

## **Initiative for Climate Action Transparency - ICAT**

### **Phase II**

# **Scoping Report**

**Dirección de Cambio Climático, DCC del Ministerio de Ambiente y Energía (MINAE)**

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**UNEP DTU Partnership**

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# 1 Introduction

This Scoping Report presents an overview of the activities, results and lessons learned from the implementation of the first phase of the Initiative for Climate Action Transparency (ICAT) in Costa Rica. The document is developed with the purpose of sharing insights with other ICAT countries and partners, and in this way promote peer-to-peer learning.

The report begins with a description of the country context, followed by an introduction on the role of ICAT under its Phase I in Costa Rica. The specific activities, results, and lessons learned from ICAT Phase I are then described in more details. In the final chapter, the report takes a forward-looking approach to outline how the results of the activities developed under ICAT Phase I will find their continuation in Phase II.

# 2 Country context

Costa Rica is located in the Central American Isthmus and shares borders with Nicaragua, on the north, and Panama, on the south (Figure 1). The total area of Costa Rica is 51,100 km<sup>2</sup>, and the population is around 5 million, as of 2020. The country is characterised by a tropical climate and more than half of its land is covered by forests.



Figure 1. Map of Costa Rica.

One of the most prosperous and politically stable countries in the region, Costa Rica has been characterised by an important GDP growth since the second half of the 20th century - with an average of 4% growth between 2000 and 2018 (World Bank, n.d.). This has contributed to social mobility and a growing middle-class (OECD, 2016). Nevertheless, around 20% of the population still lives below the national poverty line (The World Bank, 2020). Costa Rica has quite a diversified economy with important sectors being tourism, agriculture, renewable energies, IT, and services. Electricity generation is virtually 100% renewable, with hydro constituting around 80% of the mix, while the total primary energy is around half renewable and half oil-based (IEA, n.d.).

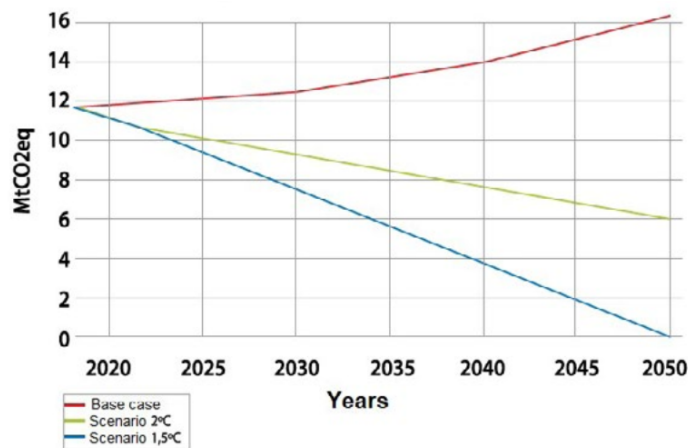
Costa Rica lies in one of the regions most threatened by the impacts of climate change. Changes in rainfall patterns and levels and spikes in temperatures are responsible for extreme weather conditions that cause both floods and drought. Vulnerability has also to do with the presence of

populations in areas prone to volcanic eruptions and in unstable lands, degraded by wide-spread cattle ranching, or in poorly planned settlements prone to landslides and flooding.

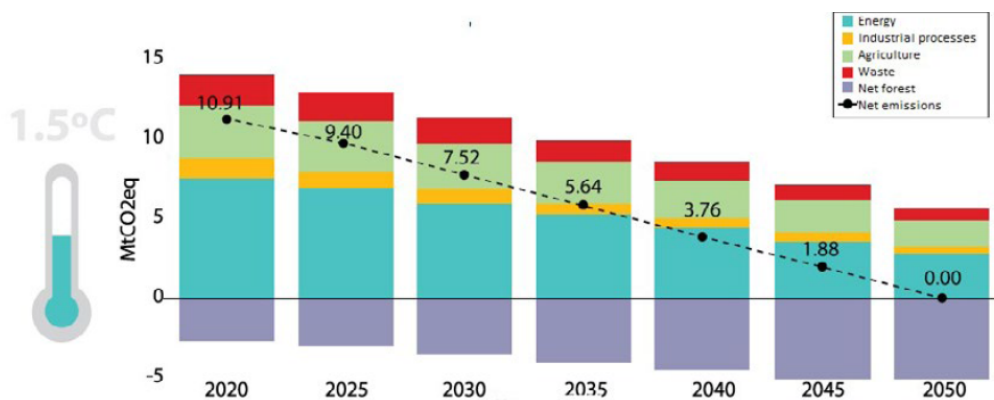
Costa Rica is widely recognized as a global leader in environmental policy and climate action. In 2018, the country has published its National Decarbonisation Plan to 2050, which sets out the pathway to achieving net-zero emissions by 2050, in line with the goals of the Paris Agreement (Government of Costa Rica, 2019).

Decarbonisation is seen by Costa Rica as a way to transform development into a sustainable transformative process based on bioeconomy, green growth, social inclusion, and improvements in the quality of life for all.

The starting point for the development of the decarbonisation plan has been the vision for 2050, based on a decarbonised economy, which has achieved emissions reductions aligned with the objectives of the Paris Agreement (well below 2°C and possibly 1.5°C). From here, through a backcasting process, Costa Rica has developed trajectories and identified policy packages necessary to achieve the goal set by the vision Figure 2. Costa Rica's emissions trajectories to 2050 (1) and projects of emissions by sectors to reach the 1.5C target (Government of Costa Rica, 2019).(Figure 2).



