



PARTNERSHIP FOR MARKET  
READINESS – COSTA RICA PROGRAM



**Program Activity Brief**

THE COSTA RICAN **OFFSET  
MECHANISM** (MCCR)

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1818 H Street NW, Washington DC 20433

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# I. THE COSTA RICAN OFFSETTING MECHANISM (MCCR)

The Costa Rican Offsetting Mechanism (*Mecanismo de Compensación de Costa Rica*, MCCR) is a proposed domestic greenhouse gas crediting instrument to address the structural issues ailing the country's Domestic Carbon Market (*Mercado Doméstico de Carbono*, MDC) and its reform. The resulting proposed mechanism is an instrument to foster the transformational change needed for deep decarbonization, which is the center of Costa Rica's Nationally Determined Contribution (NDC) on mitigation and the ultimate goal of its climate change mitigation policy in general.

The Partnership for Market Readiness–Costa Rica (PMR-CR) program supported the government of Costa Rica in the assessment of the MDC, led its reconceptualization, and provided technical recommendations and input to inform the discussion and decision making on a potential gradual transition from the MDC into the MCCR.

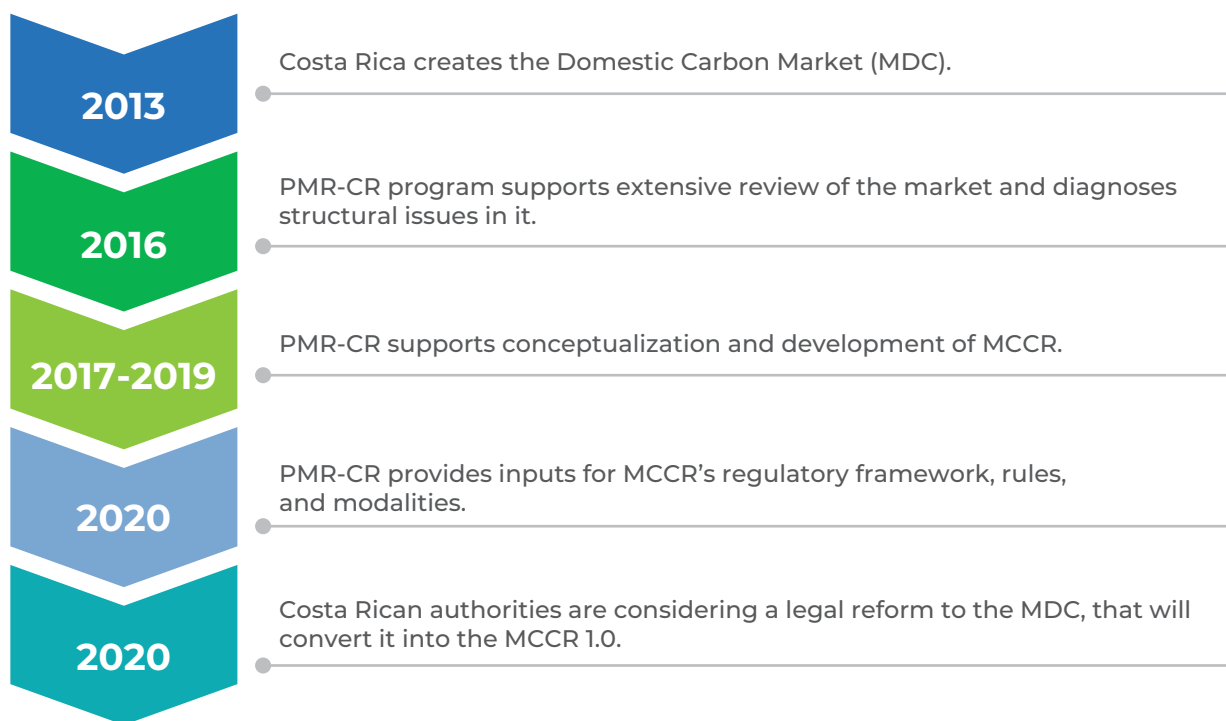
The design of the MCCR intends to resolve the structural issues that had impeded the full implementation of the MDC (originally conceived in 2013 and established in Executive Decree No. 37926-MINAE) and incorporates lessons learned in terms of simplifying and streamlining both the governance scheme and the project cycle.

