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Re: Comments on April 5, 2016 Workshop - Ongoing Evaluation of the Potential for Sector-Based Offset Credits in California's Cap-and-Trade Program

Dear California Air Resources Board staff,

Thank you for the opportunity to comment on the California Air Resources Board (CARB) slideshow presentation of April 5, 2016. International sector-based offset credits have implications for carbon pricing across parties actively engaged in emissions trading under the Western Climate Initiative (WCI), including California, Quebec and new emerging North American partner jurisdictions. CARB's deliberations also hold promise for finally putting into action the Reducing Emissions from Deforestation and Forest Degradation (REDD+) mechanism, long discussed at the UNFCCC, and actively involve less developed countries in the fight against climate change.

My comments are intended to be constructive and inform CARB deliberations on international sector-based carbon offsetting, especially arrangements for monitoring, reporting and verification (MRV). My interpretation of MRV is broad and assume that it implies regulatory and governance structures in addition to technical issues. Indeed, in a recent review of the term's use in international climate change negotiations, one observer has noted that "'MRV' was adopted as the catchall for the metrics and assurance processes covering the full range of emerging climate change initiatives" (Gillenwater, 2014: 57).

The comments that I provide below are informed by field-based empirical research into the effectiveness and implementation of international climate finance instruments that I have conducted over the past decade, including research into the Clean Development Mechanism (CDM), REDD+ as well as Nationally Appropriate Mitigation Actions, NAMAs (Purdon, 2005; 2009a; b; 2010; 2013; 2014; 2015b; Purdon and Lokina, 2014; Purdon et al., 2014). This work has emphasized comparative, cross-national approaches in an effort to understand the conditions most conducive to the effective implementation of climate finance instruments (see Purdon, 2015a). A common theme running through my comments is that any mechanism for international sector-based offset credits should be designed with an appreciation of the economic, technical and political challenges involved.

1) The need for prudence

While I urge CARB to proceed with international sector-based offset credits, there is a need for prudence. Currently, only six countries have submitted forest reference levels/forest reference emission levels to the

UNFCCC, the key design element against which offset credits are to be generated.[1] Consequently, it is likely that many design challenges remain to be identified as these countries move towards implementation. Because REDD+ is only at the early stages of implementation, opportunities for ex-post evaluation are limited. Much of the published academic literature on REDD+ is, therefore, based on assumptions about expected practice that need to be verified. There are concerns that much of this research has not paid sufficient attention to capacity constraints as well as political and administrative challenges. As a recent survey concluded, "The majority of [REDD+ economic modeling] studies have produced optimistic benchmarks for each application that do not consider policy realities and practical implementation issues" (Lubowski and Rose, 2013: 69). More recent modeling efforts have sought to account for political and technical risks, leading to substantial upward revisions of the costs of implementing REDD+ (Coren et al., 2011; Rose et al., 2014). Non-price factors, including governance arrangements, state capacity and public policy paradigms, are increasingly being recognized as important factors shaping efforts to reduce deforestation and other international climate finance instruments (Assunção et al., 2012; Kanowski et al., 2011; Kashwan, 2015; Korhonen-Kurki et al., 2014; Purdon, 2015b).

2) Importance of development interests

Efforts should be made to align climate finance instruments with the development interests of countries involved, because the possibility of such alignment has important implications for the level of incentive required to bring countries genuinely onboard with mitigation activities such as REDD+ and thus the challenges facing MRV. REDD+ implies a significant change to the traditional process of economic development, which saw forest clearance as a part of economic development followed by, in post-industrial societies, movement towards forest restoration (Angelsen and Rudel, 2013). Land management has historically played a crucial role in rural development and the early stages of industrialization (Boone, 2007; Kay, 2009; Kohli, 2004). Given these historical precedents, without a credible commitment from the international community, many jurisdictions are unlikely to see international efforts to halt deforestation as being in their immediate economic development interests.

