

Options Paper

Regulatory Design Options for Subnational REDD Mechanisms

**Expert Meeting
Sacramento, CA
February 18-19, 2010**

**William Boyd
University of Colorado Law School
GCF Advisor and Project Lead
email: william.boyd@colorado.edu**

SUMMARY & BACKGROUND

This options paper (“Options Paper”) was prepared for the upcoming technical meeting on REDD regulatory design sponsored by the Governors’ Climate and Forests Task Force (“GCF”) and the California Resources Agency. It provides an overview of some of the key issues and associated design options that might be considered in the development of regulatory provisions governing the acceptance of REDD offsets into a greenhouse gas (“GHG”) compliance system. The Options Paper was prepared in consultation with a number of workshop participants. It does not reflect any positions of the GCF, the California Resources Agency, the California Air Resources Board (“ARB”) or any other body.

Although the impetus for the workshop and much of the agenda has been driven by the ongoing California rulemaking, it is very important that this effort look beyond California in order to ensure consistency (to the extent possible) with the development of REDD provisions in other fora. To that effect, the Options Paper discusses, where appropriate, relevant provisions from ARB’s Preliminary Draft Regulation (“PDR”); the proposed U.S. federal legislation; and the UNFCCC discussions and decisions on REDD.

The intent of the Options Paper is to identify issues and options to frame the discussion at the technical workshop. It should not be read as an endorsement, or lack thereof, of any particular option or approach. Nor should it be taken as any sort of comprehensive treatment of the relevant issues. Given the time constraints, we have been selective in choosing issues for the workshop. The goal is to frame the issues and options in a way that captures the art of the possible and, accordingly, channels the discussion in a manner that will generate recommendations for possible regulations that are workable and that meet the environmental and other goals of emerging GHG compliance systems in California and elsewhere.

The issues and options discussed below focus specifically on the development of regulatory provisions that would govern REDD credits generated on the basis of a jurisdiction-wide approach at the state or provincial level in tropical forest countries. Such an approach could take a number of pathways, including (a) credits issued by the regulator to “nested” REDD projects that meet specific eligibility criteria and are reconciled with state/province-level accounting and (b) acceptance of credits issued by an approved external state or provincial REDD program. Therefore, in exploring these different options, the workshop will not spend much time discussing provisions for stand-alone REDD projects, unless such provisions relate directly to the development of larger architectures for jurisdiction-wide accounting.

Obviously, the concept of a “sector-based” approach to offsets is novel and untested, but it is clear from both the U.S. federal legislation and the PDR that there is a preference for the development of such an approach as opposed to pure, project-based

offsets. Accordingly, REDD could provide one of the first test cases for a sector-based approach to offsets.

* * * * *

As noted, workshop discussions will proceed under Chatham House rules. A summary report of the workshop, including any recommendations on design options, will be developed shortly after the workshop and made available to participants, ARB staff, and others. Nothing from the workshop discussions or the summary report will be attributed to any individual or organization.

The background document prepared by ARB staff and circulated on February 12, 2010 summarizes key provisions of the PDR that are relevant for the workshop and should therefore be read in conjunction with this Options Paper.

Because this workshop is focused on regulatory design options, participants should think carefully about what is practicable and how to operationalize particular substantive goals into regulatory language without imposing prohibitive transactions costs. To some extent, the REDD provisions in the proposed U.S. federal legislation and in the UNFCCC debates (as well as some of the language on international forest carbon activities in the ARB Scoping Plan) provide guidance in terms of overall direction and the general parameters of the “art of the possible,” but they lack many details necessary to develop a fully operational REDD program. Thus, it is very important to drive this discussion to a more granular level of resolution for the purposes of regulatory design. In doing so, we should strive to keep things simple, avoiding unnecessary complexity (substantive and procedural). Where possible, we should also seek to preserve flexibility and modularity given that the overall regulatory architectures -- state, federal, international -- are still taking shape (*i.e.*, we should be looking for ways to frame particular requirements, criteria, tools, and procedural options in a manner that would allow them to fit under various regulatory architectures). We should also build on what is happening in tropical forest countries, with eye toward what is feasible on the ground. And, where relevant, we should look to standards and methodologies developed for the voluntary markets, asking how they can inform and/or be incorporated into the compliance markets. This is not the time to reinvent the wheel. Finally, we need to guard against asking too much of REDD and avoid letting the perfect be the enemy of the good.

KEY ISSUES AND DESIGN OPTIONS

The workshop will begin with a brief discussion of some preliminary issues regarding definitions and scope of REDD activities and the overarching legal arrangements that might govern particular crediting pathways.

