



# Guidance Document: Options for Nesting REDD+ Projects

Timothy Pearson, Felipe Casarim and Anna McMurray

*Winrock International*

With contributions from Florian Reimer, Pablo Llopis and Christian Dannecker,  
*The South Pole Group*



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## EXECUTIVE SUMMARY

The nesting of REDD+ projects in subnational and national programs is necessary to ensure integrated accounting of emissions reductions and to facilitate the equitable distribution of benefits from these reductions.

Many options exist for jurisdictional programs with regard to nesting strategies and nesting plans that present a challenge in terms of deciding the path forward. This guidance document presents options in three categories:

- Jurisdiction-favored – where the policies are dominantly in the interests of the jurisdiction, protecting it from risks and maximizing the jurisdiction’s proportion of emission reductions and/or removals (ERRs), *but* likely dissuading private sector participation in achieving such results;
- Project-favored – where the nesting requirements support and encourage the establishment of projects, with the private sector playing a key role in achieving ERRs. *However*, this project-fostering approach likely reduces the ERRs the jurisdiction can claim and introduces risks for the jurisdiction;
- Mutually-beneficial – where options are intended to strike a compromise to encourage project participation while maintaining jurisdictional preeminence. For jurisdictions that want private investment through projects to be part of the REDD+ solution, a mutually-beneficial solution should be preferred.

This report discusses key technical issues related to the nesting of REDD+ projects, presents a list of operational solutions to each of these issues as follows:

- I. Incongruent REDD+ Scope (activities, pools, and gas)**
  - *Jurisdiction-Favored: Require projects to conform with the jurisdictional program*
  - *Project-Favored: Expand jurisdictional program to include accounting of additional activities, pools, and/or gases*
  - *Mutually-Beneficial: Separate accounting for activities, pools, and/or gases that are outside the jurisdictional program*
  
- II. Incongruent baselines employing different approaches, projection methods, spatial scales, and/or data sources**
  - *Jurisdiction-Favored: Area-based division of the jurisdictional forest reference emission level or forest reference level (FREL/FRL)*
  - *Project-Favored: Jurisdictions accept project baselines as is*
  - *Mutually-Beneficial: “Cookie-cut” baselines (i.e., extract project baselines from spatially explicit jurisdictional baseline)*
  - *Mutually-Beneficial: Recalculate project baselines with jurisdiction data sources*

- III. Incongruent measurements with differing data sources, spatial scales, and time periods**
- *Jurisdiction-Favored: Require projects to apply jurisdictional measurement system*
  - *Project-Favored: Accept project measurement results*
- IV. Allocation for leakages and reversals**
- *Jurisdiction-Favored: Establish fixed tax / standard leakage and non-permanence deductions*
  - *Project-Favored: Do not account for project leakage or reversal risk*
  - *Mutually-Beneficial: Variable deductions based on risks of leakage and non-permanence*
- V. Grandparenting**
- *Jurisdiction-Favored: Require immediate alignment*
  - *Project-Favored: Grandparenting following the JNR rules*
  - *Mutually-Beneficial: Fixed period for grandparenting with phase in*
- VI. Crediting and trading nested project emission reductions and/or removals**
- *Jurisdiction-Favored: Trading exclusively through jurisdiction*
  - *Project-Favored: Parallel trading of ERRs*
  - *Mutually-Beneficial: Parallel trading of ERRs for existing projects, but new projects trading exclusively through jurisdiction*

## INTRODUCTION

### Background

Nesting represents a set of provisions aimed at “fitting” lower-level REDD+ programs and projects into larger scale jurisdictional (e.g. national) initiatives. It includes criteria and requirements to ensure the alignment of technical elements and data and the accuracy of emission reductions and/or removals across accounting levels, i.e. projects, subnational programs, and national programs.

As national and sub-national approaches to REDD+ are increasingly being developed and implemented, there remains a significant need for direct investment and implementation of activities in areas that are under threat. It is important that such investment and activities at the project scale are encouraged so that performance can be achieved, and then rewarded. These site-specific activities require nesting so that they can be harmonized and contribute positively to governmental REDD+ programs.

How nesting is implemented is critically important for the following reasons:

1. **Nesting impacts whether new and existing projects, and associated investment, will be encouraged or dissuaded.** For instance, if the nesting of a project into a jurisdictional program results in the project being required to significantly cut its projected emissions reductions, this could serve as a disincentive for future effective project development. Likewise, if nesting is perceived by jurisdictional governments as too complicated or requiring capacities beyond their reach, such governments may be tempted to ban projects or to reject recognizing their ERRs. Consequently, the **extent of private sector participation and investment** in these projects may be determined by the extent to which they are encouraged or prevented through nesting requirements.
2. **Nesting has implications on the amount of emissions reductions available under the jurisdictional program.** The number, location and territorial extent of nested projects will directly affect the available ERRs that the jurisdiction can claim outside the project areas.
3. **Nesting facilitates the equitable distribution of benefits from emissions reductions.** Nesting can ensure that communities engaged in or affected by projects and those distant from projects have equal opportunity to participate in reducing emissions or increasing sequestration and receiving fair distribution of benefits for doing so.
4. **Nesting promotes the integrity of emissions accounting at all levels of REDD+ implementation and prevents double counting of emissions reductions.**

Nesting requirements should be designed to encourage the participation of civil society and private sector in REDD+ and to recognize the leadership and initiative of early action REDD+ projects, whose commitments made to local communities and indigenous groups should be respected, while also respecting the sovereignty and governance of jurisdictional REDD+ programs. The use of nesting will have an impact on the baselines used, the data collected, and ultimately the ERRs reported, and may

influence benefit distribution. As such, nesting should be considered carefully and negotiated with both public and private actors, to foster project development and ensure fair allocation of ERRs.

## Scope of Guidance Provided

The purpose of this guidance is to concisely identify key technical issues related to nesting and to provide potential solutions, discussing the implications of the various options presented. This document focuses on the technical aspects of key nesting issues, although the authors acknowledge the importance of socio-political and institutional arrangements to allow for nesting to occur.

Many options exist for jurisdictional programs with regard to nesting strategies and nesting plans that influence the decision of how to move forward. This guidance document presents options in three categories:

- Jurisdiction-favored – where the policies are dominantly in the interests of the jurisdiction, protecting it from risks and maximizing the jurisdiction’s proportion of emission reductions and/or removals, *but* likely dissuading private sector participation in achieving such results;
- Project-favored – where the nesting requirements support and encourage the establishment of projects, with the private sector playing a key role in achieving ERRs *However*, this project-fostering approach likely reduces the ERRs the jurisdiction can claim and introduces risks for the jurisdiction;
- Mutually-beneficial – where options are intended to strike a compromise to encourage project participation while maintaining jurisdictional preeminence. For jurisdictions that want private investment through projects to be part of the REDD+ solution, a mutually-beneficial solution should be preferred.

