc.gov/ucm/groups/public/@swaps/documents/file/dfstudy\\_carbon\\_011811.pdf](http://www.cftc.gov/ucm/groups/public/@swaps/documents/file/dfstudy_carbon_011811.pdf).

<sup>6</sup> Chan, Michelle, *Smaller, Simpler and More Stable: Designing Carbon Markets for Environmental and Financial Integrity*, Friends of the Earth, Sept 2009 at <http://www.foe.org/sites/default/files/CarbonMarketsReport.pdf>.

policy discussions to develop international sector-based REDD credits (see Section 10). The Board Resolution requires the Executive Officer (EO) to review compliance offset protocols and approve any necessary changes to ensure consistency throughout the program. The EO must ensure that these concerns are addressed prior to implementation of the program. Some of these requirements are further undermined by weak, insufficient measurement and verification requirements (see Section 6 below). General requirements are of little use if not complemented by robust verification processes to ensure that requirements are actually being met.

#### **4. ARB Must Include Grievance Mechanisms and Appeals Processes for Offset Credits**

**Section 95972.** In keeping with international norms and best practice for accountability, ARB should require that all offset protocols establish environmental and social safeguard standards, and also provide a grievance or complaint mechanism to allow affected citizens and communities to hold offset developers accountable for adhering to the policies and procedures within the protocol. Complaint mechanisms are being actively debated in REDD policymaking venues. The Center for International Environmental Law summarizes the function of complaint mechanisms thusly: “Generally speaking, a complaint mechanism involves a set of standards and an institutional administrative office that determines whether those standards are being met in the implementation of specific activities. Complaint mechanism functions can include: fact-finding, advising, resolving disputes, assessing compliance, granting remedies, and/or awarding compensation.”<sup>7</sup>

There is a general presumption that affected communities should resolve the complaint through existing judicial recourse mechanisms and exhaust national remedies. However, in some cases, resolution at the national level may not be an option due to power differences, lack of access to justice, political instability, or a host of other reasons. This is particularly a concern for international offsets.

We recommend that ARB provide impartial, independent, transparent and credible accountability mechanisms for human rights violations and non-compliance of any and all other regulatory provisions of either California or the jurisdiction where the offset credit is issued. The mechanism should have the authority to serve in both dispute-resolution and compliance functions. The processes for submitting a complaint should allow for affected individuals and communities of varying capabilities to effectively communicate their concerns and make a complaint without the need to hire outside experts. Given that no existing entity within ARB has specialized experience, it may be helpful to consider the experience of existing accountability mechanisms, including for example, World Bank Inspection Panel or OECD National Contact Points.

**Section 95980 and 95981.** Because of the substantial evidence indicating that a significant proportion of offset projects, particularly those in the Clean Development Mechanism (CDM), do not meet even basic regulatory requirements or actually mitigate global climate change, ARB

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<sup>7</sup> Rainforest Foundation Norway and Center for International Environmental Law, *A Complaint Mechanism for REDD+*, May 2011 at <http://www.regnskog.no/languages/english/attachment/13163?ts=130dafd0942>.

should provide an appeals process for ARB and registry offset credits. Such an appeals process should be established to ensure accountability for environmental integrity of offsets, and be fair, objective and effective.

The appeals process should be broadly available to civil society and affected communities. Appeals must be available for decisions to credit a project on the basis of both procedural and substantive violations. Stakeholders must be afforded the right to request a review of registration or issuance requests in order to avoid unnecessary appeals. The time within which appeals may be brought should not be limited where new, material facts come to light indicating that an offset project does not meet the core requirements. Finally, an accurate and complete record upon which the appeal is based must be compiled and made publicly available.

## **5. Current Draft Regulation Allows for Double Counting of Emissions**

**Section 95975 (c)(5)** merely requires the Offset Project Operator and any Authorized Project Designees to disclose credits issued for the same offset project being listed. ARB must ensure that there is no double counting of emissions reductions credits in the ARB program alongside other voluntary or compliance markets, as this totally defeats the objective of the program to deliver emissions reductions.

## **6. Measurement and Verification Processes Insufficient to Address Forest-related Mitigation Actions**

**Section 95973 (b)** only requires the Offset Project Operator and any Authorized Project Designees to fulfill all local, regional, and national requirements on environmental impact assessment. Elsewhere in the regulation, offset project originators and verifiers must ensure compliance with all local state and federal environmental regulatory requirements. Section 95973 (b) should be amended to ensure all local, state, national environmental laws and regulations are met in the course of the offset project.

**Section 95977. Verification Requirements:** There are a number of weaknesses in the verification section, especially to the extent these verification requirements will apply to any future agreement to include international sector-based REDD offset credits.

