

Key updates in ACR's IFM v2.0

Further additionality safeguards

Carbon projects create "additional" climate benefits when they exceed "business-as-usual" (BAU) management, sequestering more carbon than would've been accrued in the absence of the project. Thus, an evaluation of additionality requires assessment of how the given landowner would manage their lands in the presence and absence of the carbon project. The new version of the ACR IFM methodology introduces several new safeguards to help guide this assessment.

Projects have always had to demonstrate their baseline management scenario is legally permissible at the time of validation. New to this version is the continued assessment of legal restraints over the crediting period, and periodic updates to the baseline as necessary. Essentially, as legal constraints evolve over time, so does the baseline.

We've also solidified the methodology language surrounding what constitutes a baseline constraint, and how they should be modeled. For example, deed restrictions and legally binding terms and conditions of land acquisition and donor funding have always been considered legal restraints, although the methodology did not contain specific language on this. Likewise, including roading and timber costs in NPV analyses, as well as ensuring timber harvested in the baseline is accessible and operable, has been broadly applied and now is a specific requirement.

Third, although published best management practices (BMP's) are generally considered voluntary guidelines, we've observed they have very high adoption rates and nearly all projects have modeled them as baseline constraints. For conservatism, we've officially specified them as legal constraints in baseline modeling in IFM v2.0.

Finally, in the process of updating the methodology, we took a deep dive to confirm the NPV discount rates used in forecasting baseline harvests in the ACR IFM methodology are still relevant for each land ownership type. NPV rates go far in regulating the amount and timing of timber that can be harvested. The rate (%) represents an informed proxy of landowner management preference, considering the range of landowner traits and forest conditions that exist in the market (e.g., income, education, age, tract size). The 6% rate used by private industrial ownerships represents prioritization of profit maximization. Lower discount rates simulate joint prioritization of profit and amenity values (e.g., recreation, hunting, habitat), and ultimately simulate a less intensive forest management regime with extended rotation lengths and more conservative silviculture.

After reviewing the literature, we determined the NPV discount rates previously used in the ACR IFM methodology are still relevant for the majority of ownership types included in the methodology. However, we conservatively elected to decrease the NPV discount rate for the non-governmental organization (NGO) ownership type to 3% (as opposed to 4% NPV rate) to better reflect the joint maximization of timber and non-timber amenities commonly valued by NGO's.



Refinement of landowner options for demonstrating sustainable forest management

All projects conducting commercial harvesting must demonstrate their practices meet an ACR approved threshold of sustainable forest management (SFM). Many ACR projects to date have used the forest certification option, which is still available. However, several new mechanisms for demonstrating SFM have been added to accommodate the variety of users of the methodology.

New options to demonstrate SFM include enrollment in a state sanctioned forestry program that includes monitoring and enforcement mechanisms, and for tribal ownerships, demonstrating either a Bureau of Indian Affairs (BIA) approved management plan or employment of forest management practices informed by traditional knowledge.

Utilizing a professionally developed forest management plan continues to be another option for demonstrating SFM, but its use is now conservatively constrained only to small landowners with <2,500 forested acres and must now be compatible with Montreal Process Criteria for the conservation and sustainable management of temperate and boreal forests.

To accommodate these changes, we separated sustainable management requirements into their own standalone section (as opposed to nested within applicability conditions).

Refined list of eligible project start dates

The ACR Standard requires projects to validate within 3 years of their start date as a safeguard against crediting historical activity. This rule has been in place for previous versions of the ACR IFM methodology, and is now reiterated in the methodology text for emphasis.

We've also added "Land acquisition or easement enrollment date" as a new eligible start date. This addition is important because acquiring new lands and enrolling them in carbon projects has huge climate impact, especially when lands transition from private industrial to NGO or other conservation minded organizations that increase rotation length. Conservation easements provide further assurance of the longevity of greenhouse gas (GHG) benefits from IFM projects and should also be incentivized.

To provide adequate time to finalize land transactions and incentivize the acquisition of new lands for carbon projects, we've clarified in IFM v2.0 that the NPV discount rate of the previous owner may be utilized for baseline setting for up to 5 years from acquisition. Likewise, when jointly enacting conservation easements on newly developed carbon projects, we've clarified a 3-year timeframe from project start date in which conservation easements are considered to have occurred in conjunction with the carbon project. Legally binding conditions of easements enacted more than 3 years from project start date must be modeled in the baseline.

Increased public reporting

Transparency is a critical component of the existing carbon market. The easier it is to understand the project and methodology, the better. With this in mind, the updated version of ACR IFM has taken significant steps to specify and streamline reporting of project attributes.



We added a completely new section for baseline reporting. This section provides a streamlined and standardized public reporting format for all projects, including a comparison of baseline management to regional common practice, descriptions and substantiation of baseline silvicultural prescriptions, and a full list of legal constraints affecting baseline management.

The introduction of standardized stratification and inventory standard operating procedures (SOP) documents also help to provide clear, detailed, and standardized reporting. The stratification SOP clarifies stratification parameters and provides information necessary such that the stratification can be examined and duplicated as necessary. An inventory SOP also describes key metrics of the inventory process, such as description of the inventory design, measurement procedures, biomass estimation techniques, and more.

New equations for calculating "removals" credits

Carbon markets are evolving, and savvy investors have expressed interest in further distinguishing carbon credit types. For ACR IFM, projects generate both removals (credits associated with biological carbon sequestration) and emission reductions (credits associated with avoided harvests). Until recently, there hadn't been a consistent, transparent, and verifiable registry-approved mechanism to distinguish between these project benefits. ACR IFM v2.0 provides clear equations to distinguish verified "removals" from "emission reductions" and is the first registry to provide tagging functionality for such credits.

Increased specificity in the validation and verification process and requirements

Independent validation and verification are critical in ensuring the reputability of carbon offset claims. The basis and rigor of these steps is as stringent as ever in IFM v2.0. The new methodology has now significantly expanded these sections to provide detailed requirements on the scope and requirements of these steps.

Clarifications in project accounting, leakage, and uncertainty analysis

The math behind our methodology has been revisited for increased clarity and transparency. Baseline wood products are now more directly applied in the calculation of credits, and the standard market leakage deduction has correspondingly been adjusted to 30%. These accounting changes result in a more transparent and direct calculation of carbon benefits. Also, IFM v2.0 has greatly expanded and standardized the instructions for the calculation of tree biomass. Lastly, the process for quantifying project uncertainty has been updated to reflect the latest advances in statistics.