This guidance is not designed to be a complete technical blueprint for nesting. Additional guidance on the institutional needs and benefit sharing options relevant to nested REDD+ programs may be developed by the VCS in the future. Nesting manuals for application of the VCS Jurisdictional and Nested REDD (JNR) framework and others exist including:

The USAID LEAF Planning Guide – Integrating REDD+ accounting within a nested approach, available at: <http://www.leafasia.org/library/planning-guide-integrating-redd-accounting-within-nested-approach>

The USAID FCMC Guidance for Jurisdictional and Nested REDD+ Program Design, available at: <https://rmportal.net/library/content/fcmc/publications/guidance-for-jurisdictional-and-nested-redd-program-design>

While nesting refers to subnational programs as well as projects, the focus of this document is on the nesting of projects within the larger subnational or national jurisdictions.

Nested REDD+ programs will increasingly interact with the INDC (Intended Nationally Determined Contribution) process in countries. Where ERRs are allocated to projects and traded to entities

outside the country, this activity must be considered and tracked for accurate INDC accounting for both the originating and destination countries.

The document is organized in a way that individual sections can be read independently by users seeking guidance on any of the particular issues discussed. Reading the document in its entirety is not necessary if readers have already identified a specific issue that needs resolving.

## Consultations with Country Stakeholders

REDD+ stakeholders, including project developers and government officials involved in jurisdictional or national REDD+ programs, from four different countries were asked to provide their perspective on major nesting issues and potential solutions.<sup>1</sup>

## GLOSSARY OF KEY TERMS

This list is by no means exhaustive but identifies relevant key terms:

### **Baseline vs Reference Level**

**Baseline** – here referred to as the “business as usual” scenario for projects against which emissions and sequestration under project implementation should be compared.

**Reference Level** – here referred to as the benchmark reference case for national and subnational emissions against which emissions and sequestration under the measurement of MRV should be compared.

### **Nested Project vs Standalone Project**

**Nested Project** – here represents a project fully nested within a national or subnational jurisdiction, meeting all the criteria for registration and ongoing implementation within the jurisdiction.

**Standalone Project** – here represents a project outside of a national or subnational jurisdictional program, either due the fact that the program is not yet fully implemented or because the scope of the project is outside the area currently eligible for inclusion at the jurisdictional level.

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<sup>1</sup> The stakeholder insights helped inform the development of this guidance document. Due to the sensitivity of the information, however, this document refrains from discussing the details that these stakeholders provided.



## CONSIDERATION OF KEY NESTING ISSUES

Six technical nesting issues are considered and discussed here in the form of short issues papers that highlight each issue's complexities and provide potential solutions and recommendations.

The issues are:

1. REDD+ Scope
2. Baselines / Reference Emission Levels
3. Measurement, Reporting and Verification
4. Leakage and Reversals
5. Grandparenting
6. Crediting and trading nested project emission reductions and/or removals

## I. INCONGRUENT REDD+ SCOPE (ACTIVITIES, POOLS AND GASES)

Differences in scope can exist between the hosting jurisdiction and projects, particularly early action projects developed prior to the jurisdiction's definition of REDD+ scope. These differences in scope pertain to activities, carbon pools and GHG gases considered and accounted for in the baseline and MRV systems at each level. For jurisdictions, divergence may represent foregone opportunities and compromised completeness in GHG accounting. For projects, it can lead to committed expenses without the potential for return when these projects become nested.

### Jurisdiction-Favored: Require projects to conform with the jurisdictional program

Projects nested within the jurisdictional program would be required to adopt the jurisdictional scope in their baseline and future measurement, reporting, and verification (MRV) and exclude additional elements that are not part of the jurisdictional program (or alternately include additional elements). This ensures full consistency between projects and programs.

In the hypothetical example, this option would allow the project to account only for emissions reductions achieved by avoiding deforestation and forego emissions removals from forest carbon stock enhancements as a result of the agroforestry implementation.

This will likely be the most common approach considered initially for nesting projects, though it can be restrictive and deleterious to individual projects, especially in cases where it removes a potentially significant portion of a project's emission reductions and/or removals and where projects have already made investments to build baselines and MRV the excluded activities, pools and/or gases. This approach could also provide a disincentive for any future project developers to implement these activities, reducing the potential ERRs achieved. In the example, forest carbon stock enhancements may represent an important strategy to reduce deforestation and a significant source of emission removals. Therefore, precluding the project from accounting for and trading these emission removals could result in project failure. If this solution is selected, grandparenting rules are especially

#### HYPOTHETICAL EXAMPLE TO ILLUSTRATE SOLUTIONS:

*A project is seeking to stop deforestation by promoting the establishment of agroforestry as an alternative livelihood option for local communities who depend on forest products. This project therefore accounts for ERRs from avoided deforestation and removals from forest carbon stock enhancements (referred to as ARR in the VCS AFOLU Requirements) promoted by the establishment of the agroforestry systems. However, the jurisdictional program only considers deforestation in its scope, and thus is committed to accounting only for avoided deforestation.*

important (refer to Section III) in order to allow projects to properly adapt to the jurisdictional program's rules and avoid, to a certain extent, financial losses.

### IMPLEMENTATION STEPS:

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Meet with stakeholders including projects and clearly present the scope of REDD+ program and the reasons for any exclusions</li> </ul>	<ul style="list-style-type: none"> <li>- Revisit project design to determine viability of project after exclusion of elements incongruent with jurisdictional REDD+ program</li> <li>- Decide whether or not to continue with project after exclusion of incongruent elements</li> <li>- Revise baseline calculations to conform with scope of the jurisdictional REDD+ program</li> </ul>

### Project-Favored: Expand jurisdictional program to include accounting of additional activities, pools, and/or gases

In this solution, jurisdictional programs would expand in scope at the next renewal of the reference level to include additional elements (REDD+ activities, carbon pools, and/or GHG gases) considered by registered projects within the boundaries of the jurisdiction. This solution would foster project development and the continuation of already established projects with their original design.

In the hypothetical example, the jurisdiction would follow the project's lead and include forest carbon stock enhancements in its REDD+ program. This solution would benefit projects by allowing them to claim credits from all elements included in their reference levels and MRV systems, although it is considered unlikely that jurisdictions would expand their scope in response to individual projects<sup>2</sup>.

When deciding whether or not to include additional elements, jurisdictions should consider their contribution to total emissions within the jurisdiction, and the additional costs required to measure these contributions. Inclusion of additional elements should only occur when jurisdictions have assessed that doing so is cost-effective and / or when the jurisdictional governments want to further

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<sup>2</sup> Also, unless these decisions are made during initial design, there will likely be a delay under this solution as expansion of the jurisdictional system will not occur until the next FREL/FRL is submitted – thus reducing the benefit to projects (especially if the previously excluded elements have already been registered as stand-alone projects with associated incurred costs).

support and protect private investments in projects; inclusion could vary among jurisdictions under a national program with additional elements being selectively included depending on localized factors<sup>3</sup>.

