

## FCPF Carbon Fund Methodological Framework Discussion Paper #13 Operational and Financial Planning for FCPF Emission Reduction Programs

WORKING DRAFT SOLELY FOR INPUT INTO AND DISCUSSION BY CARBON FUND WORKING GROUP

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*This paper is a work product of independent consultants,  
managed and revised by the FCPF Facility Management Team and World Bank staff, and does  
not reflect the opinion of the World Bank*

**About this document:** The FMT commissioned the development of this series of about a dozen topic-specific Discussion Papers (also known as “Issue Papers”) to serve as a common starting point for discussion on the Methodological Framework. The Papers were circulated January-April 2013 to Carbon Fund Participants and to over 100 experts who participated in REDD+ Design Forums which channeled input into the Methodological Framework. For each topic, the corresponding Issue Paper first presents background research and major approaches, and then suggests initial thinking on how to translate that topic into the context of the Methodological Framework of the Carbon Fund.

Because each paper presents a wide range of options, developed at the very beginning of the MF development process, the original drafts do not capture the discussions during Summer 2013 or reflect the final drafts of the MF. For this reason, FMT has added an introductory update to this paper, below.

### Update (October 2013)

This paper on Operational and Financial Planning, while providing useful tools that program and project planners can use to prepare REDD+ initiatives, ultimately contains a scope and specificity that is outside the mandate of the Methodological Framework. Because the Carbon Fund will use results-based finance, requiring specific elements for ER Programs’ own financial processes is not a role for the Carbon Fund or the Methodological Framework. Therefore, there is not a section on Financial and Operational Planning in the September 2013 draft of the Methodological Framework. The contents of this paper may be more suited to traditional development aid models of investing in a certain program, and requiring detailed financial information prior to that investment. Nonetheless, the contents of this paper will be provided publicly on the FCPF website as a resource for REDD+ program planners and the broader REDD+ community.

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## Original Issue Paper (April 2013)

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## Key Questions

1. Should the financial and operational feasibility of a program be assessed by the Carbon Fund (CF)?
2. What is included in assessing operational and financial feasibility of an Emission Reduction (ER) Program as a whole?
3. How should the operational and financial feasibility of managing and implementing an ER Program be demonstrated and assessed within the FCPF ER Program cycle?
4. Within the context of the questions above, what guidance can be provided to countries on how to assess the financial and operational feasibility of their program and how to present such an assessment?
  - How best can a country draft a business plan for its CF proposal, addressing the proposal's relationship to other mitigation or development programs it has planned or is considering?
  - What are the key parameters that have to be assessed: implementation costs, MRV costs, potential risks, program effectiveness, carbon price, and program delivery time?
  - How to assess and present sensitivity of cost estimates to key risk, effectiveness, and delivery variables?
  - How can a country best structure an ER Program proposal in its development and development assistance context?
  - What are the sources of up-front and ex-post finance that have to be identified and taken into account?
  - Can any guidance be given on how a country determines the appropriate mix of carbon and non-carbon benefits for its context and ER Program area? How can a country decide which of the potential activities in its emerging REDD+ strategy make sense to propose to the CF? What parameters are required to make that assessment?
    - Program cost effectiveness \$/tCO<sub>2</sub>eq?
    - Sensitivity to carbon payments (is carbon the icing or the cake)?
  - What is the optimal timing of ERPA payments and MRV events, and the trade-offs across them (i.e., more frequent payments offer early revenues to cover costs or offer benefits, but likely require more frequent MRV)?

## **1. Determining need and approach to assessing financial and operational feasibility of an ER Program**

The Carbon Fund (CF) of the Forest Carbon Partnership Facility (FCPF) will pilot payments for verified emission reductions (ERs) while promoting future large scale positive incentives for REDD+ programs. The FCPF, through the development of its Methodological Framework, is addressing whether it needs to require the ER Program to demonstrate the operational and financial (O&F) feasibility of the program. Unlike the Measurement, Reporting and Verification (MRV) related requirements, which have been defined over years of research and field testing in other fora, the O&F requirements are not tested. Assessing ER Programs can, however, follow a standard due diligence process that an investor would undertake to assess the risk associated with financing and implementation of any investment.

To evaluate whether the FCPF should undertake an O&F due diligence process, this first section 1) identifies the current FCPF guidance and requirements related to O&F; and 2) recommends draft definitions of O&F feasibility that are relevant for REDD+ programs. Additional comparative analysis of other programs' O&F requirements and due diligence processes along with an overview of costs and revenues of three industrialized country emissions trading schemes that include forestry is provided in Annex 1.

### **1.1 Key FCPF Documents**

There are a number of key FCPF documents – either completed or under development – related to the fund engaging with REDD Country Participants, reviewing ER Program documents and entering into EPRAs. These documents include:

- Charter Establishing the Forest Carbon Partnership Facility (October 24, 2012 - revised)
- Operating Agreement Under the Carbon Finance Mechanism Issues Note (February 9, 2011 revised)
- Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF (June 11, 2012 - revised final draft), to be replaced by the Methodological Framework currently under development
- Update on Pricing Issues of Carbon Fund (March 8, 2013)
- ERPA Term Sheet (draft version January 23, 2013)

There are various implicit and direct references and requirements in each of these documents related to whether the FCPF should ensure that an ER Program can demonstrate O&F feasibility to enter into an Emission Reductions Purchase Agreement (ERPA) with the FCPF.

Section 3.1(a) of the Charter states the Facility shall encourage “effective... implementation of... Emission Reductions Programs”.

The Operating Agreement Issues Note explicitly sets out potential risks and risk mitigation options available to the CF. For the purposes of this paper, the three main inter-related risks identified are: 1) financial risk to the CF; 2) financial risk to the ER Program; and 3) delivery risk. The suggested risk mitigation for the delivery risk includes “applying tight selection procedures so that only the most promising ER Programs are included in the portfolio, that are fully funded and where good governance is in place”.

The Working Group on the Methodological and Pricing Approach for the CF recommendations include five accounting and six programmatic elements along with an overarching element.

*Programmatic Element 1: Endorsement and implementation capacity* deals with operational capacity and states:

“The ER Program is endorsed by the national government (or governments, as appropriate) and is implemented by an entity (or entities) that has (have) the capacity to implement the proposed REDD+ activities, potentially via a stepwise approach.”

The programmatic element language “capacity to implement the proposed REDD+ activities” implies that ER Programs need to demonstrate to the FCPF that they have the technical and financial capacity to implement the activities at scale in the ER Program.

The Update on Pricing Approach states that ER Program costs will be one of three main parameters used in the price negotiations. However, it also states that “CF Participants and ER Program developers are not seeking to maximize their returns” and the pricing approach does not emphasize analysis of ER Program risk as a key parameter in its pricing approach. The three key parameters are minimum price to support a viable program, price trends of comparable transactions, and additional benefits of the program. As a result of this, the Pricing Approach recommends that a “sound financial analysis of the ER Program is essential and should be performed by the ER Program developers and reviewed by the CF Participants”.

Clause 20 of the draft ERPA Term Sheet also states that the Seller has a number of obligations, including:

“Implementation and operation of the ER Program in accordance with the ER Program Document (including the feed-back and grievance redress mechanism for the ER Program) and all applicable laws and regulations; compliance with the REDD Country Participant’s MRV system, the Methodological Framework and the ER Program Monitoring Plan; implementation of the Benefit-Sharing Plan; not to cause, tolerate or authorize the occurrence of any Reversal Event; cooperation with Buyer and other relevant authorities/entities regarding ER verification/certification/issuance/transfer/forwarding; etc.”

If meeting financial and operational soundness criteria and indicators are included in the ER Program Document or Methodological Framework, Clause 20 of the ERPA Term Sheet will create a binding covenant on REDD+ countries to meet any such criteria and indicators.

Based on the clause above, it is clear that an assessment of the financial and operational soundness of ER Programs is warranted. This raises further questions regarding 1) how to assess what is financially sound; 2) how to assess what is operationally sound; and 3) who carries out these assessments and when. Before discussing these three points in further detail, the United Nations Framework Convention on Climate Change (UNFCCC) REDD+ decisions are briefly reviewed along with requirements under comparable programs.

## **1.2 Draft Definitions for Operational and Financial Feasibility**

In order to discuss O&F feasibility of ER Programs it is important to first develop a shared view of what the O&F elements of a REDD+ program are. An ER Program may contain a number of

different policies, programs or other interventions to reduce emissions and/or increase removals. These components may be applied across the entire ER Program and/or be more localized to a particular region. In either case, an ER Program will need to ensure each component is operationally and financially sound, along with demonstrating that the ER Program as a whole is also operationally and financially sound. Four potential O&F components are summarized in Table 1.

**Table 1: Summary of possible O&F components of a REDD+ Program**

	<b>Operational</b>	<b>Financial</b>
<b>Program Level</b>	<b><u>Program Level Operations (P-Ops)</u></b> P-Ops feasibility refers to the capacity for the REDD Country Participant to manage the overall operation and administration of the ER Program.	<b><u>Program Level Financials (P-Fin)</u></b> P-Fin refers to whether or not the financial plan to manage and operate the ER Program is feasible based on sufficiency funds for the operation and management of the ER Program (but not implementation of REDD+ interventions).
<b>ER Level</b>	<b><u>ER Level Operations (ER-Ops)</u></b> ER Ops refers to the capacity for the REDD Country Participant to implement activities that will produce ERs.	<b><u>ER Level Financials (ER-Fin)</u></b> ER-Fin refers to whether it is financially feasible to carry out activities under the ER Program to produce ERs.

#### ***Program Level Operational (P-Ops)***

P-Ops feasibility refers to the capacity for the REDD Country Participant (and any sub-entities) to manage the overall operation and administration of the ER Program. This may include the ability to 1) carry out the operational aspects of running the ER Program described in the ER Program document; 2) manage the ER Program so that it meets the requirements and indicators as defined in the Methodological Framework (e.g., possessing the staff, equipment and expertise to develop a RL and carrying out MRV, develop and implement a benefit sharing system, establish a feedback and grievance redress mechanism, etc.); and 3) manage the REDD+ country's obligations under the ERPA (i.e., ensuring the terms and conditions are being satisfied, such as meeting deadline, and meeting reporting or other notice obligations). Note that P-Ops does not include the operational aspects of implementing the REDD+ interventions which produce ERs.

#### ***ER Level Operational Feasibility (ER-Ops)***

ER Ops feasibility may refer to the capacity for the REDD Country Participant (and any sub-entities) to implement activities that will produce ERs. This will relate to how REDD+ interventions to address drivers of deforestation are designed and whether they can be implemented as planned to produce the estimated number of ERs and if this estimate is reasonable.

#### ***Program Level Financial Feasibility (P-Fin)***

P-Fin may refer to whether or not the financial plan to manage and operate the ER Program is feasible. It is recommended that the financial plan includes financial projections covering anticipated costs and sources of funding. It should cover costs associated with P-Ops, along with any other additional costs of staff, data, technology and any other capital expenditures, communications, and other outsourced services to support running the ER Program according to the ER Program document, Methodological Framework and ERPA. The cost analysis should include the startup costs to launch the ER program along with annual costs of running the ER

program. The projections should include the sources of funds expected to cover the costs from various sources (donors, government budgets, loans, bonds, revenue from program operations) and identify any funding shortfalls.

#### ***ER Level Financial Feasibility – (ER-Fin)***

ER-Fin may refer to whether it is financially feasible to carry out activities under the ER Program to produce ERs. It is recommended that this includes the costs of implementing activities that address drivers of deforestation and forest degradation, and/or other activities to sustainably manage forests or enhance carbon stocks. This could be complex, as it is likely that an ER Program could have a host of activities that engage numerous stakeholders, some of which are under the control of the ER Program and others are not. It is also anticipated that activities carried out under an ER Program will be integrated into other (national) development or planning policies and programs that may have separate budgets. Additional complexity will arise if the ER Program is required to determine the opportunity costs of its activities.

The following sections develop how to assess these four components of O&F feasibility. The final section summarizes O&F feasibility criteria and provides recommendations on how the O&F criteria could be applied within the CF's ER Program cycle.

## **2. Program Level Operational Requirements (P-Ops)**

It is recommended that the program level operational requirements cover all the elements that an ER Program needs to have in place to demonstrate that they both have the authority and capacity to implement and manage the ER program in order to meet all the FCPF requirements included in its governing documents and transaction agreements. Because the ER Programs will be some of the first comprehensive payment-for-performance programs in the world to enter into ERPAs, there is minimal guidance available on how these programs might demonstrate their operational capacity and how the FCPF might perform due diligence on this requirement.

Four draft criteria that could be used to demonstrate an ER Program is operationally feasible are:

#### **Draft P-Ops Criteria**

1	Laws and regulations provide the legal mandate for the relevant entities to oversee and manage the ER Program and each of its components
2	Institutional and implementation arrangements are identified and entities have sufficient capacity to support ER Program operations
3	Information dissemination and public comment processes follow good practices for rulemaking and ER Program operation
4	The implementation plan is sound and demonstrates the ability to measure, monitor and report ERs that can be verified, and carry out the Safeguards Plan and Benefit Sharing Plan

Under each of these four criteria, we have provided guidance on how the REDD Country Participant could provide information to allow the FCPF to evaluate how they meet the criteria.

## **2.1 National (and/or sub-national) laws and regulations provide the legal mandate for the relevant entities to oversee and manage the ER Program and each of its components**

It is recommended that the REDD Country Participant provide a written **Legal Analysis** to demonstrate i) who the authorized entity to enter into a ERPA with the Trustee of the FCPF is; and ii) that the entity is operating within the REDD+ country laws and regulations in the development and implementation of the ER Program.

The Legal Analysis should list the laws, regulations, or other government documents with legal effect that set out the rules and requirements for the implementing the REDD+ program. The analysis should set out the process required for implementing the REDD+ program and the designated lead government agency and any supporting agencies responsible for implementation.

