

FOUNDATIONS FOR CARBON PROJECT DESIGN







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SUMMARY

Carbon markets under Article 6—including cooperative approaches under Article 6.2 and the Paris Agreement Crediting Mechanism (PACM)—together with independent carbon programs (ICPs) such as Verra, Gold Standard, Global Carbon Council, and Cercarbono, are expanding the avenues for private-sector engagement in mitigation activities. As sovereign buyers activate early-stage funding windows (e.g., the Swiss Klik Foundation, GGGI's Carbon Transaction Facility, Japan's JCM, Singapore and South Korea), developers face increasingly structured expectations regarding technical robustness, regulatory alignment, safeguards compliance and long-term delivery of high-integrity mitigation outcomes.

To be considered fundable, project concepts must demonstrate transparent additionality, a credible financing model, sound project planning, and an MRV system aligned with methodological requirements and feasible under local conditions. Equally, proposals must show early conformity with host-country procedures, including no-objection, approval and—when relevant—authorization for international transfers. Elements such as legal compliance, safeguards, stakeholder engagement, benefit-sharing mechanisms, and the treatment of risks and dependencies are essential for completeness at the concept stage.

This policy note distills practical guidance based on early Article 6 practices, national authorization frameworks and the requirements of major sovereign buyer programs. It highlights the core elements needed to prepare Expressions of Interest (EOIs), Mitigation Action Idea Notes (MAINs) and similar submissions, emphasizing clarity around methodology applicability, baseline justification, MRV feasibility, technology readiness, and alignment with national climate priorities. It also outlines the structured financing cycle of carbon projects—from early-stage analysis to MOPA negotiation, monitoring, verification and transfer of mitigation outcomes (e.g., ITMOs).

Innovation, particularly in digital MRV, can reduce verification costs and strengthen evidence trails when aligned with ICP requirements and host-country systems. However, developers must ensure that innovative tools remain compatible with methodological rules and verifiable by third-party auditors.

Overall, while not all information is expected to be available for early-stage funding applications, it is expected that the project developer presents a project concept that demonstrates strong technical foundations, coherent planning, regulatory alignment, and a clear justification that carbon finance is essential for enabling implementation. By providing a consolidated overview of expectations from sovereign buyers and national authorities, this policy note aims to support private developers in preparing bankable, high-quality proposals capable of advancing through early-stage funding, detailed due diligence and long-term Article 6 cooperation.

INTRODUCTION

Cooperative approaches under Article 6 are transitioning from political agreement to operational deployment. With the Article 6 Rulebook adopted at COP26 and further guidance clarified at COP29, countries are activating bilateral cooperation. There are currently¹ thirty-eight cooperative approaches agreements signed and fifty memorandums of understanding. In this situation, sovereign buyers, development facilities, and compliance-linked schemes are simultaneously supporting early-stage mitigation activities, creating new entry points for carbon project developers.

Several initiatives linked to Internationally Transferred Mitigation Outcome (ITMO)-acquiring countries have launched calls for proposals, such as the Swiss Klik Foundation, the Carbon Transaction Facility (CTF) by the GGGI, the Joint Crediting Mechanism (JCM) by Japan, and others from Singapore and South Korea. Each of these calls for proposals comes with specific eligibility criteria and process steps.

In parallel, host countries are advancing the operationalization of Article 6 frameworks, establishing the rules of the game for the development of Article 6 projects in their jurisdiction. Often, these policy frameworks also regulate activities that do not seek corresponding adjustments, normally developed for the voluntary carbon market.

Carbon projects are developed under the guidance and rules of different mechanisms (Article 6.2 or the PACM) or independent carbon programs (ICPs). There is an increasing number of ICPs and each of them has its own rules and procedures. VERRA and Gold Standard for the Global Goods followed are the largest ICPs followed by the Global Carbon Council, Cercarbono and Plan Vivo (especially for forestry sector). ICPs are evolving and raising standards through initiatives like the Integrity Council for the Voluntary Carbon Market (ICVCM) and the Initiative for Climate Mitigation (ICM), tightening eligibility rules and assurance systems.

For private developers, this emerging landscape offers both opportunities and complexity. Buyer programs, host-country procedures and program requirements vary widely, and proposals fundable under one pathway may be misaligned under another. This policy note provides practical guidance to help developers navigate these expectations. Drawing on emerging practice from Article 6 calls for proposals, early MOPAs and national authorization procedures, it outlines some of the technical, legal, financial and procedural elements that are required to prepare robust EOIs, MAINs and other early-stage funding proposals that align with sovereign buyer expectations and host-country frameworks.

¹ UNEP Copenhagen Climate Centre. <u>Article 6 pipeline</u>. Last updated 11-November-2025.

1 OPPORTUNITIES FOR THE PRIVATE SECTOR

The private sector plays a central role in the implementation of mitigation activities developed under the different mechanisms of Article 6, as well as within ICPs. Developers contribute technical expertise, investment capacity, and execution capabilities that are essential for generating mitigation outcomes aligned with the expectations of sovereign buyers and host countries. As international cooperation expands and host-country frameworks mature, private entities are increasingly positioned to participate in structured processes for project identification, authorization and long-term crediting arrangements.

Several governments have established dedicated channels to finance or otherwise support mitigation projects. Switzerland, through the Klik Foundation, has been one of the earliest and most active actors in issuing calls for project concepts aligned with Article 6. Japan, with the Joint Crediting Mechanism, brings its long-standing experience under the CDM to a new cooperative landscape under Article 6. Similar initiatives have emerged from Sweden, Norway, Singapore, South Korean and other countries that are developing or expanding their purchasing programs. Although each program has its own priorities, they commonly assess project proposals against criteria such as technological relevance, expected emission reductions and NDC contribution, additionality, contribution to national climate objectives, safeguards, and the project's ability to meet authorization and monitoring requirements.