As summarized in the Agenda and discussed in more detail below, the workshop will then work through the following issues:

- (1) Crediting Pathways
- (2) State/Province-Level Accounting
 - a. Baselines and Targets
 - b. State/Province REDD Planning
 - c. GHG Inventory/Registry Requirements
- (3) Monitoring, Reporting, Verification (“MRV”) of Performance
 - a. MRV of State/Province Performance
 - b. MRV of Nested Project Performance
- (4) Safeguards
 - a. Environmental Safeguards
 - b. Protection of Rights/Interests
 - c. Benefit Sharing
- (5) Enforceability
- (6) Early Action/Phased Approach

CREDITING PATHWAYS

REDD regulations (state or federal) will need to specify how, and to whom, REDD credits will be issued. For activities within states and provinces, various crediting options are available, including direct crediting to project-level activities, perhaps as nested projects within larger state or provincial accounting frameworks; direct crediting to states or provinces based on reductions that result from policies or programs; and recognition of credits issued under an approved state or provincial program, or perhaps some other external program. These options are not mutually exclusive. That is, one could envision REDD regulations that allowed for the possibility of multiple crediting pathways available to different states/provinces depending on particular circumstances.

Getting some clarity on crediting options upfront is important because crediting will determine how one approaches the design of regulations and the identification of criteria for accounting, safeguards, etc. Crediting decisions will also influence how issues such as enforceability are handled.

Assuming that it is unlikely under either a federal or a California system that crediting would go directly to stand-alone REDD projects (except perhaps in small developing countries or as part of an early offset supply), this workshop will focus on crediting options that involve some type of state-level accounting and/or performance. It is also important to recall that crediting under such systems will be *ex post*; that is, credits will only issue after performance has been demonstrated.

- **Current Thinking:**

- **ARB PDR:** The PDR offsets provisions contemplate two primary crediting pathways for offsets to enter a California system.
 - First, ARB would act as the credit issuing body, with credits going to projects (nested projects perhaps) and/or possibly to states or provinces for performance relative to a sector-wide crediting baseline.
 - Second, ARB could recognize credits issued by a Board approved external program, which could include state/province REDD programs or perhaps a credit-issuing standards body. As currently written, such a pathway could fit under both the linked external program sections of the PDR and the sector-based crediting provisions of the PDR,.
- **Proposed U.S. Federal Legislation:** HR 2454 provides that the Administrator “may issue international offset credits for greenhouse gas emission reductions achieved through activities to reduce deforestation at a state or provincial level” that meet the specific eligibility requirements of the legislation. Elsewhere, the legislation refers to “activities” occurring within the relevant jurisdiction as the basis for generating credits. Thus, there seems to be some flexibility in terms of how the crediting would be designed in the implementing regulations, with no specific requirement that the crediting go either directly to a state or province or directly to a project-level activity that is nested within and reconciled with state/provincial accounting.¹ It also seems plausible that, under the current language, the

¹ The most recent version of the Boxer-Kerry bill expressly contemplates the possibility of nested crediting. See section 744(e)(7) on “offset credit issuance,” which states that “[r]equirements under this subsection to issue international offset credits only if the quantity of the international offset credits is determined by reference to a national, State-level, or province-level deforestation baseline do not preclude the Administrator from issuing a portion of the total quantity of those credits directly to an

Administrator could, in similar fashion to sector-based crediting approach contemplated in the PDR, recognize credits issued under a state/province level REDD program and “issue” credits that would be converted from the state- or province-issued credits.

- **UNFCCC:** N/A.
- **Design Options:**
 - **Option 1:** Regulatory agency (ARB, EPA, etc.) recognizes “sector-based credits” issued by approved country, state/province, or program as contemplated in the current PDR and based on performance relative to specific target or trajectory (see below). Such sector-based credits would need to be converted to the appropriate offset currency, *e.g.*, California Offset Credit or International Offset Credit under a U.S. federal system, with proper accounting to avoid double counting, before they could be tendered for compliance purposes in the relevant GHG compliance system.
 - **Option 2:** Regulatory agency (ARB, EPA, etc.) issues credits directly to states or provinces for specific program-level activities that are part of overall state or provincial REDD program and on condition that state/province performs relative to specific target or trajectory (see below).
 - **Option 3:** Regulatory agency (ARB, EPA, etc.) issues credits directly to projects that are “nested” within state/province-level REDD program, reconciled with state-level accounting, and conditioned upon state/province performance relative to specific target or trajectory (see below).
 - **Option 4:** Include two or more of the above options as distinct crediting options/pathways. Different states/provinces could choose among the pathways and perhaps move from one pathway to another over time.

STATE/PROVINCE-LEVEL ACCOUNTING

For all of the crediting options discussed above, some type of state/province-level accounting would be necessary. This Options Paper divides the discussion of design options for state/province-level accounting into the following areas:

offset project developer for use in carrying out activities in accordance with this section that contributed to a reduction in emissions, if that issuance is authorized by—(A) the agreement or arrangement described in subsection (b)(2)(A); and (B) if the credits are issued pursuant to paragraph (5), by the State or provincial government.