Most carbon offsetting systems have assumed that a carbon price would allow for mitigation activities incentivized through carbon finance to be easily distinguished from background "noise". The counterfactual approach that underlies many carbon offsets would be more justifiable if the changes induced by carbon finance were transformative and easily observable. However, my research suggests that at currently low global carbon prices, international carbon finance has been used effectively for reducing emissions when mitigation activities are implemented for developmental purposes. In particular, my ex-post evaluations of CDM forest and bioenergy projects suggests that international carbon offset projects have been most effective in genuinely reducing emissions when they are aligned with state development interests, effectively supporting the state to extend existing development efforts that have the ancillary benefit of climate change mitigation (Purdon, 2014; 2015b; Purdon and Lokina, 2014). Such alignment is particularly important given uncertainties about the long-term viability of international carbon finance as well as currently low international carbon offset prices.

The implication is that financial incentives realized through REDD+ may not be sufficient on their own to drive genuine emission reductions. If reducing deforestation is not a country's development priority, this may imply that a higher carbon price is necessary than is typically considered appropriate. I note that the World Bank Forest Carbon Partnership Facility has committed a willingness to pay only up to $5 per tCO2e for REDD+ (WB-FCPF, 2014: 29), much lower than allowance prices on the California-Quebec carbon

[1] http://redd.unfccc.int/submissions.html?topic=6

market. While there will likely be pressure to seek out REDD+ offset credits at lowest possible price, it is important that the price not be so low that it renders its effect on deforestation trends difficult to observe.

3) Environmental integrity risk management tool

While assuring that international sector-based offset systems align with country development interests remains important, a technical solution for managing the risk of violating environmental integrity might also be created in order to better ensure that international offset credits are genuine (see Meyers, 1999). Such a tool bears many similarities to tools being considered by CARB for the management of forest carbon permanence and could be integrated with them in order to constitute a comprehensive MRV system. While details remain to be elaborated, briefly such a tool may be envisioned as consisting of, first, an ex-ante environmental integrity risk analysis that would be used to assign the REDD+ programme an environmental integrity risk score which would indicate, secondly, the amount of carbon credits that need to be deposited in a environmental integrity risk buffer account. Finally, carbon credits in this account would be issued upon an ex-post additionality evaluation at the end of the crediting period, with the exact amount of credits issued depending on the degree to which environmental integrity has been achieved relative to the ex-ante assessment.

4) Demand and offset systems design in California and partner jurisdictions

Technical solutions to MRV challenges are not only to be found in developing countries hosting REDD+ projects, but might also be found in policy design in California and partner jurisdictions accepting international sector-based offset credits. Already the price floor built into the emissions trading scheme between California and linked trading jurisdictions such as Quebec promises to help stabilize prices for international sector-based offset credits. However, other more technical solutions exist to minimize the negative effects of bogus carbon credits, including discounting carbon credits relative to emission allowances in cap-and-trade systems (Chung, 2007; Murray et al., 2013). CARB may want to consider such arrangements as part of its system for accepting international sector-based offset credits.

Thank you for considering these comments. I would be happy to discuss any of these issues with CARB staff in further detail if there were interest in doing so.

Kind regards,

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References

Angelsen A and Rudel TK (2013) Designing and implementing effective REDD+ policies: A forest transition approach. *Review of Environmental Economics and Policy* **7**:91-113.

Assunção J, Gandour CC and Rocha R (2012) Deforestation slowdown in the Legal Amazon: prices or policies. *Climate Policy Initiative Working Paper*.

Boone C (2007) Property and Constitutional Order: land tenure reform and the future of the African state. *African Affairs* **106**:557-586.

Chung RK (2007) A CER discounting scheme could save climate change regime after 2012. *Climate Policy* **7**:171-176.

Coren MJ, Streck C and Madeira EM (2011) Estimated supply of RED credits 2011–2035. *Climate Policy* **11**:1272-1288.

Gillenwater M (2014) Reflections on MRV in an Era of Climate Policy Sluggishness, in *Greenhouse Gas Market 2014* (Kouchakji K ed) pp 57-59, IETA, Geneva.

Kanowski PJ, McDermott CL and Cashore BW (2011) Implementing REDD+: lessons from analysis of forest governance. *Environmental Science and Policy* **14**:111-117.

Kashwan P (2015) The Political Economy of REDD+: A Comparative Analysis of India, Tanzania, and Mexico. *Global Environmental Politics* **15**:95-117.