These countries often provide structured proposal formats and templates that outline the information required at different stages of the funding process. Examples include Expressions of Interest (EOIs), Mitigation Action Idea Notes (MAINs), and preliminary eligibility forms. While these templates vary across programs, they typically request information on project activities, expected mitigation potential, implementation arrangements, regulatory status in the host country, and the steps needed to align with Article 6 procedures. Representative templates are included in the annexes for reference.

For developers, these funding and identification processes represent a significant opportunity to secure early support and establish long-term partnerships with sovereign or institutional buyers. However, proposals must demonstrate that key aspects of project design and implementation are under control. This includes clarity on the authorization pathway in the host country, preliminary assessment of the applicable methodology and monitoring requirements, early identification of safeguards and permitting needs, and a credible plan for financial structuring. Projects that are able to present this information coherently at the concept stage are more likely to advance toward detailed assessment, feasibility funding, and eventual contracting under a mitigation outcome purchase agreement.

2 CARBON PROJECTS FINANCING CYCLE

The financing cycle of a carbon project is shaped by the timing of credit issuance and the sequence of activities required to reach verification and authorization. Mitigation outcomes are only monetized after monitoring, third-party verification, and, where relevant, host country authorization and transfer. This process, as portrayed in **Figure 1**, can take several years from the initial concept stage, requiring project developers to structure financing in phases that correspond to the project's development and implementation timeline.

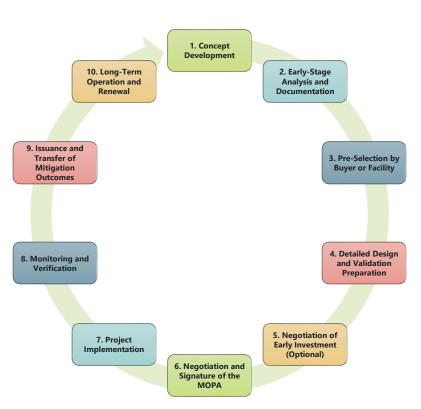


Figure 1. Steps for a financing cycle of a carbon project

allow the buyer to assess the viability of the proposed activity.

In some cases, part of the investment can be negotiated with buyers or investors before full implementation. Such arrangements may involve higher risk for the buyer and therefore are usually linked to discounted pricing and milestone-based payments—such as payments upon validation or upon the first issuance of mitigation outcomes. However, these arrangements remain limited and depend on each sovereign facility or investor strategy.

If initial assessments are successful, the buyer and the developer may proceed to negotiate a Mitigation Outcome Purchase Agreement (MOPA). The MOPA defines the commercial terms for results-based payments over the crediting period, including expected delivery volumes, price, conditions for payment, and the allocation of responsibilities related to authorization, monitoring,

Early-stage financing is often the most challenging. Developers must cover feasibility studies, baseline assessments, stakeholder consultations, permitting, and the preparation of initial documentation such as idea notes or design documents. Because revenues will materialize after verification. most developers rely on grants, concessional resources, or their own equity to fund initial work. In the context of sovereign Article 6 buyers, early support typically takes the form of small grants that cover preliminary research and documentation preparation. These grants help reduce the upfront risk for developers and and transfer. The MOPA provides long-term financial visibility and allows developers to mobilize additional financing for implementation, sometimes including debt or equity investment conditioned on contractual revenue flows.

Throughout this financing cycle, as described in **Table 1**, developers must carefully manage implementation risks, authorization timelines, MRV obligations, and potential changes in host country regulations. A well-structured financing plan enables the project to move from early concept development to long-term results-based payments, ensuring that the activity remains viable until verified mitigation outcomes can be transferred.

Table 1. Chronological Financing Cycle of a Carbon Project

Stage	Description	Typical Financing Source	Key Outputs / Milestones
1. Concept Development	Initial identification of the mitigation activity, preliminary assessment of feasibility, sector relevance, and potential emission reductions.	Developer equity, internal resources	Concept note, initial technical description, alignment with host country priorities
2. Early-Stage Analysis and Documentation	Preparation of baseline studies, stakeholder consultations, regulatory checks, and early project documentation (e.g., Idea Note / MAIN).	Developer equity, internal resources	Feasibility assessment, baseline analysis, early safeguards screening, first project documentation
3. Pre-Selection by Buyer or Facility	Sovereign buyer or program reviews the concept and determines whether the project is suitable for further development.	No financing or minimal technical support	Pre-selection confirmation, feedback on required improvements, invitation to develop full documentation
4. Detailed Design and Validation Preparation	Development of the Mitigation Activity Design Document (MADD or equivalent), MRV plan, safeguard instruments, permitting plan. Engagement with host country for no-objection or approval.	Small grants, readiness funding from sovereign buyers or cooperation facilities	Complete design document, draft MRV plan, evidence of progress in authorization pathway
5. Negotiation of Early Investment (Optional)	In some cases, partial pre-finance or milestone-based payments may be negotiated before full implementation.	Buyer pre-payments (rare), impact investors, concessional capital	Conditional investment agreement, milestone-based financing terms
6. Negotiation and Signature of the MOPA	A Mitigation Outcome Purchase Agreement is negotiated, specifying volumes, price, authorization conditions, MRV obligations, delivery schedule, and payment terms.	Results-based finance committed for the crediting period	Signed MOPA, clear revenue structure, confirmation of commercialization pathway
7. Project Implementation	Procurement, construction, and commissioning of project activities. Continued engagement with host country and monitoring systems setup.	Developer equity, commercial debt supported by MOPA revenue	Commissioned infrastructure or operational activity, operational MRV systems
8. Monitoring and Verification	Monitoring of emission reductions, third-party verification, submission of documentation for issuance and authorization.	Internal Operational Expenditures (OPEX), sometimes reimbursable after issuance	Verified emission reductions, verification report, eligibility for payment