- (a) Baselines and targets
- (b) State/province REDD plans
- (c) GHG inventory/registry requirements

This is followed by a separate section on monitoring, reporting and verification of performance (MRV), recognizing that this is a somewhat artificial distinction and that MRV could easily be included under State-Level Accounting.

- **Baselines & Targets:**

- **Current thinking:**

- **ARB PDR:** the provisions for sector-based crediting require “a quantitative crediting baseline” for the sector and outline certain criteria that would apply in establishing such a crediting baseline.
 - For crediting baselines established on the basis of “an absolute GHG emissions level,” the PDR states that the “crediting baseline must be established at a lower level of GHG emissions than would occur under a business-as-usual scenario.” The PDR concept note on sector-based crediting states further that “[t]o ensure additionality, this baseline must be established below the projected business-as-usual performance level for the target sector.”
 - The PDR further provides that “to set the crediting baseline, the country, state, province, or international program issuing the sector-based credit must take into account the relevant current and historical trends in the sector as well as domestic and international policies or incentives to reduce GHG emissions, sequester GHG, or improve technology adoption.”
 - Finally, the PDR provides that “the additionality and the performance of the sector will be based on the crediting baseline”
- **Proposed Federal Legislation:** For large states and provinces, the proposed legislation (HR 2454) provides that a state or province deforestation baseline shall:
 - be consistent with any existing nationally appropriate mitigation commitments or actions for the country in which the activity is occurring, taking into consideration the average

annual historical deforestation rates of the state or province during a period of at least 5 years, relevant drivers of deforestation, and other factors to ensure additionality;

- establish a trajectory that would result in zero net deforestation by not later than 20 years after the state or province deforestation baseline has been established; and
 - be designed to account for all significant sources of greenhouse gas emissions from deforestation in the state or province and adjusted to fully account for emissions leakage outside the state or province.
- **UNFCCC:** The recent COP SBSTA decision on methodological guidance for REDD+ “[r]ecognizes that developing country Parties in establishing forest reference emission levels and forest reference levels should do so transparently taking into account historic data, and adjust for national circumstances, in accordance with relevant decisions of the Conference of the Parties.”
- **Design Options:**
 - Under the sector-based crediting provisions in the PDR and in the federal legislation, the notion of a “crediting baseline” (to use the PDR’s phrase) would include the initial baseline determination and any pre-determined trajectory or target that would determine the performance level necessary for crediting. The following options discussion is thus organized in two parts: (a) initial baseline determination; and (b) trajectory and targets.
 - **Initial Baseline Determination:**
 - **Option 1:** Emissions reference level determined from (a) averaging of historical annual deforestation rates based on spatially-explicit activity data from remote sensing (including specific criteria on remote sensing resolution, etc.?) for a set period and (b) carbon emissions factors for relevant forest classes based on IPCC tiers (tier 2?).
 - **Option 1a:** Require at least 5 years of data from a specified period (e.g., 1995-2010)
 - **Option 1b:** Require at least 10 years of data from a set period (e.g., 1995-2010)

- Questions:
 - Does 10-year data requirement exclude certain states/provinces because of lack of available data during the relevant time period?
 - How to deal with the fact that strict historical approach excludes certain low-deforestation states/provinces (see option 2)?
 - **Option 2:** Emissions reference level from Option 1 adjusted to account for high-forest/low-deforestation states/provinces. How adjusted?
 - **Option 3:** Emissions reference level based on projected or simulated business as usual (BAU) emissions.
 - **Others?**
- **Targets/Trajectories:**
 - **Option 1:** Step-wise downward trajectory to a defined target – *e.g.*, XX% reductions by 2020; zero “net” deforestation within 20 years, etc. – where crediting only possible if emissions are below the specified trajectory in each crediting period.
 - **Option 2:** Start with emissions reference level (initial baseline) as crediting baseline for first “compliance period” and use performance below crediting baseline in previous crediting period as new crediting baseline for next crediting period.
- **State-wide REDD Plan/Strategy**
 - **Current Thinking:**
 - **ARB PDR:** The PDR provisions on sector-based crediting (including the concept note) do not say anything explicit about state/province-level sectoral planning. But the PDR does appear to contemplate this possibility, noting that states and provinces will need to adopt policies and measures to achieve performance in the relevant sector as well as MRV systems for measuring performance.
 - **Proposed Federal Legislation:** For large states and provinces, the proposed legislation (HR 2454) provides that such states and

provinces must have in place a “land use or forest sector strategic plan that— (i) assesses [state/provincial] and local drivers of deforestation and forest degradation and identifies reforms to [state/provincial] policies needed to address them; (ii) identifies the [state/province] emissions from deforestation and forest degradation; (iii) identifies improvements in data collection, monitoring, and institutional capacity necessary to implement a [state/province] deforestation reduction program; and (iv) establishes a timeline for implementing the program and transitioning to low-emissions development with respect to emissions from forest and land use activities.”

