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To: California Air Resources Board Staff
Re: REDD+ offsets staff white paper
Date: November 16, 2015

Dear CARB Staff:

Thank you for the opportunity to participate in the early stages of the dialogue regarding the possibility of inclusion of sector-based offsets, and REDD+ offsets in particular, in future compliance periods of California's cap-and-trade system. As one of the few global funds focusing on investing in and developing REDD+ projects, we are well positioned to work with you on understanding the current state of the science, evaluating different mechanisms for accomplishing the goals you have described, and providing feedback from our experience on the ground developing the highest quality projects in the world.

Permian Global was established as a for-profit conservation fund because we believe that investing in forest conservation and restoration is the most critical (and least expensive) lever in the global attempt to ward off catastrophic climate change; access to capital markets is necessary to achieve the scale needed to meet the challenge; and market dynamics provide important discipline to ensure the best and lowest-cost projects are rewarded. California's ongoing effort to build a robust carbon market and to work with and lead other jurisdictions in the establishment of their own carbon markets is commendable, and based on this same basic market scale and efficiency theory we share. By considering whether and how to allow REDD+ credits into the California carbon market, you are allowing California to invest in, support, and in turn benefit from what may well be the most important asset in the world – and you will achieve this goal at the lowest cost to California.

We have a few comments to offer on the white paper, but we wanted to start by noting that the CARB staff has clearly done its homework. This is a complicated subject, and there are genuine and difficult questions to address. The white paper is a reasoned and thorough synthesis, with important insights about the direct impact of tropical forests on California's climate and the need for low-cost offsets to help with cost containment in the carbon market.

Because we recognize that there are a lot of complicated issues to work through, we start with one high-level observation about the risk of locking into any given model now for how REDD+ projects will be established and funded. The white paper notes the preference for a jurisdiction-based approach in any possible future plan to admit REDD+ offsets into the California market, citing concerns about leakage and an interest in large-scale impact. Both issues are obviously very important, but less obvious at this point is how any one model best optimizes around each issue or the two issues in concert. If California plans to bring jurisdictions into the system sequentially or in batches, we would encourage you to treat these opportunities as moments for experimentation, perhaps bringing in jurisdictions with different approaches, provided that a universal (high) standard of quality is met. Our argument here is straight-forward: variations on a jurisdictional approach are manifold, and until such time as the data make clear that one approach trumps others in measurable, verified reductions in deforestation and degradation, it would be unwise to preference the ease of a standardized approach over an experimental approach that produces more meaningful outcomes. We are all still learning, and we should not prejudice that.

We say this in part because the stakes are high and the opportunity great, indeed much greater than the white paper highlights. The paper cites an emissions figure for deforestation and degradation of between 11-14% worldwide. We think recent analysis suggests the total mitigation value of forest conservation and restoration is more like 33% (or more) of all mitigation opportunities. This is driven by a) a total emissions calculation for deforestation and degradation of between 14-21% of total emissions (vs. your 11-14% figure), which largely excludes emissions from peatlands and mangroves (meaning the total emissions count is likely much higher, but the challenge in estimating those emissions requires conservativism), and b) a forest carbon sequestration calculation of between 10-15% of all mitigation opportunities, which we also think is likely conservative.[1] Added together, these numbers amount to 24-36% of total carbon mitigation opportunity globally, which is the more useful way of viewing the data. Simply put, every argument made for why California should look to tropic forest conservation and restoration is strengthened considerably when the much larger, and much more realistic, numbers are examined.

The sequestration discussion is one important data point that also gets to the question of how you might think about designing the rollout of an entry for REDD+ credits. The white paper notes that the ROW recommendations suggest not including activities like reforestation that enhance carbon stocks, at least initially. While we acknowledge that there are challenges in capturing the reforestation side of the calculus, we also argue that technologies and methodologies are rapidly improving, and that from a policy standpoint we should absolutely seek to encourage robust this sequestration analysis as quickly as possible – forest-based sequestration is, after all, the only known lost-cost "technology" available to us to remove carbon from the atmosphere with anywhere near the speed and scale we need now, and regrowth of degraded forests is likely the key lever in this sequestration effort. The challenges in analyzing and valuing forest stock enhancement would seem to be a point of useful experimentation amongst your partner jurisdictions. Our company is investing in forest regrowth strategies, and if we are willing to take on the investment risk there and to work with the jurisdictions in which we operate to get that effort properly verified, and to work with you to keep you updated on our progress, we would encourage you to bringing in some of these "degradation" or "regrowth" credits as one element any experimentation with jurisdictional approaches.

Regarding the proposed limitation on the use of REDD+ credits by covered entities, which we understand to be capped at 4% of each entity's obligation (i.e. 50% of the 8% limit on the use of offsets generally by a covered entity), our only observation here is that high quality offsets should be able to compete with each other on the basis of price and other relevant attributes. There may be

[1] The best recent synthesis report laying out the science and numbers is "Tropical Forests: A Review," published by the Prince of Wales's International Sustainability Unit and available here: http://www.pcfisu.org/wp-content/uploads/2015/04/Princes-Charities-International-Sustainability-Unit-Tropical-Forests-A-Review.pdf.

administrative or political reasons why such a limitation makes sense, but for the core reasons you have identified in considering allowing REDD+ credits into the system – cost containment, preservation of ecosystems relevant to California and the world at large, mitigation of climate risk, and leadership on the issue – such a limitation would seem to run counter to the logic identified to support REDD+ inclusion. We believe our carbon credits are the highest quality the world and look forward to their being allowed to compete head-to-head with other credits.

We offer the above as additional material to consider as this dialogue moves forward and, again, in the spirit of congratulating you on the fine work to date. The white paper goes on to cite a significant set of additional questions or problems to work through, and we offer our help and engagement where valuable to that process. There are a number of fine developers of offset projects, but relatively fewer REDD+ project developers, and even fewer companies like Permian Global operating on the ground in many of the relevant jurisdictions and seeking to develop projects at a kind of scale where they would have material impact on jurisdictional emissions and the California carbon market. To the extent our perspective is useful, we look forward to future engagement with you.