

International Forest Offsets and California's Carbon Market

In November 2012, California's Air Resources Board auctioned off the first round of carbon permits for its voluntary cap-and-trade market, which officially went live on January 1, 2013. This initiative came out of California Assembly Bill 32, the Global Warming Solutions Act, which sets a goal of lowering greenhouse gas emissions to 1990 levels by 2020 (a reduction of about 30 percent).¹

Under this regulation, polluters can meet their emissions reductions through three options: reducing emissions, trading emissions allowances or using offset credits for emissions reductions outside of the cap.² California is the first state to have a cap-and-trade market for greenhouse gases in the United States.³ Many policymakers are looking to the state's market as a test for a national model.⁴

Cap-and-trade markets, however, are not the solution to emissions reductions that they pretend to be. They do not produce real reductions in greenhouse gas emissions and pose serious problems for common resource management. The privatization and financialization of nature is synonymous with these markets, and the numerous opportunities for corruption further weaken their legitimacy as real solutions for reducing emissions. In particular, the use of offsets poses significant problems in California's new market.

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Background on Offsets and REDD+

An offset is a tradable credit representing reductions in greenhouse gas emissions outside of the entities covered by the cap-and-trade market.⁵ Through offsets, a polluter can pay to prevent emissions outside of the cap, in lieu of reducing emissions at the source.⁶ So far, California's cap-and-trade market has approved four categories of domestic offsets, and each



polluter will be allowed to meet 8 percent of its emissions reductions with offsets.⁷

For example, a polluter in California could pay for a section of forest to not be cut down in Oregon. This would count toward the polluter's required reductions even though emissions are not reduced in California but are in theory prevented in Oregon. Because trees store carbon but also release greenhouse gases into the atmosphere if they are cut down, then not cutting down trees is considered an offset.

In addition to the domestic offsets already approved, California is considering the future inclusion of international forest offsets. These would come from programs like the Reduction of Emissions from Deforestation and Degradation (REDD+), which has the added purpose of conserving and enhancing forest carbon stocks and sustainably managing forests (the '+' in REDD+).⁸

REDD+ programs are carried out in developing countries with significant forest cover, like Brazil, Indonesia and many others.⁹ Through financial incentives, landowners are paid to not cut down forests and instead protect them. What California would do is sell credits for preserved forestland from REDD+ programs. This would be one of the first cap-and-trade programs to allow international forest offsets from REDD+ initiatives.¹⁰

The use of offsets is problematic, as is REDD+, and if California goes through with accepting these offsets in its cap-andtrade market, the impacts could be serious. REDD+ offsets lead to the financialization and privatization of nature. In addition, forests usurped into REDD+ programs become offlimits to the indigenous communities that have lived there for decades and have sustainably managed the forests without financial incentives.

Moreover, significant concern has been voiced about forest offsets. Some critics "question the wisdom of entrusting the world's last tropical forests to the instability of profit-led global commodity and trading markets that have proven to be highly unstable and unpredictable ... and historically suffer from drastic boom and slump cycles."¹¹ Others argue that offsets do not reduce emissions, but rather move the reductions elsewhere, usually to countries in the global South where it is less expensive to make the reductions.¹² Pollution continues at the source while it is assumed that reductions are made at the offset location, which may or may not be the case.¹³

Generating offsets from REDD+ programs exposes vital forest resources to financial markets that have no regard for the intrinsic value of biodiversity, conservation, sustainable management and the necessity for common resources to remain under public control. Unfortunately, there is a real chance that REDD+ offsets could make it into the California market, as recent analyses show that existing domestic offsets will not meet demand, whereas the inclusion of REDD+ offsets could meet this demand and even exceed it.¹⁴

Offsets: A Liability

To qualify as an offset, one credit must equal one metric ton of greenhouse gas emissions.¹⁵ Offsets are essentially a loop-hole in real emissions reductions, because they do not reduce emissions at the source, and are therefore a serious liability.