- **UNFCCC:** The draft AWG-LCA REDD decision contemplates the development of “a national strategy or action plan and, as appropriate, a subnational strategy.”

- **Design Options:**

- **Option 1:** Require that any REDD activities (nested projects, programmatic activities, or approved state/province REDD programs) be included within and/or based upon an approved state/province REDD plan/strategy. Any regulations to this effect would need to specify the following:
 - Basic elements/criteria for REDD plan/strategy
 - Process for review and approval (*e.g.*, direct approval by regulator or independent third-party certification?)
 - Requirements for updating
 - Stakeholder participation and other procedural requirements (see Safeguards discussion below)
- **Option 2:** Require approved REDD plan/strategy only for states/provinces seeking approval as external, credit-issuing program. For nested projects, require only that project in question be approved by the state/province (and be reconciled with state-level accounting).

- **GHG Inventory/Registry Infrastructure**

- **Current thinking:**

- **ARB PDR:** The PDR provisions on linkage to external programs and sector-based crediting require tracking and registrations systems and related infrastructure. Specifically, the provisions regarding linkage to external programs specify that in order to be approved by ARB for

linkage, a GHG offset crediting system must “require that each issued offset credit is registered in a publicly accessible registry, with individual serial numbers assigned to each offset credit; be capable of transferring information on all transactions between systems; and have a tracking system which serves as a repository of issuance, ownership, and retirement information on all offset credits it issues.” Similarly, the PDR provisions for both linkage to external programs and sector-based crediting require that any MOU between ARB and the external program or jurisdiction must provide for “sufficient tracking and registration systems and related infrastructure that will record and track GHG emissions and GHG emissions reductions.”

- **Proposed Federal Legislation**: The HR 2454 international offsets provisions do not contain any registry or tracking requirements specific to states, provinces, and countries participating in the offsets program. The general offsets provisions, including those for early action, contain some general registry requirements.
- **UNFCCC**: N/A. The relevant REDD+ texts address the need for robust and transparent national forest monitoring and reporting systems, but do not discuss registries and tracking specifically.
- **Design Options**:
 - **Option 1**: Regulations require credits issued for nested REDD projects and, if relevant, REDD programmatic activities to be registered in regulatory agency’s compliance tracking registry system and meet its registration requirements.
 - **Option 2**: Regulations for external credit-issuing programs (i.e., states, provinces, or standards bodies) include specific criteria for registries and tracking systems as condition for approval of external program. Specific criteria could include:
 - Use of tracking system as repository of issuance, ownership, and retirement information on all offset credits
 - Public accessibility
 - Assignment of individual serial numbers to offset credits
 - Capability to transfer information on all transactions to external registries and tracking systems
 - Links to national-level registry (if relevant)?
 - Third-party certification?
 - Other?

MONITORING, REPORTING, VERIFICATION OF PERFORMANCE

MRV is important at two levels: (1) state/province-level performance and (2) project-level performance (in the case of a nested approach). Presumably, under the current PDR approach, many of the MRV requirements regarding project-level performance would be spelled out in a “quantification methodology” and/or additional guidance documents rather than in the regulations themselves. It is not clear at this point that EPA would follow a similar approach if/when they are tasked with developing federal regulations for a REDD program. For approved external credit-issuing programs, some of the MRV criteria/requirements may also be elaborated in the governing agreement with the program (i.e., state/province or other body) as contemplated under the PDR. Finally, any discussion of MRV – at either the state/province or project-level – will need to address whether and, if so, how much of this should be subject to independent third-party verification.

Under a nested project pathway, it is important to avoid to the extent possible any redundant accounting requirements that are more appropriately handled at the state/province level. For example, under a nested pathway, project-level leakage can be accounted for at the state/province level. Likewise, additionality, which would derive from the overall performance relative to the pre-established crediting baseline, should not matter as much under a nested approach if the project performs and the state performs below the crediting baseline. Permanence (or reversals) might also be handled differently under these pathways (see Enforceability discussion below).

- **MRV of State/Province Performance**

- **Current thinking:**

- **ARB PDR:** The PDR provides that sector-based credits can be approved only if the “country, state, province, or program issuing the sector-based credit has implemented substantive and procedural requirements for the relevant sector that would provide equal or greater assurance of the integrity of such sector-wide GHG reductions or avoidances, or GHG sequestration as is provided by the requirements for other offset credits approved under this article.” The PDR concept note on sector-based crediting states that “it is essential that adequate monitoring, reporting, and verification (MRV) systems be in place” to ensure that no credits will be earned “until the crediting baseline is reached and surpassed.” The PDR concept note further contemplates “cooperative Memorandums of Understanding (MOUs) for verification and enforcement” with states and provinces seeking to participate in sector-based crediting and discusses the option of establishing “a joint MRV program between California and interested developing country states or provinces. For

example, an MRV committee could be established in the developing country, state or province that could include some California representatives to help guide the process and establish the rules. Once the crediting baseline is reached, there could also be third party independent verification to ensure reductions achieved beyond the crediting baseline are real, additional, quantifiable, permanent, verifiable and enforceable.”