Kay C (2009) Development strategies and rural development: exploring synergies, eradicating poverty. *Journal of Peasant Studies* **36**:103-137.

Kohli A (2004) *State-directed Development: political power and industrialization in the global periphery*, Cambridge University Press, Cambridge.

Korhonen-Kurki K, Sehring J, Brockhaus M and Di Gregorio M (2014) Enabling factors for establishing REDD+ in a context of weak governance. *Climate Policy* **14**:167-186.

Lubowski RN and Rose SK (2013) The potential for REDD+: Key economic modeling insights and issues. *Review of Environmental Economics and Policy* **7**:67-90.

Meyers S (1999) *Additionality of Emissions Reductions From Clean Development Mechanism Projects: Issues and Options for Project-Level Assessment*, Ernest Orlando Lawrence Berkeley National Laboratory, Berkeley, CA.

Murray BC, Busch J, Woodward RT and Jenkins A (2013) Designing Cap and Trade to Correct for Non-Additional Offsets. *Duke Environmental and Energy Economics Working Paper EE*:13-05.

Purdon M (2005) What potential for rural development in Cameroon through the Clean Development Mechanism (CDM) of the Kyoto Protocol?, Cameroon Ministry of Environment and Nature Protection and CIDA, Yaounde.

Purdon M (2009a) Bio-carbon Overview, in *Bio-Carbon in Eastern & Southern Africa: harnessing carbon finance to promote sustainable forestry, agro-forestry and bio-energy* (Kelly R and Purdon M eds) pp 2-25, UNDP, New York.

Purdon M (2009b) Implementing Forest Bio-Carbon Projects: summary and synthesis of existing CDM methodologies for AR and forest bio-energy, in *Bio-Carbon in Eastern & Southern Africa: harnessing carbon finance to promote sustainable forestry, agro-forestry and bio-energy* (Kelly R and Purdon M eds) pp 50-85, UNDP, New York.

Purdon M (2010) The Clean Development Mechanism and community forests in sub-Saharan Africa: reconsidering Kyoto's "moral position" on biocarbon sinks in the carbon market. *Environment, Development and Sustainability* **12**:1025-1050

Purdon M (2013) Land Acquisitions in Tanzania: strong sustainability, weak sustainability and the importance of comparative methods. *Journal of Agricultural and Environmental Ethics* **26**:1127-1156.

Purdon M (2014) *Ex-post Evaluation of the Additionality of a Clean Development Mechanism Cogeneration Project in Uganda: the signficance of changes in project financing and background economic conditions - GRI Working Paper 152*, Grantham Research Institute on Climate Change and the Environment Working Paper, London.

Purdon M (2015a) Advancing Comparative Climate Change Politics: Theory & Method. *Global Environmental Politics* **15**:1-26.

Purdon M (2015b) Opening the Black Box of Carbon Finance "Additionality": the Political Economy of Carbon Finance Effectiveness across Tanzania, Uganda and Moldova. *World Development* **74**:462–478.

Purdon M and Lokina R (2014) *Ex-post Evaluation of the Additionality of Clean Development Mechanism Afforestation Projects in Tanzania, Uganda and Moldova - GRI Working Paper 149*, Grantham Research Institute on Climate Change and the Environment Working Paper, London.

Purdon M, Lokina R and Bukenya M (2014) Comparing the effectiveness of forest sector reforms in Tanzania and Uganda, in *Forest Tenure Reform in Asia and Africa: Local Control for Improved Livelihoods, Forest Management, and Carbon Sequestration* (Robinson E and Bluffstone R eds) pp 83-106, Resources for the Future Press, Washington, DC.

Rose S, Beach R, Calvin K, McCarl B, Petrusa J, Sohngen B, Youngman R, Diamant A, de la Chesnaye F, Edmonds J, Rosenzweig R and Wise M (2014) *Market Realities for Global Mitigation Supply: Accounting for Investment Risks* IAMC Annual Meeting, November 14, 2014. Available at (accessed 5 March 2015): http://www.globalchange.umd.edu/iamc_data/iamc2014/Rose_IAMC_Nov_2014_final.pdf, College Park, Maryland

WB-FCPF (2014) *2014 Annual Report*, World Bank, Washington, DC.