Stage	Description	Typical Financing Source	Key Outputs / Milestones	
9. Issuance and Transfer of Mitigation Outcomes	Host country processes authorization (if applicable), mitigation outcomes are issued and transferred to buyer.	Payment from sovereign buyer or investor	Transfer of mitigation outcomes (e.g., ITMOs), results-based payment	
10. Long-Term Operation and Renewal	Continued operation under the crediting period, potential renewal, ongoing MRV and safeguards compliance, Operation post-crediting should secure financial sustainability.	Project revenues (RBPs), possible reinvestment	Long-term sustainability plan, continued compliance, possible crediting period extension and planning after MOPA expires.	

Source: Authors' elaboration.

3 KEY CONSIDERATIONS FOR THE DEVELOPMENT OF FINANCING PROPOSALS FOR CARBON PROJECTS

This section highlights common aspects required in calls for proposal from different sovereign buyers and facilities including the Swiss KliK Foundation, GGGI's Carbon Transaction Facility (CTF), Singapore's International Carbon Credit Framework, Japan's Joint Crediting Mechanism (JCM), and Korea Emissions Trading Scheme (K-ETS) launched by South Korea, and its associated international cooperation activities. **Annex I** summarizes their main process steps and eligibility requirements.

3.1 Understanding the requirements of the funding counterpart

Funding counterparts, such as sovereign facilities, compliance-linked schemes, development banks, and dedicated buyers publish sector priorities, eligibility criteria, documentation templates, and decision gates that structure how proposals are reviewed. A strong submission reflects these requirements by mirroring the format and terminology used by the buyer, demonstrating that the project fits clearly within the program's scope.

At the concept stage (Expression of Interest-EOI, or a Mitigation Action Idea Note-MAIN), not all detailed information is expected to be finalized. However, reviewers will expect a coherent narrative that already shows control over the critical dimensions of the activity. This includes a clear description of the mitigation approach, preliminary estimates of emission reductions, indicative implementation and financing arrangements, and an understanding of the standards and methodologies under the relevant ICP. The proposal should also explain how the host-country (as applicable) no-objection, approval, authorization, registry routing, and potential corresponding adjustments will be navigated within the intended timeline.

Where multiple commercialization channels are possible, the proposal should state the primary route and briefly note differences in eligibility, authorization practice, and the allocation of risks between parties. Proponents who engage early with the buyer's available guidance documents, calls for proposals, and template structures are better positioned to anticipate due diligence questions and pass initial screening.

3.2 Understanding the requirements of the host country framework

Understanding the host-country carbon market strategy and policy/regulatory framework is essential. National regulations determine which projects require government clearance and at what stage. For those projects under regulatory oversight, a project may need to receive no-objection, approval, and, where applicable, authorization for international transfers. Importantly, developers must clarify how the project's intended use category (e.g., authorized ITMOs, contribution claims, or domestic credits) will be reflected once the host country operationalizes its authorization system.

These frameworks are evolving at different speeds across countries. In countries with approved regulations, proposals must demonstrate clause-by-clause alignment with the eligibility criteria and outline the concrete steps and the authorities responsible for no-objection, approval, authorization, issuance, tracking, and the first transfer. Where the regulatory framework is still under development, proponents should commit to recognized international good practice, demonstrate familiarity with draft instruments, and present scenarios for administrative fees, levies, and benefit-sharing obligations. Proposals should also identify Article 6 focal points who can support engagement during project development.

Demonstrating early understanding of regulatory direction, anticipated timelines, and potential risks strengthens credibility and increases the likelihood of alignment once the framework becomes fully operational.

3.3 Technology Transfer and Project Design

Funders and host country authorities prioritize projects that combine proven, state-of-the-art technologies with credible plans for localization, operation and long-term maintenance. A strong proposal demonstrates not only that the selected technology has a solid performance record, but also that it can be deployed reliably under local conditions and within the parameters required by the applicable methodology. Main aspects to consider are:

- Developers should provide evidence of technological robustness through performance in comparable climatic, geographic or operational environments, manufacturer or supplier warranties, certification or compliance with recognized international standards, and documented experience with similar scales of deployment. Proposals should specify the expected operational life of key components, degradation profiles where relevant (e.g., batteries, renewable energy systems), and compatibility with local infrastructure.
- A credible technology-transfer plan includes clear arrangements for training and capability transfer to local operators and institutions. This may involve structured operation and maintenance (O&M) training, provisions for technical supervision during the initial years, and the identification of local entities responsible for implementation. Proposals should explain how responsibilities for maintenance, troubleshooting and periodic replacement of parts will be allocated during the crediting period, and how performance will be monitored to remain within the parameters of the selected methodology.
 - Supply chain and logistics considerations are increasingly important for funders assessing delivery risk. Proposals should therefore outline the availability of spare parts, expected lead times, and contingency measures to mitigate disruptions, especially for technologies requiring specialized components or regular servicing. Identifying local distribution partners, maintenance providers or regional suppliers strengthens credibility and reduces concerns about operational continuity.

 Finally, developers should demonstrate that the project design is resilient across different scenarios, including regulatory changes, instability, variable demand, or environmental stresses. When relevant, proposals may describe technology redundancies, modularity options, remote monitoring capabilities or backup systems that ensure sustained performance. Projects that articulate these elements clearly are better positioned to pass technical duediligence reviews and to be considered bankable by both funding counterparts and hostcountry authorities.