### IMPLEMENTATION STEPS:

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Meet with project developer(s) to understand additional elements considered in project scope</li> <li>- Define feasibility of inclusion of additional elements from projects into jurisdictional REDD+ program scope, with consideration of the costs and benefits</li> <li>- Design jurisdictional REDD+ program with the inclusion of elements suggested by project developers</li> <li>- Attempt to establish a partnership with project developers to share the additional workload and potential costs for inclusion of additional elements</li> <li>- Conduct measurements / modelling / calculations necessary to allow proper accounting of additional elements</li> <li>- Devise an MRV plan that satisfies the requirements necessary for including additional elements. Here jurisdictions can again try to establish work relationships with projects to divide workload and costs.</li> </ul>	<ul style="list-style-type: none"> <li>- Meet with jurisdictional REDD+ program personnel and present the additional elements considered in the scope of the REDD+ project. Projects are encouraged to highlight the benefits of including additional elements in jurisdictional REDD+ program</li> <li>- Propose a workable partnership with jurisdictional REDD+ program personnel to assist in the inclusion of additional elements</li> <li>- Help jurisdictional REDD+ program in conducting measurements / modelling / calculations as necessary to allow proper accounting of additional elements</li> </ul>

## Mutually-Beneficial: Separate accounting for activities, pools and/or gases that are outside the jurisdictional program

Projects with a scope differing from the jurisdictional program would be required to adopt the jurisdictional scope in the baseline and MRV, although they could register additional elements split off as individual projects in the voluntary market. This would mean projects could nest the portion of their baseline that is congruent with the jurisdictional REDD+ program, while continuing to account for activities/pools/gases that are incongruent with the program. These additional elements would

<sup>3</sup> Note that under the UNFCCC the FREL/FRL must be consistent with the national GHG inventory. To avoid inconsistent accounting and double counting, countries should be encouraged to use their national GHG inventories to establish their FREL/FRL, and expansion of the FREL/FRL would be accompanied by expansion of the national GHG inventory accounting.

have to be registered as separate project activities from the portion nested within the jurisdictional REDD+ program (registration under a separate voluntary market e.g. VCS).

This option enables projects to strive for completeness in their emissions accounting, although they would likely face additional transaction costs in registering the incongruent elements as a separate project(s), which may lead proponents to exclude these elements altogether if such costs exceed the expected income from the emission reductions or removals associated with them.

In the hypothetical example, this option would allow the project to continue accounting for emissions removals resulting from the agroforestry establishment by registering this activity, and thus generate emission reductions and/or removals (ERRs) from forest carbon stock enhancements. The avoided deforestation elements would continue as a nested project under the national REDD+ system.

Under this mutually-beneficial option, it is recommended that projects conduct a cost-benefit analysis to verify whether it is feasible to register the additional elements.

The mutually-beneficial solution could be possible for projects with activities now excluded (e.g. sustainable forest management, afforestation/reforestation/revegetation, etc), but is highly unlikely to be cost effective for excluded carbon pools or gases, where the additional ERRs that can be claimed may be insufficient to justify the transaction costs associated with separate registration. Moreover, jurisdictional governments may issue specific rules on which and how excluded elements may be developed to ensure the future consistency of such elements with the jurisdictional program.

### IMPLEMENTATION STEPS:

#### JURISDICTION

- Meet with stakeholders including projects and clearly present the scope of REDD+ program as well as the conditions for the separate registration of activities, pools and gases as separate projects.

#### PROJECTS

- Decide if viable to register elements that are incongruent with jurisdictional REDD+ program as separate project activity (ies)
- Revise baseline calculations to conform with scope of the jurisdictional REDD+ program
- Where relevant, estimate baseline for elements that are incongruent with jurisdictional REDD+ program
- Where relevant, register additional elements as separate project activity(ies) with the voluntary market

## II. INCONGRUENT BASELINES EMPLOYING DIFFERENT APPROACHES, PROJECTIONS, SPATIAL SCALES, AND/OR DATA SOURCES

The most serious issue and challenge for long-term nested project viability is the nesting of baselines in jurisdictional reference levels.

Project baselines and jurisdictional reference levels are developed differently. Projects develop a 'business-as-usual' (BAU) scenario by reviewing historical data and projecting how emissions will continue into the future. Sometimes models are used to project trends might increase or decrease based on other forces (e.g., illegal deforestation could increase in the future due to increased demand for certain crops). Jurisdictions also review historical data and generally assume that the same average will continue into the future. As such, projects typically try to estimate what will happen in the absence of an intervention, while jurisdictional accounting typically takes a simplified approach to determine an estimate of what has happened already as a predictor of future emissions.

Another key difference between project baselines and jurisdictional reference levels is a difference in scale. Projects in relative terms are small and are implemented in areas where there is usually a high risk of emissions. The selection of projects in high deforestation risk areas is to maximize potential returns in terms of emission reductions and/or removals and ultimate project viability. In such areas of high risk, the cost of reducing emissions or increasing sequestration are often high, both to cause and sustain a positive impact (and the private sector nature of projects means that interventions have to reach a level of profitability to justify the private sector involvement). In contrast, jurisdictions operate over a much larger scale where areas with high potential for emission are in many cases greatly exceeded by areas under little to no threat. Over the large areas involved, reference levels represent an average rate of emissions of an entire jurisdiction versus rates for project areas which are already under (or facing high threat of) emissions.

Therefore, significant incongruences can arise between a project baseline, based on projections of business as usual for a specific-geography, and the jurisdictional baseline, derived from historical data from across the entire jurisdiction. These incongruences lead to the risk that projects may have

### HYPOTHETICAL EXAMPLE TO ILLUSTRATE SOLUTIONS:

*A 500 ha project exists in an area with high deforestation pressure in Jurisdiction X. The project, following its own approach, calculates a baseline of 50 ha of deforestation per year (10%/yr).*

*Jurisdiction X has 100,000 ha of forest with an annual deforestation rate in its reference period of 0.75%.*

estimated ERRs that proportionally exceed those that would be determined from the project area alone in the jurisdictional baseline (though of course the opposite could occur in jurisdictions with decreasing rates of emissions).

### Jurisdiction-Favored: Area-based division of the jurisdictional forest reference emission level or forest reference level (FREL/FRL)

In this jurisdiction-favored solution, projects would calculate their baseline by taking a proportion of the higher level FREL/FRL based on the project area. For example, if a project included 1,000 hectares of land within the total jurisdictional area of 100,000 hectares, the project's baseline would be a hundredth of the jurisdictional baseline. This solution is the most punitive to projects and will likely result in many projects becoming unviable. For most projects, this option will radically decrease their estimated emissions reductions because projects are intentionally established in areas with high risk of future emissions (e.g., from deforestation), and thus areas with high potential for generating credits.

An additional risk of this option is that it could cause project developers to develop future projects in low-deforestation risk areas instead of high-risk areas, where projects can adopt the same baseline but can achieve emissions reductions without further intervention on the ground. This, somewhat perverse incentive, can reduce the overall real world effectiveness of the jurisdictional program in reducing emissions.