This mandate could be found within a larger set of environmental regulations, or it could be found within specific law(s) that lays out the requirements and timeline for establishing the detailed regulations to implement the law. For example, California's Assembly Bill 32<sup>2</sup> is only 13 pages, but within the bill it sets out specific requirements for adopting regulations including the; 1) timeline for establishing the regulations that require reporting and verifying emissions reductions, 2) inclusion of specific early action measures, 3) timeline for preparing and approving a "scoping plan"<sup>3</sup>, and 4) the date in which the actual monitoring, reporting, verification and in the case of California compliance requirements would take effect. While REDD Country Participant laws are likely to take a different form from California, the legal analysis should be able to cover the same rulemaking elements in AB 32 with references to the host country laws and regulations. For national level ER Programs this should refer to national and any relevant local laws or regulations. Sub-national ER Programs should demonstrate how the sub-national program fits within the national legal framework, along with the same legal authority and responsibility required at the national level.

National REDD+ Readiness supported under the FCPF Readiness Fund should provide much of the information needed for the Legal Analysis. In the case where a the REDD Country Participant is a sub-national entity, all the criteria defined the P-Ops should be demonstrated, but there is an additional requirement that the sub-national REDD Country Participant can provide the FCPF evidence that they have 1) the authority to manage the ER Program; and 2) the rights to the ERs being contracted within the ERPA (see Section 3.3). If a sub-national ER Program is being considered and there is no clear legal designation on sub-national REDD programs from the national government, the FCPF could review the Legal Analysis that documents the level of decentralized power of the sub-national entity. Decentralization authority can be evaluated based on the level of power, authority and decision-making control that has been shifted from the national government of a country to a geographical subdivision, such as states or provinces within the country. Three main types of decentralization can be distinguished: 1) fiscal; 2) administrative; and 3) political. Fiscal decentralization is characterized by the distribution of financial resources to regional stakeholders and governments rather than only to the national government. Administrative decentralization is concerned with the delegation of authority to provincial, district or local governments, which may still remain accountable to a central authority. Political decentralization is indicated by the extent to which local governments have

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<sup>2</sup> California's Assembly Bill 32, [http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab\\_0001-0050/ab\\_32\\_bill\\_20060927\\_chaptered.pdf](http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf)

<sup>3</sup> California's Assembly 32 Scoping Plan, [http://www.arb.ca.gov/cc/scopingplan/document/adopted\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf)

specific discretionary authority and are accountable to local populations, thereby enabling their participation in the decision-making process<sup>4</sup>.

## **2.2 Institutional and implementation arrangements are identified and entities have sufficient capacity to support ER Program operations**

The legal analysis will show which government agencies are responsible for the implementation of the laws and establishment of regulations and implementation plans. However, there may be more than one government agency and other domestic and international entities (including newly established ones) that have a role in the ER Program implementation and operation. The ER Program's ability to operate smoothly and have control over all the components of the program will require that the responsibilities and lines of accountability of different implementing partners and the sub-agreements are clear and in place to support the REDD Country Participants ability to manage the entity's performance. This may also include third party Sub-Entities and/or new government entities established by REDD Country Participants to manage carbon revenues, benefits sharing and other elements of the ER Program.

It is recommended that the ER Program Document include an **Implementing Partners Schematic**, showing all the entities responsible for implementation, their main roles, and identify the contractually and/or organizational legal documentation that are used to govern performance (**Contractual Agreements**). The responsible person at each implementing entity, including their name and contact information should be included. The ERPA Term Sheet allows for Sub-Arrangements with Sub-Entities. If Sub-Entities are engaged the REDD+ Country Participant should provide confidential copies of any Contractual Agreements that support the Sub-Arrangements.

In some cases, REDD Country Participants may establish quasi public-private entities to manage the ER Program's operational and/or financial activities. An example of this is Acre, which has created a special self-managed governmental entity that is economically and financially autonomous and administratively independent. In Acre's case, this entity was setup via legislation and will operate many aspect of the REDD+ program, and thus, is integral to the success of the ER Program. In cases like this, the FCPF should understand the relationship between these entities and the responsible government, and may want to review the establishment and governance documents of the entity. In cases where the entity acting as the seller under the ERPA has private investors, the FCPF assessment will need to cover anti-money laundering and other World Bank Operational Policies and Procedures.

Evaluating the capacity of implementing entities can be challenging and could be a daunting task if it was required for all the implementing entities involved in the operation of the ER Program. It is recommended that a **Capacity Assessment** of the entities supporting each of the following key operational elements of an ER Program; Administrative Oversight, Regulation and Program Design, REL and Monitoring Infrastructure, ER Issuance and Tracking, Financial Management and Benefit Plan Admin, and Stakeholder Engagement is carried out.

Using the information collected above, the functional and technical requirements of operating an ER Program can be defined at a "task" level with each implementing entity defined. This produces a sufficiently detailed definition of all the activities that need to be supported within

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<sup>4</sup> Ribot, J. C. 2004. "Waiting for Democracy: the politics of choice in natural resource decentralization", Washington, DC: World Resources Institute.

the key operational aspects of the ER Program. The recent UNREDD “Capacity Needs Assessment of Government Institutions at Central, Regional, District and Local Levels for the Establishment and Management of a REDD+ Scheme in Tanzania,”<sup>5</sup> published in September 2012, provides an example of the application of “Capacity Needs Assess Framework.” It defines a set of capacities and indicators that can be applied to determine overall operational capacity. Parts of this framework, as detailed in Annex A of the report, could be good starting point for the FCPF to develop a specific operational capacity evaluation tool for the ER Program that could be used for the Capacity Assessments.

### **2.3 Information dissemination and public comment processes follow good practices for rulemaking and ER Program operations**

The Safeguards Plan should cover a broad set of related requirements for stakeholder engagement, social and environmental safeguard assessment, grievance redress mechanism and information dissemination. **Public Information Dissemination and Public Commenting Requirements** will need to addressed and demonstrated, and is covered under in the papers and criteria and indicators on safeguards, benefits sharing and grievance redress mechanisms.

### **2.4 The Implementation plan is sound and demonstrates the ability to produce verified ERs within X years**

After it is clear who is authorized, who is responsible for each specific element of the implementation and that they have capacity, it is recommended that there is an evaluation of the viability of the overall implementation plan for the ER Program.

It is recommended that an **ER Program Implementation Plan** covers all the Operational Elements of the ER Program in sufficient detail to define all key milestones (and their related activities) for the implementation of the ER Program with delivery dates, and then include requirements for regular reporting on progress and ability to revise plan as needed under a transparency and systematic process. The REDD Country Participant should provide information on how they intend to manage the deliverables under the plan, what resources, systems and processes they will use and also provide some background on capacity of the project management team. This would be an opportunity for the REDD Country Participant to provide background on the management information systems they use and the technology platforms, including data security, reliability and redundancy. This is particularly important for the systems that host the data needed to support all the REL and MRV.

As part of the ER Program Implementation Plan, the REDD Country Participant should establish a schedule for reporting their progress against the implementation plan. This could include a specific requirement that the FCPF establish formal reporting and a public reporting process. In the case of California the state was required as part of the AB 32 law to produce a “Scoping Plan” and then each agency responsible for activities under the Scoping Plan was required to provide a semiannual program update which is submitted to the legislature. In California’s case, the California Air Resources Board (CARB) report<sup>6</sup> must include:

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<sup>5</sup> “Capacity Needs Assessment of Government Institutions at Central, Regional, District and Local Levels for the Establishment and Management of a REDD+ Scheme in Tanzania” available at:

[http://www.unredd.net/index.php?option=com\\_docman&task=doc\\_details&Itemid=&gid=8499](http://www.unredd.net/index.php?option=com_docman&task=doc_details&Itemid=&gid=8499)

<sup>6</sup> And example report for CARB, Annual Report to the Joint Legislative Budget Committeeon Assembly Bill 32 (Chapter 488, Statutes of 2006) The California Global Warming Solutions Act of 2006, for January 2013

<http://www.arb.ca.gov/cc/jlbcreports/jan2013jlbcreport.pdf>

“...significant activities related to CARB’s GHG reduction measures, including an analysis of which programs are having the greatest impact in terms of GHG reductions per dollar spent; key developments on supporting activities such as updates to the AB 32 Scoping Plan, cap-and-trade auction fund regulations, coordination with entities outside of California like the Western Climate Initiative, and SB 375 sustainable communities plans; and the amount of cap-and-trade auction funds deposited into the Greenhouse Gas Reduction Fund and the current balance in that fund.”

While the REDD Country Participant report would cover different elements, there should be progress on each of the Operational Elements of ER Program: Administrative Oversight, Regulation and Program Design, REL and Monitoring Infrastructure, ER Issuance and Tracking, Financial Management and Benefit Plan Admin, and Stakeholder Engagement. Each major implementing agency or partner should be required to submit the progress report. These reports form the basis for ongoing oversight by the FCPF of issues that relate to managing the ERPA, but also should be part of the public information dissemination process.

As part of some of the more advanced Readiness Plan Proposals (R-PPs), there are examples of implementation plans that can provide a guide for how an ER Program Implementation Plan can be developed. However, as a caution these often do not have enough detail to evaluate and monitor progress, often mix the operational requirements of running the ER Program with the operational requirements of producing the ERs, and are too short-term – often covering less than three years. The ER Program Implementation Plan should include a defined outcome for each operational element Activities and sub-activities should be defined in such a way as to be able to perform monitoring and evaluation and manage implementation partners. The ER Program Implementation Plan should also identify and assess risks, along with strategies for mitigating these risks. Comparative examples include the Tanzania R-PP which, in its Annex 2c, has an implementation framework. While it is relatively detailed and combines budget estimates, it does not have the level of detail, implementing partner identification and forward looking timeline for the activities to be able to access the completeness and reasonableness of the implementation plan and the ability to monitor progress. The FCPF could create a template for the ER Program Implementation Plan, or alternatively detailed information and good guidance on what should be included could be provided, thereby allowing the REDD Country Participant the ability to easily adapt and possibly expand on what they have already prepared.

### **3. Emissions Reductions Level Operational Feasibility (ER-Ops)**

ER-Ops concerns whether the operational capacity (across all the implementing partners and any sub-entities) is adequate to produce the ex-ante estimated ERs. It is recommended that the ER-Ops assessment is based on evaluating an ER Program document that identifies the major drivers of deforestation, the planned REDD+ interventions and the REDD Country Participants capacity to implement those REDD+ interventions. This may include evaluating drivers of deforestation and interventions occurring at multiple scales within a program and the capacity for the relevant groups – from the local implementation of program activities to national and regional policies and programs – to carry out the operational aspects to implement those interventions in line with program design. This should also include creditable estimates of ERs that are expected to be generated from each set of activities (which will also be required for ER-Fin below).

Operational feasibility of ER activities could be demonstrated by the draft criteria listed below. For national level ER proponents, some of this information will likely be contained in the R-PP but may need to be focused on how they are actually going to implement.

#### Draft ER-Ops Criteria

1	Quantitative and prioritized <sup>7</sup> analysis has identified the most prevalent historic driver(s), agents and underlying causes of deforestation and highest potential program areas for emissions reductions or removals
2	Main sets of REDD+ program interventions have been defined that address drivers, agents and underlying causes at each scale
3	Implementation plans and implementing partners are clearly defined, contractually engaged and have capacity and funding to implement the REDD+ program interventions
4	The REDD Country Participant can demonstrate that it has rights over the ERs over the ERPA

#### 3.1 Quantification of Drivers, Agents and Underlying Causes and Mapping to Project Actions (Program Design) and High-Level ERs Estimates

It is recommended that the REDD Country Participant provide a detailed analysis of the drivers, agents and underlying causes of deforestation that are most active in the ER Program boundary (**Detailed Drivers, Agents and Underlying Causes Assessment**). If these drivers/agents are not uniformly active across the ER Program, this should include a spatial identification of where different drivers/agents combinations are most active across the ER Program. This assessment should not only include the deforestation drivers, but each agent or group of agents should be identified, as well as why each agent engages in deforestation activities (underlying causes). These agents may be operating legally or illegally. The only way for a REDD Country Participant to demonstrate their ability to actually produce ERs is to demonstrate that they have an in-depth and objective understanding of deforestation patterns in the jurisdiction *and* that they can define and implement plans to address some or all of the drivers. There should be a quantitative analysis of relative contribution that each of these drivers has to deforestation on the jurisdiction. This will allow the FCPF to understand how the ER Program proponent views the priority of addressing each of these main deforestation drivers. If there are activities other than reducing deforestation, such as reducing degradation, forest management or enhancements, these should be included.

#### 3.2 REDD+ Intervention Implementation Plans

It is recommended that the REDD Country Participant should use analysis of drivers, agents and underlying causes to document the set of REDD+ interventions that they intend to implement to address each driver to reduce deforestation (**REDD+ Interventions Program Design**). The activities are likely to occur at multiple scales national, sub-national and local and the relative effectiveness of each set of activities to address drivers should be quantified. Relative effectiveness is generally determined based on the complexity of implementing an activity (or set of activities) designed to reduce deforestation. When the risk of implementing is high, for example settlement programs for migrants, then the effectiveness is likely to be low. An

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<sup>7</sup> Generally, this is a quantitative assessment of the contribution of each driver to the overall deforestation and a mapping of the REDD+ interventions (activities) that can be undertaken to address each driver with their associated relative effectiveness.

attempt should be made to separate out activities whose implementation can be spatially attributed to the potential production of ERs. While there are some REDD+ interventions that may not lend themselves to being able to produce a direct connection to specifying what is done where and how many reductions they can produce, these should be separated out in the ER Program design.