For sequestration projects, the schedule of verification is wholly insufficient to address the likelihood of both leakage and reversals. The current draft allows sequestration projects to be verified once every six years, and after initial verification, reforestation project can delay verification for twelve years. For non-sequestration, verification is performed annually. This is particularly alarming in light of Section 95983 on Forestry Offset Reversals (see below); the State cannot rely on virtuous reporting of intentional reversals and must ensure annual verification of stated greenhouse gas emissions reductions. Section 95977(c) must be amended to require annual verification for all sequestration projects.

Section 95977.1 (b)(3)(G) on sampling plans for offset project data reports and section 95977.1 (b)(3)(L) on data checks for offset project data reports are insufficient for addressing the complexity of measuring carbon stocks and fluxes from land based emissions.

The use of default values in offset project calculations is widespread and estimates of carbon volumes stored in the respective forest areas vary considerably.<sup>8</sup> Error bars of 50% and more are not uncommon,<sup>9</sup> with 30-40% being the average range of uncertainty from measuring land-use change emissions in EU countries.<sup>10</sup> In the United States, the statistical uncertainty in estimating emissions flux from forests and cropland greatly exceeds that in estimating emissions from fuel combustion.<sup>11</sup> Some have proposed that uncertainties can be dealt with through conservative accounting; however, the scale of uncertainty that arises in forest carbon accounting suggests that conservative accounting is insufficient to address the challenge. A recent study assessing the uncertainty in measuring forest carbon found that, “the overall model output uncertainty reaches an average of +/- 43.5%” and that “none of the scenarios tested ... achieve emissions reductions outside the error margins.”<sup>12</sup>

A recent report also found that “from a trading point of view, the process [by] which forest creates carbon is ill defined to the point of being unacceptably risky. It contains a vague, poorly defined and scientifically unreliable process for creating forest carbon.”<sup>13</sup> Munden found that the market would deliver three possible reactions to uncertain accounting methods: (1) This uncertainty will be considered a significant risk, and used as justification to significantly discount the price of carbon; (2) Participants will choose the most complex methodology and rig it in order to produce artificially high numbers of credits; or (3) The easiest accounting method will be chosen, regardless of scientific accuracy, in a bid to reduce start-up costs.<sup>14</sup>

Further, given the significant uncertainty and error margins in GHG calculations in the forest sector, qualitative narratives of uncertainty risk assessments in baselines, sequestration calculations, among others is not sufficient. Using professional judgment in determining the number of data checks (Section 95977.1 (b)(3)(L)3.) is not adequate to ensure environmental integrity.

Nor do we also do not see sufficient treatment of monitoring and verifying leakage. The Noel Kempff Climate Action Project (NKCAP) in Bolivia has failed to protect against leakage despite promises by the NKCAP sponsors. Project sponsors avoided rigorous, expensive monitoring of

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<sup>8</sup> Two recent (unpublished) studies of carbon stocks in projects in Peru, carried out using two different methodologies resulted in a difference of carbon stocks of 50 tonnes of carbon/hectare.

<sup>9</sup> Kintisch, E. (2007) “Improved monitoring of rainforests helps pierce haze of deforestation.” *Science*. vol 316, 27 April, pp 536-537.

<sup>10</sup> European Commission, Directorate-General Climate Action. Summary Report on the work carried out by European Climate Change Programme (ECCP) group on Climate Policy for Land Use, Land Use Change and Forestry (LULUCF) draft 3, September 2010.

<sup>11</sup> U.S. EPA, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS 1990-2008, U.S. EPA # 430-R-10-006 (Apr. 2010) p. 7-19, 7-30. available at

<http://epa.gov/climatechange/emissions/usinventoryreport.html>. As Cited In: Center For Biological Diversity. Request For Correction Of Information Disseminated By The Environmental Protection Agency Regarding Emissions From Biomass Combustion In The Inventory Of U.S. Greenhouse Gas Emissions And Sinks. July 28, 2010

<sup>12</sup> Pelletier J., et al. 2011. Diagnosing the uncertainty and detectability of emission reductions for REDD+ under current capabilities: an example for Panama. *Environ. Res. Lett.* 6 (2011) 024005 p. 7.

<sup>13</sup> The Munden Project. “Redd And Forest Carbon: Market-Based Critique and Recommendations” March, 2011. Accessed August 5, 2011: <http://www.mundenproject.com/forestcarbonreport2.pdf>.