In the hypothetical project, the 500 ha project area will receive the same rate as across the entire forest area of the jurisdiction (0.75%/yr), this gives an annual baseline deforestation of 3.75 ha, a 93% decrease from its previous annual baseline of 50 ha of deforestation annually.

#### IMPLEMENTATION STEPS:

##### JURISDICTION

- Collation of data on reference levels including area of forest. Prepare tables on annual activity data and emission factor per unit area divided by region or stratum if reference level is so divided
- Develop process for assessment of project area and allocation of relevant reference level portion to projects

##### PROJECTS

- Interact with jurisdiction on development of process
- Interact with jurisdiction in assignment of baseline

This solution could be made more mutually beneficial by stratifying the forest area in the jurisdiction by deforestation risk or by proxies that can represent that risk such as forest type, elevation and sub-region. This would represent essentially a stratification of the reference level largely preventing the

dilution of areas under high risk by areas under low risk in terms of annual emissions. In doing so, projects located in an area with higher historical emissions will have a higher baseline and a smaller disparity between a project-specific baseline and a baseline derived from jurisdiction-wide calculations.

### Project-Favored: Jurisdictions accept project baselines as is

In this project-favored solution, jurisdictions would allow projects to generate ERRs and receive recognition based on the projects' self-designed baselines, provided they meet a certain standard, such as the VCS. This solution is straightforward and very friendly to projects and private market participation in REDD+.

Where this solution is adopted, jurisdictions may wish to increase required buffer withholding (see Issue 4) to address the increased risk that partial or complete project failure may impact jurisdictional ERRs. Jurisdictions also should consider the degree of benefit sharing to the jurisdiction from project ERRs to compensate the jurisdiction for enhanced risk and decreased jurisdictional potential for claiming ERRs.

In the hypothetical project, the jurisdiction would accept the project's calculation of 50 ha of deforestation per year, which would represent 6.7% of the annual reference level deforestation area for the entire jurisdiction on 0.5% of the forest area in the jurisdiction. The effective impact would be that the reference level deforestation rate for the remainder of the forest area in the jurisdiction would drop from 0.75% per year to 0.7% per year.

#### IMPLEMENTATION STEPS:

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Hold consultations with stakeholders on how projects can and should be incorporated</li> <li>- Develop criteria, processes and procedures for incorporation of project data where relevant</li> <li>- Collate project areas and determine proportion of jurisdictional area</li> <li>- Calculate reference levels with proportion identified for project areas.</li> <li>- Consider risk to recording ERRs and distributing benefits for areas outside of projects</li> <li>- At reference level renewal, incorporate project data (activity data and emission factors) to maximize agreement between project and jurisdictional baselines</li> <li>- Examine buffer withholding to handle</li> </ul>	<ul style="list-style-type: none"> <li>- Consult with jurisdiction on current status and plans</li> <li>- Submit detailed spatial and tabular data on project and project baseline to jurisdiction</li> </ul>



elevated risks from project failure. And determine the appropriate benefit sharing of projects back to local and national governments

## Mutually-Beneficial: Recalculate project baselines with jurisdiction data sources

The final solution would be a compromise that allows projects to develop a project baseline reflecting the area-specific pressures and potential, while using approaches that foster agreement with the jurisdiction. A potential option to prevent substantial disagreement is to provide a cap on the absolute difference between the project baseline and the jurisdictional reference level (on an area basis). This solution requires projects to (re-)calculate baselines using some or all of the same data and methods employed by the jurisdictions (for example, the same emission factors could be required and the same source of activity data). Other examples of decisions that could be made to elevate congruency are: locate the project reference areas within jurisdictional boundaries, common practice limited to practices within jurisdictional boundaries, linked sources of activity data and emission factors.

The (re)calculation of project baselines with jurisdictional data ensures there is consistency between and within the different levels, while helping to enable projects established in high-risk areas to receive fair credit for their emission reductions and/or removals. Projects could use reference areas outside the project boundary but within the jurisdiction boundary and could project emissions upward in the future. However, the jurisdiction would need to apply a maximum cap for the amount a project could differ from an area-based subset of the jurisdictional reference level. This solution may be the most fair and attractive to project developers while ensuring alignment with jurisdictional programs and needs.

In the hypothetical project, the jurisdiction sets an arbitrary cap of five times the generalized jurisdictional deforestation rate (0.75%/yr). This is equal to 18.75 ha/yr in this case. The application of the Jurisdictional datasets gives the project a new total of 35 ha per year of deforestation in the baseline. The cap reduces the project baseline to 18.75 ha/yr and while this is less than the original project baseline of 50 ha/yr it is much higher than the area-based proportion of the reference level (3.75 ha/yr).

The calculation of a baseline using jurisdictional data sources could allow projects to claim a baseline for the specific project area that is closer to the realistic one. While an upward projection from projects may not be politically attractive to many countries, it may best reflect the reality that projects generally choose areas highly threatened by deforestation and/or degradation. By allowing projects to project a more realistic baseline, the jurisdiction would recognize the efforts and investments made by projects as well as attract future investment to address other highly threatened

areas. Without allowing this, projects may be held to an artificially low baseline that disincentivizes investment in high-threat areas, while potentially providing a perverse incentive to invest in areas with low-threat.

A variant on this mutually-beneficial option would be to apply the jurisdiction-favored approach but to use project-specific baseline calculations as the basis for changes in programmatic benefit sharing with negotiated compensation for diminished project baselines.

### IMPLEMENTATION STEPS:

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Develop acceptable cap for divergence from Jurisdictional reference level for project baselines. To do so, consider the costs and benefits of encouraging projects versus risk of divergence</li> <li>- Establish rules and procedures to avoid over issuance of credits at the jurisdictional level including accurate accounting in a registry system</li> <li>- Collate and provide activity data and emission factors for projects to use</li> <li>- Develop project baseline approval procedures</li> <li>- Receive feedback from projects through time for development of new data and factors</li> </ul>	<ul style="list-style-type: none"> <li>- Take jurisdictional data and jurisdictional project baseline procedures and requirements and develop project baseline applying cap if relevant</li> <li>- Provide inputs to jurisdiction as it updates data sources and factors</li> </ul>

### Mutually-Beneficial: “Cookie-cut” baselines

Under the “cookie-cut” approach, projects would extract their baseline directly from the jurisdiction’s spatially-explicit baseline (replacing any existing baseline they have). The concept of “cookie cutting” is that the boundaries of the project can be traced on a map that displays an estimation of the emissions for each hectare or group of hectares for each year of the reference level. This solution is potentially the most accurate and fair and can be beneficial to both projects and jurisdictions because it makes baseline calculations relatively simple and inexpensive, while keeping them identical to the jurisdictional reference level. It also provides jurisdictions with confidence regarding the project baseline.