Once the drivers/agent and activities are documented, the REDD Country Participant, should produce high-level emission reduction estimates for each set of activities (**Ex-Ante ER Estimates**). The Ex-Ante ER Estimates should be based on sound methods, using documented data and literature. It should be noted that these should be projected annually, based on a realistic “ramp up” of activities and should allow for effectiveness of less than 100% on higher risk interventions. Depending on the level of development of the ER Program, the Ex-Ante ER Estimates may be extremely detailed and based on carbon accounting methodologies and data collected specifically to support the estimated ERs. For example, these estimates could be based on a calculation methodology per group of activities aimed at specific drivers and calculates 1) a baseline; 2) REDD intervention scenario (with the relative effectiveness applied); and 3) accounts for leakage and some form of risk buffer.<sup>8</sup> Alternatively, they may be high-level and more of a “feasibility level” but the calculations should nonetheless be transparently presented with all data and assumptions documents. Where possible, comparisons to the GHG ERs for other similar programs and projects should be used to calibrate the results. The Ex-Ante ER Estimates are a critical input to determining the financial availability of the ER Program (see Section 5.2).

A REDD Country Participant may include a suite of REDD+ Interventions that will be implemented at various scales with multiple implementing partners and that are designed to address different drivers of deforestation. For example, the national government may implement a program to cancel timber concessions that have not been activated and allocate this land for conservation. Or, at a very local scale, community groups may be supported with new NTFP programs that provide alternative livelihoods to illegal logging. For each of these planned activities the REDD Country Participant will need to demonstrate that it has a detailed plan for implementation plan and the contractual agreements are in place to manage implementing partners, ensuring that ERs can be produced (**REDD+ Interventions Implementation Plan**).

While the REDD+ Interventions Implementation Plan will be more complex than a REDD+ project plan due to operating at multiple scales and with multiple implementation partners, project plans can be leveraged for certain site-specific interventions to guide the development of a strong ER Program Implementation Plan. This is an implementation plan that covers the activities that actually produce the ERs, not the plan for running the ER Program, which is covered in Section 2.4.

### 3.3 Rights to ERs under ERPA

A separate issue paper on carbon rights and land tenure is currently being prepared. Demonstrating compliance with any criteria and indicators on this topic is important to demonstrating ER level feasibility. It is recommended that a **Report on Rights to ERs** (or something similar) is provided as part of the ER Program Document.

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<sup>8</sup> It is not clear whether the FCPF will require a risk buffer to account for permanence.

## 4. Program Level Financial (P-Fin)

Evaluating the financial viability and sustainability of the ER Program involves understanding the costs and revenues of implementing and then operating all the Key Operational Elements (as defined in Section 2.2) of the ER Program. These costs are not the same as the costs associated with producing the ERs, which are covered in Section 0. It is recommended to break down the ER Program operational costs into 1) *Startup Costs* – those needed to establish the operational infrastructure of the ER Program; and 2) *Management Costs and Revenue* – those needed to operate the ER Program and support the ongoing management of the key operational elements. Possible P-Fin criteria for demonstrating financial viability of the ER Program to become operational and then operate in a financially sustainable manner are:

### Draft P-Fin Criteria

1	A full budget covering costs of setting up the ER Program is developed
2	A full budget covering 10-15 years with costs and revenues of operating the ER Program is developed
3	Funding sources have been secured to support the Operationalizing the ER Program and that the program can demonstrate the financial viability of ongoing operations

### 4.1 Startup Costs Budget

Many REDD Country Participants have already incurred a number of the upfront cost associated with establishing their ER Programs. But given that their ER Programs are not likely to be fully operational yet or may not yet be developed to fully meet the requirements of the FCPF, there will likely be additional costs that they will incur to make the ER Program operational and compliant with the FCPF requirements. If the REDD Country Participant develops the ER Program Implementation Plan as recommended in Section 2.4 broken down by operational elements and then activities within each by Implementing Partner, then it is recommended an **ER Program Startup Cost Budget** could follow that same format to ensure that all the activities that need to be funded have a clear rational about how they have been estimated and that each requirement is included in the budget. See Table 2 for an example template budget.

**Table 2: Example of Template for ER Program Operational Startup Cost Budget**

Ops Element	Activities	Measured Output	Implementing Partner	Type Costs	of Cost Parameters and Units	\$ Yr 1	\$ Yr 2	\$ Yr 3	Total
Stakeholder Engagement	ER Issuance and Tracking	Regulation Program Design	Admin						
Financial Management and Benefit Plan									
REL and Monitoring Infrastructure									
ER Issuance and Tracking									
Financial Management and Benefit Plan									
Stakeholder Engagement									

#### 4.2 Ongoing Management Costs and Revenues

To perform an evaluation of the P-Fin financial viability and long-term (10-15 years) sustainability of the ER Program, a full **ER Program Management Budget**, including the costs and revenues is recommended. This should be developed by the REDD Country Participant and include cash flow projections complete with sensitivities on the main financial drivers. Most ER Programs have developed some form of projected budgets which is a great starting point, but often these budgets do not cover the 10-15 period needed to assess financial sustainability and they often blend costs of implementing the REDD+ interventions with costs of actually running the ER Program infrastructure (i.e., the Key Operational Elements). It is important to understand the cost of operating the ER Program, regardless of whether one ton is verified. REDD Country Participants budgets may also include costs for programs not directly linked to managing and/or

producing ERs (such as social programs), which, while these might be valuable programs, should be identified separately in the budget and evaluated distinctly from the costs of operating the ER Program.

The financial projections should include sources of revenue that could come for the ER Program in the form of fees collected for issuance of tons, fees for management of carbon revenues and/or fees that may be collected on non-government managed REDD+ activities (such as nested projects) within the overall ER Program. An example of this type of fee is the registration fees under AB 32. In this case, California uses the revenue to manage AB 32 and to develop and implement programs to reduce the state's GHG emissions. For the first few years of the program, the fee will be used to repay loans that were taken to fund the startup of the AB 32 program.<sup>9</sup> It should be noted that, since there is risk in generating revenues that are collected for the production of ERs, this should be evaluated as part of the sensitivity analysis.

Once a comprehensive **ER Program Management Budget** is developed by the REDD Country Participant, the other sources of funds can then be applied to create a cash flow projection. The other sources of funds should include amounts that have been appropriated by the government related to managing the ER Program, the portions of donor funds that can be directly used for specific elements of the ER Program operation, pre-payment amounts for ERs and any sources of funds that can be used to cover the costs of setting up and managing the ER Program. It is critical when including these sources only to count the portion of funds that can be directly applied to the activities included in the Implementation Plan and that they can be used to fund the specific implementing partner that has been identified. The budget template contained in Table 2 could be adapted to generate an ER Program Management Budget – e.g., by, at a minimum, extending the timeframe out 10-15 years, removing any redundant startup costs, and adding any additional ongoing costs.

#### 4.3 Financing Strategy

Based on the costs and revenue projections from the startup and ongoing budgets above, it is recommended that the REDD+ Country Participant provide an **ER Program Cash Flow Projection** for 10-15 years for running the program. All sources of funds that can be directly applied to implementing the activities in the ER Program should be added to the financial projections. It is quite likely that REDD Country Participant financing will come from a variety of sources with different terms and different structures. Most ER Programs will generally receive multiple sources of donor funds, Official Development Assistance and other concession funds that can be used to support startup. The non-concessional funds could take multiple forms as well, including the “ER program fees” collected from carbon revenue, loans from international for domestics sources and governmental budget allocations.

Once all the sources of funds have been included in the financial projections, then the REDD+ Country Participant can demonstrate that it has funding to not only startup the program but to operate on the financially sustainable basis. It should be clearly identified in the financial projections for all sources of funds which are not fully secured or have certain covenants that could impact their overall availability. The REDD+ Country Participant should provide the FCFP the cash flow projections and a written description of the way in which funding will be secured to support the ER Program (**ER Program Financing Plan**).

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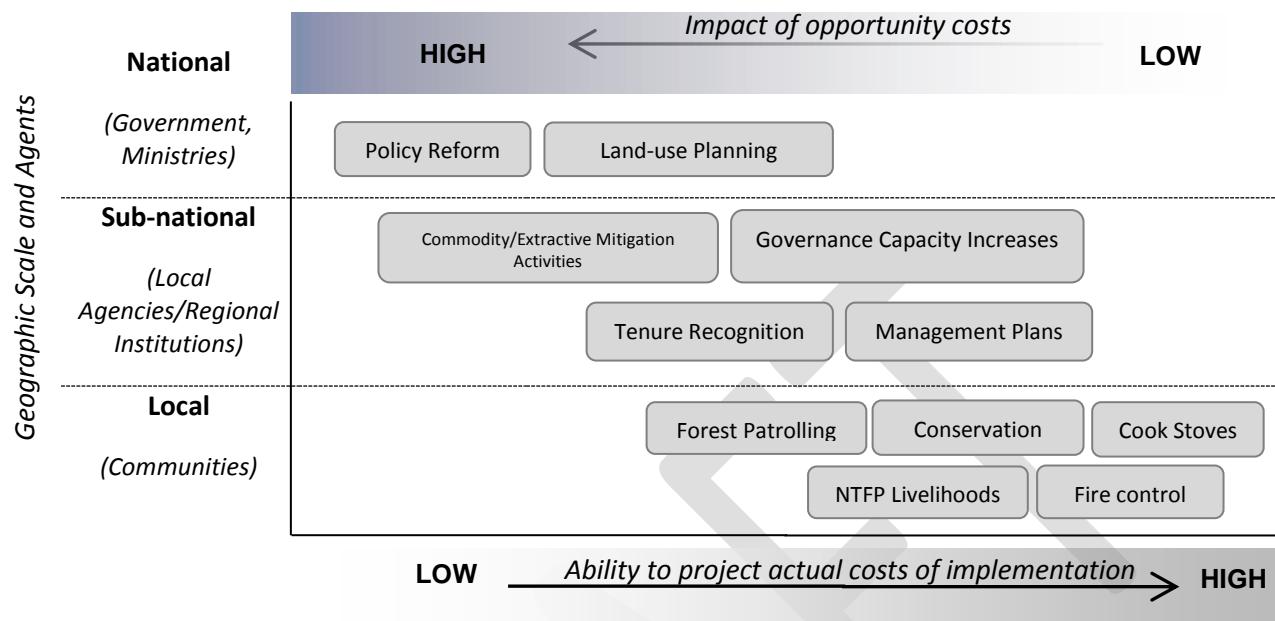
<sup>9</sup> AB 32 Cost of Implementation Fee Regulation – FAQs [www.arb.ca.gov/cc/adminfee/revenue.htm](http://www.arb.ca.gov/cc/adminfee/revenue.htm).

## **5. Emissions Reductions Level Financial Feasibility (ER-Fin)**

ER-Fin refers to the ability of the ER Program to cost effectively implement the proposed activities and produce ERs. The costs of producing ERs from implementing activities must be financially feasible, given expected revenues from carbon and non-carbon sources associated with those activities. Assessing costs can be complex, given the number of interventions within an ER Program, each engaging multiple stakeholders in numerous activities and not all of which are under the direct control of the ER program. Furthermore, opportunity costs – most relevant at earlier stages (land-use planning, for example) – are important and may need to be considered in decision-making, yet are not precise and open to manipulation. This can be particularly relevant if opportunity costs are a part of the price negotiations if higher prices paid per ER are linked to higher opportunity costs.

Ability to forecast actual costs of implementation and the impact of opportunity costs depends on type of REDD intervention and the geographic scale of implementation. Geographic scale is mapped against the granularity of cost analysis and impact of opportunity costs in Figure 1 below. At local level planning for example, the costs of fuel-efficient stove distribution can be more precisely projected than management planning or forest patrolling, although the impact of the former on the overall ER Program is much higher. At a national level, strengthening land tenure through community forestry can be more easily assessed in cost profile than policy reform, though the latter has a greater opportunity cost impact. As a result, different interventions can be expected to demonstrate financial feasibility differently, with, for example, more detailed financial analysis available for local interventions compared to national level interventions.

**Figure 1: Scale vs. ability to project costs**



**Table 3: Examples of possible REDD+ interventions**

REDD+ Intervention Type	Examples of REDD+ Intervention
Policy Reform	<ul style="list-style-type: none"> <li>• Decentralizing land-use authority and management</li> <li>• Elimination of timber exports</li> </ul>
Land-use Planning	<ul style="list-style-type: none"> <li>• Land-neutral agriculture expansion laws</li> <li>• Changes in infrastructure (roads) planning requirements that reduce deforestation</li> </ul>
Commodity/Extractive Policy	<ul style="list-style-type: none"> <li>• Implementation of compensation programs for loss of biodiversity, covering prevention, mitigation, correction, and finally, compensation for extractive industries</li> <li>• Adoption of mandatory extractive industry social responsibility (CSR) principles and international standards for the extractive industries</li> </ul>
Governance Capacity Increases	<ul style="list-style-type: none"> <li>• Technical and staffing support to government for increased detection rates and fines for illegal logging</li> <li>• Setting up multiple horizontal levels of government monitoring to reduce corruption</li> </ul>
Management Plans	<ul style="list-style-type: none"> <li>• Support for the development and registration of forest management plans</li> <li>• Improved access to “agricultural technology” (e.g., crop and livestock varieties, planting and harvesting techniques, and management strategies (e.g., intercropping, pasture rotation) to increase productivity</li> </ul>
Tenure Recognition	<ul style="list-style-type: none"> <li>• Support for community organization, demarcation and registration under existing tenure laws such as community forestry laws</li> <li>• Implementation or enhancement of local tenure tracking or cadastral systems</li> </ul>
Forest Patrolling	<ul style="list-style-type: none"> <li>• Community-based forest patrols</li> <li>• Resources for sign posts and for patrols to track illegal access and use</li> </ul>
Conservation	<ul style="list-style-type: none"> <li>• Small-scale agriculture intensification and diversification</li> <li>• Crop residual management</li> </ul>
Cook Stoves	<ul style="list-style-type: none"> <li>• Installation of fuel efficient stoves and other ways to reduce unsustainable use of fuel wood for cooking</li> </ul>
NTFP Livelihoods	<ul style="list-style-type: none"> <li>• Grants/micro credit for setup of small businesses that product non-timber forest products (e.g., beekeeping, medical plants, mushrooms)</li> <li>• Intercropping within forests small-holder (e.g., coffee, cocoa, Shea, rubber)</li> </ul>
Fire Control	<ul style="list-style-type: none"> <li>• Community-based fire education</li> <li>• Fires breaks and local water resources for fire fighting</li> </ul>

For ER-Fin, the following criteria could be considered to ensure financial feasibility in REDD+ interventions that produce ERs:

#### Draft ER-Fin Criteria

1	Proponent has completed a full breakdown of all costs of implementation through interventions on a line item basis.
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2	Market price analysis for carbon and other revenue sources has informed a decision on carbon and non-carbon asset price assumptions for input to a financial model.
3	Proponent has completed a break-even analysis from combining 1) and 2) with ER volume estimates, revealing upfront financing needs and the range of commercial terms that will allow ongoing commercial viability.
4	Stress tests have adjusted key commercial variables across multiple scenario analysis: total costs, issued tons, carbon price, timing of first verification.

