NewForests
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Tuesday, July 13, 2010

California Air Resources Board
1001 "I" Street
P.O. Box 2815
Sacramento, CA 95812

Re: Comments on ARB staff cost-containment and offset presentations on June 22, 2010

To Whom it May Concern:

Thank you for the opportunity to comment on ARB initial staff thinking on cost containment and offsets.

New Forests manages investments in sustainable forestry and associated eco products, such as carbon, biodiversity and water, for institutional and private equity clients. The company is headquartered in Sydney, Australia, with offices in San Francisco and Kota Kinabalu, Malaysia. New Forests has been active as a company in forest carbon markets for five years: New Forests staff participated in the committee that developed the previous CCAR forestry protocol, contributed to the Voluntary Carbon Standard's AFOLU guidelines, contributed to the development of the New South Wales Greenhouse Gas Abatement Scheme, participated in the stakeholder working group that assisted CAR with the development of its proposed aggregation guidelines, and currently participate in the ANSI-accredited Forest Carbon Standards Committee. We are an active investor in the California carbon market, and we look forward to continuing to partner with California forest owners to bring forest carbon offsets to market and to achieve shared forest conservation objectives.

We would make the following comments on ARB initial staff thinking related to cost containment and offsets, a portion of which mirrors previous comments made regarding ARB staff's June 23, 2010 presentations on offset protocol development:

1. **Altering offset limits as a cost-containment mechanism**.
   ARB staff stated that ARB is considering several mechanisms that would adjust quantitative use limits on offsets in its suite of cost-containment options. In particular, ARB is considering: a) temporarily relaxing the quantitative use limit in response to the carbon price reaching a trigger price as the core cost-containment mechanism,[1] and b) if a reserve cost containment mechanism is used, increasing the quantitative use limit on offsets in proportion to the number of allowances allocated to replenish a cost containment reserve.[2]

   Between these options, **we would recommend adjusting the quantitative use limit on offsets in response to reserve replenishment rather than a temporary adjustment in response to market price fluctuations.** Temporarily relaxing the quantitative use limit in response to the market carbon price

[1] CARB, *Cost Containment Options in a California Cap-and-Trade Program* (June 22, 2010) at 9.
[2] *Ibid.* at 16.

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reaching a trigger price would be unlikely to attract significant new investment in offset supply. Offset projects take time to develop, and offset project developers would have difficulty rapidly registering projects in response to a temporary increase in demand. In addition (as ARB staff note on slide 9) many offset projects may need a reasonable expectation of adequate demand for a more extended period to appear financially viable and attract investment. In theory offset supply might increase slightly as a function of the expected probability of the trigger price being reached over a given time period and the volume of increased demand, but in practice market participants would have difficulty estimating the probability of increased demand due to a trigger price being reached – carbon markets are highly volatile, particularly in the early years of operation, and forecasting is difficult.

In contrast, ARB staff note on slide 16 that ARB (if using a Reserve approach to cost containment) may consider increasing the quantitative use limit on offsets in proportion to the volume of allowances allocated to replenish the cost containment reserve, with the goal of avoiding increased prices due to decreased allowance supply. We believe that this approach would catalyze increased offset supply, *particularly if the allowances allocated to replenish the reserve are drawn from a mix of current and future vintages and the offset use limit is accordingly increased over several years*. "Smoothing" reserve replenishment across several allowance vintages in this manner would give offset project developers adequate notice of likely increased offset demand and the time to respond by seeking investment in new offset projects.

2. **Reduced Emissions from Deforestation (RED): a key cost containment and climate mitigation opportunity**.
ARB staff indicated in their presentation on offsets and linkage that ARB is considering linking to international RED credits produced by GCF partners as a source of offset supply and as a cost-containment mechanism.[3] We strongly support such a linkage: effectively reducing tropical deforestation will be critical to avoiding dangerous climate disruption, and avoiding such deforestation can create significant co-benefits including biodiversity conservation and more sustainable development pathways. California has the opportunity to be a global leader in fostering concrete action on this critical issue by offering clear support for RED within the AB32 policy framework.