As the U.S. Government Accountability Office (GAO) reports, "In theory, offsets allow regulated entities to emit more while maintaining the emissions levels set by a cap and trade program or other program to limit emissions."¹⁶

Offsets must meet a series of requirements in order to be valid — requirements that are often hard to meet and verify. These include proving that an offset is real, additional, permanent, quantifiable, verifiable and enforceable.¹⁷ These are defined as:

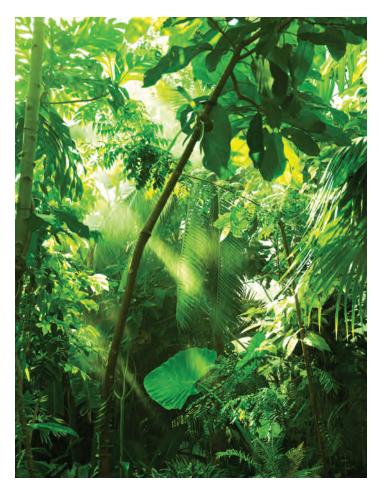
- *Real:* There must be evidence that the offset is both appropriate and accurate;
- Permanent: The offset must be irreversible;
- *Additional:* Emissions reductions must exceed (be in addition to) those required by law, and must exceed reductions that would otherwise occur in a business-as-usual scenario;
- *Quantifiable:* It must be possible to accurately measure and calculate the emissions reductions produced by an offset, and to be able to replicate the findings;
- *Verifiable:* The emissions reductions from an offset must be monitored and documented; and
- *Enforceable:* There must be structures of accountability in place and a body that oversees and enforces these requirements.¹⁸

Meeting these requirements is challenging, especially with regard to REDD+ forest offsets. First, guaranteeing permanence is very difficult.¹⁹ Trees can easily be cut down, damaged by fire or destroyed through other natural disasters.²⁰ A Congressional Research Service report suggests that offsets could come with assurances that if something compromised the offset it would be restored.²¹ However, this contradicts the point of requiring permanence and presents another loophole in offset compliance.

Second, establishing a baseline of greenhouse gas emissions is very difficult, yet it is a vital component.²² Baselines are needed to compare predicted reductions to what would have happened without the offset program. Without this comparison, determining emissions reductions or the amount of carbon sequestered is nearly impossible.²³

Baselines are also needed to establish additionality, the requirement that reductions be in addition to what would have happened if no action were taken. This requires determining what the emissions levels would have been without an offset program.²⁴ Without a properly calculated baseline, it is difficult to determine additionality, and non-additional offsets have already been awarded under existing programs, meaning that real reductions may not materialize.²⁵

Third, there is a significant risk for leakage to occur. This happens when emissions controls cause pollution to shift elsewhere, leading to reduced emissions in the location under regulation and increased emissions in unregulated areas.²⁶ The



pollution therefore "leaks" from one area to another. For example, if a country agrees to protect its forests, logging companies could move to unprotected land and carry out logging there. If this happens, the total level of prevented deforestation and emissions would be unchanged, because the leakage elsewhere cancels out the reductions in the regulated area.²⁷

A fourth complication of offsets is that they cause distortions in price signals and incentives to reduce emissions within the pollution market. If the market is to work as supporters suggest it will, then market signals must be able to drive prices in order to drive reductions in pollution that is now left to the market, instead of regulation. If too much emphasis is placed on the use of offsets to achieve reductions, the proper price signals are not sent to polluters to reduce emissions at the source and subsequently to invest in the necessary technology to do so.²⁸

This complication can be attributed to the distortionary nature of offsets, which serve primarily to make compliance with reduction requirements less expensive, rather than incentivizing polluters to reduce emissions at the source.²⁹ Again, offsets represent a loophole that undermines real emissions reductions, further perpetuating the problems caused by greenhouse gas emissions.

Finally, measuring emissions reductions is another challenge, and forest projects are the most controversial type of offset

because so many issues exist in ensuring their integrity.³⁰ The only way to attempt a good measurement is direct monitoring through various tools.³¹ However, direct monitoring is not always attainable or economical, and does not account for the impacts of leakage.³² This contradicts the promoted purpose of offsets to keep compliance costs low for emissions reduction markets.

While offset credits might be cheaper per credit than trading emissions allowances, the process of establishing that offsets are valid and legitimate is highly cost prohibitive. If the only way for offsets to work is through extensive monitoring and evaluation systems that require substantial funds to operate, then offsets do not offer a cost-effective market option for reductions. Instead, the law should be enforced and require that polluters directly reduce their emissions.