### 5.1 Cost analysis

Cost analysis is the cornerstone for the development of a program-life budget on which a financial model will eventually be built to allow analysis of commercial viability, financial returns and safety margin. It is recommended the program proponent develop an **ER Implementation Cost Budget** (or use the World Bank REDD+ Cost Assessment Tool currently in development) to itemize and analyze costs at the line item level – one item per line – to ensure full transparency and ability to adjust data. The REDD+ Interventions Program Design document will have generated ex-ante estimates for the set of interventions, allowing full cost analysis of the program. Costs of preparing for carbon development include both fixed and variable costs (as a function of tons) incurred through upfront validation and verification, registration and issuance (costs of transferring issued credits from the Seller's registry account to the Buyer's registry account), ongoing carbon monitoring and verification costs, program design and prep costs, program implementation oversight costs and all upfront and ongoing costs of program actions. Note that costs may be negotiated to be paid for by the buyer to lower the program's cost base once ERPA negotiations begin.

### 5.2 Revenue analysis – market prices and other revenue sources

It is recommended that the next component of a working financial model is the development of a carbon market and other commodity or other price assumptions that are applied to ex-ante estimates of volumes generated (both carbon and non-carbon outputs) to yield **ER and Related Revenue Projections**. As detailed in *FMT Note CF-2013-1 Update on pricing issues for the Carbon Fund*, carbon market price must be assessed through market demand research into prevailing demand trends and specific attributes sought by buyers to generate a fair assumption as to future carbon prices. Market demand research must assess both emerging compliance and existing voluntary demand trends given the geography, methodology and key characteristics of the project. To ensure a satisfactory level market demand research, it is suggested that the program proponent should have discussed market conditions with three to four leading brokers of environmental assets and relevant commodities, particularly with respect to evolving regulatory regimes. The trends in underlying market prices can also be assessed through market-wide research sources, such as for carbon in the *State of the Voluntary Carbon Markets* report by Bloomberg New Energy Finance/ Ecosystem Marketplace (note also that Point Carbon produces quarterly price survey bulletins to a private mailing list) and the annual World Bank *State and Trends of the Carbon Markets* report. As a program develops, the potential forward sale value of a future credit will increase as a result of the decreasing risk that the program will fail to generate ERs.

At the next level, the program proponent should be able to demonstrate understanding of 1) the current market trade-off in the pricing of pre-payment and payment-on-delivery emissions reductions; 2) the discounting of price required as a function of risk given stage of program development (see for further discussion *FMT Note CF-2013-1 Update on pricing issues for the Carbon Fund*); and 3) the key characteristics of the program that are selling attributes for the program within the current

marketplace. Where potential sales price is difficult to estimate, the program may consider using an auction format for sales of a portion of credits. Note that as introduced in P-Fin above, where a jurisdiction is charging a fee on revenue, this amount is deducted from program revenue earned from carbon sales.

### 5.3 Revenue Analysis – Breakeven Assessment

Once cost, market prices and output volumes are combined, a complete financial model can demonstrate the financing amount needed by a program, i.e., that program revenue will cover its costs and the extent to which there is a timing mismatch between set-up costs being paid and the first revenues flowing given sales of carbon credits and non-carbon program outputs (**Cash Flow and Breakeven Analysis**). In addition, this assessment verifies the ongoing financial viability of the program, meaning the ongoing ability of revenue to cover costs with accumulation of cash in reserve accounts and/or government support that covers shortfalls in any individual year where there is no issuance and sale of carbon credits. When financial viability is demonstrated in the context of satisfactory operational and legal structure, a program may be referred to as “investment grade.”

The ability to develop an investment-grade program should support efforts to secure upfront funding and secure other buyers in addition to the CF, enhancing the overall program risk profile.

### 5.4 Commercial Terms Analysis

Following calculation of the initial financing required, the program is in a position to evaluate the bounds of commercial terms that are possible ahead of going into first ERPA negotiations (**Funding and Commercial Terms Analysis**). The most important aspect of terms negotiation is that sufficient free cash flow can be sustained given the ERPA contract terms. This can be verified using the financial model prepared.

FMT Note CF-2013-1 *Update on pricing issues for the Carbon Fund* suggests the following terms for negotiation: contract ER volume; price; price for additional ER volumes achieved (which may be contracted through put or call options); advance payments; and carbon development cost sharing (if applicable) and conditions of effectiveness or “conditions precedent” to the ERPA contract coming into force. Price structure may include different features depending on the risk preferences of the program in selling its carbon. Price negotiation will typically include both fixed and market-linked (or “floating”) price components as a function of the program’s desire to lock-in the level of cash flow from carbon sales during the contracted ERPA term versus the potential for upside – but also downside – through revenue being linked to carbon market values at the time of delivery. A transaction price benchmark should be selected that represents the most liquid (highly transacted) indicator of market pricing at the time of delivery.

Where the ERPA includes a pre-payment component to finance the early stage activities of the project, this amount may be staged as a function of preconditions to drawdown. The amount of drawdown negotiated should be sufficient to fund activity to achieve the next key milestone in project development, while respecting any negotiated cap in the upfront capital amount as a percentage of the total ERPA purchase value. The proponent should be able to articulate these key milestones against which capital can be sequentially drawn down and the amounts required for each.

ERPA pricing structures can become complex and complex structures should be avoided (see further comments in FMT Note CF-2013-1 *Update on pricing issues for the Carbon Fund* and FMT Note 2012-8 *Recommendations of the Working Group on the Methodological and Pricing Approach for the Carbon Fund of the FCPF*). The proponent will need to assess its preference for fixed and floating prices,

blending the certainty in revenue values for a fixed price portion against the opportunity to benefit or lose given market price fluctuations. Additionally, the proponent must understand the profit share concept and – where an equal 50:50 share of profits is not agreed – know the minimum profit share proportion that it will accept as fair.

## 5.5 Model Stress Testing

Total costs, ERs volume generation and carbon price are the most important drivers to a program's profitability. It is recommended to take a "base case" financial model and apply stress tests to assume future variation in each of these components of the financial model, in addition to simulating the delay in the timing of the first verification (**Financial Model Stress Testing**). In a stress test, input values are adjusted to assess the impact on commercial viability and to identify the factors that demonstrate the greatest sensitivity to change. Scenario analysis combines multiple changes in variables to create negative scenarios that could be reasonably anticipated and to inform the financial feasibility assessment.

The project proponent should consider the outcomes of this modeling in the light of a certain level of "safety margin," to demonstrate that the program can continue to operate in scenarios that, while not welcome, are plausible.

# 6. Summary and Integration into FCPF ER Program Cycle

O&F feasibility criteria and indicators could be included in the methodological framework and/or integrated into the ER Program cycle. The advantage of including financial and operational criteria and indicators into the methodological framework is that it allows a complete set of criteria and indicators to be located in a single document. The disadvantage of this approach is that it mixes technical accounting and safeguard issues required under the UNFCCC to quantify ERs and promote social and environmental soundness with program design and implementation issues that are not currently part of UNFCCC requirements. Under either option O&F soundness will need to be assessed as part of the ER Program cycle, which is the focus of this section.

## 6.1 FCPF ER Program Cycle

Elements of the ER Program cycle are set out in the *Operating Arrangements under the Carbon Finance Mechanism Issues Note*.<sup>10</sup> Key review and decision points relevant to this Issues Paper are set out below, with particularly relevant steps or points emphasized in *italics*:

- 1) The REDD Country Participant *submits an ER-PIN to the FMT, who reviews the ER-PIN against selection criteria included in the Issue Note, or additional criteria "as determined by the Carbon Fund Participants."*
  - The selection criteria includes requirements for the ER Program to demonstrate, amongst other things, *performance (ability to generate ERs), finances, benefit sharing mechanisms* including adequate governance and financial management, and (for sub-national ER Programs) *capacity to measure and report on ERs*.
- 2) The FMT submits the ER-PIN to the Carbon Fund Participants, which may request the FMT to *establish an Ad Hoc Technical Advisory Panel (TAP) to assist the Participants review the ER-PIN*. The ER-PIN is also posted online.

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<sup>10</sup> Dated February 9, 2011 (revised). Part 2 contains a series of steps for Emission Reduction Creation and section 3 contains additional selection criteria.

- 3) The Tranche Participants decide on whether or not to include the ER Program in its portfolio, *taking into account the TAPs review and other relevant comments*. This decisions should ideally be adopted by consensus, or if this is not possible by a “double two-thirds majority.”<sup>11</sup> Once approved, the trustee sends a letter of intent to the REDD Country Participant notifying them of the Tranche Participant’s intent to consider the ER Program (or part of it) for a potential ERPA.
- 4) The FCPF Participants Committee assesses whether the submitting country has made sufficient progress towards REDD+ Readiness to enter into an ERPA.
- 5) The World Bank performs its due diligence to ensure compliance with Bank Operational Policies and Procedures, *and advises the submitting country on ways to improve the quality of the ER Program during the design and/or implementation, as appropriate*.
- 6) The REDD Country Participant continues to develop ER Program, *taking into account input received* (as appropriate) and *submits final ER Program document* to FMT.
- 7) The FMT draft an ERPA with the REDD Country Participant *based on the Valuation and Pricing Approach and ERPA General Conditions* (which is a more detailed iteration of the Term Sheet).
- 8) The REDD Country Participant and the relevant Tranche of the CF come to an agreement on the terms of the ERPA and an ERPA is signed. This decisions should ideally be adopted by consensus, or if this is not possible by a “double two-thirds majority.”<sup>12</sup>
- 9) The ER Program is implemented, emission reductions verified, transferred and paid for.

Details on financial and operational feasibility should be included in the ER-PIN and the final ER Program document (Points 1 and 6). Points 1, 2, 3, 5 and 7 are the most logical places within this cycle where assessment of O&F soundness – and decisions based on such assessment – can be expected to occur. The information that a REDD Country Participant should include in an ER-PIN and ER Program Document package and scope of possible review of each is set out in Sections 6.2 and 6.3 below, with a detailed summary in Section 6.4.

## **6.2 ER-PIN Submission and Review**

### **6.2.1 Content of the ER-PIN**

#### ***Operational feasibility***

Version 3.0 of the ER-PIN (dated September 8, 2012) requires information on partners and other entities involved in the proposed ER Program in Section 3. This section of the ER-PIN requires listing the name of the partner, contact details and a description of their core capacity and role in the ER Program. This is followed by additional text descriptions of the relevant agency’s capacity. In Section 5, activities planned under the ER Program are described, and Section 6 includes a description of how the ER Program is consistent with the national REDD+ strategy and governance arrangements, including governance of the ER Program and how it relates to the national framework.

Sections 3, 5 and 6 should provide sufficient detail for a general assessment of the management and governance of the ER Program. However, the ER-PIN could benefit by including a specific section that contains a summary ER Program Implementation Plan for the ER Program. This is different to the list of institutions and activities and should set out the steps that need to be carried out to develop and implement the ER Program and generate ERs. This should specify who will be responsible for each step and potential barriers or risks to each step being achieved.

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<sup>11</sup> See FCPF Carbon Fund, *Note on Decision-Making Modalities in the Carbon Fund*, April 19, 2011 (Note FMT 2011-3-Rev).

<sup>12</sup> See FCPF Carbon Fund, *Note on Decision-Making Modalities in the Carbon Fund*, April 19, 2011 (Note FMT 2011-3-Rev).

### ***Financial feasibility***

Version 3.0 of the ER-PIN (dated September 8, 2012) requires information on the financial plan in Section 14. This includes a “Financing plan summary table” that is divided into costs and revenue. The cost side includes four line items of costs related to development of the ER Program, operational and implementation costs, financing costs and other costs. The revenue section includes line items for grants, loans, revenue from REDD+ activities, revenue from sale of ERs (contracted and not yet contracted) (see Annex 2 for a copy of the summary table). The level of detail included in the ER-PIN is useful to capture a general sense of possible costs and revenues of a financial plan. However, additional detail at the ER-PIN stage on costs would help focus REDD Country’s development of their ER Program and provide more detail for a thorough pre-feasibility assessment of the ER Program by the FMT and CF Participants. For example, a more detailed cost assessment could include separate line items for:

- Operational costs of managing the ER Program: This could include an explanation of institutions involved and separate costs of managing the following key operational elements of an ER Program.
  - Administrative Oversight
  - Regulation and Program Design
  - REL and Monitoring Infrastructure
  - ER Issuance and Tracking
  - Financial Management
  - Benefit Plan Administration
  - Stakeholder Engagement

It could include costs of initial development of the key operational elements, along with ongoing management over the life of the ER Program.

- Costs of implementing the ER Program: This could include a line item for each proposed activity under the ER Program and their associated costs. This could differentiate between activities that will generate ERs and other activities that are part of the ER Program (e.g., activities that may come under a benefit sharing plan).
- Financing costs: This includes costs of finance such as interest on loans.
- Other costs.

The breakdown of revenues could also include an additional revenue line item for fees or other revenues created under the ER Program. To the extent that any particular activities included in the summary of costs are expected to generate revenue of any sort, the revenue from these activities could be separated out by activity.

A simplified spreadsheet template could be developed by the FMT to support the financial analysis needed at the ER-PIN stage. Such a template would need to be sufficiently flexible and open to adjustments to cater for the diversity of ER Programs.