<sup>14</sup> Ibid.

leakage, favoring elaborate models which depended on significant guesswork. A report released last year shows leakage from the project could be as high as 42-60 percent.<sup>15</sup>

**Section 95983. Forestry Offset Reversals:** Reversals of sequestration efforts are a likely occurrence in the forest sector. Addressing both human and non-human induced reversals of sequestration will be necessary as forests are affected both by human-induced activity (e.g., logging), natural disturbances (e.g., forests fires), unpredictable changes in carbon cycles of tropical forests resulting from climate change, as well as shifts in broader socio-economic policies (e.g., commodity price fluctuations). This is particularly true as global mitigation efforts continue to be insufficient to stabilize concentrations of greenhouse gas emissions in the atmosphere. Increasing areas of, forests will be at growing risk of major disturbances driven by rising global average temperatures and associated increased severe weather events, shifts in climatic regimes and increased pest infestations among other abiotic and biotic factors.

ARB must further clarify and justify the percentage of ARB offset credits that will be held in buffer accounts will be sufficient to address the problem. While we appreciate the intent to safeguard against both intentional and unintentional reversals, this section does not amount to a prudential approach to risk management. First, there is no certainty that credits held in buffer accounts will be sufficient to address all possible and likely reversals of sequestration projects. This is particularly concerning when read in light of extremely weak verification requirements for sequestration offsets (see above, comments on Section 95977 Verification Requirements). While the Compliance Offset Protocol for U.S. Forest Projects provides some guidance on percentages to be contributed to the buffer account, these calculations appear arbitrary. Second, like any insurance mechanism, creating a buffer account could discourage efforts to seriously address issues such as leakage and permanence.

As stated above, the State cannot rely on virtuous reporting of intentional reversals and must ensure annual verification of stated greenhouse gas emissions reductions.

## **7. Domestic Forest Offset Protocols Lead to Forest Clearcutting**

Forty-seven organizations wrote a letter to ARB in December 2010 raising concerns about the domestic forest offset protocol, arguing that “ARB’s proposed cap-and-trade rule currently not only explicitly invites forest clearcutting as a carbon offset project, but also incentivizes the conversion of natural forests into tree farms.”<sup>16</sup> The Climate Action Reserve (CAR),<sup>17</sup> which developed the forest protocol, similarly acknowledged concerns regarding the environmental impacts of forest clearcutting, but has repeatedly and indefinitely postponed any action to address those concerns. When ARB Board members raised questions about the inclusion of forest clearcutting when the protocol was first considered in September of 2009, they were

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<sup>15</sup> Ariana Densham, et. al. “Carbon Scam: Noel Kempff Climate Action Project and the Push for Sub-national Forest Offsets.” 2009. Amsterdam, Greenpeace International.

<sup>16</sup> NGO Letter to Honorable Mary Nichols, Chair, California Air Resources Board. December 9, 2010. RE: The Forest Carbon Offset Program Should Not Include Forest Clearcutting.

<sup>17</sup> The Climate Action Reserve is a non-governmental entity which develops various carbon offset protocols and is comprised of carbon offset developers, carbon offset purchasers, and environmental organizations.

assured that these flaws would be addressed and the forest protocol would become the “gold standard” for forest carbon offsets. Unfortunately, the cap and trade rules adopted by ARB still include forest clearcutting.

## **8. Tribal Lands**

While we are supportive of efforts to ensure programs and projects undertaken through this regulation are in accordance relevant statutes governing sovereign relations with Tribes, the requirements for “limited waiver of sovereign immunity” in the regulation are much too vague at this point to provide the public or tribes with any understand of how limited or broad such a waiver might be. While enforcement of any portion of this regulation is imperative, vague and undefined terms may result ARB’s inability to fully enforce the provisions of the rule.

## **9. Approval of Additional Protocols**

We note that even though the regulations concerning sector-based REDD offsets credits are limited in scope, California government officials continue to participate in the Governor’s Climate and Forests Taskforce and the REDD Offsets Working Group (both of which arose out of Memoranda of Understanding with developing country governments). We are concerned that this process mirrors past processes to establish the domestic forest offset protocol, which has been criticized for its failure to ensure effective public participation. In the future, ARB must ensure that there are opportunities for review and public comment period, including on the scope and intent of proposed actions.

Similarly, the Climate Action Reserve is also developing a Forest Project Protocol for use throughout Mexico, one of the Governors’ Forest and Climate Task Force countries, and presumed early provider of REDD credits to California. The repeated failure of CAR to address the perverse incentive to clearcut sets a damaging and alarming precedent for international offsets.