In order to “right-size” the proposed MCCR to the evolving context, the MCCR was designed with scalability in mind, with a two-phase implementation approach. The first phase (also referred to as MCCR 1.0) establishes a governance and process structure that is lean enough to operate at a very small scale but can be easily reinforced to meet growing demand. It focuses on providing an efficient framework from which to supply national carbon offset units to a recently re-vamped National Carbon Neutrality Program (*Programa País Carbono Neutralidad*, PPCN), which can be accessed online at [www.cambioclimatico.go.cr](http://www.cambioclimatico.go.cr).

The second phase (MCCR 2.0) is designed as a complementary instrument to the envisaged GHG emissions levy, under consideration by the Costa Rican Ministry of Environment and Energy (*Ministerio del Ambiente y Energía de Costa Rica*, MINAE), to channel a portion of the revenue from the levy through a reverse-auction mechanism to “transformational” mitigation actions in key sectors.

The conceptual scheme behind the MCCR brings key conceptual and methodological innovations that would strengthen the field of GHG crediting instruments in Costa Rica and worldwide, particularly in the implementation of a robust additionality definition under a new framework compatible with the Paris Agreement.

The MCCR technical proposal has been developed in close collaboration between the PMR-CR team and the Climate Change Directorate (*Dirección de Cambio Climático*, DCC) within MINAE.



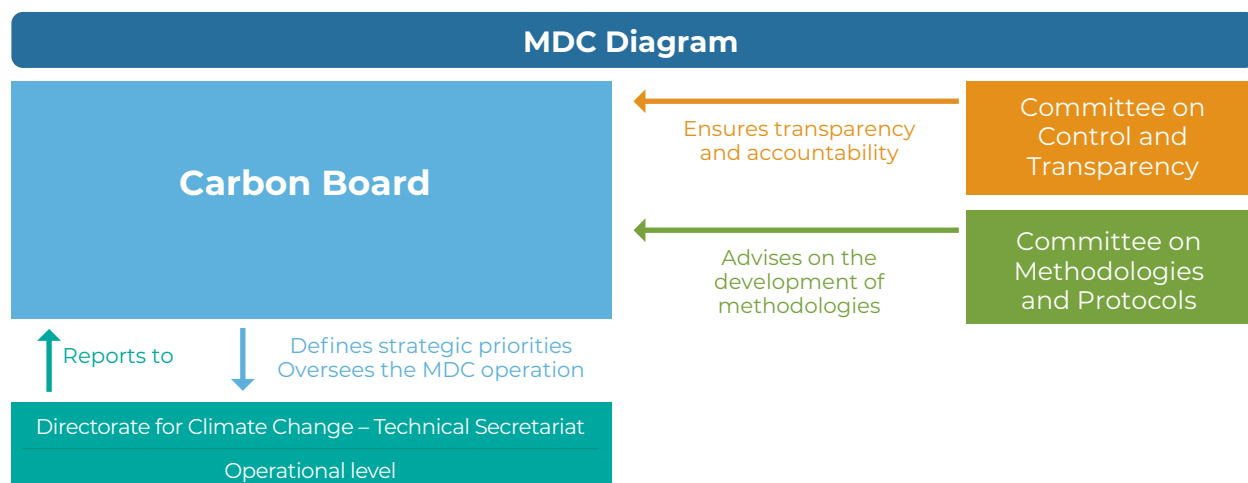
**Figure 1. Brief Timeline of Major MCCR Milestones**

## **Scope and Nature of the Original Domestic Carbon Market**

One of the central mitigation policy instruments that Costa Rica had as a result of its early climate actions was the Domestic Carbon Market (MDC).

The MDC was created in 2013 as a tool to mobilize economic resources for greenhouse gas (GHG) mitigation activities and to facilitate the offset of these gases in the country. Its creation was an important part of the National Climate Change Strategy, formalized in 2009, which placed the country on a path towards carbon neutrality by 2021. The structure and functions of the MDC were established in Executive Decree No. 37926-MINAE and related regulations ("*Reglamento de regulación y operación del mercado doméstico de carbono*"). Due to structural reasons, the MDC never became fully operational.

The MDC's governance structure was composed of three bodies. The first was the Carbon Board (Junta de Carbono, JC) as its highest decision-making body. Furthermore, two support committees were established: the Committee on Methodologies and Protocols (CMP), and the Committee on Control and Transparency (CTC). The Technical Secretariat of the Mechanism was decided to be the Climate Change Directorate at MINAE (see Figure 2).



**Figure 2. Modus Operandi of MDC as initially conceived**

The MDC was created as a voluntary mechanism to generate carbon credits at the local level (Costa Rican Offset Units [*Unidades Costarricenses de Compensación*, UCCs]), from projects or activities committed to reducing/removing greenhouse gas emissions, to be marketed nationally or internationally. These credits could be used by an organization to achieve carbon neutrality within the Carbon Neutrality Country Program (PPCN), or by other parties interested in offsetting their GHG emissions.