#### **6.2.2 Review of the ER-PIN**

Additional review criteria for the information contained in the ER-PIN could be developed and made available. The review criteria could draw on the criteria developed in Sections 2-5 of this report, but tailored to the level of detail contained in the ER-PIN. For example, the P-Fin criteria are: 1) A full budget

covering costs of setting up the ER Program is developed; 2) a full budget covering 10-15 years with costs and revenues of operating the ER Program is developed; and 3) funding sources have been secured to support operationalizing the ER Program and that the program can demonstrate the financial viability of on-going operations. This cannot be expected at the ER-PIN stage, thus could be revised as: 1) A draft budget covering costs of setting up the ER Program is developed; 2) a draft budget with costs and revenues of operating the ER Program is developed; and 3) funding sources and/or funding gaps have been identified. Similar revisions of the other criteria contained in this report could be included in a document of ER-PIN review criteria approved by the CF Participants.

### **6.3 ER Program Document Submission and Review**

#### **6.3.1 Content of the ER Program Document**

The ER Program Document and supporting documents should provide sufficient detail for the Trustee and CF participants to assess the O&F feasibility of the proposed ER Program. This assessment should be taken into consideration during the pricing negotiations. The ER Program Document template should provide a framework for REDD Countries to add relevant information and detail to demonstrate how the ER Program meets O&F feasibility criteria suggested in this paper. It should also contain a list of supporting documentation that REDD Country Participants could include as annexes or attachments to the ER Program Document to demonstrate feasibility. A list of possible documentation suggested in this paper is set out in Table 4 and 5.

**Table 4: Summary of potential documentation used to demonstrate operational feasibility**

<b>Requirement (Section)</b>	<b>Report/Document</b>
P-Ops (2.1)	<b>Legal Analysis</b> to demonstrate REDD+ country program's mandate to develop and oversee the ER Program
P-Ops (2.2)	<b>Implementing Partner Schematic</b> for government and non-government entities with roles and responsibilities
P-Ops (2.2)	<b>Contractual Agreements</b> between REDD+ Country Program and implementing partners
P-Ops (2.2)	<b>Capacity Assessment or Demonstration of Capacity</b> for implementing partners
P-Ops (2.3)	<b>Public Information Dissemination and Public Commenting Requirements</b>
P-Ops (2.4)	<b>ER Program Implementation Plan</b>
ER-Ops (3.1)	<b>Detailed Drivers, Agents and Underlying Causes Assessment</b> with relative contribution and spatially explicit
ER-Ops (3.2)	<b>REDD+ Interventions Program Design</b> that is tied to the many drivers and agents
ER-Ops (3.2)	<b>Ex-Ante ER Estimates</b> by groups of REDD+ interventions
ER-Ops (3.2)	<b>REDD+ Interventions Implementation Plan</b> with measurable outputs by implementing partner
ER-Ops (3.3)	<b>Report on Rights to ER</b> that is documented through Legal Analysis for each land tenure type in the ER Area

**Table 5: Summary of potential documentation used to demonstrate financial feasibility**

Requirement (Section)	Report/Document
P-Fin (4.1)	<b><i>ER Program Startup Cost Budget</i></b>
P-Fin (4.2)	<b><i>ER Program Management Budget</i></b> with costs and revenues (at least 10 years)
P-Fin (4.3)	<b><i>ER Program Cash Flow Projection</i></b>
P-Fin (4.3)	<b><i>ER Program Financing Plan</i></b>
ER-Fin (5.1)	<b><i>ER Implementation Cost Budget</i></b> with the costs of all the activities needed to produce ERs
ER-Fin (5.2)	<b><i>ER and Related Revenue Projections</i></b>
ER-Fin (5.3)	<b><i>Cash Flow and Breakeven Analysis</i></b>
ER-Fin (5.4)	<b><i>Funding and Commercial Terms Analysis</i></b>
ER-Fin (5.5)	<b><i>Financial Model Stress Testing</i></b>

A spreadsheet template could be developed by the FMT to support the financial analysis needed at the ER Program document stage. Such a template would need to be sufficiently flexible and open to adjustments to cater for the diversity of ER Programs.

### 6.3.2 Review of the ER Program Document

The criteria suggested in Sections 2-5 in this paper for program level operational feasibility, program level financial feasibility, emission reduction level operational feasibility and emission reduction level financial feasibility could form the basis of review criteria applied to ER Program Documents and their supporting documents.

### 6.4 Summary Recommendations and Process Overview

The ER Program cycle summarized in section 6.1 above contains a number of steps and review processes. However, there is some ambiguity regarding any review and approval of the final ER Program Document and its relation to the ERPA negotiation and execution. A flowchart showing the possible steps in the ER Program cycle including key documentation and review points is set out in Figure 2 below. The recommended documentation and draft review criteria for steps covered in this paper are set out in Table 6.

Figure 2: Possible steps in the ER Program cycle

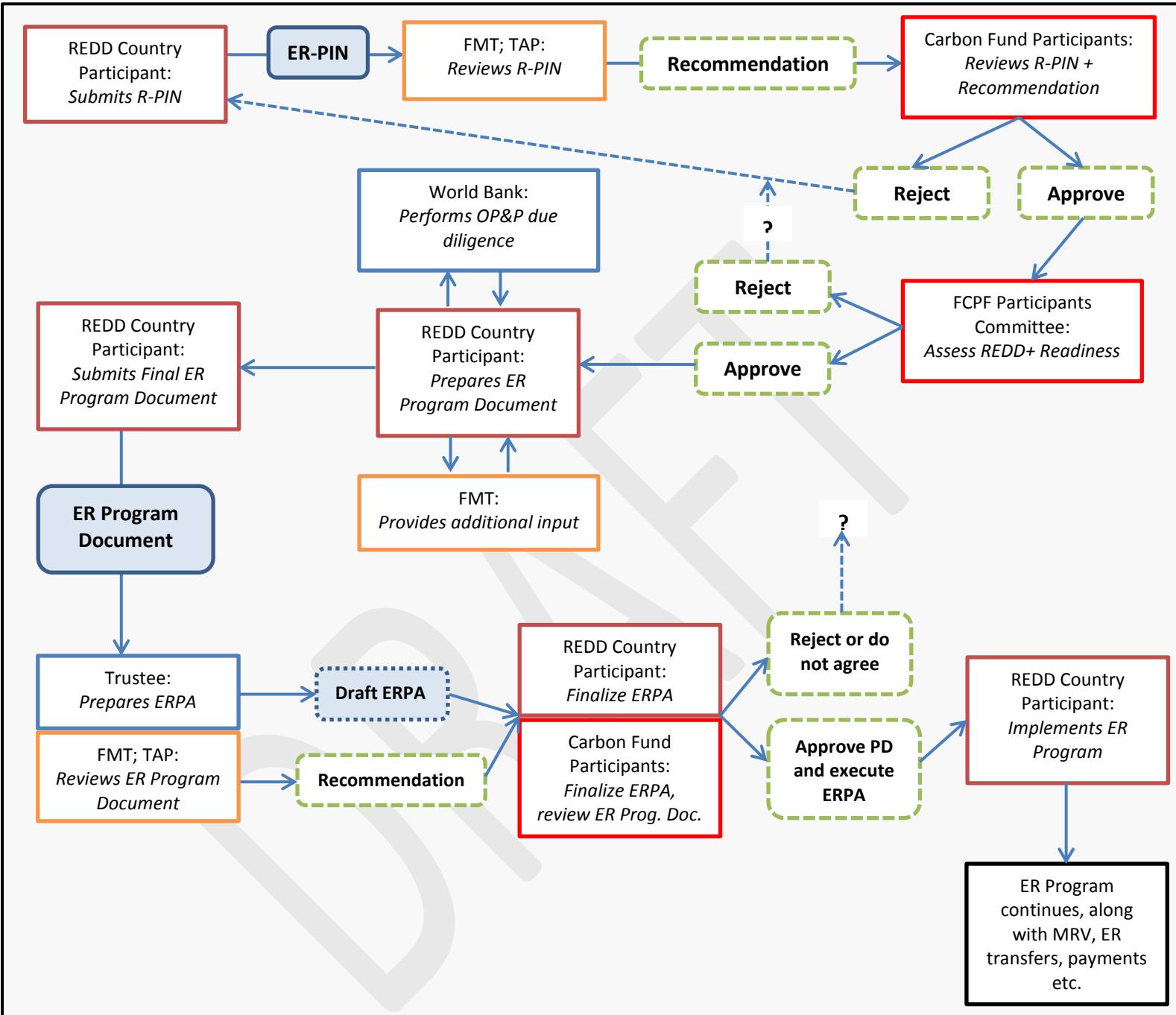


Table 6: Recommended documentation and draft review criteria

Document / review step	Additional documentation &/or information provided	Operational criteria	Financial criteria	Other relevant criteria
<b>ER-PIN</b>	ER-PIN, which includes: <ul style="list-style-type: none"> <li>Initial Implementing Partner Schematic</li> <li>Initial ER Program Implementation Plan</li> <li>Initial ER Program budget (including cost and revenue analysis)</li> </ul>			
<b>FMT; TAP: Reviews R-PIN</b>	FMT and TAP review: <ul style="list-style-type: none"> <li>ER-PIN and supporting material</li> </ul>	Simplified P-Ops and ER-Ops: <ul style="list-style-type: none"> <li>Legal mandate for the relevant entities to oversee and manage the ER Program and each of its components is identified or proposed.</li> <li>Institutional and implementation arrangements are identified.</li> <li>Initial ER Program Implementation Plan is sound</li> </ul>	Simplified P-Fin and ER-Fin: <ul style="list-style-type: none"> <li>A draft budget covering costs of setting up the ER Program is developed.</li> <li>A draft budget with costs and revenues of operating and implementing the ER Program is developed.</li> <li>Funding sources and/or funding gaps have been identified.</li> </ul>	Additional criteria: <ul style="list-style-type: none"> <li>Draft safeguards plan, benefit sharing plan, and grievance redress mechanisms (or process to develop them) are sound.</li> <li>Additional criteria based on other issues covered in the Methodological Framework</li> </ul>
<b>Carbon Fund Participants: Reviews R-PIN + Recommendation</b>	Carbon Fund Participants review: <ul style="list-style-type: none"> <li>ER-PIN and supporting material</li> <li>Recommendation from FMT and TAP</li> </ul>	Carbon Fund Participants' review criteria for the ER-PIN are the same as FMT and TAP	Carbon Fund Participants' review criteria for the ER-PIN are the same as FMT and TAP	Carbon Fund Participants' review criteria for the ER-PIN are the same as FMT and TAP

Document / review step	Additional documentation &/or information provided	Operational criteria	Financial criteria	Other relevant criteria
<b>ER Program Document</b>	ER Program document and supporting material: <ul style="list-style-type: none"> <li>See tables 4 and 5 above for a complete list of recommended information and supporting documentation</li> </ul>			
<b>FMT; TAP: Reviews ER Program Document</b>	FMT and TAP review: <ul style="list-style-type: none"> <li>ER Program document and supporting material</li> </ul>	<p>P-Ops criteria 1, 2, 4. In brief:</p> <ul style="list-style-type: none"> <li>Laws and regulations provide the legal mandate for the ER Program</li> <li>Institutional and implementation arrangements identified and entities have capacity</li> <li>Implementation plan is sound</li> </ul> <p>ER-Ops criteria 1,2,3. In brief:</p> <ul style="list-style-type: none"> <li>Driver analysis completed</li> <li>Interventions to address drivers are defined</li> <li>Implementation plans and partners are defined, engaged and have capacity and funding</li> </ul>	<p>P-Fin criteria 1,2,3. In brief:</p> <ul style="list-style-type: none"> <li>Budget of setting up the ER Program is developed</li> <li>Budget for 10-15 years of costs and revenues to operate ER Program is developed</li> <li>Funding sources have been secured to demonstrate financial viability</li> </ul> <p>ER-Fin criteria 1,2,3,4. In brief:</p> <ul style="list-style-type: none"> <li>Full breakdown of costs of implementation completed.</li> <li>Market price analysis completed.</li> <li>Break-even analysis with ER estimates completed.</li> <li>Stress tests completed.</li> </ul>	<p>P-Ops criteria 3:</p> <ul style="list-style-type: none"> <li>Information dissemination and public comment processes follow good practices for rulemaking and ER Program operation</li> </ul> <p>ER-Ops criteria 4:</p> <ul style="list-style-type: none"> <li>The REDD Country Participant can demonstrate that it has rights over the ERs over the ERPA</li> </ul> <p>Additional criteria based on other issues covered in the Methodological Framework</p>

Document / review step	Additional documentation &/or information provided	Operational criteria	Financial criteria	Other relevant criteria
<p>Carbon Fund Participants: Finalize ERPA, <b>review ER Prog. Doc.</b></p>	<p>Carbon Fund Participants review:</p> <ul style="list-style-type: none"> <li>• ER Program document and supporting material</li> <li>• Recommendation from FMT and TAP</li> </ul> <p><b>NOTE:</b> Recommendations on the ERPA are not included in this paper</p>	<p>Carbon Fund Participants' review criteria for the ER Program Document are the same as FMT and TAP</p>	<p>Carbon Fund Participants' review criteria for the ER Program Document are the same as FMT and TAP</p>	<p>Carbon Fund Participants' review criteria for the ER Program Document are the same as FMT and TAP</p>
<p>ER Program continues, along with MRV, ER transfers, payments etc.</p>	<p>Ongoing reporting documents may include:</p> <ul style="list-style-type: none"> <li>• ER Monitoring Report</li> <li>• Verification Report</li> <li>• Information on Safeguard Plans</li> <li>• Information on the Benefit Sharing Plan</li> <li>• Information on Non-Carbon Benefits</li> </ul>	<p>P-Ops criteria 1. In brief:</p> <ul style="list-style-type: none"> <li>• Laws and regulations provide the legal mandate for the ER Program</li> </ul> <p>Ongoing review of other operational criteria should be carried out as good practice.</p>	<p>P-Fin criteria 3. In brief:</p> <ul style="list-style-type: none"> <li>• Funding sources have been secured to demonstrate financial viability</li> </ul> <p>Ongoing review of other financial criteria should be carried out as good practice.</p>	<p>ER-Ops criteria 4:</p> <ul style="list-style-type: none"> <li>• The REDD Country Participant can demonstrate that it has rights over the ERs over the ERPA</li> </ul> <p>Additional criteria based on other issues covered in the Methodological Framework</p>