- **Proposed Federal Legislation**: For large states and provinces, the proposed legislation (HR 2454) provides that eligible states and provinces must have
 - “the technical capacity to monitor, measure, report, and verify forest carbon fluxes for all significant sources of greenhouse gas emissions from deforestation with an acceptable level of uncertainty, as determined taking into account relevant internationally accepted methodologies, such as those established by the Intergovernmental Panel on Climate Change”
- **UNFCCC**: The recent COP decision on methodological guidance for REDD+ requests developing country Parties
 - “To use the most recent Intergovernmental Panel on Climate Change guidance and guidelines, as adopted or encouraged by the Conference of the Parties, as appropriate, as a basis for estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes;”
 - “To establish, according to national circumstances and capabilities, robust and transparent national forest² monitoring systems and, if appropriate, sub-national systems as part of national monitoring systems that:”
 - “Use a combination of remote sensing and ground-based forest carbon inventory approaches for estimating, as appropriate, anthropogenic forest-related greenhouse gas emissions by sources and

² The decision contains the following footnote here: “Taking note of, if appropriate, the guidance on consistent representation of land in the Intergovernmental Panel on *Climate Change Good Practice Guidance on LULUCF*.”

removals by sinks, forest carbon stocks and forest area changes;”

- “Provide estimates that are transparent, consistent, as far as possible accurate, and that reduce uncertainties, taking into account national capabilities and capacities;”
- “Are transparent and their results are available and suitable for review as agreed by the Conference of the Parties;”

The AWG-LCA draft decision on REDD+ also states that the development of national and/or subnational forest monitoring systems should include information on how social and environmental safeguards (see below) are being addressed.

- **Design Options:**
 - **Option 1:** establish and/or reference general criteria for MRV, with possible further elaboration in guidance documents, that would be incorporated within the general requirements for approval of a particular state or province (or other body) as a credit-issuing body under the sector-based crediting approach and, specifically, in any MOU governing such an arrangement. Such criteria might include:
 - Specific guidance on use of remote sensing for assessing land cover change (activity data)
 - Specific guidance on use of IPCC emissions factors (tier 2 or 3)
 - Specific guidance on MRV for social and environmental safeguards
 - Provisions for verification by accredited third parties
 - Provisions for public availability and transparency of MRV data (see inventory/registry discussion above)
 - Specific guidance on accounting for leakage including, where relevant and feasible, links to national-level accounting
 - Others?
 - **Option 2:** establish and/or reference general criteria for state/province-level MRV, with possible further elaboration in guidance documents, that must be met by any external standard or protocol for state/province-level performance. The regulatory body (ARB, EPA, etc.) would then approve external standard/protocol

(perhaps more than one) that meet the criteria. Credits would only be issued to state or provincial programs -- perhaps via registries operated by the external standards body -- that meet the pre-approved standard as certified/verified by independent third party.

- **Option 3**: establish and/or reference general MRV criteria for state/province level performance for nested project pathway, which could obviously incorporate parts of options 1 and/or 2 above if multiple crediting pathways are chosen.
- **Other options?**

- **MRV of Nested Project Performance**

- **Current Thinking:**

- **ARB PDR**: The general provisions on offsets require that all offset credits issued by ARB result from “an offset quantification methodology adopted by the Board.” The PDR then includes a set of requirements (§96240) for offset quantification methodologies. If ARB decided to develop regulations for nested REDD projects where ARB was issuing the offset credits to the project activity, these provisions would presumably provide some guidance for the development and approval of such quantification methodologies in the context of nested projects.
- **Proposed Federal Legislation**: Under HR 2454, the provisions for international offset credits reference the general requirements for domestic offsets, including the development of specific methodologies (with due consideration given to existing methodologies) for listed project types to determine additionality, establish baselines, quantify reductions or sequestrations, account for and mitigate potential leakage, and account for reversals. If the federal program developed in a manner that allowed for nested REDD projects, these provisions might provide some guidance regarding the development of appropriate methodologies for such projects.
- **UNFCCC**: N/A

- **Design Options:**

- **Option 1**: Require that any credits issued to nested projects be based on project-level performance as determined by application of

approved “quantification methodology.” Include within general requirements for offset project quantification methodologies a subsection that provides additional and/or modified requirements specific to nested projects. Such requirements might include:

- Specific provisions regarding accounting for leakage at the state/province level
 - Specific provisions stating that project will satisfy additionality if performance demonstrated at both project and state level
 - Specific provisions regarding accounting for reversals tied to state-level performance over time
- **Option 2**: Require that any credits issued to nested projects be based on project-level performance as determined by application of approved “quantification methodology” for existing relevant project types, and further require that the application of such quantification methodologies to nested projects take account of the relevant distinctions between stand-alone projects and nested projects.