It will be difficult to significantly reduce tropical deforestation (within the territory of GCF Partners or elsewhere) in the absence of private-sector investment, however. **We recommend that ARB: a) formally link to the GCF process and/or particular GCF Partners as rapidly as is reasonable and possible; b) support a brief transitional period of project-level RED within the GCF process to develop capacity and foster stakeholder support; and c) offer explicit support and guidance for "nested RED" (project-level RED reconciled with a sectoral baseline) within GCF Partner jurisdictions.**

We would recommend these measures for the following reasons:

ARB is relying heavily on ODS for offset supply. ARB staff noted that offsets produced through destroying stockpiles of Ozone-Depleting Substances (ODS) are currently expected to provide over 90% of offset supply through 2020.[4] We would suggest that it may be risky to rely so heavily on one source

[3] CARB, *Update on Offsets and Linkage in a California Cap-and-Trade Program* (June 22, 2010) at 22.
[4] *Ibid.* at 27.

of offset supply, given that ARB staff's March 2010 economic analysis of the AB32 Scoping Plan indicated potentially dramatic allowance price increases in the event of an offset shortage.[5] In addition, if ARB already plans to source more than 90% of offsets from outside of California, ARB should look to maximize co-benefits from its offset supply and use its policies to leverage broader climate mitigation – goals more readily achieved by clear, rapid support for RED offsets through the GCF than through such a dramatic reliance on ODS offsets.

The available science suggests that RED is critical to successful climate mitigation globally. Emissions from deforestation account for approximately 12-18% of global greenhouse gas emissions – more than the global transportation sector.[6] The Union of Concerned Scientists has stated that "The world will not be able to meet the aggressive emissions reduction targets that scientists tell us are necessary without addressing the emissions produced by tropical deforestation and forest degradation."[7] ARB has a clear opportunity in partnership with the GCF to make a significant impact on this problem, given that nearly half of the world's tropical forests are located within GCF member jurisdictions.[8]

Private-sector investment is critical to successfully reducing tropical deforestation rates. Governmental and scientific estimates have placed the cost of reducing global deforestation emissions by 50% by 2020 at $20 billion to $33 billion per year.[9] Practically speaking, governments cannot adequately finance this cost. If RED is linked to carbon markets, RED activities (whether at the national, regional, or project-level) must be financed up front to produce credits that are registered and available for sale only after verification (*ex post*). Given the cost of reducing deforestation by half by 2020, a significant funding gap exists. For example, World Bank annual lending for environmental and natural resource management between 1990 and 2007 averaged $3.3 billion.[10] Overseas Development Aid from OECD member states for forestry averaged only $439 million per annum from 2002 through 2008.[11] At the UNFCCC COP-15 in Copenhagen and in subsequent international meetings, wealthy nations have committed to approximately $4.5 billion in fast-start funding for RED over three years, or $1.5 billion per year. Even if we assume that all of these public-sector financing sources were devoted exclusively to RED, the available funds would represent at most 26% of the funding necessary annually to halve global deforestation emissions by 2020.

In the GCF context, many of the GCF partners will not have the resources to finance upfront investment in activities necessary to reduce deforestation and produce RED credits. ARB will therefore catalyze

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[5] California Air Resources Board, *Updated Economic Analysis of California's Climate Change Scoping Plan* (March 24, 2010) at 39 (indicating that the allowance price under AB32 in 2020 would increase 592% from $25 to $148 in the absence of offsets [base case scenario], suggesting the possibility of significant price increases from offset shortages short of a complete lack of supply).

[6] G. R. van der Werf et al, *CO2 emissions from forest loss*, 2 Nature Geoscience (November 2009).

[7] Union of Concerned Scientists, *Tropical Deforestation and Global Warming: A Solution* (November 2009), *available at* http://www.ucsusa.org/assets/documents/global_warming/Tropical-Deforestation-Basics.pdf.

[8] Dan Nepstad et al, *REDD+ in the Post-Copenhagen World: Recommendations for Interim Public Finance* (2010), *available at* http://www.idesam.org.br/ingles/releases/arquivos/Interim_Finance_Recommendations.pdf.

[9] *See, e.g.,* UK Office of Climate Change, *Climate Change: Financing Global Forests* (2008); Union of Concerned Scientists, *Tropical Deforestation and Global Warming: A Solution* (November 2009).

[10] World Bank Independent Evaluation Group, *Environmental Sustainability: An Evaluation of World Bank Group Support* (2008) at 3, *available at* http://siteresources.worldbank.org/EXTENVIRONMENT/Resources/EvalSumm.pdf.