The Dangers of REDD+

The initial REDD concept is based on the premise that deforestation and degradation occur because no economic value is placed on forests except as lumber or potential agricultural land. By providing financial incentives to protect forests, it is thought that this will solve problems of deforestation and degradation.³³ However, many indigenous communities worry that monetizing forests through REDD+ initiatives will lead to land grabs by large corporations or the government, a problem that has already occurred in trial projects.³⁴ Rainforests are home to millions of indigenous peoples and forest communities that subsist on the resources of the forest.³⁵ These communities have successfully managed and conserved forests for centuries, without degrading or deforesting them, because they depend on the forests for their livelihood and long-term wellbeing.³⁶ Yet REDD+ programs raise many concerns about indigenous rights, land tenure, forest governance and corruption.³⁷

Indigenous peoples are often forced off their land and prohibited from their long-established use of the forests when the government or other groups become involved in forest management.³⁸ The forests become privatized and are no longer in the hands of the communities that have long resided there. Concerns have also been raised that REDD+, which rewards polluters, gives only marginal benefits to the indigenous communities that have sustainably managed forests.³⁹

Unfortunately, in many countries with vast holdings of tropical forest, the governments often do not recognize indigenous rights or ancestral forestlands.⁴⁰ Forest communities have lived on forestlands for decades without legal title to it, and many cases exist where governments will declare this untitled land property of the state.⁴¹ As a result, indigenous communities are kicked off their land.⁴²

A primary concern is that the protection of forest carbon reserves will be placed above the protection and rights of for-



est peoples.⁴³ REDD+ programs stand to generate significant income for governments, incentivizing leaders to ignore land disputes in forested areas and to support REDD+ initiatives over indigenous rights.⁴⁴ This shifts government accountability away from the citizens to the financial benefits of REDD+ — it puts profits over people.

Looking specifically at offsets from REDD+ initiatives, many problems and limitations persist. Developing countries often do not have access to the resources necessary to implement, monitor and enforce the rules.⁴⁵ Problems of permanence and establishing a baseline are also formidable challenges.⁴⁶ In addition, because each country has different legal frameworks, issues arise with verification.⁴⁷ The measurement techniques are complex and cost prohibitive, documentation of emissions or avoided emissions can be inadequate and it is difficult to establish whether project developers have legal ownership of the land in use.⁴⁸

Ample opportunities for corruption exist as well, since there are not incentives to correctly report information or inspect offset authenticity — if the baseline is overstated, more offsets can be produced.⁴⁹ There is also a risk that offset buyers will enforce their own criteria for forest governance that could jeopardize the livelihoods of indigenous peoples and forest communities.⁵⁰

Finally, REDD+ by itself and as an offset poses serious risks for the privatization and financialization of nature. Attaching financial incentives, like offsets, to REDD+ programs could cause owners of forested land, primarily governments, corporations and conservation organizations, to cut up tracts of forest into protected, privatized areas.⁵¹ The United Nations REDD+ program (UN-REDD+) has even admitted that several potential failings exist. These include the likelihood of depriving indigenous and forest communities of their lands, marginalizing these communities, undoing significant progress in sustainable forest management practices and, most importantly, that REDD+ programs could "lock-up forests by decoupling conservation from development."⁵²

California and REDD+ Offsets

Since California faces a potential shortage of offsets for its cap-and-trade market, administrators have discussed using REDD+ offsets to keep compliance costs low.⁵³ If REDD+ offsets become eligible in California's market, they stand to generate up to \$2.2 billion.⁵⁴ California's market would be one of the first to use these, despite the fact that other markets have rejected using REDD+ offsets.⁵⁵

This has happened in the case of the UN Clean Development Mechanism (CDM).⁵⁶ CDM is an offsets initiative that issues certified emission reduction credits (CERs) in developing countries that can be bought by industrialized countries to meet their reduction targets. REDD+ credits are not accepted because of problems with measurement, reporting and verification (MRV), as well as with accounting, additionality, leakage and permanence.⁵⁷