SAFEGUARDS: GENERAL

We have divided the safeguards discussion into three subsections, which roughly track the discussion of safeguards in the proposed federal legislation: (a) environmental safeguards; (b) protection of rights/interests; and (c) benefit sharing. The whole area of safeguards, particularly those involving protection of rights/interests and benefit sharing, is a sensitive area and one that poses particular implementation challenges at the subnational level.

SAFEGUARDS: ENVIRONMENTAL

The relevance of certain environmental safeguards may depend upon the scope of eligible activities. Moreover, to the extent that the specific crediting trajectory is tied to a “no net deforestation” target, specific environmental safeguards may be necessary to demarcate what types of forest activities can count toward meeting such a target.

- **Current Thinking**
 - **ARB PDR**: The sector-based crediting provisions do not have any specific language on environmental safeguards. The general offsets provisions in the PDR contain a “no net harm” requirement, stating specifically that any approved “quantification methodology” must “ensure that the offset

project type does not cause or contribute to adverse effects on human health or the environment.”

- **Proposed Federal Legislation**: HR 2454 provides that to be eligible to receive international offset credits for REDD activities, the activity must be “designed, carried out, and managed—(i) in accordance with widely accepted, environmentally sustainable forest management practices; and (ii) to promote or restore native forest species and ecosystems where practicable, and to avoid the introduction of invasive nonnative species;”
- **UNFCCC**: The AWG-LCA draft decision on REDD includes environmental safeguards, namely that REDD+ activities should be “consistent with the conservation of natural forests and biological diversity, ensuring that [such activities] are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.”
- **Design Options**:
 - **Option 1**: Regulations identify general environmental safeguards for REDD activities (nested projects and/or state-level programs) and regulatory agency (ARB, EPA, etc.) assesses whether particular nested project or state-level program has met safeguards. General environmental safeguards provisions for REDD might include the following:
 - REDD activities shall be designed and implemented to maintain and restore native forest species and ecosystems where practicable, and to avoid the introduction of invasive nonnative species.³
 - REDD credits shall not be issued for activities that result in the conversion of natural forests.
 - In determining state/province-level performance relative to a target of “no net deforestation” within a certain time period, increases in forest carbon stocks associated with certain defined forestry activities (plantations?) shall not be used to meet such target.
 - Others?

³ This may not be as relevant if the focus is exclusively on REDD rather than REDD+.

- **Option 2:** Regulations identify general environmental safeguards for REDD activities and invite third-party standards organizations to submit for approval standard(s) addressing these safeguards. Regulation then requires independent third-party certification of nested projects and/or programs against the approved standards as sufficient to demonstrate compliance with relevant safeguards.

SAFEGUARDS: PROTECTION OF RIGHTS/INTERESTS

- **Current Thinking**

- **ARB PDR:** The sector-based crediting provisions do not have any specific language on protection of rights and interests. As noted above, the general offsets provisions in the PDR contain a “no net harm” requirement, which is limited to avoiding adverse impacts on human health and the environment.
- **Proposed Federal Legislation:** HR 2454 provides that to be eligible to receive international offset credits for REDD activities, the activity must be “designed, carried out, and managed—(iii) in a manner that gives due regard to the rights and interests of local communities, indigenous peoples, forest dependent communities, and vulnerable social groups; [and] (iv) with consultations, and full participation of, local communities, indigenous peoples, and forest-dependent communities, as partners and primary stakeholders, prior to and during the design, planning implementation, and monitoring and evaluation of activities;”
- **UNFCCC:** The AWG-LCA draft decision on REDD includes safeguards for protection of rights and interests, namely that REDD+ activities should be undertaken in a manner that promotes and supports: “[r]espect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples; [and] [f]ull and effective participation of relevant stakeholders, in particular, indigenous peoples and local communities.”

- **Design Options:**

- **Option 1:** Regulations identify general safeguards regarding protection of rights/interests for REDD activities (nested projects and/or state-level

programs) and regulatory agency (ARB, EPA, etc.) assesses whether particular nested project or state-level program has met safeguards.⁴ The definition and framing of the requirements may vary depending on whether they apply to nested projects or to a state/province credit-issuing program, but should generally cover the same areas. Some general safeguards for protection of rights/interests might include the following:

- REDD activities shall be designed and implemented in a manner that gives due regard to the rights and interests of local communities, indigenous peoples, and vulnerable social groups. More specific safeguards requirements underneath this could include:
 - Identification of stakeholders whose rights/interests are potentially affected;
 - No involuntary relocation of stakeholders;
 - Establishment of public and transparent grievance documentation and resolution process;
 - Prohibition of “uninvited” encroachment by REDD activities on private property, community property, or customary rights unless free, prior informed consent is obtained from those whose rights to lands, territories, or resources will be affected.