However, this option only works where the jurisdictional reference level is spatially explicit, which is currently uncommon. A spatially explicit deforestation reference level would identify the hectares expected to be deforested in each year of the implementation period. The viability of a spatially

explicit baseline depends on a number of variables, including the jurisdiction's capacity to perform spatial modelling, its capacity to validate the models, and how politically controversial the model results will be. While this solution benefits projects in areas identified as having high emission reduction potential in the models, it has the potential to disincentivize action in any other area not predicted to have such a high emission. This solution also only works for those activities that can be spatially modelled, such as unplanned deforestation. It is unlikely to be applicable to most forms of degradation or enhancement, as they are not well suited to spatial modelling. Where the jurisdiction has a spatially explicit reference level, then the specific hectares deforested, for example, in each year of the reference level are identified and the project can take these hectares as the project baseline.

In the hypothetical example, the jurisdiction has a map for each year of the implementation period showing areas projected to be deforested under business-as-usual. This map gives 32 hectares of deforestation per year within the project boundaries. This deforestation would form the project baseline.

#### IMPLEMENTATION STEPS:

##### JURISDICTION

- Development of capacity on spatial modeling
- Agreement on resolution of reference level / baseline maps in consultation with stakeholders including project developers
- Agreement on factors to include in projection (e.g. roads, distance to markets, topography, soils) in consultation with stakeholders including project developers
- Modeling of baseline for reference level period
- Consultation and agreement on reference level map

##### PROJECTS

- Interaction with Jurisdiction on decisions involved in creation of spatial model and agreement on model
- In partnership with Jurisdiction cut out the baseline for each year

### III. INCONGRUENT MEASUREMENT WITH DIFFERING DATA SOURCES, SPATIAL SCALES, AND TIME PERIODS

The estimation of emission reductions has two critical components: the baseline / reference level AND the measurement of actual emissions / removals. Differences will multiply between projects and jurisdictions where there is a lack of agreement on the scale of data, data sources, and methods used for measurement. Thus, nesting rules should reconcile any inconsistency, and avoid potential for overestimation and/or double counting of credits generated.

#### Jurisdiction-Favored: Require projects to apply jurisdictional measurement system

This jurisdiction-favored solution would require projects to use the outputs of the jurisdictional measurement system. The jurisdiction will almost invariably collect spatially resolved data. Therefore, application of jurisdictional results to projects should not be challenging, and the provision of measurement results to projects will reduce the projects' transaction costs.

It is worth pointing out that the decrease in scale, and differentiation by scale of activity data and emission factors will likely impact projects to some extent. The smaller the project is compared to the jurisdiction, the more inaccurate the measurement results are likely to be for the project. Different temporal resolutions do not represent a problem as statistical methods for interpolation and extrapolation can be used to reconcile temporal resolutions (IPCC GPG, 2003)<sup>4</sup>.

In the hypothetical example, the project would have to accept the lower resolution of the jurisdictional MRV system. This would result in lower accuracy in measurement results, which could increase or decrease measured results. However, the project

#### HYPOTHETICAL EXAMPLE TO ILLUSTRATE SOLUTIONS:

*A project seeking to stop deforestation has a measurement system using activity data generated using high-resolution satellite imagery (e.g. RapidEye), while, the jurisdictional REDD+ program uses moderate resolution satellite imagery (e.g. Landsat). This clearly represents incongruent spatial resolutions in activity data used for the project and for the jurisdiction. To make this example more complex, let's assume the project also generated land use/land cover maps from 5 points in time to estimate the activity data, while the jurisdiction generated only three land use/land cover maps to estimate the activity data, thus creating activity data that are incongruent with respect to their temporal*

<sup>4</sup> Intergovernmental Panel on Climate Change (IPCC). 2003. Penman J., Gytarsky M., Hiraishi T., Krug T., Kruger D., Pipatti R., Buendia L., Kyoko M., Negra T., Tanabe K., and Wagner F. (Eds). Good Practice Guidance for Land Use, Land-Use Change and Forestry. IPCC/IGES, Hayama, Japan. Available at: <http://www.ipcc-nggip.iges.or.jp/public/gpplulucf/gpplulucf.html>

would no longer be responsible for its own measurement system and therefore would have lower accompanying costs.

It may be of advantage to the jurisdictions to consider data from projects for refining emission factors and even inputs to activity data in the stepwise improvement of MRV systems.

#### IMPLEMENTATION STEPS:

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Conduct jurisdictional measurements and estimate results</li> <li>- Share results pertaining to projects to project developer(s)</li> <li>- Be available to respond to questions from project developer(s) if any arise</li> <li>- Adjust measurement results if discrepancy(ies) or errors are identified</li> <li>- Report jurisdictional final results</li> </ul>	<ul style="list-style-type: none"> <li>- Request jurisdictional measurement results for the area pertaining to the project(s)</li> <li>- Verify for potential errors</li> <li>- If errors in jurisdictional measurement results are identified, communicate clearly with jurisdictional REDD+ program personnel, and be available to work on correcting and resolving the error</li> <li>- Provide a formal concurrence to jurisdictional measurement results</li> </ul>

### Project-Favored: Accept project measurement results

The project-favored option would allow projects to continue using their own measurement approaches, and would require jurisdictions to accept project measurement results. This option allows projects to continue their measurement frequency and spatial resolution as envisioned during project design. However, projects will face high transaction costs due to full maintenance of a separate measurement system. Thus, the benefit to projects of maintaining the integrity and resolution of the measurement system is unlikely to match the benefits projects receive from not having to cover the cost of a measurement system and includes increased chance of discrepancies with the jurisdictional program.

In the hypothetical example, the project would continue monitoring its performance using high-resolution imagery while the jurisdiction would continue monitoring using moderate resolution imagery. The results measured and reported by the jurisdiction would have to include the results from the project.

Under this option, it is recommended that jurisdictions verify the project-reported measurements before assimilating them directly into the jurisdictional reported measurements, which may incur additional transaction costs to the jurisdictional REDD+ program. It is possible that acceptance of project measurements is likely politically unattractive in most countries.

**IMPLEMENTATION STEPS:****JURISDICTION**

- Conduct jurisdictional measurements and estimate results
- Request measurement results from projects within time to adjust potential discrepancies that may arise
- Verify project-reported measurements and compare with jurisdictional measurement results. This may result in identification of discrepancies of results reported by projects and by jurisdictions
- If discrepancies are identified, meet with project developer(s) to correct discrepancies
- Assimilate project measurements into jurisdictional reported measurements
- Report jurisdictional final results

**PROJECTS**

- Conduct project measurements and report result to jurisdiction
- Be available for jurisdiction consultation of project results if necessary
- In case discrepancies are raised by the jurisdiction, work with jurisdiction to correct discrepancies

## IV. ACCOUNTING FOR LEAKAGE (RISK OF PROJECT REDUCTIONS BEING DISPLACED) AND REVERSALS (RISK OF NON-PERMANENCE OF PROJECT REDUCTIONS)

Leakage is an important consideration in nesting, because jurisdictions may fear that projects could push emissions-causing activities, such as deforestation, from within project boundaries to other areas in the jurisdiction. In this case, the project receives credit for emission reductions and/or removals that in reality have not decreased the total emissions occurring in the jurisdiction. Thus, for jurisdictions, projects in the worst case present a risk to the ERRs the jurisdiction itself can claim.