3.4 Project planning

Project planning is a core component of any financing proposal, as it demonstrates that the activity can be implemented within realistic timelines and with an acceptable level of technical, regulatory and operational risk. Funding counterparts and host-country authorities assess not only the quality of the technology and expected mitigation outcomes, but also the ability of the proponent to organize and sequence the project in a credible manner.

A credible project plan should demonstrate that the activity can be implemented within realistic timelines and with manageable regulatory, technical, and operational risks. As mentioned above, experience with similar scales of deployment is fundamental. **Table 2** outlines key elements for project planning.

Table 2. Key elements for project planning

Key planning	Main aspects
considerations	
	 Clear sequence of project stages (feasibility → baseline → design → procurement → installation → commissioning → monitoring). Identification of responsible entities for each stage (developer,
Implementation	implementing partners, suppliers, service providers).
structure	• For Programs of activities (PoAs) present the overall program structure and triggers for instances inclusion.
	 A realistic timeline that reflects technical complexity, logistical requirements and country context.
	 Integration of no-objection, approval and authorization steps required by the host country.
Regulatory and authorization pathway	 Expected timelines for validation, verification and issuance under the selected standard.
patiway	 Alignment with buyer documentation stages (EOI, MAIN, MADD or equivalent).
	Identification of critical path activities that could delay implementation.
Risk identification and mitigation	Mitigation measures for permitting delays, supply-chain constraints, infrastructure limitations or regulatory uncertainty.
	Contingency planning for high-impact risks.

Key planning considerations	Main aspects
	Description of the project governance structure, including roles of local partners and implementing institutions.
Governance and coordination	• Experience in the implementation of similar projects in the same country or similar countries. Describe lessons learned and key success factors.
	 Arrangements for coordination between technical teams, suppliers, and host-country authorities.
	 Evidence of MOUs, partnership agreements or letters of support (when available).
Procurement and	Procurement strategy for equipment and services.
supply-chain	Expected lead times, availability of spare parts and maintenance services.
management	 Identification of local or regional suppliers to support operational continuity.
	 Preliminary Capital Expenditures (CAPEX) and Operational Expenditures (OPEX) estimates.
Financial planning	 Indicative financing milestones (e.g., investment before commissioning, results-based payments after issuance).
	Financing partners and status of negotiations.
	 Alignment between the financial model and the expected timeline of mitigation outcome delivery.
Dependencies and external	• Status of prerequisites such as land acquisition, grid connection, regulatory licenses or alignment with national programs.
requirements	Steps required to secure these dependencies within the proposed timeline.
Safeguards and	Initial screening of environmental and social safeguards.
stakeholder engagement	 Planned consultations and compliance requirements under host-country rules, carbon program requirements and buyer frameworks.
	Timelines for completing assessments and corrective actions.
	Statement of the intended route: Article 6 cooperation, voluntary market or domestic crediting system or a combination of these.
Commercialization pathway	 Integration of authorization milestones and reporting obligations for international transfers.
	Alignment with the selected carbon programs validation, verification and issuance cycle.

Source: Authors' elaboration.

A coherent and realistic project plan reduces uncertainty and increases confidence among funding counterparts, ultimately improving the likelihood of progressing to detailed due diligence and contracting.

3.4.1 Crediting period and renewal

A key element of project planning is defining the crediting period, that is, the time during which

the activity is eligible to generate verified emission reductions. Crediting periods differ across major ICPs, host countries may also include in their regulatory framework provisions for accepted crediting periods for internationally authorized units. sovereign buyers may also impose additional expectations regarding authorization timelines, registry reporting and the demonstration of sustained additionality at renewal. The crediting period influences long-term financial viability, risk allocation, and the structure of mitigation outcome purchase agreements. A credible proposal should therefore explain the alignment between the project design, the selected ICP's rules and the expected delivery schedule for mitigation outcomes.

Annex II shows a comparative overview of key elements related to crediting periods and renewal under the three main standards.

3.5 Legal aspects

Legal aspects define whether a project can operate in compliance with host-country regulations, ICPs and buyer requirements. A credible proposal must demonstrate early control over the legal foundations of the activity, including permits, approvals, land rights, and the conditions for generating and transferring mitigation outcomes. Key legal considerations include:

Table 3. Key legal considerations

Key legal considerations	Main aspects
Permitting and regulatory compliance	 Identification of all permits required for construction, operation, environmental and social compliance. Status of applications, expected timelines and responsible institutions. Confirmation that the project is compatible with national sectoral regulations and land-use rule, as applicable.
Environmental and social impact assessments (EIA/SIA)	 Whether an Environmental Impact Assessment-EIA or Social Impact Assessment-SIA is required under national law, and the timeline for its preparation and approval. Stakeholders' consultation processes in line with regulatory provisions and the ICP. If applicable, planning and status of Formal Prior Informed Consent (FPIC) processes. Overview of key risks and planned mitigation measures. Alignment with buyer safeguard frameworks where these go beyond host-country requirements.
Safeguards compliance	 Initial screening under the relevant safeguard system (national, donor, or buyer). Identification of potential risks related to land, labor, gender, biodiversity or cultural heritage. Proposed actions to ensure compliance before commissioning.