	<b>Required or Good Practice at PIN Stage</b>	<b>Required or Good Practice at ER-Program Stage</b>	<b>Required at Program Implementation Stage; or Optional Good Practice</b>
I. Relevant criteria that are dealt with as part of other criteria of the meth framework ( Carbon Right, Safeguards, Benefits Sharing, Grievance Redress mechanism)		e.g. Required???: Report on Proof of Rights to ER that is documented through Legal Analysis for each land tenure type in the ER Area	e.g Funding and Commercial Terms Analysis
II. Operational criteria	e.g ER Program Implementation Plan		
III. Financial Criteria			

## List of Acronyms

AB	Assembly Bill
ARB	Air Resources Board
CARB	California Air Resources Board
CDM	Clean Development Mechanism
CERs	Certified Emission Reductions
CF	The Carbon Fund
CFI	Carbon Farming Initiative
DCCEE	Department of Climate Change and Energy Efficiency
ER	Emission Reductions
ERPA	Emission Reductions Purchase Agreement
ERU	Emission Reduction Units
ER-Fin	Emissions Reductions Level Financial Feasibility
ER-Ops	Emissions Reductions Level Operational Feasibility
ETS	Emissions Trading Scheme
EU ETS	EU Emissions Trading Scheme
FCMC	Forest Carbon, Markets and Communities
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
FMT	Facility Management Team
GEF	Global Environment Facility
GHG	Greenhouse Gas
JI	Joint Implementation
JNR	Jurisdictional and Nested REDD+
JP	Jurisdictional Proponent
LCAL	Low Carbon Australia Limited
MF	Methodological Framework
MRV	Measurement, Reporting and Verification
NAPA	National Adaptation Programs of Action
NJP	National UN Joint Programmes
NZ ETS	New Zealand's Emissions Trading Scheme
NZU	New Zealand Unit
O&F	Operational and Financial
P-Fin	Program Level Financial Feasibility
P-Ops	Program Level Operational Feasibility
REDD+	Reducing Emissions from Deforestation and Forest Degradation in Developing Countries; and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks
REL	Reference Emission Level
R-PPs	Readiness Plan Proposal
TAP	Technical Advisory Panel
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	United Nations REDD+ Programme
VCS	Verified Carbon Standard

## Annex 1: Comparative Analysis of other Programs

### 1. International and multilateral programs

#### 1.1 UNFCCC, NAPAs, and Kyoto Flexible Mechanisms

The Recommendations of the Working Group on the Methodological and Pricing Approach for the CF of the FCPF contain an Overarching Accounting and Programmatic Element that states ER Programs should “strive to be consistent with evolving UNFCCC decisions on REDD+.” There are no formal requirements to demonstrate financial or operational feasibility for REDD+ activities under the UNFCCC. Most of the references to REDD+ finance under the Convention focus on the provision of adequate finance to carry out activities and options for generating this finance. The Cancun Agreements require national plans be developed for REDD+, and the Cancun Safeguards state that REDD+ activities should be “undertaken in accordance with national development priorities, objectives and circumstances” and be “consistent with Parties’ national sustainable development needs and goals.”<sup>13</sup>

Integrating REDD+ into national development plans and other national policies will require developing cost estimates and operational planning to implement, which will be carried out as part of a REDD+ readiness process. However, this does not imply that demonstrating financial and operational soundness is an eligibility criteria or condition which must be met in order to receive results-based or other REDD+ finance under the UNFCCC. That said, just because demonstrating financial and operational soundness is not a formal requirement or condition under the UNFCCC, it does not mean that it is not prudent to do so. Other climate finance mechanisms require financial analysis and feasibility assessment as part of their program development and funding procedures.

National Adaptation Programs of Action (NAPAs) require national level planning, coordination and identification of activities to be implemented that should deliver cost effective results, which has analogies to REDD+. Both NAPAs and REDD+ aim to draw upon multiple sources of funding to help meet implementation and operational costs, aim to be developed in a consultative process, aim be integrated into national development plans and other national planning processes, and have some form of ongoing monitoring and evaluation. These requirements are included in the NAPA template, which requires NAPAs to describe the institutional framework for project implementation, expected cost-effectiveness and monitoring and evaluation plans. The short descriptions of proposed activities also require basic information on implementation and management costs. The completed NAPAs that contain this information are reviewed and used as the starting point to obtain funding from either the Least Developed Countries Fund (managed by the Global Environment Facility [GEF]) or other sources of donor funding. Providing financial information and cost analysis is also commonplace amongst other GEF-managed funds as part of their project review and approval procedures.

One important difference between GEF funding and the FCPF is that GEF funds are directed towards supporting the underlying project costs which makes cost analysis essential. The FCPF CF, on the other hand, is purchasing ex-post ERs. This may be more analogous to purchasing Certified Emission Reductions (CERs) under the Clean Development Mechanism (CDM) or Emission Reduction Units (ERUs) under Joint Implementation (JI) where financial analysis is often undertaken in the context of additionality analysis. Additionality analysis does not, however, extend to overall analysis of project

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<sup>13</sup> Decision 1/CP.16 *The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, Appendix I “Guidance and safeguards for policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries,” Paragraph 1.

operational feasibility, and prudent purchasers of CERs or ERUs, or investors in CDM or JI projects, will undertake their own financial and operational due diligence separate from any additionality analysis.

## 1.2 The FIP and UN-REDD

The Forest Investment Program (FIP) and United Nations REDD Programme (UN-REDD) both support REDD+ readiness and demonstration activities which complements FCPF funding. While there are no requirements for project/program review and approval processes to be harmonized between the initiatives, comparative analysis of how these organizations approach this question is nonetheless informative. Similar analysis could also be carried out on other multilateral initiatives such as the Global Environment Facility, the Program for Market Readiness, and other funds and initiatives under the Climate Investment Funds, but this broader analysis is beyond the scope of this issues paper.

The Forest Investment Program (FIP) is a program of the Strategic Climate Fund, which is one of two funds under the Climate Investment Funds. The FIP has been pledged \$639 million from donors and supports eight developing countries REDD+ efforts<sup>14</sup>. The FIP requires countries to develop an Investment Strategy that should demonstrate, amongst other aspects, economic and financial viability, described as “FIP investment strategies, programs and projects should catalyze self-sustaining financially profitable models for REDD at scale without the need for continuing subsidies.”<sup>15</sup> The Investment Strategy is reviewed by technical experts and assessed against FIP investment criteria that include, amongst others, cost effectiveness and implementation potential.<sup>16</sup> Detailed procedures set out review procedures and criteria for expert reviewers.<sup>17</sup> The Investment Strategy is also reviewed by the FIP Sub-Committee, where the investment criteria are to “provide the guiding framework” for the FIP Sub-Committee to consider whether an Investment Strategy meets the FIPs objectives. An Investment Strategy will only move forward if it has been endorsed by the FIP Sub-Committee.<sup>18</sup>

The United Nations REDD Programme (UN-REDD) works with 46 partner countries to support the design and implementation of national REDD+ programs, and assists in developing methodologies and tools to complement developing countries’ actions. As of 2012, UN-REDD had a total of US\$ 117.6 million in funds. Its five-year strategy states a key priority area is ensuring “transparent, equitable and accountable management of REDD+ payments.”<sup>19</sup> This includes ensuring the “integrity of fiduciary systems for receiving and disbursement of funds,” strengthening oversight institutions and linking REDD+ strategies with existing anti-corruption frameworks.<sup>20</sup> When deciding on funding for National UN Joint Programmes (NJP), the Secretariat assesses the NJP against a list of criteria, including: 1) Programme effectiveness, coherence with country strategies and other relevant initiatives (including the FCPF), and cost-efficiency; 2) management of risks and likelihood of success; 3) consistency the UN-REDD Programme Framework Document; and 4) compliance with UN-REDD operational guidance and NJP format.<sup>21</sup> The NJP format is an existing United Nations Development Programme (UNDP) process for developing joint development programs that include planning, implementation, and monitoring, evaluation and reporting steps. It consists of a number of steps and template documents (including a

<sup>14</sup> Brazil, Burkina Faso, Democratic Republic of Congo , Ghana, Indonesia, Lao People's Democratic Republic, Mexico, and Peru.

<sup>15</sup> Climate Investment Funds, *Design Document for the Forest Investment Program, A Targeted Program Under the SCF Trust Fund*, July 7, 2009

<sup>16</sup> see FIP/SC.3/4 *Investment Criteria and Financing Modalities*

<sup>17</sup> Climate Investment Funds, *Procedures for the Preparation of Independent Technical Reviews of Investment Plans Under the Forest Investment Program (FIP)*, November 28, 2011

<sup>18</sup> See Climate Investment Funds, *FIP Operational Guidelines*, June 29, 2010, at paragraphs 18 – 20.

<sup>19</sup> UN-REDD Programme. The UN-REDD Programme Strategy: 2011-2015. See Section 5, Table 1, Page 8. Available at: <http://www.un-redd.org>

<sup>20</sup> UN-REDD Programme. The UN-REDD Programme Strategy: 2011-2015. See Section 5.5, Page 14. Available at: <http://www.un-redd.org>

<sup>21</sup> UN-REDD Programme. UN-REDD Programme Rules of Procedure and Operational Guidance. See Section 2.5, Page 10. Available at:

<http://www.un-redd.org/PublicationsResources/tabid/587/Default.aspx>

results framework and work plan) that need to be completed.<sup>22</sup> The Framework Document discusses financial policies necessary for successful REDD+ implementation and details a number of risks related to delivering ERs and REDD+ benefits. These risks are not, however, explicitly labeled as criteria to be used or assessed for decision-making purposes. The Framework Document provides some insight as to what policies and practices can mitigate these risks, drawing on lessons learned from the CDM. These policies include developing transparent payment delivery mechanisms, agreement over risk management, selling options for REDD+ credits to raise up-front cash streams and assessing needs for new or modified in-country institutions to manage transactions.<sup>23</sup> When conducting the review the Secretariat may consult independent technical experts as necessary, though it is not bound by their views. The Secretariat may request revisions or submit the NJP to the policy board with a recommended action. The policy board is responsible for final approval and disbursement of funds and is not bound by the Secretariat's recommendations.<sup>24</sup>

## 2. Domestic Emissions Trading Schemes

Domestic Emissions Trading Schemes (ETS) in developed countries have some analogies to REDD+ and ER Programs. Both require national level planning and large scale or national level implementation and governmental administration and oversight. While an ETS will have different accounting rules to a REDD+ ER Program, there are also technical and procedural similarities, including MRV requirements (including the forest sector), dealing with multiple stakeholders (and any associated grievances), and recording or registering local interests or rights (e.g., via a registry). The costs of operating and implementing an ETS in a developed country will differ to the costs of operating and implementing a REDD+ ER Program, but is useful to compare cost components, how funds are raised, and overall operational costs as a high-end cost comparison. This makes a brief comparison useful to understanding some of the management and implementation costs ETS's face. Australia, New Zealand and California all include domestic forestry and some other land-use sectors are briefly reviewed<sup>25</sup>.

### 2.1 Australia

#### 2.1.1 Summary

Australia's climate legislation contains a number of components, mostly contained within the Department of Climate Change and Energy Efficiency (DCCEE), which leads the development and coordination of Australia's climate change and energy efficiency policy. The DCCEE is responsible for the oversight of the Clean Energy Regulator, the Climate Change Authority and Low Carbon Australia Limited. The Clean Energy Regulator is responsible for implementation and administration of the carbon pricing mechanism, the Carbon Farming Initiative (CFI), and the Australian National Registry of Emissions Units amongst others. The national system starts by applying a flat price (tax) of AU\$23 (US\$24<sup>26</sup>) per metric ton of carbon dioxide equivalent emitted for the first three years which turns into an ETS in 2015 and will be linked to the EU Emissions Trading Scheme (EU ETS). It also provides for the creation of domestic forestry and land-use offsets under the CFI. The carbon pricing legislation is expected to raise

<sup>22</sup> For a list of documentation and supporting material see: <http://www.undg.org/index.cfm?P=240>

<sup>23</sup> UN-REDD Programme. 2008. UN-REDD Framework Document. See "REDD Payment Structuring," Page 11. Available at: <http://www.un-redd.org/PublicationsResources/tabid/587/Default.aspx>

<sup>24</sup> UN-REDD Programme. UN-REDD Programme Rules of Procedure and Operational Guidance. See Section 2.6, Page 10. Available at: <http://www.un-redd.org/PublicationsResources/tabid/587/Default.aspx>

<sup>25</sup> For additional analysis of market potential for REDD+ in Australia, New Zealand and California see "Emerging Compliance Markets for REDD+: An Assessment of Supply and Demand", Forest Carbon, Markets and Communities, available at [www.fcmglobal.org](http://www.fcmglobal.org). For additional information on California specifically see "California Cap-and-Trade and International Forest Carbon Offsets for Institutional Investors", Forest Carbon, Markets and Communities, available at [www.fcmglobal.org](http://www.fcmglobal.org).

<sup>26</sup> All exchange rates from AU\$ to US\$ in this paragraph use the interbank rate of AU\$1 = US\$1.04163 from 1 April 2013 on [www.oanda.com](http://www.oanda.com)

significant revenue for the Australian government that will be used to fund a number of government run programs. Implementation of is expected to cost the government AU\$4.3 billion (US\$4.5 billion) over the first four years, with most of this amount (AU\$ 2.9 billion/US\$3 billion) in the first year. These amounts are after expected revenues are taken into account, which include revenue of AU\$25.6 billion (US\$26.7 billion) from the sale of units.<sup>27</sup> After the first four years the government claims the legislation will be budget-neutral, though this is contested by the opposition.<sup>28</sup> Anticipated expenses include investing AU\$1.7 billion (US\$1.8 billion) dollars of carbon price revenue over the first six years in seven land sector programs to improve productivity, sustainability and profitability. Other proceeds from the carbon price revenue will be invested into other sectors and used to offset tax breaks given to low income earners. In addition to this, Australia has developed a sophisticated system to account for land-use change and forestry emissions and removals – the National Carbon Accounting System. The system took approximately 10 years to develop at a cost of approximately AU\$35 million (US\$36.5 million). The ongoing operating costs of the system could not be determined.