Equally, reversals present a risk to the hosting jurisdiction. If a project fails to decrease emissions beyond the reference level, then any shortfall will become a liability for the jurisdiction itself in the absence or in the failure of a buffer account.

With these considerations in mind, projects will need to continue to account for any leakage that occurs and retain insurance against non-permanence. Familiarity with leakage and reversal risks will allow the jurisdiction to fully understand the impact of projects and consequently handle projects fairly.

**Jurisdiction-Favored: Establish fixed tax / standard leakage and non-permanence deductions**

The jurisdiction-favored option would entail the definition of a flat tax or standard leakage and non-permanence deduction percentage to all projects participating within the jurisdictional program. This fixed tax would consider the risk of leakage and non-permanence across the actual and potential project portfolio within the Jurisdiction. The rate should

### HYPOTHETICAL EXAMPLE TO ILLUSTRATE SOLUTIONS:

1. A project stops degradation caused by logging conducted by the local population without provision of alternative livelihood to these degradation drivers. As a result, the local loggers move the area from which they extract logs to an area neighboring the project area and still within the jurisdictional boundaries.

2. A large project has a baseline that represents 8% of a Jurisdiction's reference level for a given period. Bankruptcy of the project developer leads to project failure with high accompanying emissions that detract from achievements from the Jurisdiction in

be revised as needed (e.g. with establishment of new projects, based on changes in jurisdictional circumstances, during jurisdictional baseline renewal, etc.).

Establishing flat taxes seems simple, but could discourage projects from managing and mitigating leakage, and could thus bring additional risks of reduced performance at the jurisdictional level. In solution, the jurisdictional government could establish complementary rules to ensure that projects carry out activities to reduce the likelihood of displacements or reversals, or even define differentiated deductions based on the degree of implementation of such measures.

In the hypothetical example, the jurisdiction has defined a flat buffer rate of 40% for projects with no leakage mitigation activities and 30% for projects with such activities. This accumulation in the buffer across all projects would have to cover the leakage from projects and the risk of project failure. The number of projects registered and the number of emission reductions and/or removals accumulated prior to any failures will be critical to the success of this approach.

#### IMPLEMENTATION STEPS:

##### JURISDICTION

- Assess risk of leakage and non-permanence from projects within the actual and potential portfolio in the jurisdiction. This assessment should consider the project's own self-assessments in project documentation as well as conservative estimations by the jurisdiction of realistic worst case scenarios
- Define, with inputs from key stakeholders, a fixed tax / leakage and non-permanence deduction percentage
- Revise as needed (e.g. new assessments of portfolio risk, change in jurisdictional circumstances, at jurisdictional baseline renewal, etc)

##### PROJECTS

- Communicate clearly with the jurisdiction all self-assessments of leakage and non-permanence risks with justifying evidence
- Provide feedback on jurisdictional defined fixed tax / leakage and non-permanence deduction percentage. Appeal rates with contrary evidence if needed
- Apply fixed tax / leakage and non-permanence deduction percentage to all emission reduction claims

### Project-Favored: Do not account for project leakage or reversal risk

The simplest solution is not to account for project leakage or reversal risks.

Projects' not accounting for leakage will represent a risk in terms of atmospheric integrity as full jurisdictional accounting will capture emissions leaked by projects. Project (and jurisdictional) leakage is objectively very hard to measure. Some projects will actually have a positive spillover effect (i.e. "positive" leakage), rather than (negative) leakage. Further, in most cases project leakage will not be a significant source of emissions at the jurisdictional scale. However, there is a risk that leakage from



projects could negatively impact jurisdictions and as such criteria for acceptable project designs should include measures to minimize the risk of leakage. Projects may also not favor this approach as it may undermine their credibility.

Failing to consider reversal risks likely is more problematic for jurisdictions. The greatest risks are likely to be project failure for administrative, financial or environmental reasons. Risks of project failure can be decreased through project registration requirements to demonstrate long-term viability, and environmental catastrophes are likely similar with and without a project. Yet there is little protection for the jurisdiction in the absence of some surety delivered from the project to the jurisdiction.

The need for surety likely pushes either a flat or variable tax or deduction as the most reasonable solution.

#### IMPLEMENTATION STEPS:

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Develop project design criteria for leakage minimization and mitigation, and for maximization of positive spill-over effects</li> <li>- Develop project registration criteria to assure viability of registered projects</li> <li>- At project registration assess project design and require changes where potential leakage is not sufficiently considered</li> <li>- Develop and maintain regulatory tools that can identify projects that are leaking emissions and apply penalties</li> </ul>	<ul style="list-style-type: none"> <li>- Demonstrate sound project structure and long term viability</li> <li>- Apply jurisdictional requirements on project design to minimize and mitigate leakage</li> <li>- Continually monitor leakage proxies and update leakage mitigation measures as necessary</li> </ul>

### Mutually-Beneficial: Variable deductions based on risks of leakage and non-permanence

The mutually-beneficial option would require that jurisdictions (in partnership with projects) develop systems and calculations to determine deductions relative to risk of leakage and non-permanence. Such an approach would encourage projects to design structures and practices to minimize deductions and therefore maximize the benefit to the both the jurisdiction and the atmosphere.

For leakage, the deductions in emission reduction credits that projects will have to provide to jurisdictions could be calculated using approved approaches in existing methodologies (e.g. VCS or CDM).

For reversals, a project could be required to calculate a permanence buffer proportion using approved tools (e.g. the VCS Non-Permanence Risk Tool) that would be held as a form of insurance.

In hypothetical example 1, the lack of alternative livelihood provision by the project leads to an expectation of high risk of leakage. The methodology directly calculates leakage of 39% during the first monitoring period; this proportion is then deducted from the project's emission reductions and/or removals. In hypothetical example 2, the assessment of the project's internal risk using the VCS AFOLU Non-Permanence Risk Tool<sup>5</sup> is 23%. Subsequently 23% of ERRs are retained in a buffer account. The pooled buffer account would be used to cover previously issued ERRs at the time of the project reversal.

### IMPLEMENTATION STEPS:

#### JURISDICTION

- At project registration assess project documentation on leakage and non-permanence risks, accepting or rejecting leakage mitigation plans and proposed buffer deduction proportions
- At each MRV period, assess leakage and require credit reductions by the project. Incorporate leakage credits in the Jurisdictional ERRs estimation at each MRV period.
- At each MRV period, place agreed proportion of credits in a buffer account. Retain non-permanence buffer credits and use across the project portfolio whenever complete or partial project failure is recorded

#### PROJECTS

- Estimate ex-ante leakage and non-permanence as required by the jurisdiction
- Estimate and communicate project ex-post leakage, where relevant, at every MRV event

<sup>5</sup> <http://www.v-c-s.org/sites/v-c-s.org/files/AFOLU%20Non-Permanence%20Risk%20Tool,%20v3.2.pdf>

## V. GRANDPARENTING

Given the differences in accounting approaches between projects and jurisdictional programs, the transition from standalone project to nested project represents a critical accounting issue.