Key legal considerations	Main aspects
Carbon ownership and title	 Clarification of who legally owns the mitigation outcomes generated by the project. Confirmation that ownership is transferable under national law and consistent with the project's contractual structure. Evidence of land tenure or contractual rights where relevant (e.g., forestry, land-use or off-grid energy systems).
Authorization and transfer conditions (Article 6 when applicable)	 Description of the no-objection, approval and authorization steps required for international transfers under the host country regulatory framework. Identification of competent authorities and expected processing times. Explanation of how the project's intended use category (authorized ITMOs, contributions, domestic credits) will be reflected in agreements and reporting.
Contractual arrangements	 Summary of key contracts or agreements that support implementation (e.g., EPC, O&M, community agreements). Identification of obligations, responsibilities and risk allocation between parties. Early indication of the contractual interface with a Mitigation Outcome Purchase Agreement (MOPA), where applicable.

Source: Authors' elaboration.

3.6 Stakeholders' consultations and community involvement

High-integrity practice requires meaningful and well-documented engagement with affected stakeholders throughout project development and implementation. Proposals should demonstrate that consultations will follow host-country regulations and the requirements of the selected ICP, while also meeting broader expectations for inclusiveness and transparency.

Main elements include:

- **Consultation process** aligned with national rules, ICPs and applicable safeguards, carried out in languages and formats accessible to local communities.
- Documented consultation record. If consultations have started, provide information, including who was consulted, issues raised, and how concerns were addressed.
- **Accessible grievance mechanism**, operational prior to implementation and maintained throughout the crediting period.
- **Gender-responsive engagement**, ensuring participation of women and vulnerable groups where relevant.
- **Integration of community benefits**, linked to local development priorities and consistent with host expectations.

Budget allocation for consultation, safeguards and grievance procedures over the full life
of the project.

A credible proposal shows that stakeholder engagement is not a one-off requirement, but a continuing obligation supported by adequate resources and institutional arrangements.

3.6.1 Share benefits

Benefit-sharing arrangements must comply at minimum with host-country regulations and, where applicable, buyer or program requirements. Developers should explain how mitigation-outcome revenues, co-benefits or other advantages will be distributed fairly among communities, local partners or participating institutions.

Proposals should:

- Describe the **benefit-sharing mechanism**, including financial and non-financial benefits.
- Demonstrate **consistency with host-country rules**, including any levies, fees or mandated distribution formulas.
- Explain how revenues or benefits will be **allocated transparently**, with governance provisions that reduce the risk of mismanagement.
- Identify **community development priorities** and show how the project aligns with them.
- Present a **clear rationale for fairness**, showing that benefits reflect the roles, contributions and risks borne by communities and partners.
- Commit to **monitoring and reporting** benefit-sharing outcomes throughout the crediting period.

Fair and transparent benefit-sharing strengthens local support, reduces social risk, and enhances the credibility of the project in the eyes of both funders and host-country authorities.

3.7 Financing model

The financing model must demonstrate that the project is financially viable over the full implementation and crediting period, and that all costs, risks and revenue assumptions are transparent and realistic. It should also address if and how financial sustainability is secured after the crediting period. Funding counterparts assess not only capital needs, but also the credibility of expected yields, issuance schedules and long-term sustainability.

The proposal should therefore present:

a) Sources and uses of funds

• Full breakdown of capital sources: equity, concessional components, commercial debt, grants, and any milestone-based advances.

- Allocation of funds across project stages (CAPEX, OPEX, safeguards, MRV, authorization costs, contingency).
- Evidence that financial commitments match the project timeline.

b) Issuance and revenue profile

- Non-carbon revenues forecast and variability.
- Realistic yield and issuance schedule, acknowledging ramp-up periods and operational risks.
- Expected annual volume of mitigation outcomes and timing for verification and issuance.
- Clear identification of uncertainties (e.g., weather variability, technology degradation, demand fluctuations).

c) Cash waterfall and cost structure

- A cash-flow structure that accounts for non-carbon revenues, validation, verification and registry fees, host-country charges, taxes and foreign exchange exposure.
- Identification of who bears each cost category and how these costs affect net revenue.
- Contingency buffers to manage issuance underperformance.

d) Carbon transactions offtake considerations (when applicable)

- Clear description of the price construction under the MOPA (fixed or indexed).
- Any premium associated with authorization, corresponding adjustment or higher integrity requirements.
- Delivery profile and conditions precedent for payment (e.g., issuance, first transfer, authorization confirmation).
- Allocation of risks between seller and buyer across the delivery schedule.

e) Post-crediting sustainability

- Costing of long-term obligations beyond the crediting period, including O&M, safeguards, grievance mechanisms, and monitoring commitments.
- Evidence that the project remains operational and financially stable after final issuance.
- Treatment of decommissioning, handover or long-term community benefits, where relevant.

A credible financing model gives funders confidence that the project can reach commissioning, generate verified mitigation outcomes and sustain operations over its full lifetime, while maintaining compliance with host-country regulations and buyer requirements.

3.8 Justification of the need of carbon finance, additionality

Additionality is the core justification for accessing carbon finance. A credible proposal must demonstrate that the project would not proceed, or would proceed at a reduced scale or pace, without revenues from mitigation outcomes. Funders and host-country establish additionality requirements and expect a transparent explanation of the economic, regulatory and market conditions that establish this need. Moreover, ICPs include provisions for the demonstration of additionality at the program level and also as part of the specific methodology applicable to the project. Main aspects are summarized in **Table 4**.

Table 4. Additionality considerations

Main aspects to consider	Explanation
Investment additionality	 Demonstrate financial need using transparent baseline economics (CAPEX, OPEX, IRR, payback, and cost-of-abatement). Show that the project is not financially viable under conventional investment criteria without carbon revenues. Provide sensitivity analyses that illustrate financing gaps under different cost and performance scenarios.
Regulatory surplus	 Confirm that the activity goes beyond existing laws, mandates or sectoral requirements in the host country. Explain why the project is not already required under current regulations or utility obligations. Highlight anticipated policy changes and how these could affect the baseline.
Common practice analysis	 Demonstrate that the technology or scale of activity is not yet common practice in the host-country context. Provide market data, penetration rates, adoption barriers and country-specific constraints. Explain how carbon finance enables earlier or broader adoption.
Starting date and safeguards for eligibility	 Respect the starting-date rules of the selected ICP or Article 6 facility. Show that no irreversible investment has been made before the eligibility date, unless exceptions apply. Address potential policy or market changes affecting additionality through contingency planning.