The original intention and expectation were for the MDC to be driven by the national demand for UCCs originating from the PPCN as well as to provide an avenue for product differentiation and access to international markets with high environmental standards (the MDC placed a focus on ecocompetitiveness). On the supply side, national participants included project developers and wholesalers providing offset credits generated by verified GHG emission reductions or CO<sub>2</sub> removal from carbon sinks. While the MDC came into operation, the Transitory II of Executive Decree No. 37926 authorized the National Fund for Forest Financing (*Fondo Nacional de Financiamiento Forestal*, FONAFIFO) to issue UCCs, and this remains the case to date. One implication of this is that forestry GHG crediting has become the only source of UCCs in the country, which gave the forestry sector a dominating position. Another key implication is that it complicated the accounting of mitigation outcomes and the tracking of UCCs.

The design of the MDC relied on what was then the gold standard for GHG emissions offsetting schemes, the Clean Development Mechanism (CDM) under the Kyoto Protocol. The MDC was designed before the expert community internalized some of the key lessons of the CDM and thus, its design replicates some of the limitations later identified in the CDM. In particular, the MDC has a complex governance structure that has hampered its full implementation, causing high transaction costs. Additionally, it retained a focus on project-based mitigation, more appropriate for seeking incremental change, rather than focusing on sectoral efforts and programs with huge transformative potential.

## Change in the International Context

The Paris Agreement, signed in 2015, modified the global context for local projects like the MDC, which had a strong component focused towards the export of UCCs. Before the reconfiguration of the MDC could begin, Costa Rica had to reconsider these new conditions.

The Paris Agreement meant new considerations for carbon pricing instruments. In the era of the Kyoto Protocol (2005-2012), before the Paris Agreement, the use of carbon pricing instruments expanded, largely due to the success of the Clean Development Mechanism. Within this paradigm, developed countries,

the core historical drivers of climate change, would bear the economic responsibility for addressing it and would be the main source of demand for emission reductions, to be supplied by developing countries.

During this Kyoto Protocol era, carbon credits had no compliance value for developing countries beyond their commercialization, as these nations had not assumed quantified mitigation commitments. For this reason, their interest lay in promoting as many GHG abatement projects as possible and maximizing the emission reductions payments, without worrying about the opportunity cost of the mitigation outcomes given that as a developing nation, Costa Rica did not have mitigation targets (a concern that developed countries were obliged to address).

Under the Paris Agreement, all countries made reduction commitments. For example, if a developed country “A” buys a volume of reductions from a project in another developing country “B” to use it towards its NDC compliance, that transfer would have to be reflected in both countries’ balance sheets. This new paradigm of “corresponding adjustments” implies that carbon credits now have value for non-Annex I Countries (those with no obligations under the Kyoto Protocol) beyond the potential revenue that could be generated from their sale.

In the Paris Agreement framework, the Costa Rican climate policy also took an important turn. Until then, national policies had been framed by voluntary commitments made to the international community. However, in the months prior to the agreement, and under the mandate of the decisions of the parties to the United Nations Framework Convention on Climate Change (UNFCCC), the country prepared a new central document for climate policy: its own Nationally Determined Contribution (NDC), one of the most ambitious in the world.

Costa Rica’s NDC communicated this vision through the country’s commitment to a maximum of 9,374,000 tCO<sub>2</sub>e net emissions by 2030, and an indicative trajectory of 1.19 net tons per capita by 2050 and -0.27 net tons per capita by 2100. These targets are consistent with the goal of containing the global temperature increase well below 2°C with respect to the pre-industrial average and aiming toward 1.5°C.

The ambition of this target forced the country, following the signing and ratification of the Paris Agreement, to reconsider the domestic value of the carbon credits it generated. Crucially, it forced Costa Rica to reconsider the role and the scope of the Domestic Carbon Market, as the international transfer of UCCs could compete with meeting mitigation objectives embedded in its own NDC.

## **Challenges Faced by the Domestic Carbon Market**

After the Paris Agreement was signed, and after years of delays in the operation of the MDC, the Costa Rican government decided to conduct an extensive review of the MDC to identify the causes behind its inaction and suggest reforms. In 2016, the authorities sought support from the PMR-CR to conduct this review.