In the majority of cases, projects will have agreements or at least understandings with investors, buyers, and local stakeholders and communities on emission reduction accrual based on the original accounting approaches.

A very rapid transition will thus cause significant financial problems for projects. On the other hand, a very slow transition opens up an extended window under which jurisdictions will struggle to reconcile results between scales and may believe they are over crediting subsets of the total jurisdictional area, and thus not equitably distributing credits to the remaining areas.

### Jurisdiction-Favored: Require immediate alignment

In the jurisdiction-favored solution, projects would have to nest immediately within the jurisdictional program. This may cause substantial economic hardship for projects, and in many cases project failure, due to commitments made to investors, partners, and beneficiaries. Failed projects would be unable to make good on their commitments to local communities and indigenous groups, leading to negative perceptions of REDD+ efforts in these communities and ultimately in the international community.

In the hypothetical example, the project has to accept the immediate drop in claimable emission reductions and/or removals. If they are unable to do so, the project will cease.

#### HYPOTHETICAL EXAMPLE TO ILLUSTRATE SOLUTIONS:

*In this hypothetical example, the project in jurisdiction X has an existing baseline equal to 50 ha of deforestation a year across its 500 ha.*

*The baseline for the project as determined by the jurisdiction will be 38.75 ha /year.*

*In addition, the project included all pools while the jurisdiction only accounts live tree biomass (above and belowground). The exclusion of dead wood, litter and soil results in 23% lower ERRs for the project.*

*The project, once aligned, has a baseline rate of deforestation that is 37.5% of the original, with a further drop of 23% due to the inclusion of fewer measurement pools. The net result is annual ERRs that are 29% of those expected under the original project planning.*

**IMPLEMENTATION STEPS:****JURISDICTION**

- Lay out clearly the full requirements for projects
- Provide steps for registration and immediate alignment

**PROJECTS**

- Examine jurisdictional standards and requirements (ideally in initial project design)
- Communicate clearly with the jurisdiction if immediate application of the requirements will lead to project failure
- Plan for alignment coinciding with registration
- Examine and clearly communicate impacts on beneficiaries

**Project-Favored: Grandparenting following the JNR rules**

The VCS JNR Requirements indicate that projects should continue under their existing accounting and baselines until the time of baseline renewal, at which point they should nest fully. This option would foster the continuation of existing projects, as it gives projects time to fulfill previously made commitments and to develop plans for aligning the baseline and mitigation strategies with the jurisdiction. However, this may be up to ten years and as such is likely to be unpopular with jurisdictions.

Were this solution adopted, jurisdictions should likely increase focus on buffer accounts (see Issue 5), as the risk to the jurisdiction would be elevated from partial or complete project failure.

In the hypothetical example, the project is due to renew its baseline 8 years from now. As a result, it retains its existing numbers during these eight years. The impact for the jurisdiction will be that the project will be claiming a disproportionate share of the emission reductions and/or removals for these years.

**IMPLEMENTATION STEPS:****JURISDICTION**

- Lay out clearly the full requirements to which projects will have to comply
- Examine current project baselines and ex-ante ERR estimates to determine risks to jurisdiction of grandparenting period
- Where risk exists, implement a buffer account to shield the jurisdiction and other projects

**PROJECTS**

- Examine the requirements of the jurisdictional program
- Plan for alignment at baseline renewal
- Calculate impacts of alignment on project income and communicate early with all beneficiaries

## Mutually-Beneficial: Fixed period for grandparenting with phase in

Under the mutually-beneficial compromise solution, the original and new nested baselines would be calculated and compared. There would then be a fixed grandparenting period (e.g., 5 years) with a gradual step-down from the original to the new baseline until full nesting is achieved at the end of this period. This alternative gives additional time to projects to complete nesting but safeguards jurisdictions by requiring the immediate start of a transition. It recognizes the early actions promoted by projects and allows projects to continue using their estimated validated baselines as they transition to fully nest their baselines in the jurisdictional reference level. The use of standardized proportional deductions simplifies accounting compared to requiring a gradual adoption of the fully nested standards, which may be difficult to implement and would have irregular accounting impacts through time over the phase-in period. This option thus facilitates the reconciliation of results at the project and jurisdictional levels during the grandparenting period, while also helping the jurisdiction achieve emissions reductions through project actions.

In the hypothetical example, the project would have five years to transition from the project baseline to the jurisdictional-approved baseline. After the project has determined what its new baseline will be once nested, the jurisdiction requires the project to step down to the new baseline in 20% increments over five years. The standalone project baseline is 50 ha per year with an emission factor of 500 t CO<sub>2</sub>/ha, giving a baseline emission of 25,000 t CO<sub>2</sub>/yr. The project baseline allowed under the jurisdictional program is 38.75 ha/yr with an emission factor of 385 t CO<sub>2</sub>/ha, giving a baseline emission of 14,919 t CO<sub>2</sub>/yr. Thus, using a 20% incremental step-down, the following annual baselines will be applied during the grandparenting period:

- Original	25,000 t CO <sub>2</sub>
- Year 1	22,984 t CO <sub>2</sub>
- Year 2	20,968 t CO <sub>2</sub>
- Year 3	18,951 t CO <sub>2</sub>
- Year 4	16,935 t CO <sub>2</sub>
- Year 5	14,919 t CO <sub>2</sub>

**IMPLEMENTATION STEPS:****JURISDICTION**

- Lay out clearly the full requirements to which projects will have to comply including fixed period over which alignment must occur
- Define proportional alignment schedule (e.g. 20% per year over five years)
- Examine current project baselines and ex-ante ERR estimates to determine risks to Jurisdiction of grandparenting period
- Establish a timeline for the integration of projects
- Where risk exists, implement a buffer account to shield the jurisdiction and other projects

**PROJECTS**

- Examine jurisdictional standards and requirements
- Plan for alignment at end of fixed period
- Calculate impacts of alignment on project income and communicate early with all beneficiaries

## VI. CREDITING AND TRADING NESTED PROJECT EMISSION REDUCTIONS AND/OR REMOVALS<sup>6</sup>

*Authored by Florian Reimer, Pablo Llopis and Christian Dannecker, The South Pole Group*

When jurisdictions or projects nested within jurisdictional REDD+ programs are also involved in emissions reductions trading, double counting, double claiming and/or double trading of the same emission reductions and/or removals by the project(s) and jurisdiction must be avoided.

All three solutions presented below avoid double counting and maintain environmental integrity of ERRs. They differ in their degree of centralization and approach to benefit distribution. Local contexts will determine which system will appropriately maintain incentives for sustainable forest management at all scales. This section provides only a high-level overview of these options, while future work to expand this guidance may elaborate many of the related benefit sharing options that could be used to reward projects and other actors in a jurisdiction who are effective at reducing emissions, while ensuring harmonized accounting.