Source: Authors' elaboration.

A strong justification of additionality increases funders' confidence that the project delivers real, measurable and necessary mitigation outcomes, and that carbon finance plays a decisive role in enabling the activity.

3.9 Technical Methodologies and Calculation of Emission Reductions

Methodology selection must be justified against applicability conditions, baseline drivers, and the policy context of the host country. A strong proposal explains why the chosen methodology is appropriate and how the calculation logic will be implemented in practice, ensuring that results are replicable, conservative, and aligned with international best practice.

a) Methodology applicability and baseline justification

- If applicable, confirm the project will be below the thresholds for a micro scale or small-scale methodology. Apply small or micro scale methodologies only if the project capacity/emissions reduction is expected to be below the threshold.
- Select a methodology and version of the same that are current.
- Demonstrate that the activity meets all other applicability conditions of the selected methodology. If the methodology is not fully applicable, check options with the ICP.
- Explain the baseline scenario, including key drivers, regulatory context, technological alternatives and sectoral constraints.
- Describe how baseline emissions will be quantified, citing relevant data sources, assumptions and conservative defaults.

b) Calculation logic

- Even when detailed calculations may not be required for early funding proposals, present the core formulae or logic in clear, non-technical prose so that evaluators can understand the basis of emission reductions.
- Describe how emission factors, performance benchmarks or measurement devices will be selected.
- Highlight any materiality thresholds, leakage considerations, uncertainty factors or conservative assumptions.

c) Monitoring, reporting and verification (MRV) design

- Provide an outline of the MRV system covering monitoring devices, sampling frequency,
 Quality Assurance / Quality Control (QA/QC) procedures and data archiving.
- Describe the monitoring and reporting responsibilities.
- Identify key monitored parameters and their data sources (e.g., on-site meters, supplier certificates, lab tests, remote sensing).
- Indicate expected monitoring costs and feasibility implications for long-term implementation.

d) Validation and verification readiness

- Identify the intended validation and verification body (if already known).
- Explain previous experience with validation and verification processes, if any.

e) Evidence trail and data integrity

- Commit to building an audit-ready evidence trail based on immutable raw data storage, metadata (geospatial or device-based) and calibration records.
- Avoid reliance on retrospective data reconstruction, which increases verification risk and cost.
- Describe the systems that will ensure data integrity, including backups, secure repositories and responsible personnel.

A proposal that presents a clear methodology justification, a transparent calculation logic and a robust MRV design gives funders and authorities confidence that emission reductions will be real, replicable and cost-effective to verify over the life of the project. **Annex III** presents a comparative Overview of Methodological Frameworks and MRV Requirements as a practical support.

4 TECHNOLOGY AND INNOVATION IN CARBON PROJECTS

Technology and innovation can significantly improve assurance, reduce MRV costs, and strengthen the credibility of carbon projects—provided they remain compatible with the ICP requirements and host-country systems. Proposals should demonstrate how innovation is used pragmatically to improve data quality, reduce uncertainty and enable long-term operational efficiency, without relying on tools or methods that lack regulatory acceptance. Important elements to highlight are:

- **ICP and host-country acceptance:** Ensure that innovative tools (e.g., digital MRV, remote sensing, telemetry) fit within recognized methodological parameters and host-country data requirements.
- Cost efficiency and MRV simplification: Demonstrate how technology reduces verification
 cost per ton—for example through automated monitoring, device-level data capture, or reduced sampling needs.
- **Data integrity and traceability:** Explain how digital pipelines, sensor metadata, geospatial records, calibration files and automated logs will create an audit-ready evidence trail that increases verifier confidence and reduces the risk of data gaps.
- **Alignment with methodologies:** Show how innovative tools directly support the monitored parameters required by the selected methodology (e.g., energy meters, flow meters, biomass measurements, GPS-based area assessments).

- **Early validator engagement:** Test innovative modules or measurement approaches with the intended validator before finalizing the monitoring plan, ensuring feasibility and early feedback on evidence requirements.
- **Operational resilience:** Provide a migration or fallback plan in case host authorities introduce new formats or reporting systems during implementation.
- **Scalable and replicable design:** Highlight how the chosen technologies can be replicated across sites or scaled nationally, which is often valued by sovereign buyers.

Recent publications by **the World Bank,² SustainCERT**,³ **Gold Standard**,⁴ and **Verra**⁵ on digital MRV (DMRV) offer practical guidance on evidence trails, automated data systems and assurance protocols. Additional insights from **ICVCM** and **IETA** provide emerging best practices on digital infrastructure, data integrity and validator acceptance, reflecting the rapid evolution of DMRV requirements across Article 6 and ICPs.