## **10. Sector-Based Offset Credits**

While these regulations are still limited in scope at this stage, several critical problems are readily apparent. ARB is proposing a “nested sectoral approach” to generating REDD credits. This combines elements of a traditional, project-based offsets program (where companies or entrepreneurs can develop their own offset projects) within a wider jurisdictional sector-based offsets program.<sup>18</sup>

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<sup>18</sup> The sector-based elements require governments to make their own sector-wide emissions reductions. According to ARB presentations, tropical forest countries must first establish a baseline reflecting a business-as-usual emissions scenario based, mostly likely, on a 5-15 year historic average of national deforestation or forest degradation rates. (See [http://www.gcftaskforce.org/documents/May\\_Aceh/Day\\_1\\_2/California%20Presentation%20%28May%2019%202010%29.pdf](http://www.gcftaskforce.org/documents/May_Aceh/Day_1_2/California%20Presentation%20%28May%2019%202010%29.pdf).) Once the crediting baseline is reached, individual projects would be eligible to receive carbon credits for additional greenhouse gas emissions reductions. These individual projects would be “nested” within a state or provincial program designed to reduce emissions through avoiding deforestation. Each individual project would be required to comply with as yet undeveloped methodologies to inventory and account for all project-level activities.



However, California's proposal to use a nested sectoral crediting approach contravenes REDD agreements that have been negotiated at the international level. For example, California requires provincial and state governments in forested countries to use their own budgetary resources to deliver emissions reductions needed to get to the crediting baseline and therefore generate offset credits. In contrast, within the UNFCCC, developed countries are required to pay the full, incremental cost of developing country mitigation action. Additionally, the nested sectoral approach undermines the agreement made last year at the UNFCCC conference in Cancun, which explicitly states that payments for emissions reductions must take place in the context of national monitoring systems.<sup>19</sup>

The "nested sectoral crediting" approach proposed by ARB poses significant risks to the environmental integrity of California's cap and trade program. Project level crediting significantly increases the risk of emissions leakage, when REDD efforts simply prompt deforesting or degrading activities to shift elsewhere. Many REDD policymakers, including the Council of the European Union and the Informal Working Group on Interim Finance for REDD (IWG-IFR), have noted that national implementation is required to minimize the risk of in-country leakage.<sup>20</sup> Even with national accounting, which theoretically, though not always in practice, should account for intra-national leakage, international leakage effects could be in excess of 50 percent.<sup>21</sup>

**Section 95994.** Finally, California cap and trade regulations have also ignored the vital importance of protecting the rights of indigenous peoples and local communities. The ARB rules on sectoral offsets do not reference the rights of indigenous peoples, requiring only mechanisms for public participation. This falls well short of the benchmarks established by the UN Declaration on the Rights of Indigenous Peoples. The World Bank, UN-REDD and the UN Framework Convention on Climate Change have all recognized that ensuring the rights of indigenous peoples and local communities is essential the success of REDD policies.

Forest protection financing can also lead to increased conflict over resources, social exclusion and "land-grabbing," if rights are not recognized and upheld. If the rights and participation of indigenous peoples and forest dependent communities are not guaranteed in California's regulation to establish a REDD crediting program, governments are likely to view avoiding adverse social impacts and respecting rights merely as extra implementation costs, rather than as a contribution to and prerequisite for REDD effectiveness. The lack of clear commitment and

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Additionally, the host jurisdiction (i.e., the developing country government) must establish a system for reconciling project-based greenhouse gas emissions reductions in sector-level accounting.

<sup>19</sup>Paragraph 77 (read in conjunction with footnote 8) Cancun Decision 1.CP/16. UNFCCC. Accessed August 2, 2011: <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2>.

<sup>20</sup> European Council. "Council Conclusions on addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss" (Conclusions of the 2912th Environment Council meeting, Brussels, 4 December 2008). & Meridian Institute. 2009. "Reducing Emissions from Deforestation and Forest Degradation (REDD): An Options Assessment Report." Prepared for the Government of Norway, by Arild Angelsen, Sandra Brown, Cyril Loisel, Leo Peskett, Charlotte Streck, and Daniel Zarin.

<sup>21</sup> Brian C. Murray, Ph.D. "Seeing REDD: Addressing Additionality, Leakage, and Permanence with a National Approach" (powerpoint presented at Presented at Forest Day, UN Framework Convention on Climate Change COP Meeting. Bali, Indonesia, December 8, 2007).

guidance requiring the full protection of the rights of indigenous peoples and local communities sends a dangerous signal.

Project- and subnational-based REDD credits are incapable of meeting the environmental integrity standards demanded by AB 32, and they should be excluded from any cap and trade program in California. If California is to proceed with any form of forest protection efforts in developing countries, it must ensure that the development and implementation of such programs do not lead to negative social and environmental consequences.

### **Conclusion**

The current approach to regulating emissions through a cap and trade program is prone to fraud, gaming, and corruption and lacks environmental integrity. We strongly urge ARB to take the opportunity provided to examine alternatives to cap and trade to implement a robust program to reduce emissions that ensures financial market and environmental integrity and protects the lives and livelihoods of all Californians.

Sincerely,

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