[11] OECD, *ODA by Sector*, http://stats.oecd.org/Index.aspx?DataSetCode=ODA_SECTOR.

the most RED activity and have the greatest chance of ensuring a ready supply of RED offsets by adopting policies that encourage private-sector investment, while maintaining the atmospheric and environmental integrity of the resulting credits.

Creating a brief transitional crediting window for project-level RED activities would offer many advantages. As ARB staff noted, many GCF partner jurisdictions will not be able to implement sectoral RED crediting in the near future. A brief (2-3 year) transitional crediting window for project-level RED, with credits issued directly to projects based on emissions reductions measured against project-level baselines, would:

- Provide concrete incentives for early action in GCF partner territory, protecting forests that would otherwise be lost;
- Build confidence and public buy-in among GCF partners that RED finance is real and that significant governmental effort is warranted;
- Help GCF partner jurisdictions build the necessary experience, technical capacity and institutional arrangements to establish robust sectoral RED crediting programs; and
- Provide ARB with a mechanism for low-risk learning with RED in the early years of the compliance market.

GCF partner jurisdictions that meet criteria set by ARB could nominate a number of pilot projects, which could be registered with a qualified external program linked to by ARB and verified by approved third-party auditors. The GCF process is actively considering pilot projects, and ARB's explicit support for such projects would enable investment to flow to GCF partners, giving them a significant incentive for more rapid development of the infrastructure necessary for sectoral RED crediting.

We understand the concerns expressed by various stakeholders over the possible leakage associated with project-level RED activities. These leakage concerns could be addressed by the limited duration of the crediting, the leakage provisions in quantification protocols in qualified external programs (e.g. *ex post* quantification of leakage and leakage deductions), and a requirement that any pilot RED projects transition into a nested RED framework after project-level crediting ceases.

Offering explicit support and guidance for "nested RED" would leverage continued private-sector investment over time while addressing leakage concerns. While a transitional window for project-level RED crediting would help "jump start" RED infrastructure and capacity development in GCF partner jurisdictions, longer-term success in reducing deforestation and sourcing RED offsets will likely depend on successful development of programs that enable project-level RED activities reconciled within a regional or national baseline emissions reference – "nested RED".

A few GCF partners will be able to successfully reduce deforestation through governmental programs financed through internal resources or ODA. Many will not, however, due to inadequate resources or limits to effective governmental control over key deforestation agents. By offering explicit support and guidance for nested RED, ARB would facilitate effective avoided deforestation within a wider range of GCF partners while maintaining offset credit quality. Nested RED frameworks ensure that any credits issued to project-level RED activities are not double counted and conditioned upon aggregate

state/province level performance against a regional baseline, thereby fully addressing potential leakage.

3. **Relationship of ARB Protocols to CAR Protocols.**
ARB staff indicated on June 22 that ARB is considering the Climate Action Reserve as a short-term linking opportunity, and that ARB may accept CAR Forestry 2.1 and 3.0 offsets of 2005-2014 vintages (with possible additional ARB desk review) to recognize early action to reduce greenhouse gas emissions.[12] We appreciate this indication of interest in linking to the CAR program, as such action would help ensure early offset supply. Our experience with one of the earliest mandatory greenhouse emissions trading schemes in the world (the New South Wales GGAS system) indicated that a dearth of early offset supply can lead to a significant spike in offset and allowance prices early in a system's operation. ARB's expressed interest in linking to CAR is also consistent with the State of California's expressed intent in establishing the California Climate Action Registry, CAR's predecessor organization.[13]

However, ARB's intent as expressed on June 22 and June 23 is not enough to ensure continued investment in developing CAR offsets and therefore an adequate early offset supply through CAR. In particular, **we would recommend that ARB**:

a) **Clarify whether ARB is considering accepting vintage 2005-2014 offsets from the CAR protocols mentioned regardless of project registration date, or whether projects must be registered prior to a date certain for their offset credits to be considered for linkage**;

b) **Either link to CAR protocols or not link to them pursuant to a formal rulemaking, but avoid an ambiguous additional ARB desk review of offsets already verified according to an approved CAR protocol**. The supply side of the offset market currently faces dramatic political risk and uncertainty, and very little further investment in CAR offset development will occur if an investor is uncertain whether the CRTs will be accepted even if a CAR protocol is approved and linked to. In the alternative, ARB should clearly specify what criteria it will apply during any "additional ARB desk review . . . needed to meet regulatory requirements" that is mentioned on slide 21 of the June 22 presentation. This will help investors, compliance buyers and project developers assess whether a given offset project's credits are likely to be marketable in the compliance system.