- REDD activities shall be designed and implemented with full and effective participation of local communities and indigenous peoples that are affected by the activity [project, program, etc.] prior to and during the design, implementation and evaluation of REDD activities. More specific safeguards requirements underneath this could include:
 - Procedures to ensure that stakeholders have access to adequate information, in local or regional languages where appropriate, about the relevant REDD activities;
 - Procedures to ensure that stakeholders have access to adequate legal advice about the rights with respect to REDD activities;
 - Procedures to ensure the opportunity to participate in the planning, implementation, and evaluation of REDD activities;
 - Public and transparent grievance documentation and resolution process (see above);

⁴ Such an exercise seems quite difficult for an environmental regulatory agency, especially at the subnational level.

- Prohibition of “uninvited” encroachment unless free, prior informed consent (see above).
- Others?
- **Option 2:** Regulations identify general safeguards for protection of rights and interests applicable to REDD activities (such as those identified in Option 1 above) and invite third-party standards organizations to submit for approval standard(s) addressing these safeguards. Regulations then require independent third-party certification of nested projects and/or programs against the approved standards as sufficient to demonstrate compliance with relevant safeguards.

SAFEGUARDS: BENEFIT SHARING

- **Current Thinking:**
 - **ARB PDR:** The sector-based crediting provisions do not have any specific language on benefit sharing. As noted above, the general offsets provisions in the PDR contain a “no net harm” requirement, which is limited to avoiding adverse impacts on human health and the environment.
 - **Proposed Federal Legislation:** HR 2454 provides that to be eligible to receive international offset credits for REDD activities, the activity must be “designed, carried out, and managed—(v) with equitable sharing of profits and benefits derived from offset credits with local communities, indigenous peoples, and forest-dependent communities;”⁵
 - **UNFCCC:** As noted above, the AWG-LCA draft decision on REDD includes safeguards for protection of rights and interests, but does not include anything specific about benefit sharing.
- **Design Options:**
 - **Option 1:** Regulations identify general safeguards regarding benefits from REDD activities (nested projects and/or state-level programs) and the regulatory agency (ARB, EPA, etc.) assesses whether a particular

⁵ There is no definition or guidance regarding what would constitute “equitable” sharing in this context, opening up the possibility of significant disputes between various stakeholders and, perhaps, litigation – all of which raises considerable challenges from the standpoint of the regulator or standards body tasked with ensuring that a safeguard framed in this way has been met by a particular REDD activity.

nested project or state-level program has met such safeguards. General safeguards provisions on benefits might include the following:

- REDD activities shall be designed and implemented in a manner that generates direct benefits for the local communities and indigenous peoples (and other relevant stakeholders) that are affected by the activities. More specific requirements could be elaborated depending on whether the activity in question is a nested project or an approved state/province credit-issuing program, including:
 - Requirements that nested projects include specific provisions for distribution of some portion of offset credits and/or revenues to affected local communities and indigenous peoples (and other relevant stakeholders involved in the particular project activity);
 - Requirements that approved state/province credit-issuing program include institutional mechanisms (stakeholder-targeted projects, trust funds, revenue distribution programs, etc.) to ensure distribution of offset credits and/or revenues. Such requirements could include reference to a particular allocation “rule” or “methodology” for distributing credits or revenues, such as the stock-flow approach.
- Procedures to ensure that specific credit and/or revenue distribution mechanisms or programs are objective, transparent, accountable, auditable, etc.
- Others?
- **Option 2:** Regulations identify general safeguards regarding benefits from REDD activities and invite third-party standards organizations to submit for approval standard(s) addressing these safeguards. Regulations then require independent third-party certification of nested projects and/or programs against the approved standards as sufficient to demonstrate compliance with relevant safeguards.

ENFORCEABILITY

Enforceability poses distinct challenges in the international context. In cases where the credits are issued by an approved external program, it may be possible to handle some elements of enforceability through whatever agreement governs the relationship with the external program. But this becomes problematic when the external program is a state or province in a foreign country. The alternative, of course, is to handle enforceability through a liability rule that imposes liability for reversals on the regulated entity that tenders an international offset credit for compliance purposes (regardless of whether such credit was issued by the regulator to a nested project or by an approved external program). Other alternative ways to deal with the reversal problem include insurance, credit reserves, temporary crediting, and/or buffer requirements. Such approaches may not be enough by themselves to satisfy “enforceability” and thus may have to be used in combination with a liability rule. Finding a solution to the enforceability challenge in the context of international sector-based crediting without imposing unduly burdensome transactions costs will be very important.