Innovation should enhance assurance, not complicate it. Projects that adopt practical, verifiable and regulator-accepted innovations can significantly lower long-term MRV costs while strengthening credibility and mitigation outcome delivery.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

- Carbon finance can play a decisive role in enabling mitigation activities that are not financially
 viable under conventional investment conditions, particularly in countries where capital costs
 and regulatory constraints limit the adoption of low-carbon technologies. Article 6
 cooperation offer structured pathways for mobilizing private investment, but require
 developers to present proposals that are technically sound, regulatorily compliant and
 operationally feasible.
- Successful funding proposals demonstrate a clear understanding of the requirements of both
 the funding counterpart and the host country, including authorization pathways,
 methodological alignment, and long-term MRV feasibility. Projects must show credible
 planning, transparent economics and strong evidence of additionality, as well as the capacity
 to deliver verified mitigation outcomes over a full crediting cycle.
- High-integrity practice also requires meaningful stakeholder engagement, clear benefitsharing arrangements and compliance with safeguards that go beyond minimum regulatory

² World Bank; Carbon Markets Infrastructure Working Group. 2025. <u>Technical Guidance Note on Standardizing Digital</u> <u>MRV in Carbon Markets: System Evaluation Criteria and Hotspots Assessment</u>

³ SustainCERT. 2023–2024. <u>Digital MRV Framework and Assurance Guidelines</u>

⁴ Gold Standard. 2023. <u>Digital Monitoring</u>, Reporting and Verification Guidance;

⁵ Verra. 2023–2024. <u>DMRV Framework and Data Infrastructure Guidelines</u>

obligations. As market expectations evolve, innovation—particularly digital MRV and automated data systems—can help reduce verification costs and strengthen the evidence base, provided it remains aligned with methodological requirements and host-country systems.

 Overall, fundable carbon projects are those that combine strong technical foundations, credible financing models, and a clear demonstration that carbon revenues are essential to enable implementation. The guidance presented in this note provides a structured framework for preparing proposals that meet the expectations of sovereign buyers, host authorities and high-integrity carbon programs.

5.2 Recommendations for Project Developers

- Be consistent. While not all details are expected to be available for early funding proposals, funding applications should present a coherent project idea, clear implementation pathways and the role carbon finance will play.
- Align early with host-country authorities to understand authorization steps, data requirements, and interactions with national registries.
- Present your experience in the implementation of similar projects, identify potential risks and mitigation actions.
- Confirm if the project fits the micro, small or large scale as per each ICP definitions. Select methodologies carefully and confirm all applicability criteria are met.
- Elaborate on how the first high level emissions reduction estimates have been calculated. Provide enough data to allow for replicability.
- Show how stakeholders and communities will be involved from inception to implementation and monitoring.
- Justify additionality transparently following the requirements from the involved Parties and the ICP, using baseline economics, regulatory surplus and common-practice analysis.
- Develop a realistic financing model, integrating CAPEX/OPEX, issuance schedules, host charges, foreign exchange (FX) exposure and long-term obligations. Justify the feasibility of the project during the crediting periods and how it can be sustainable overtime.
- Plan MRV conservatively, with clear monitoring parameters, QA/QC procedures and an auditready data trail.

ANNEXES

Annex I. Comparative Overview of Proposal Formats and Eligibility Requirements

Program / Country	Convening entity	Key process stages	Key eligibility criteria	Proposal format / template availability	Sources of information
KliK Foundation (Switzerland)	KliK Foundation, with host country partners and developers	Registration → Mitigation Activity Idea Note (MAIN) → Pre- selection → Mitigation Activity Design Document (MADD) → ITMO purchase agreement	Host country has bilateral cooperation agreement with Switzerland under Art. 6.2; emissions reductions go beyond host NDC; additional Sustainable Development (SD) benefits; host country willing to authorize and apply corresponding adjustments	Yes – MAIN and MADD templates available	 Participation process: https://www.klik.ch/en/international/registration/ MAIN/MADD templates (PDF): https://a.storyblok.com/f/24679 4/x/0d20526a84/climate-action-wheel participation-process feb 150.pdf
GGGI – Carbon Transaction Facility (CTF)	Global Green Growth Institute (GGGI)	Country readiness → Project idea identification → Concept stage → Activity development → Support for ITMO transaction	Alignment with national strategies; institutional readiness; clear governance; robust MRV concept; contribution to long-term transformation	EOI and guidance available; structured templates in toolkits	 Article 6 Overview: https://gggi.org/wp-
Singapore – International Carbon Credit Framework	Government of Singapore (NCCS and relevant agencies)	Registration of eligible standards and methodologies → Submission → Assessment and recognition under framework	Use of approved standards and methodologies; high environmental integrity; transparent disclosure	No fixed proposal template; information requirements provided in	 Eligibility List: https://carbonmarkets- cooperation.gov.sg/environmen tal-integrity/overall-eligibility- list/ Singapore Government— Guidance on Carbon Markets

Program / Country	Convening entity	Key process stages	Key eligibility criteria	Proposal format / template availability	Sources of information
				framework documents	and Voluntary Market Integrity: https://www.nccs.gov.sg/building-confidence-in-carbon-markets/
Japan – Joint Crediting Mechanism (JCM)	Government of Japan (MOEJ)	Project design → Government review → Issuance under JCM rules → Bilateral cooperation under Article 6.2	Bilateral cooperation with Japan; measurable mitigation; methodologies must meet JCM rules; host country agreement	Templates available (PIN, PDD, Monitoring Plan)	 JCM official site: https://www.jcm.go.jp Methods/Templates: https://www.jcm.go.jp/mechanisms/methodologies
Republic of Korea – Korean Emissions Trading Scheme (K-ETS)	Ministry of Environment / Korea Exchange (KRX)	Eligibility assessment → Offset registration → Verification → Issuance → Use under K-ETS or international transactions	Use of approved methodologies; alignment with K-ETS offset rules; third- party verification	Offset project templates available (CDM, K-VER)	 K-ETS overview: https://www.kpx.or.kr/eng/power.do?key=314 Offset guidance: https://www.me.go.kr/eng/web/index.do?menuId=270

Source: Authors' elaboration

Annex II. Comparative Table of Methodologies (Verra, Gold Standard, Global Carbon Council, Cercarbono)