c) **Accept offsets registered under CAR forestry protocols 2.1 and <u>3.x</u>**. ARB staff indicated on June 22 that ARB may consider allowing credits issued under CAR voluntary protocols Forestry 2.1 and 3.0 to be used for compliance. No offset credits have been or will be issued under CAR's forest project protocol v3.0: CAR has already issued version 3.1 under an "errata and clarifications" document that will apply to all forestry projects listed but not yet verified and

[12] CARB, *Update on Offsets and Linkage in a California Cap-and-Trade Program* (June 22, 2010) at 21.

[13] "The state hereby commits to use its best efforts to ensure that organizations that . . . register emissions results that are verified in accordance with this chapter receive appropriate consideration under any future . . . state regulatory scheme relating to greenhouse gas emissions." S.B. 1771 §42801(e) (while further noting that the state cannot guarantee such recognition).

registered.[14] Approximately 140 forestry projects have been listed pursuant to the CAR forestry protocol v3.x, but none have been registered to date; thus, all forestry projects except for the few projects registered under v2.1 will be verified and registered according to version 3.1 or later. ARB should therefore plan to accept offset credits verified to any minor variation of the 3.0 protocol (e.g. 3.1, 3.2, 3.x) if it plans to accept v3.0 offset credits.

4. **Permanence: liability and buffer reserves**.

ARB staff note in slide 24 that ARB is considering requiring compliance buyer liability and/or a buffer reserve as tools for managing the permanence of carbon offsets that are subject to reversals, such as forest carbon offsets.

We recommend the buffer pool approach adopted by CAR or, in the alternative, blending that approach with a brief buyer liability period. We understand the enforcement rationale behind holding large compliance buyers liable for reversals; however, we are unaware of any active emissions trading system that uses this as a technique to manage offset permanence. Forest carbon offsets will effectively trade at a substantial discount if they are not fully fungible with offsets that avoid emissions through a 'one-off' action, such as methane or ODS projects. If they trade at a substantial discount it is less likely that the price will be adequate to incentivize any substantial investments in increasing the sequestration activity of California's forests.

We therefore recommend that ARB adopt the buffer pool approach, which enables forestry offsets to be fully fungible with all other offsets in the market. We believe this is the best approach to manage the inherent 'reversibility' of any land-based offsets. We also believe that the majority of offset supply can and should come from such land-based offsets due to the co-benefits such offsets can provide to California's citizens and the environment. A buffer approach avoids relegating forestry and agricultural offsets to a second – and likely unused – tier of offsets.

In the alternative, if ARB does choose to impose liability for offset reversal on compliance buyers, we would urge ARB to limit the amount of time that compliance buyers are exposed to such liability. For example, a liability period of five to ten years could be more easily managed contractually by compliance buyers: they could assess the creditworthiness of the project developer and/or landowner counterparty and seek indemnification in the event of a reversal over that time period. An open-ended liability or more extended liability period would leave compliance buyers unable to assess the long-term value of such an indemnification, leading them to place a significant discount on forestry offsets – and the reduced price would likely lead to a collapse in supply of forestry offsets.

A short (5-10 year) buyer liability period for reversals could be followed by the activation of a CAR-style buffer reserve to fully manage permanence from an atmospheric perspective. We believe that a pure buffer reserve approach is the best approach to managing permanence for land-based offsets, but if

[14] *See* Climate Action Reserve, *Forest Project Protocol, Version 3.1 Errata and Clarifications* (June 8, 2010) at 1, *available at* http://www.climateactionreserve.org/wp-content/uploads/2009/03/Errata_and_Clarification_FPP__v3_1_06-08-10.pdf ("Both errata and clarifications are considered effective on the date they are first posted on the Reserve website. The effective date of each erratum or clarification is clearly designated below. All listed and registered FPP projects must incorporate and adhere to these errata and clarifications when they undergo verification.")

ARB does choose to create the first emissions trading system with buyer liability for offset permanence, we would recommend considering the above approach.

We thank you for your time and for considering our comments.