- **Current Thinking:**
 - **ARB PDR:** The PDR concept note on “Reversals of Offset Credits” states that ARB staff is evaluating enforcement options for reversals. The note states further that “ARB’s preferred approach would be to require the covered entity using the flawed offset credit to meet its surrender obligation by making the system whole and replacing the lost tons.” Covered entities would then manage their liability through commercial “make whole” contracts with offset suppliers. The PDR concept note on “International Offset Credits and Sector-Based Crediting” contemplates the development of “cooperative (MOUs) for verification and enforcement” with the relevant foreign jurisdiction and includes within this the possible establishment of a joint MRV committee that would include California representatives.
 - **Proposed Federal Legislation:** The REDD provisions in HR 2454 do not include specific provisions on enforceability. Presumably enforceability would be handled to some degree under the bilateral and/or multilateral “agreement or arrangement” between the United States and the foreign country in which the offset activity takes place, which is a pre-requisite for all international offsets. The general provisions on offsets address the issue of reversals for listed project types and direct the Administrator to establish requirements to account for and address reversals, including the possibility of specific allowance-holding requirements for compensation purposes, assignment of responsibility for compensation,

insurance mechanisms, and an “offsets reserve” mechanism that sets aside a portion of offset credits proportionate to the risk of reversal.

- **UNFCCC:** N/A

- **Design Options:**
 - **Option 1:** Require that any covered entity that tenders an international offset credit for compliance – regardless of whether the credit was issued by the regulator or by an approved external program – be liable for any reversals.

 - **Option 2:** In addition to basic liability on covered entity (Option 1), identify specific instruments and/or mechanisms to further ensure that the system is “made whole” in the event of a reversal, including insurance, credit reserve, and/or buffer requirements.

 - **Option 3:** For both nested projects and approved external programs, require that the foreign jurisdiction or, if relevant, other credit-issuing body adopts certain practices to account for and address reversals. This could be handled through an MOU or other agreement between the regulator and state, province, or other external program. Such an approach could also include provisions that would impose residual liability for reversals on the covered entities.

EARLY ACTION/PHASED-APPROACH PATHWAYS

Given that a number of states and provinces in tropical forest countries may not be ready for full sectoral accounting and crediting at the start of a California or federal GHG compliance system, some have proposed that these systems include provisions that would allow for a “phased approach” in order to catalyze immediate emissions reductions for crediting in initial compliance periods and to incentivize the development of full sectoral frameworks over the longer term. Such an approach might take a number of forms, from identification of key elements of an early action window for eligible project-based credits to come into the initial compliance period to the encouragement of nested project and/or programmatic pilot activities in early mover states and provinces (or both).

- **Current thinking:**
 - **ARB PDR:** The PDR recognizes that sector-based crediting mechanisms “are still being developed internationally, and may not be ready when the California cap-and-trade program begins in 2012.” It further provides

that “[b]ecause appropriate cost control mechanisms will be needed for regulated entities at the outset of the program, an early supply of international offsets may be needed from other sources. In order to establish an early supply, ARB staff is considering allowing entities to use a limited amount of CERs issued under the CDM, or other approved project-based credits from other systems, for compliance purposes for a limited period of time.”

- **Proposed Federal Legislation**: The HR 2454 REDD provisions do not contain any specific language on early action/phased approach pathways. The Tropical Forest and Climate Coalition (“TFCC”) has developed some early action language and has been working with members to insert this into climate legislation. There is also some general language in the HR 2454 offsets provisions regarding early action.
- **UNFCCC**: N/A.
- **Design Options**:
 - **Option 1**: As a prerequisite for participation in a “phased approach” pathway, require states and provinces to establish: (1) specific forest sector GHG targets; (2) a plan to reduce forest sector emissions across the state and move to full sectoral accounting and crediting (as defined in the regulations – see discussion above) within a limited number of years; and (3) a state/province-wide monitoring program to track progress towards achieving GHG targets. These commitments could be secured through agreements with the relevant jurisdictions. During the first compliance period, REDD projects in these states and provinces would be eligible for crediting based on individual project emissions reductions as independently verified using best-practice, pre-approved carbon accounting standards or protocols that ensure the credited emissions reductions are real (including accounting for potential leakage), additional, permanent, etc. After the first compliance period, no credits would be issued directly to projects unless accounted for under a full sectoral accounting framework as elaborated in the regulations.
 - **Option 2**: Establish limited window into first compliance period for early pilot/demonstration nested pathways and/or state/province-level programs, perhaps as identified through the GCF process. Identify key elements in regulations that would apply to such pilot activities, including project-level accounting on the basis of best-practice, pre-approved standards or protocols and certain initial elements of state/province REDD program (*i.e.*, GHG target, REDD plan, state/province monitoring program, etc.).