The PMR-CR team assessed the MDC’s governance, the project registration process, and its regulations, their functioning, and the minutes of the 2014 and 2015 sessions. An external expert review, including consultations with key policymakers and stakeholders, was conducted with the aim of validating the findings and recommendations.

The assessment concluded that the MDC was insufficient as a tool to assist in meeting the commitments made in the NDC or even the previous aspirational goal of meeting carbon neutrality by 2021. Both the level of demand and the structure of the domestic offsetting mechanism was such that without major changes, there would be no contribution towards the national target. The assessment concluded that neither demand nor potential projects eligible for enrollment in the MDC had the potential to become truly scalable.

These problems could be attributed to a methodological and governance architecture that largely replicates the Clean Development Mechanism experience, but that also replicates some of its weaknesses:

- **For example, the MDC is a system that is burdensome in its governance. The Carbon Board is expected to function as a supervisor of the regime but is made up of multiple representatives from institutions with overlapping interests in regards to most of the projects and the methodological decisions to be made.**
- **The Methodologies Committee also had officials without the required industry and carbon expertise to assess emission reduction methodologies.**
- **Finally, the governance apparatus and the fact that FONAFIFO (an established entity that already has established programs in the sector) was allowed to issue UCCs until the full implementation of the NDC, led to a default dominance by the forestry sector.**

Given Costa Rica's emissions profile, the most challenging GHG emission sources are in the transport sector, as well as in the agriculture, forestry, and other land use (AFOLU) sector, in other words, beyond the scope of forest conservation only. Unlike most other countries, electricity is already extremely clean and could also develop overcapacity. The energy sector is fairly centralized and is not governed by market pricing mechanisms such as energy exchanges.

In such a context, the traditional way in which a carbon market operates cannot be relied upon to deliver meaningful results in Costa Rica, as these smaller sources in transport and land use could not easily be swayed by the structure of the MDC and its credits. Following these assessments, the Costa Rican authorities concluded that a redesign to an offset-focused instrument was necessary, which led to the origin and development of Costa Rica's offsetting mechanism.

## Designing the MCCR

The Costa Rican authorities requested support from the PMR-CR program to conceptualize and develop the MCCR, as part of a wider effort to assist in the creation of carbon market instruments.

Under the new proposal, the MCCR is intended to be an instrument to foster the transformational change needed for deep decarbonization. The proposal states that the MCCR would be part of a broader climate change mitigation framework in Costa Rica that seeks to leverage the emissions levy and an updated version of the PPCN as sources of demand for Costa Rican Offset Units generated through the MCCR.