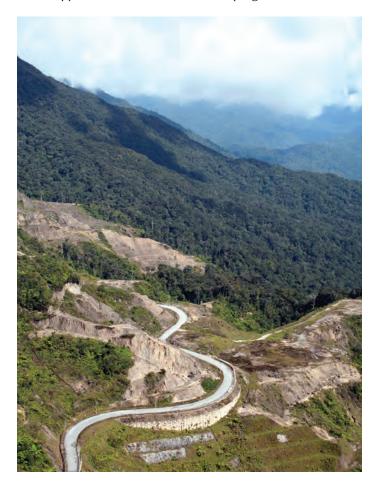
In anticipation of the possible inclusion of REDD+ offsets in California, the Governor's Climate and Forests Task Force



(GCF) was set up in 2008 and established Memoranda of Understanding (MOUs) with Brazil and Indonesia.⁵⁸ The MOUs represent initial agreements to work with California in developing REDD+ offsets for use in the state's cap-and-trade market. Since then, further countries have become members of the GCF, including Mexico, Nigeria, Peru and Spain, and additional states in Brazil.⁵⁹

Glaring problems emerge, however, when considering offsets from the countries outlined. For an offset to be valid it must prove additional, and the California Air Resources Board (ARB) states that for an offset to be additional, emissions reductions must exceed those required by law and exceed reductions that would otherwise occur in a business-as-usual scenario.⁶⁰ Brazil has a decades-old forest law that serves to prevent deforestation and conserve its forest reserves.⁶¹ Most of the states in Brazil that are members of the Task Force are in the Amazon, and landowners in that region are required by the Forest Code to conserve 80 percent of forests on their land.⁶²

Mexico and Indonesia both have forest laws on the books as well, which require forest protection and conservation.⁶³ This raises serious questions about how REDD+ offsets from these countries will prove additional. It cannot be said that the reductions in deforestation and degradation, and the added conservation of forests resulting from these laws, would not have happened without REDD+ offset programs.



Furthermore, the potential harm caused to indigenous communities by REDD+ offsets contradicts the initial intentions of California when drafting the regulation for its cap-andtrade market. Under a section called "Requirements for no net harm," the ARB stated, "The standardized methodology must ensure that the offset project type does not cause or contribute to adverse effects on human health or the environment."⁶⁴

Unfortunately, this no longer seems to be a priority for California in the development of the market. In October 2012, indigenous leaders traveled to California and protested the potential use of REDD+ offsets in the state's cap-and-trade market.⁶⁵ Many cited that they already face persecution, threats and unjust treatment at home for protesting the initiative.⁶⁶ The ARB will decide on the use of REDD+ offsets in 2013.⁶⁷

Overall, the use of REDD+ offsets in California's cap-and-trade market poses significant problems and, if adopted, would lead to the large-scale financialization and privatization of nature. Forestlands would be off-limits to public use and add to the alarming trend of monetizing nature for financial gain.

Recommendations

Supporters of alternative methods to manage forests point to a non-market approach, called the Joint Mitigation and Adaptation Mechanism (JMA), included under the United Nations Framework Convention on Climate Change.⁶⁸ This approach incorporates public support and methods for sustainable forest management, and strengthens governance.⁶⁹ It also includes safeguards for the rights of indigenous peoples, participation of relevant stakeholders and ensuring that JMA is not a method for converting forests, but for protecting them.⁷⁰

Bolivia has developed a proposal for JMA that emphasizes the use of local knowledge on forest management, addressing the root causes of deforestation and reinforcing that forests are not commodities.⁷¹ The primary goal of JMA is not carbon emissions reductions, but rather to protect the many functions and benefits of forests through the application of better land use practices and prevention of biodiversity loss, deforestation and degradation.⁷² Forests do not need REDD+ programs to sequester carbon or prevent emissions; they already do this on their own when initiatives focus on forest integrity over profits.

Given the serious implications for indigenous peoples and the public management of forest resources, California should not allow REDD+ offsets in its greenhouse gas cap-and-trade market. While the use of offsets might make compliance more cost effective, the process to accurately verify them is highly cost prohibitive, so they are not a feasible market option overall.

Based on the myriad problems of offsets, and specifically of REDD+ offsets, polluters should be required to directly reduce their emissions without depending on loopholes to do so. REDD+ offsets do not lead to real, additional or permanent emissions reductions, and they must not be allowed into California's cap and trade market.

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