### Jurisdiction-Favored: Trading exclusively through jurisdiction

In a more centralized approach, the jurisdiction may oversee and control the trading of emission reductions and/or removals from REDD+ in its territory. This option could be structured in a number of ways that may or may not allocate credits to nested projects. Where a jurisdiction seeks to maintain project activities and associated investment, jurisdictions should consider how project activities are rewarded for ERRs achieved, whether through allocation of credits, benefitting from sales of (or results-based payments for) jurisdictional ERRs, or other benefit sharing options.

Such a centralized regulatory approach would require careful avoidance of any infringements of rights of registered REDD+ projects and other landowners that are set out in law. Project proponents are usually registered legal entities in their host countries, ERRs are considered intangible assets in the legal tradition of most countries, and legal systems generally guarantee the right to property of citizens and legal entities. Changes to policies or regulations that affect the possibility of commercializing an asset could be seen as affecting investment and the general business climate of a jurisdiction, beyond pure GHG ERR trading schemes.

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<sup>6</sup> Note that this is a high-level overview of some of the issues related to crediting and benefit sharing, and it is not comprehensive. VCS and partners may expand this section in the future to provide further guidance on crediting and/or benefit sharing options related to nesting.

Inclusive and early consultation, design and communication on the benefit sharing mechanism is recommended in this solution. A lack of local incentives for sustainable forest management could lead to reversals of previously achieved ERRs.

Considerable technical, social and legal capacities may be required from the jurisdiction to implement this solution in an equitable, efficient and well-performing way.

### IMPLEMENTATION STEPS:

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Organize transactions of verified ERRs</li> <li>- Organize inclusive and early consultation, design and communication of benefit sharing mechanism</li> <li>- Regulatory steps on trading responsibility of registered projects</li> <li>- Regulatory steps against registration of further projects with issuances</li> <li>- Platform for enabling developing of local, nested activities contributing to REDD+</li> <li>- Safeguards against policy changes for long-term planning safety of local activities</li> </ul>	<ul style="list-style-type: none"> <li>- Prepare and follow commonly agreed road map on grandparenting into jurisdictional baselines and integrate into jurisdictional monitoring system</li> <li>- Participate in consultation &amp; design of JNR benefit sharing mechanism</li> </ul>

### Project-Favored: Parallel trading of ERRs

The project-favored solution allows projects to continue to manage transactions of their own reported and verified ERRs while the jurisdiction manages its own transactions in parallel. The registration of further autonomous projects may be permitted as long they follow the jurisdictional baseline requirements and integrate into the monitoring (as described in the options in the rest of this document).

Where projects are inside a jurisdictional REDD+ program, and are registered in external GHG programs that will allow them to monitor, report, verify and trade ERRs, it is paramount to avoid the double counting, double claiming and double trading of the same ERRs by the jurisdiction. Where projects are fully nested (i.e., they are using the same (or a consistent) baseline and monitoring system as the jurisdiction), this can be achieved by deducting the expected ERRs resulting from projects from the expected Jurisdictional ERRs, according to estimates listed in the REDD+ project's registration documents. When reporting jurisdictional ERRs, the actual reported project ERRs from any period overlapping the corresponding jurisdictional monitoring period must be deducted. In case monitoring periods and reporting of projects do not match the jurisdictional timeline, the best



estimate should be used and a nesting contingency reserve of jurisdictional ERRs could be created in order to deduct further tCO<sub>2</sub>e in case of projects reporting higher ERRs than expected. See Section V for further guidance on managing this issue during the grandparenting period.

Overall, ERR performance of registered projects can exceed expectations set out in their project documents. An efficient option to deal with this uncertainty systematically is to create a nesting contingency reserve that will be withheld from any jurisdictional transactions in order to be able to make further deduction to match project ERR reporting. Several approaches and considerations exist to calculate the necessary % of jurisdictional ERRs for the nesting contingency reserve. One jurisdiction, for example, uses 10%. After the reporting of all registered projects is complete and all necessary deductions are made, jurisdictional ERRs previously withheld in the reserve could be transacted.

Such an approach reserves the rights and independence of local REDD+ projects as early movers and allows for opportunity-driven development of local sustainable forest management initiatives. However, it may be useful to set up some sort of commercialization coordination mechanism, that could avoid the risk that projects and jurisdictional programs may be competing for the same ERR transaction demand. Such a mechanism could establish a single focal-point for transacting ERRs from both jurisdictional and project scales.

#### IMPLEMENTATION STEPS:

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Organize transactions of verified ERRs</li> <li>- Consider organizing a a commercialization coordination mechanism</li> <li>- Clearly communicate on requirements for permission to develop further local projects</li> </ul>	<ul style="list-style-type: none"> <li>- Organize transactions of verified project ERRs</li> <li>- Participate in commercialization coordination mechanism, where used</li> <li>- Openly and early communicate on further development of local projects</li> </ul>

### Mutually-Beneficial: Parallel trading of ERRs for existing projects, but new projects trading exclusively through jurisdiction

Under the compromise solution the trading responsibility of already registered projects is maintained, but regulatory steps are taken by the jurisdiction in order to not permit the registration of further autonomous projects with own issuances and trading activities. Further local activities contributing to the objectives of REDD+ would be closely coordinated with the jurisdictional program and receive resources for implementation and opportunity cost compensation of local land users through a jurisdictional benefit distribution mechanism.

The advantage of this solution would be respect towards the rights and independence of local REDD+ projects as early movers, while at the same time limiting the necessity to deduct ERRs. Future local initiatives contributing to REDD+ already start as completely nested components of the jurisdictional program, facilitating integration, scaling and replication.

Risks of this approach are that without a commercialization coordination mechanism, the early mover projects and jurisdictional programs could enter a competition for the same ER transaction demand.

For local activities without own issuances, the benefit sharing mechanism is essential to being able to provide local incentives to sustainable forest management. A not well-balanced or instable benefit sharing mechanism could provide disincentives for activities who require a long planning horizon of several years or even decades while jurisdictions are subject to policy changes.

**IMPLEMENTATION STEPS:**

JURISDICTION	PROJECTS
<ul style="list-style-type: none"> <li>- Organize transactions of verified ERRs</li> <li>- Consider organizing a commercialization coordination mechanism with registered projects</li> <li>- Regulatory steps against registration of further projects with issuances</li> <li>- Platform for enabling developing of local, nested activities contributing to REDD+</li> <li>- JNR benefit sharing mechanism design, including consultation and coordination</li> <li>- Safeguards against policy changes for long-term planning safety of local activities</li> </ul>	<ul style="list-style-type: none"> <li>- Organize transactions of verified project ERs</li> <li>- Participate in commercialization coordination mechanism, where used</li> </ul>

Timothy R. H. Pearson  
Technical Director  
Ecosystem Services,  
Winrock International  
tpearson@winrock.org  
office +1.703.302.6559  
2121 Crystal Drive, Suite 500  
Arlington, VA 22202, USA  
www.winrock.org



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INTERNATIONAL