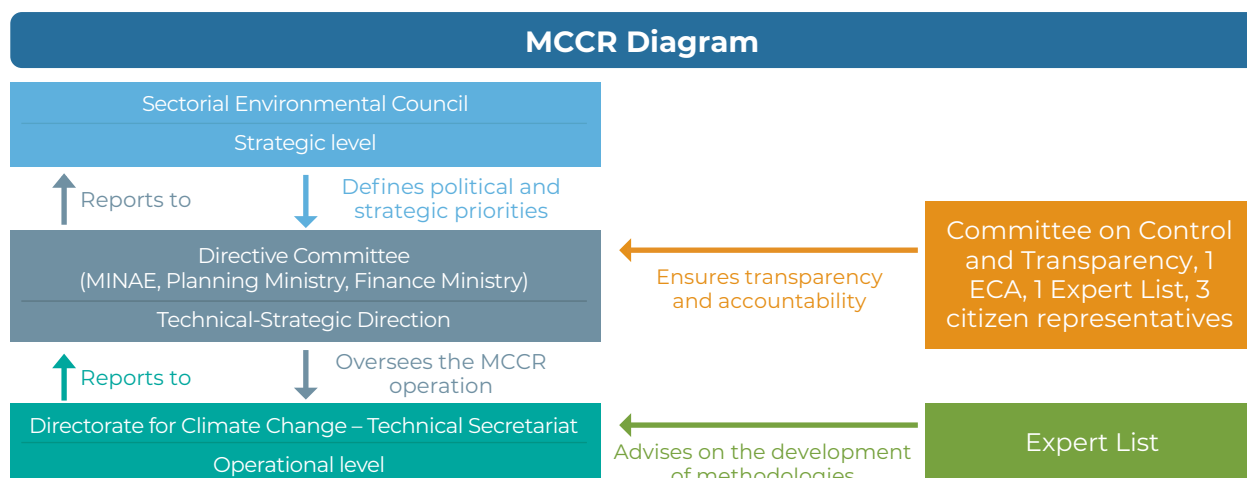


Figure 3. Arrangement Proposed for the MCCR

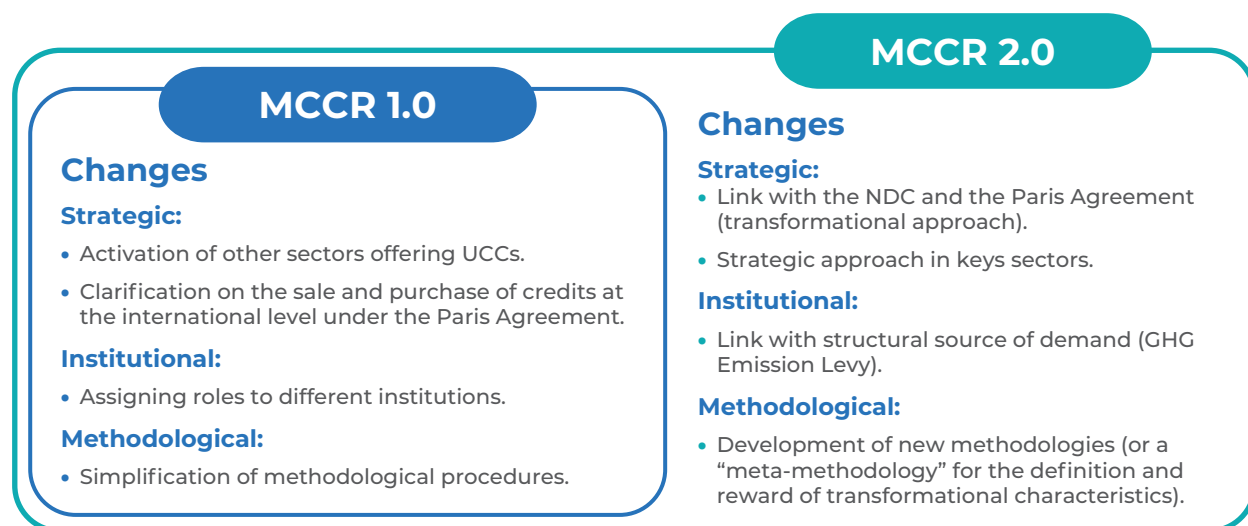
National certified emission reductions units (the UCCs) would be generated in private sector initiatives and technologies with a high transformational value. These efforts are identified through a predominantly technical process anchored in the metric and prospective capabilities of the National Climate Change Metric System (*Sistema Nacional de Métrica de Cambio Climático*, SINAMECC) as the most appropriate to be incentivized via results-based payments for offset units. The MCCR is substantially “directed” towards NDC compliance, implying that the methodologies will be focused on sectors and technologies identified as transformational. Its operation is facilitated with simplified institutional arrangements with the following operational implications:

- **The selection of NDC mitigation actions supported by the MCCR will follow transparent technical criteria and would not require a Carbon Board, which under this recommendation would be phased out.**
- **The Methodologies and Protocols Committee replacement would be a “roster of experts” who would be convened in ad hoc groups according to the needs of the methodologies to be evaluated.**
- **The Executive Secretariat (the DCC) would assume the regular operation of the MCCR. This was designed to be a robust but lean governance scheme that allows minimizing transaction times and costs with sufficient flexibility to adapt to national and international changing conditions and priorities.**

To adjust the MCCR to the Costa Rican context and its evolution, the MCCR design has scalability in mind, with a two-phase implementation approach.

The first phase (MCCR 1.0) establishes a process and governance structure, adjusted to the Costa Rican reality to the point at which it can operate on a small scale. However, it can also be strengthened to meet growing demand. The first phase focuses on providing an efficient framework from which to provide national offset units to a recently renewed PPCN. This effort is in parallel to the renewal of the Domestic Carbon Market.

The second phase (MCCR 2.0) is designed as a complementary policy to the emissions levy to channel a portion of the revenue from the levy through a reverse-auction mechanism to “transformational” mitigation actions in key sectors. Figure 4 explains this two-phase process.



**Figure 4. Planned First Iteration and Later Expansion for MCCR**



A complete and well-structured list of all rules, modalities, and procedures developed as part of the MCCR technical proposal can be found in the document “*Marco documental*” in the PMR-CR Document Library. A summary of those rules can be found in Annex 1.

## **Conceptual Innovations of the MCCR**

The MCCR is one of the first national offsetting mechanisms that was explicitly designed and developed to support national decarbonization in the context of the Paris Agreement. Developing the whole system, from regulations to forms to templates, meant that the team was forced to work through the practical implications of developing emissions offsets in the context of an explicit commitment to locally-achieved, net-zero greenhouse gases.