Standard	Crediting period	Renewal options	Additionality requirements at renewal	Relevant notes for Article 6 / PACM alignment
Verra – Verified Carbon Standard (VCS)	 7 years (renewable) or 10 years (fixed) for most project types. Agriculture, Forestry and Other Land Use (AFOLU) projects: 20–30 years depending on category. 	Up to two renewals , for a total potential duration of 21 years (7+7+7).	 Full demonstration of additionality using the latest applicable tools (financial, regulatory surplus, barriers, and common practice). Baseline must be reassessed. 	 Verra requires reassessment of methodology and baseline at each renewal. Important under Art. 6.2 to align baseline updates with NDC progress and host- country authorization conditions. Verra is preparing alignment guidance for future PACM interoperability.
Gold Standard (GS)	 5-year renewable cycles or 10-year fixed cycles. Community projects often use 10-year fixed cycles. 	Renewable every 5 years, requiring a new validation.	 Additionality reassessed at each renewal. GS may apply more stringent requirements on enabling policies, financial need, and sustainable development contributions. 	 GS requires strong SD documentation, which must remain valid under Art. 6. Renewal must show continued contribution to host-country SD priorities. GS has begun producing guidance on transition pathways toward Article 6.4 compatibility.
Global Carbon Council (GCC)	Typically 7 years (renewable) or 10 years (fixed), similar to VCS structure.	Up to two renewals, depending on project type.	Additionality aligned with CDM/VCS-like tools (investment analysis, regulatory surplus, common practice).	 GCC has already published guidance on host-country authorization under Art. 6.2 for eligible projects. GCC methodologies are being reviewed for potential PACM alignment. Heavily used in renewable energy and

Standard	Crediting period	Renewal options	Additionality requirements at renewal	Relevant notes for Article 6 / PACM alignment
				industrial mitigation in Middle East and North Africa (MENA) and Asia.
Cercarbono	 Usually 10-year fixed or fixed long-term crediting periods (common for LAC). Some AFOLU projects may have extended permanence-focused periods. 	Renewal depends on methodology; often requires full readjustment of baseline or monitoring plan.	Additionality redemonstrated using updated tools; strong emphasis on regulatory surplus and sustainability of land-use activities.	 Cercarbono is widely used in Latin America and is publishing guidance to improve compatibility with Article 6.2. Alignment with PACM principles under discussion, but several methodologies already reflect transparency and conservative baseline requirements compatible with Art. 6.4.

Source: Authors' elaboration

Annex III. Comparative Overview of Methodological Frameworks and MRV Requirements

Element	Verra – VCS	Gold Standard (GS)	GCC – Global Carbon Council	Cercarbono
Applicability conditions	Highly detailed applicability tests; strict sector and technology eligibility; clear exclusions.	Strong focus on sustainable development (SD) alignment; methodology-specific applicability; more safeguards.	Primarily focused on Middle East and North Africa (MENA) region; clear eligibility rules; strong SD criteria and alignment with host-country context.	Broad applicability across sectors common in Latin America and the Caribbean (LAC) flexible eligibility but must meet specific methodology conditions.
Baseline approach	Historical data, performance benchmarks, or standardized baselines; must demonstrate regulatory surplus and conservative assumptions.	Conservative baselines with SD constraints; may include dynamic baselines for some sectors.	Uses standardized baselines where possible; strong emphasis on conservative estimates to ensure integrity.	Allows both project-specific and standardized baselines; must demonstrate additionality and regulatory surplus.
Additionality tools	Investment, barrier and common-practice tests; standardized additionality tools for some sectors.	Stronger sustainability- linked and policy alignment tests; stricter common- practice tests.	Requires financial additionality and alignment with host-country policies; SD co-benefit demonstration.	Requires financial, technological or regulatory additionality; sectoral common- practice test.
Calculation logic	Detailed equations, emission factors, default values; transparent parameter selection and uncertainty treatment.	More prescriptive in sectors such as cookstoves, renewables, LULUCF; strong cobenefit quantification.	Uses standardized equations with conservative defaults; aligns with ISO and ICVCM expectations.	Similar to VCS but more flexible; transparent equations and parameter treatment required.
Monitoring requirements (MRV)	Technical monitoring with devices/meters; QA/QC; strict archival rules; digital MRV increasingly promoted.	Includes additional SD indicators; more field surveys; higher reporting burden.	Strong digital MRV encouragement; metadata, geolocation, standardized data pipelines.	Allows flexible monitoring but must align with methodology; onsite meters and digital data accepted.
Verification processes	Third-party verification under ISO	Verification includes both	Accredited independent	National and international

Element	Verra – VCS	Gold Standard (GS)	GCC – Global Carbon Council	Cercarbono
	14064-3; validation/verification bodies (VVBs).	carbon and SD indicators; multi-dimensional audits.	validation/verification bodies; strong alignment with ICVCM.	accredited VVBs; verification adapted to LAC context.
Evidence trail requirements	Strong digital data integrity: calibration records, geolocation, raw data logs and long-term archiving.	Requires extensive documentation for both carbon and SD indicators.	Strong emphasis on digital evidence, data integrity and UNFCCC-compatible metadata.	Evidence must be auditable, including raw data, sampling records, and QA/QC documentation.
Best suited for	Industrial, energy, waste, AFOLU, tech- based mitigation.	Renewable energy, cookstoves, water purification, community SD- heavy projects.	Renewable energy, waste, industrial mitigation in MENA, and projects seeking ICVCM alignment.	LAC-focused energy, waste, forestry-reduction, agriculture and nature-based mitigation.

Source: Authors' elaboration





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