### **2.1.2 Steps or procedures to develop the program/scheme**

The Department of Climate Change and Energy Efficiency (DCCEE) was responsible for developing Australia's domestic climate legislation. It produced informational material and held consultation workshops and meetings in Canberra, Sydney, Adelaide, Melbourne, Perth, Brisbane and Darwin.<sup>29</sup> Draft legislation and methodology guidelines were released for public comment and stakeholder feedback was taken into account when finalizing the legislation and methodology guidelines.

### **2.1.3 Operation of the scheme**

The DCCEE leads the development and coordination of Australia's climate change and energy efficiency policy. It is responsible for policy advice, policy implementation and program delivery. The DCCEE is responsible for the oversight of the Clean Energy Regulator (CER), the Climate Change Authority (the Authority) and Low Carbon Australia Limited (LCAL), formerly known as the Australian Carbon Trust Limited.

The CER is responsible for implementation and administration of the carbon pricing mechanism, the Renewable Energy Target, National Greenhouse and Energy Reporting scheme, the CFI and the Australian National Registry of Emissions Units.

The Authority is responsible for providing expert advice to the Government on climate change mitigation initiatives, including the level of carbon pollution caps, the carbon pricing mechanism, the Renewable Energy Target, the CFI and progress in achieving Australia's emissions reduction targets, through conducting periodic reviews and undertaking climate change research.

LCAL is responsible for providing information and tools for households and businesses to effectively participate in Australia's climate change response. LCAL manages the Energy Efficiency Trust.

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<sup>27</sup> See *Clean Energy Bill 2011, Revised Explanatory Memorandum*, "Fiscal Table 1: Plan for a clean energy future" at p 40.

<sup>28</sup> See Centre for Climate and Energy Solutions, *Australia's Carbon Pricing Mechanism*, December 2011, at p 5.

<sup>29</sup> Department of Climate Change and Energy Efficiency. *Carbon Farming Initiative: Consultation paper on the proposed design of the initiative*. Retrieved March 22, 2013 from <http://www.climatechange.gov.au/government/submissions/closed-consultations/carbon-farming-initiative.aspx>

## 2.1.4 Funding and Costs

The carbon pricing legislation is expected to raise significant revenue for the Australian government that will be used to fund a number of government run programs. Implementation is expected to cost the government AU\$4.3 billion over the first four years, with most of this amount (AU\$ 2.9 billion) in the first year. These amounts are after expected revenues are taken into account, which include revenue of AU\$25.6 billion from the sale of units.<sup>30</sup> After the first four years the government claims the legislation will be budget-neutral, though this is contested by the opposition.<sup>31</sup> Anticipated expenses include investing AU\$1.7 billion dollars of carbon price revenue over the next six years in seven land sector programs to improve productivity, sustainability and profitability. This includes:

- Biodiversity Fund – Nearly AU\$1 billion to support land managers to plant, restore, manage and enhance bio-diverse carbon stores
- Carbon Farming Futures – AU\$430 million over six years to help farmers and land managers benefit from carbon farming
- Carbon Farming Initiative Non-Kyoto Carbon Fund – AU\$250 million over six years to purchase CFI credits that are not Kyoto-eligible and cannot be used by liable entities under carbon pricing mechanism

Other proceeds from the carbon price revenue will be invested into other sectors and used to offset tax breaks given to low income earners.

A total of AU\$978.8 million was requested in the 2012-2013 budget year for the government's Climate Change and Energy Portfolio. A summary of these costs are set out in Table 1. Table 2 contains estimates of funding needed for the CFI 2012 to 2016.

**Table 1: Climate Change and Energy Portfolio Resources 2012-13 (AUD millions [USD millions<sup>32</sup>])<sup>33</sup>**

<i>Department of Climate Change and Energy Efficiency</i>	
Administered Appropriations <sup>34</sup>	114.10 [119.30]
Departmental Appropriations <sup>35</sup>	104.40 [109.20]
<b>Total</b>	<b>218.50 [228.50]</b>
<i>Clean Energy Regulator</i>	
Administered Appropriations	670.80 [701.40]

<sup>30</sup> See *Clean Energy Bill 2011, Revised Explanatory Memorandum*, "Fiscal Table 1: Plan for a clean energy future" at p 40.

<sup>31</sup> See Centre for Climate and Energy Solutions, *Australia's Carbon Pricing Mechanism*, December 2011, at p 5.

<sup>32</sup> Converted using exchange rate from [www.oanda.com](http://www.oanda.com) on 3/28/2013

<sup>33</sup> Government of Australia, *Portfolio Budget Statements 2012-2013, Budget Related Paper No. 14, Climate Change and Energy Efficiency Portfolio*. Available at <http://www.cleanenergyregulator.gov.au/About-us/Governance-accountability-and-reporting/budget/Documents/2012-13-pbs-pdf.pdf>

<sup>34</sup> Departmental appropriations are provided to meet costs over which an agency has control. They are the ordinary operating costs of government agencies. Expenditure typically covered by departmental appropriations include: employee expenses; supplier expenses; other operational expenses (e.g. interest and finance expenses); and non-operating costs (e.g. replacement and capitalized maintenance of existing departmental assets valued at \$10 million or less).

<sup>35</sup> Administered appropriation items are those administered by the agency on behalf of the government. They are amounts required to meet the total estimated expenses for administered activities that are expected to be incurred in the financial year. They are normally related to activities governed by eligibility rules and conditions established by the government or Parliament such as grants, subsidies and benefit payments. Agencies therefore have less discretion over how administered operating costs are incurred.

Departmental Appropriations	92.30 [96.50]
	<b>Total</b> <b>763.10 [797.90]</b>
<i>Climate Change Authority</i>	
Administered Appropriations	-
Departmental Appropriations	6.20 [6.50]
	<b>Total</b> <b>6.20 [6.50]</b>
	<b>Portfolio Total</b> <b>987.80 [1032.82]</b>

**Table 2: Estimated costs of the Carbon Farming Initiative (AUD millions [USD millions<sup>5</sup>])<sup>36</sup>**

	2012-13 Revised Budget	2013-14 Forward year 1	2014-15 Forward year 2	2015-16 Forward year 3
Carbon Farming Initiative	0.30 [0.30]	48.55 [50.76]	45.75 [47.84]	59.73 [62.45]
Carbon Farming Initiative (extending benefits) <sup>37</sup>	1.41 [1.47]	3.25 [3.39]	2.56 [2.68]	2.43 [2.54]

In addition to this, Australia has developed a sophisticated system to account for land-use change and forestry emissions and removals – the National Carbon Accounting System. The system took approximately 10 years to develop at a cost of approximately AU\$35 million. The ongoing operating costs of the system could not be determined.

## 2.2 New Zealand

### 2.2.1 Summary

New Zealand's Emissions Trading Scheme (NZ ETS) commenced at the beginning of 2008. The Ministry of Environment originally managed the ETS. In December 2011, this was transferred to the Environmental Protection Authority who now administers the ETS (except for functions related to forestry) and runs the New Zealand Emission Unit Registry. The Ministry for Primary Industries manages the ETS for the forestry sector. ETS policy development is managed by the Ministry for Environment. For the first two and a half year compliance period of the ETS, domestic forestry was the only covered sector. From July 1, 2010, the program covered emissions from other sectors. The forest sector was one area that was particularly contentious to develop due to land rights issues raised by private and Maori owners.<sup>38</sup> Entities covered by the ETS either purchase units at a price of NZ\$25 (US\$21<sup>39</sup>) per unit or received partial free allocation depending on the sector. Some sectors also have a 1:2 surrender ratio, where they surrender one unit for every two tons of greenhouse gas (GHG) emissions. Participants may also

<sup>36</sup> Government of Australia, *Department of Climate Change and Energy Efficiency. Portfolio Additional Estimates Statements 2012-13. Explanations of Additional Estimates 2012-13*, available at <http://www.climatechange.gov.au/~media/publications/budget/1213/13PAESCCEFinal.pdf>

<sup>37</sup> Extending the benefits of the Carbon Farming Initiative includes Carbon Farming Futures developing estimation methodologies and the research and estimation development component of the Indigenous Carbon Farming Fund.

<sup>38</sup> Cox G. and Peskett L. 2010. *Commodifying carbon to reduce deforestation: lessons from New Zealand*. Overseas Development Institute

<sup>39</sup> All exchange rates from NZ\$ to US\$ in this paragraph use the interbank rate of NZ\$1 = US\$0.83631 from 1 April 2013 on [www.oanda.com](http://www.oanda.com)

purchase and surrender certain CERs and ERUs to meet their obligations.<sup>40</sup> The New Zealand government stated the ETS should be revenue neutral, but some economists and commentators claimed that it would be a net cost to the government (based on the government needing to meet ongoing obligations under the Kyoto Protocol not funded by the free allocation). The New Zealand Treasury estimated in December 2012 that the ETS will have a positive operating balance through its projections to 2017, using the then current spot price for CERs of €2.17.<sup>41</sup> The Environment portfolio included a request for NZ\$6.39 million (US\$5.34 million) for the implementation and operation of the ETS and maintenance of the New Zealand registry, along with a request for NZ\$14.45 and NZ\$15.84 million (US\$12.08 and US\$13.25 million) in 2012 and 2013 for the national land-use and carbon analysis accounting system.<sup>42</sup>

## 2.2.2 Steps or procedures to develop the program/scheme

Development of the NZ ETS was largely managed by the Office of Climate Change, under the Ministry for the Environment.<sup>43</sup> It began with a government-initiated public discussion with multiple public and private sector meetings and workshops on how to address the challenges posed by climate change. The clear preference was for a national emission trading scheme as the least cost method. New Zealand Ministries and Parliamentarians then jointly designed *The Framework for a New Zealand Emissions Trading Scheme*. Public comment was invited and a series of expert advisory groups<sup>44</sup> formed, including the Climate Change Leadership Forum to facilitate communication between government, consultation participants and the broader community.<sup>45</sup> Draft legislation, reports and online bulletins were created for stakeholder and public review along with a series of emissions trading workshops for participants and stakeholders across the country among Ministries, government officials, stakeholders and Maori.<sup>46</sup> The forest sector was one area that was particularly contentious to develop due to land rights issues raised by private and Maori owners.<sup>47</sup> Following a three-month period of consultation on the framework, the Ministry of Environment published the government's response to public feedback and soon after the NZ ETS passed into law. A statutory review of the ETS was conducted in 2011 and proposed changes have been made available for public comment.<sup>48</sup>

## 2.2.3 Operation of the scheme

The Ministry of Environment originally managed the ETS. In December 2011, this was transferred to the Environmental Protection Authority who now administers the ETS (except for functions related to forestry) and runs the New Zealand Emission Unit Registry. The Ministry for Primary Industries manages the ETS for the forestry sector. ETS policy development is managed by the Ministry for Environment.

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<sup>40</sup> New Zealand Ministry for the Environment. *Report on the New Zealand Emissions Trading Scheme*. June 30, 2011, available at <http://www.climatechange.govt.nz/emissions-trading-scheme/building/reports/ets-report/ets-report-final.pdf>

<sup>41</sup> New Zealand Treasury Half Year Economic and Fiscal Update, 18 December 2012, at 106, available at <http://www.treasury.govt.nz/budget/forecasts/hyefu2012/hyefu12-whole.pdf>

<sup>42</sup> New Zealand Treasury. Vote Environment. The Estimates of Appropriations 2012/13 B.5 Retrieved 25 March 2013 from <http://www.treasury.govt.nz/budget/2012/estimates/est12envir.pdf>

<sup>43</sup> The Environmental Protection Authority is the administering agency for the emissions trading scheme and runs the New Zealand Emission Unit Registry

<sup>44</sup> For a complete list of expert groups, please see the Climate Change Information website, <http://www.climatechange.govt.nz/emissions-trading-scheme/building/groups/>

<sup>45</sup> Dickie, M., Funk, Jason, Meyer, Christopher & Schwartzman, Stephan. (April 2012). Why New Zealand's consultation process is important for REDD+ countries. *Environmental Defense Fund*. Retrieved March 21, 2013 from [http://www.edf.org/sites/default/files/New\\_Zealand\\_consultation\\_process\\_important\\_REDDE\\_countries\\_EDF.pdf](http://www.edf.org/sites/default/files/New_Zealand_consultation_process_important_REDDE_countries_EDF.pdf)

<sup>46</sup> Ibid.

<sup>47</sup> Cox G. and Peskett L., *Commodifying carbon to reduce deforestation: lessons from New Zealand*, (2010), Overseas Development Institute

<sup>48</sup> Ministry of Environment, *Updating the New Zealand Emissions Trading Scheme :A consultation document* , (2012) Publication No: INF646, accessible at <http://www.climatechange.govt.nz/consultation/ets/consultation-ets-changes.pdf>

## 2.2.4 Funding and Costs

The New Zealand government stated the ETS should be revenue neutral, but some economists and commentators claimed that it would be a net cost to the government (based on ongoing obligations under the Kyoto Protocol). The New Zealand Treasury estimated in December 2012 that the ETS will have a positive operating balance through its projections to 2017, using the then current spot price for CERs of €2.17<sup>49</sup> (See Table 3).