At the conceptual level, major key innovations from the previous approach are highlighted below:

- a. *A new approach at additionality.*** The MCCR moves away from demonstrating whether the incentive caused the emission reduction activity, and focuses on demonstrating how the incentive allows for emission reductions to occur faster and/or at a larger scale. The MCCR allows for a procedure that provides a general framework to assess and demonstrate additionality in projects under the mechanism in three stages:
  - I. Determination of the type of project (micro-project, conventional project, or large-scale project);**
  - II. Proof of alignment of the project with the implementation of the NDC and the decarbonization strategy of Costa Rica;**
  - III. Demonstration of the additionality of the project.**
- b. *Streamlined modalities for small-scale project activities.*** The MCCR defines three activity scales (micro, conventional, and large) with increasingly stringent additionality criteria that seek to reduce complexity and cost for micro-scale projects while also managing the risk of large projects flooding the budding demand for national credits. While micro-scale activities must only demonstrate that they are aligned with the National Decarbonization Plan (NDP), the requirements for large-scale activities include an assessment of transformational impact, which includes impact on the country’s Sustainable Development Goals.
- c. *Transformational impact.*** Transformational change is understood as sustained, structural change that transforms the practices that generate GHG emissions established in specific contexts, so that progress is made in the transition to a society with zero net emissions and developed in a sustainable manner. This in line with the objectives of the Paris Agreement, limiting global warming to an increase of 1.5 - 2°C, and the implementation of Agenda 2030 related to the UN Sustainable Development Goals (SDGs).

The transformational change that Costa Rica is interested in measuring is comprised of a combination of: (i) the impacts of policies and projects on the mitigation/reduction of greenhouse gases, associated with Costa Rica’s Decarbonization Plan; (ii) its impact on co-benefits associated with sustainable development sustained over time; and (iii) its contribution to interventions that cross “tipping points”, after which other dynamics (trends, scale, etc.) amplify the impact of the incentives and eventually make them unnecessary. This last attribute is the least understood component of the definition, as it is currently only included at a conceptual level.

- d. *Alignment with development and long-term deep decarbonization goals.*** This more nuanced approach at additionality testing, as well as improved baseline criteria, are all made possible by the existence of the NDP, which plots out clear economy-wide decarbonization pathways that set out the transformational visions and key milestones that must be met.

Thus, the mechanics and basic structure of the MCCR borrow deeply from existing offset schemes and established best practices, many of which were influenced by the Clean Development Mechanism (CDM),

combining features from different sources to “right-size” the proposed governance and processes to the scale of the country. However, the concepts at the very core of the mechanism have been fundamentally changed in an attempt to make them better adapted to the post-Paris Agreement era and Costa Rica’s national context.

## **Looking Ahead**

With the support of the PMR-CR readiness program, the country now has the tools to make the transition from the Domestic Carbon Market to a Costa Rican Offsetting Mechanism. The technical team successfully provided inputs for a regulatory framework, rules, and modalities for the MCCR.

Now the decision is on the Costa Rican government’s side in regards to how to implement this transformation. The implementation and execution of these proposals are under the discretion and responsibility of MINAE’s Climate Change Directorate, which has already begun working on a decree to update the MDC and transform it into the MCCR. In particular, potential next steps are:

- **Continued development of the offset registry module in SINAMECC, which will serve as the centrally accessible ledger for all carbon offset-related issuance and/or export involving units from activities based in Costa Rica, regardless of the system of scheme they are generated under (Joint Crediting Mechanism, JCM; Forest Carbon Partnership Facility, FCPF; MCCR; Architecture for REDD+ Transactions, ART/TREES; Article 6, etc.).**
- **Selection of a local trading platform, including an operating partner for day-to-day transactions of UCCs. This trading platform will have to link with the offset registry mentioned above for the avoidance of double counting.**
- **Capacity building and other technical support to the Costa Rican Accreditation Entity (Ente Costarricense de Acreditación, ECA) which accredits and oversees local Validation and Verification Organizations (OVVs) to prepare them for the validation and verification of projects and programs and their emission reductions.**
- **Development of detailed sectoral decarbonization pathways and science-based targets in support of additionality and transformational change analysis for the MCCR to facilitate the identification of areas of opportunity for methodologies and/or project activities.**
- **Development of detailed assessments of SDG impact potential for specific technologies and/or sectoral decarbonization pathways to support transformational and impact additionality assessments.**
- **Local stakeholder engagement and capacity building.**