**Table 3: ETS impact on the fiscal forecast (NZ\$ millions / [US\$ millions])**

Year	2012 Actual	2013 Previous Budget	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast
<b>Revenue</b>	64 [53.58]	311 [260.36]	65 [54.42]	66 [55.25]	66 [55.25]	66 [55.25]	66 [55.25]
<b>Expenses</b>	334 [279.61]	237 [198.41]	59 [49.39]	61 [51.07]	63 [52.74]	65 [54.42]	66 [55.25]
<b>Gains/ (Losses)</b>	507 [424.44]	-	155 [129.76]	-	-	-	-
<b>Operating Balance</b>	<b>237 [198.41]</b>	<b>74 [61.95]</b>	<b>161 [134.78]</b>	<b>5 [4.19]</b>	<b>3 [2.51]</b>	<b>1 [0.84]</b>	-

Relevant budget requests from the Environment portfolio for the fiscal year 2012/2013 are set out below in Table 4, with a multi-year appropriation for New Zealand's land-use accounting system in Table 5.

**Table 4: New Zealand ETS and related 2012/2013 budget requests<sup>50</sup> (NZD millions [USD millions<sup>51</sup>])**

Description	Budget 2012/13
<b>Emissions Trading Scheme</b> This appropriation is limited to the implementation and operation of the New Zealand Emissions Trading Scheme and maintenance of a register to enable the holding and transfer of climate change units.	6.39 <sup>51</sup> [5.35]

<sup>49</sup> New Zealand Treasury *Half Year Economic and Fiscal Update*, 18 December 2012, at 106, available at <http://www.treasury.govt.nz/budget/forecasts/hyefu2012/hyefu12-whole.pdf>

<sup>50</sup> Sources: New Zealand. Treasury. Vote Climate Change. *The Supplementary Estimates of Appropriations and Supporting Information 2011/12 B.7*. Retrieved 25 March 2013 from <http://www.treasury.govt.nz/budget/2012/suppestimates/suppest12clcha.pdf>; New Zealand. Treasury. Vote Energy. The Supplementary Estimates of Appropriations and Supporting Information 2011/12 B.7. Retrieved 25 March 2013 from <http://www.treasury.govt.nz/budget/2012/suppestimates/isse12-ener.pdf>; New Zealand. Treasury. Vote Environment. The Estimates of Appropriations 2012/13 B.5 Retrieved 25 March 2013 from <http://www.treasury.govt.nz/budget/2012/estimates/est12envir.pdf>

<sup>51</sup> In the 2011/2012 budget the budget for ETS was split across a number of agencies. The breakdown was: Administration of the ETS under Climate Change portfolio - NZ\$236,000; Implementation and administration of the ETS under Energy portfolio - \$1,634,000; Provision of Climate Change Unit Register and Information under Energy portfolio - \$524,000; Additional funding for the implementation and operation of the ETS and maintenance of a register to enable the holding and transfer of climate change units under the Environment portfolio – NZ\$4,992,000 (total NZ\$7,386,000)

<b>Climate Change MCOA</b> 1) Domestic Climate Change Programme Policy Advice (2012 – NZ\$5.25 [US\$4.40]; 2013 – NZ\$4.61 [US\$3.86]) 2) International Climate Change Programme Policy Advice (2012 – NZ\$3.77 [US\$3.16]; 2013 – NZ\$4.18 [US\$3.50])	7.79 [6.52]
<b>Administration of New Zealand Units held on Trust</b> This appropriation is limited to the application for and holding on trust of New Zealand Units on behalf of the future owners of Crown Forest Licensed land.	0.18 [0.15]
<b>Allocation of NZU</b> This appropriation is limited to the granting of New Zealand Units to sectors of the New Zealand Economy.	558.15 <sup>52</sup> [467.26]
<b>Impairment of Debt Relating to the New Zealand Emissions Trading Scheme</b> This appropriation is limited to the impairment and write-down of debt arising from the collection of revenue under the New Zealand Emissions Trading Scheme.	15.00 [12.56]
<b>Issue of New Zealand Assigned Amount Units to Permanent Forest Sink Initiative Participants</b> This appropriation is limited to the granting of New Zealand Assigned Amount Units to Permanent Forest Sink Initiative participants for eligible afforestation.	11.75 [9.84]
<b>Purchase of PRE Units</b> Purchasing of PRE emission units by the Crown from the Projects to Reduce Emissions (PRE) portfolio	1.25 [1.05]
<b>TOTAL</b>	<b>600.51 [502.73]</b>

**Table 5: Land-use and carbon analysis appropriations<sup>53</sup> (NZD millions [USD millions<sup>54</sup>])**

Portfolio	Description	Budget 2012	Budget 2013
<b>Environment</b>	<b>Land-use and Carbon Analysis System</b> This appropriation is limited to developing a national carbon accounting system that will contribute to meeting of New Zealand's GHG reporting obligations under the Kyoto Protocol and the UNFCCC. Commences: 1 July 2012; Expires: 30 June 2014	14.45 [12.10]	15.84 [13.26]

<sup>52</sup> The budget request for this was NZ\$1,558,975,000 in 2011/2012

<sup>53</sup> New Zealand. Treasury. Vote Climate Change. *The Supplementary Estimates of Appropriations and Supporting Information 2011/12 B.7.* Retrieved 25 March 2013 from <http://www.treasury.govt.nz/budget/2012/suppestimates/suppest12clcha.pdf>; and New Zealand. Treasury. Vote Environment. *The Estimates of Appropriations 2012/13 B.5* Retrieved 25 March 2013 from <http://www.treasury.govt.nz/budget/2012/estimates/est12envir.pdf>

### **2.3 California**

The *Global Warming Solutions Act* of 2006, known locally as Assembly Bill (AB) 32 sets the framework for reducing emissions in California. The Californian Air Resources Board (ARB) is mandated through the act to develop and adopt regulations to provide emission reductions incentives. This included a statewide cap-and-trade program that was adopted in 2011 and launched in 2012, with the first auction to establish a price for carbon in California (allowances sold at a few cents above \$10 raising \$290 million<sup>54</sup>). The cap-and-trade program includes several cost containment mechanisms in order to ease the compliance burden, including the use of offsets. International REDD is specifically recognized as a “sector-based” offset that would be allowable for compliance obligations up to a ceiling of 25 percent of credits submitted through 2017, rising to 50 percent through to 2020, though additional rulemaking is needed to make this provision effective.<sup>55</sup>

AB 32 raises revenue in two ways. Firstly, ARB is authorized to adopt a schedule of fees to be paid by sources of GHG emissions (approximately 300 fee payers) in order to fund the State agencies’ costs of implementing AB 32 whose implementation cost (across seven agencies) is estimated<sup>56</sup> at US\$35 million per year with a further US\$27 million for repayment of startup loans<sup>57</sup> (due to be paid off in 2013-2014).<sup>58</sup> The regulation is designed so that invoices are sent to fee payers after the budget is approved, ensuring that each year the ARB collects only the amount authorized to run the program and repay loans. Secondly, cap-and-trade auction proceeds will flow through an investment plan to support disadvantaged communities and projects, emphasizing investments in the transportation and energy sectors, including sustainable agriculture practices (including the development of bioenergy), forest management and urban forestry and the diversion of organic waste to bioenergy and composting.

### **3. Voluntary/Pre-compliance Standards - VCS JNR**

At this time, only the Verified Carbon Standard (VCS) has developed a jurisdictional carbon accounting standard. The VCS Jurisdictional and Nested REDD+ (JNR) Requirements were published in October 2012 (Version 3.0), though there are still a few of elements under development, including: the Permanence Tool, the Leakage Tool, the Jurisdictional Program Document template and the Jurisdictional Monitoring template. In its current form, there are a number of requirements that jurisdictional proponents need to demonstrate that relate directly or indirectly to O&F capacity as part of meeting the JNR requirements. Some of the current thinking coming from the groups working the remaining elements is also included where relevant.

For JNR, one of the first things that a jurisdiction needs to specify is which scenario under JNR that they are going to implement for their REDD+ program. There are three scenarios options, and, in general, they differ in what types/scale of activities are eligible for crediting and what scale the monitoring of ERs is required (Figure 1).

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<sup>54</sup> See for further details [http://www.arb.ca.gov/cc/capandtrade/auction/november\\_2012/auction1\\_results\\_2012q4nov.pdf](http://www.arb.ca.gov/cc/capandtrade/auction/november_2012/auction1_results_2012q4nov.pdf)

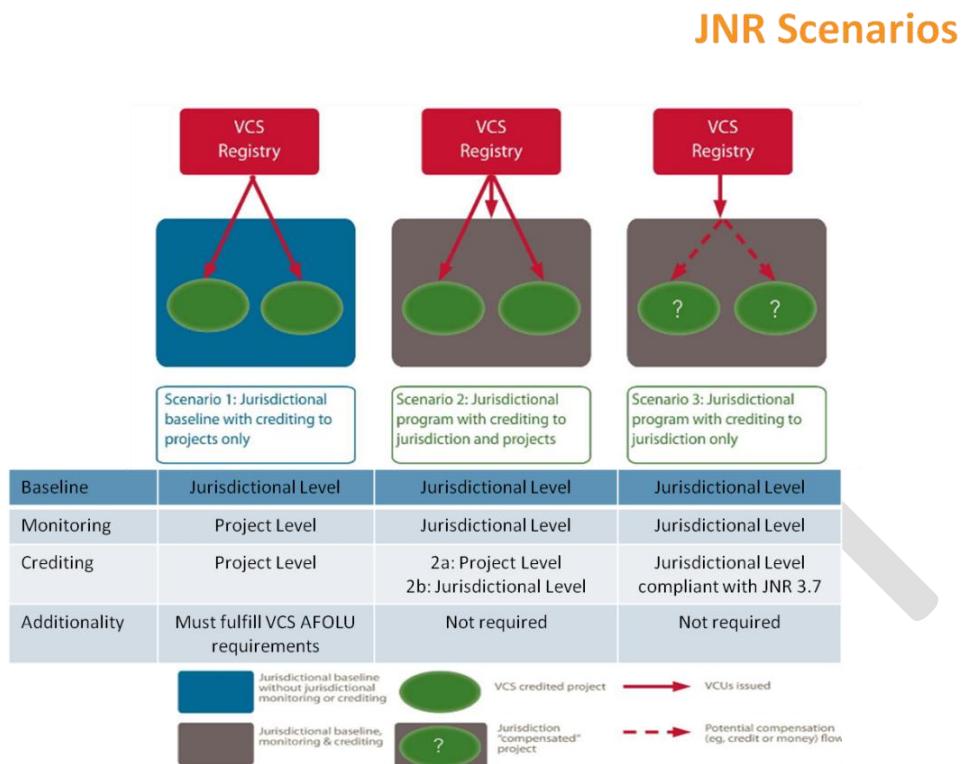
<sup>55</sup> California Air Resources Board, Final Regulation Order, Subchapter 10 Climate Change, Article 5, Sections 95800 to 96023, Title 17, California Code of Regulations, §95854(c), p 91 and §95993(a), p 264, accessed October 14, 2012 at [http://www.arb.ca.gov/cc/capandtrade/september\\_2012\\_regression.pdf](http://www.arb.ca.gov/cc/capandtrade/september_2012_regression.pdf)

<sup>56</sup> See for further information <http://www.arb.ca.gov/cc/adminfee/revenue.htm>

<sup>57</sup> The above reference describes the use of loans: ARB has used the loans for the first three years of implementation to hire new staff to develop the Scoping Plan, to develop and adopt regulations - such as the Low Carbon Fuel Standard - to reduce GHG emissions and to design resources to assist small businesses and local governments.

<sup>58</sup> See for further information <http://www.arb.ca.gov/cc/adminfee/adminfee.htm>

Figure 1: JNR Scenarios



This is a program design decision that impacts the carbon accounting requirements and the design of benefits sharing, both of which relate to the required operational capacity of a jurisdiction proponent. For example, under Scenario 1 a jurisdiction would need to have far less capacity than under the other two scenarios. Under Scenario 3, the jurisdiction would need to ensure that it is not violating rights holders by eliminating their ability to receive ERs on activities on their land.

The other elements under the JNR “General Requirements” which relate to operational feasibility include the requirement to demonstrate that the jurisdictional proponent (JP) is not breaking laws, and that implementing partners and their roles and responsibilities must be identified over the life of the program. The JNR crediting period is a maximum of 10 years, with two renewals. Thus, a JP would need to demonstrate that they had plans in place to manage for the full crediting period.

One JNR element that relates to both operational feasibility and benefit sharing is the requirement that the JP demonstrate right of use over the ERs under the definition under the VCS JNR for right of. Right of use is generally determined based on a legal analysis of tenure and activities of implementing partner (which may be the JP). Thus, to validate under the JNR, a legal analysis regarding right of use is required.

To avoid double counting, JNR also requires that participation under any other GHG program is identified and requires having a clear set of ER Implementation plans and information on what GHG emission reduction activities (including cookstoves) are happening across the jurisdiction. Core to JNR is the requirement to independently validate the Jurisdictional Program Document and verify the ERs with an approved independent third party. A JP that does not have sound operational plans for both running their program (P-Ops) and implementing their ERs activities (ER-Ops) will not likely be able to meet manage the process of 3<sup>rd</sup> party validation and verification.

And while not completed, the JNR non-permanence risk tool is likely to have a number of elements that are related to the operational capacity and financial sustainability of the Jurisdictional program. These include the requirements to demonstrate the long-term sustainability of the program and the program management capacity.

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## Annex 2: Financing Plan Tables from the ER-Pin Version 3

Financing plan summary table:

Expected uses of funds	Description	Breakdown per year									
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Costs related to developing the ER Program (e.g., monitoring costs)	(please explain)										
Operational and implementation costs	(please explain)										
Financing costs (e.g., interest payments on loans)	(please explain)										
Other costs	(please explain)										
<b>Total uses</b>											
Expected sources of funds	Description										
Grants	(please name sources)										
Loans	(please name sources)										
Revenue from REDD+ activities (e.g., sale of agricultural products)	(please name sources)										
Revenue from sale of Emission Reductions (contracted)											
Revenue from sale of additional Emission Reductions (not yet contracted)											
<b>Total sources (before taxes)</b>											
<b>Net revenue before taxes (=total sources – total uses)</b>											