## II. ANEXES

### Annex 1

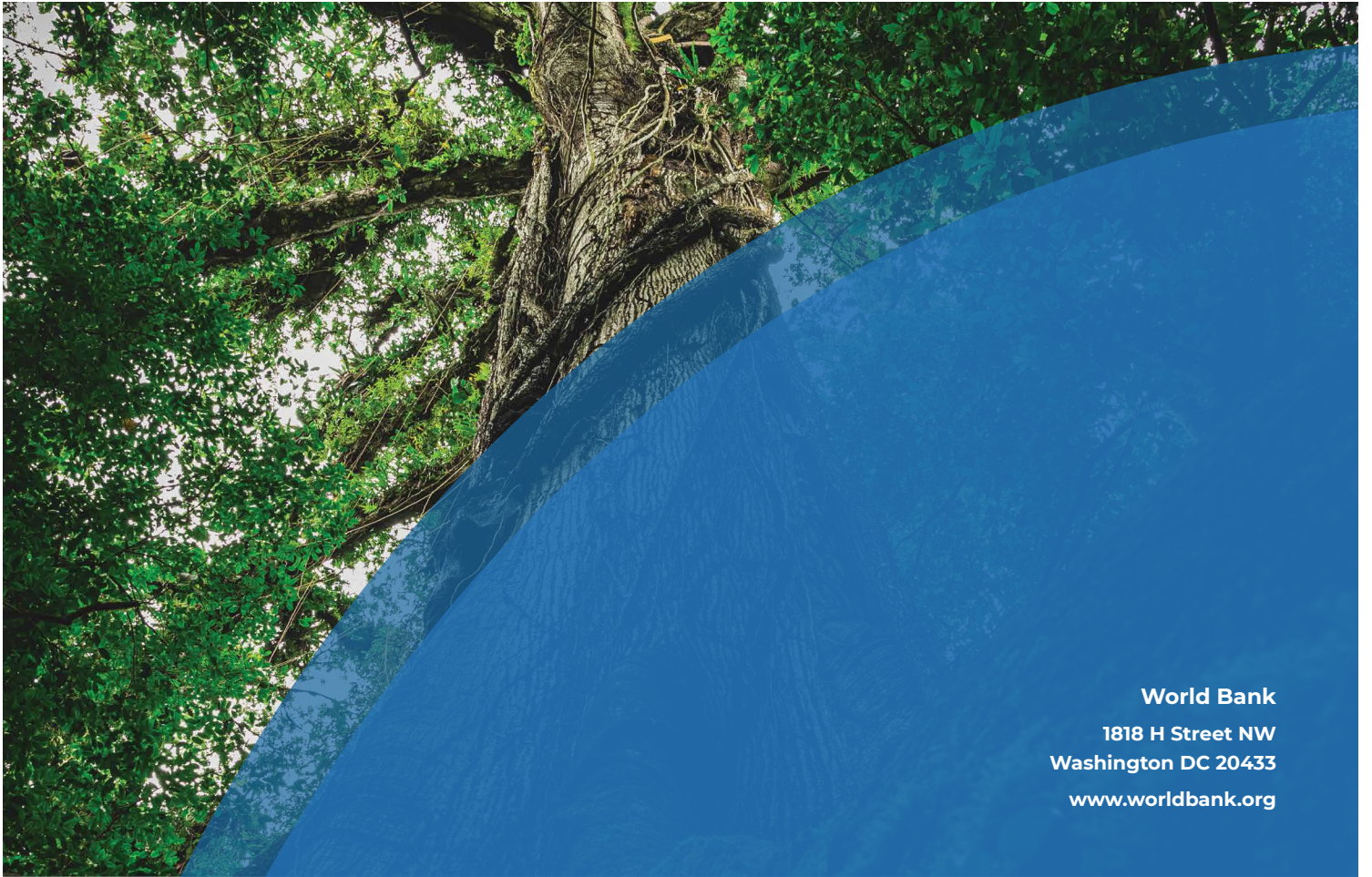
A summary of rules, modalities, and procedures developed as part of the MCCR technical proposal follows below. A comprehensive catalogue with annotations can be found in the MCCR document “*Marco documental*” in the PMR-CR Document Library.

Typology of documentation	Document	Coding
	Project cycle procedure	DCC-MC-T1-PROC-PROY
	Requirements for Project development	DCC-MC-T1-REQ-PROY
• Procedures	Guidelines for the validation and verification of projects	DCC-MC-T1-LINVV-PROY
• Requirements	Procedures of the activity program cycle	DCC-MC-T1-PROC-PDA
• Guidelines	Requirements for the development of activity programs	DCC-MC-T1-REQ-PDA
	Guidelines for the validation and verification of programs or methodological tools	DCC-MC-T1-LINVV-PDA
• Procedures	Procedure: Development, review, and clarification of methodologies or methodological tools	DCC-MC-T2-PROC-MET
• Methodologies		
• Methodological tools	Avoidance of methane emissions through composting	DCC-MC-T2-MS-MET001
	Additionality demonstration tool	DCC-MC-T2-HERR-ADIC
• Guides	Sectoral scopes guides and qualification requirements for the accreditation to the OVV	DCC-MC-T3-CALIF-OVV
• Clarifications		
• Technical notes	Technical note on transformational change	DCC-MC-T3-NT-TRANSF
	Glossary of terms of the MCCR	DCC-MC-T4-GLOS
• Glossary	Communication process statement	DCC-MC-T4-FORM-COM

	Project document form	DCC-MC-T4-FORM-DP
	Request for cancellation of the Project document	DCC-MC-T4-FORM-CANC-DP
	Application for Project registration	DCC-MC-T4-FORM-REG-PROY
	Project monitoring report form	DCC-MC-T4-FORM-IM-PROY
	Request for approval of changes in the Project	DCC-MC-T4-FORM-AC-PROY
	Request for cancellation of the activity program document	DCC-MC-T4-FORM-CANC-PROY
	Activity program document form	DCC-MC-T4-FORM-DPDA
	Request for cancellation of the activity program document	DCC-MC-T4-FORM-CANC-DPDA
	Application for registration of activity program	DCC-MC-T4-FORM-REG-PDA
	Document form of incorporated activities in the program	DCC-MC-T4-FORM-DAIP
	Request for inclusion of the incorporated activities in the program	DCC-MC-T4-FORM-INC-AIP
	Request for exclusion of incorporated activities in the program	DCC-MC-T4-FORM-EXCL-AIP
• Forms	Monitoring activity program report form	DCC-MC-T4-FORM-IM-PDA
	Change approval request	DCC-MC-T4-FORM-AC-PDA
	Request for cancellation of the activity program	DCC-MC-T4-FORM-CANC-PDA
	Request for cancellation of the monitoring report (projects and programs)	DCC-MC-T4-FORM-CANC-IM
	UCC issuance request (projects and programs)	DCC-MC-T4-FORM-EMS
	Issuance request cancellation form (projects and programs)	DCC-MC-T4-FORM-CANC-EMS
	UCC distribution request (projects and programs)	DCC-MC-T4-FORM-DISTR
	Change approval request cancellation form (projects and programs)	DCC-MC-T4-FORM-CANC-AC
	Request for development, review or clarification of baseline and/or monitoring methodologies	DCC-MC-T4-FORM-MET
	Form for the development of a new baseline and/or monitoring methodology	DCC-MC-T4-FORM-DRLLO-MET
	Completeness checklist in Project registration application	DCC-MC-T4-LVC-REG-PROY

<ul style="list-style-type: none"> <li>Checklists / verification</li> </ul>	Information checklist in the Project registration application	DCC-MC-T4-LVI-REG-PROY
	Completeness checklist in Project UCC issuance request	DCC-MC-T4-LVC-EMS-PROY
	Information checklist in the Project UCC issuance application	DCC-MC-T4-LVI-EMS-PROY
	Completeness checklist in request for approval of Project changes	DCC-MC-T4-LVC-AC-PROY
	Information checklist in the Project change approval request	DCC-MC-T4-LVI-AC-PROY
	Completeness checklist in the activity program registration application	DCC-MC-T4-LVC-REG-PDA
	Information checklist in the activity program registration application	DCC-MC-T4-LVI-REG-PDA
	Completeness checklist in Activities Incorporated into the Protocol (AIP) listing application	DCC-MC-T4-LVC-INC-AIP
	Completion checklist in the UCC issuance application of the activity program	DCC-MC-T4-LVC-EMS-PDA
	Information checklist in the UCC issuance application of the activity program	DCC-MC-T4-LVI-EMS-PDA
	Completeness checklist in the activity program change approval request	DCC-MC-T4-LVC-AC-PDA
	Information checklist in the activity program application for changes approval	DCC-MC-T4-LVI-AC-PDA

### Box 1. MCCR Document Framework



**World Bank**  
1818 H Street NW  
Washington DC 20433  
[www.worldbank.org](http://www.worldbank.org)