(1)



(2)

Figure 2. Costa Rica's emissions trajectories to 2050 (1) and projects of emissions by sectors to reach the 1.5C target (Government of Costa Rica, 2019).

The transformational actions necessary to achieve the 2050 target have been grouped into ten axes of decarbonisation (Figure 3) covering four main sectors, aligned with the IPCC and UNFCCC sectoral groups: energy, industrial processes, waste, and AFOLU. Furthermore, within each axis, action are

divided in three stages: the foundations stage (2018-2022), the inflection stage (2023-2030), and the transformation normalization stage or massive deployment (2031-2050).

Energy	Industrial processes	Waste	AFOLU (includes absorption)
Axis 1 Public transport	Axis 6 Industry	Axis 7 Residuos	Axis 8 Agriculture
Axis 2 Light vehicle fleet			Axis 8 Cattle livestock
Axis 3 Cargo transport			Axis 10 Forest Biodiversity Ecosystemic services
Axis 4 Electric system			
Axis 5 Commerce and Residence			
Axis 6 Industry			

Figure 3. The ten axis of decarbonisation of Costa Rica, divided by sectors (Government of Costa Rica, 2019).

Costa Rica has submitted its first Intended Nationally Determined Contribution (INDC) in 2016, and the updated NDC, which is due to submission in 2020, will be based on the decarbonisation plan.

The focal point to the UNFCCC in Costa Rica is the Dirección de Cambio Climático (DCC) de Costa Rica, which is part of the Ministry of Environment and Energy (Ministerio de Ambiente y Energía - MINAE). The DCC has also the role of being the focal point for the coordination and management of climate change action at the national level, which include for example the decarbonisation plan and national climate change strategies, and promote engagement of private sector and civil society in climate actions.

Within the UNFCCC landscape, Costa Rica has also been very active in the context of the negotiations concerning Article 6 of the Paris Agreement, where, at COP25, it was part of the group developing a set of principles, known as the San Jose Principles, outlining what a successful outcome could look like in the context of Article 6.

Another interesting aspects concerning Costa Rica, relevant for the theme of transparency, is its Open Government strategy. Open government has been added to the three pillars of the National Development Plan in 2015, when the country has also published its first National Strategy for Open Government. As part of this strategy, Costa Rica published its National Open Data Policy, in 2017, which constituted the first official document setting the rules over the diffusion of open data and the obligations of public institutions in terms of data sharing. Costa Rica considers open data useful in many ways, for example to strengthen trust between public institutions, government, and civil society, and to promote sustainable development and innovation at different levels.

### 3 Activities under ICAT Phase I

ICAT began working with Costa Rica in 2016. The project has so far been coordinated by UNEP-DTU Partnership, and implemented in collaboration with the DCC.

The overall aim of ICAT, under Phase I, was to strengthen Costa Rica's National Climate Change Metrics System (SINAMECC). SINAMECC is the official platform to register, manage, and publish the climate actions of the country, with the goal of monitoring the progress towards the achievement of national climate goals, and promoting evidence-based policy-making. SINAMECC is designed to be aligned to the requirements of the Enhanced Transparency Framework (ETF) of the Paris Agreement,

and also support the country to develop its NDC, thus making it a strategic tool in the context of the implementation of the Paris Agreement. The use of SINAMECC relies on the development of the “SINAMECC operational guidance” (SINAMECC guide), which incorporates guidance for including mitigation actions in the registry and assessing the impacts associated with GHG reductions. The goal for the SINAMECC guide is to include three chapters, to register and monitor the impacts of mitigation actions in three areas: climate change mitigation, sustainable development, and transformational change. Besides the focus on mitigation actions, SINAMECC also aims to become a registry for adaptation actions, and climate support received.

Under the first phase of the project, between 2016 and 2018, ICAT has worked with Costa Rica to support the DCC in developing institutional MRV arrangements necessary for collecting data to register the mitigation action in SINAMECC and measure their GHG contribution. Furthermore, work has focused on supporting the development of the Sustainable Development and Transformational Change chapters of the SINAMECC guide. For the construction of these chapters, the Sustainable Development methodology and the Transformational Change methodology developed by ICAT were used as a basis. The project also had a special focus to improve MRV arrangements and measurements of impacts specifically in the transport sector.

Throughout its activities, particular attention was placed on capacity building, with ICAT’s international representatives providing strong technical support throughout the project, most notably on application of the ICAT methodologies.

The following sections describe in more details the activities undertaken under ICAT Phase I, dividing them into four blocks:

- Legal and institutional aspects of SINAMECC and national MRV
- Integrating sustainable development and transformational change in SINAMECC
- Applying MRV to the transport sector
- Implications of the ETF for SINAMECC

### 3.1 Legal and institutional aspects of SINAMECC and national MRV

#### 3.1.1 Description

The framework for the creation and operationalisation of SINAMECC expressly recognizes the objective of providing free access to information. In view of the fact that the primary data will be generated by public and private sector entities, SINAMECC requires the establishment of a legal and institutional framework to support such data management, including signing agreements to allow or facilitate the flow of information, as well as to protect confidential information.

To inform decisions on the development of such a legal and institutional framework, the project has investigated:

- The scope of the obligations related to free access to public information, especially in light of the Open Data and Open Government strategies that Costa Rica has in place;
- The rights of private subjects to the protection of their privacy and personal data;
- The formal and informal confidentiality practices developed by institutions that generate relevant data for the operation and objectives of SINAMECC.

### 3.1.2 Results and lessons learned

By analysing gaps and barriers for data sharing across ministries, institutions, and private sector, the project produced recommendations for an efficient management of data at the institutional level, and a step-by-step plan to implement the recommendations related to institutional arrangements. The analysis found that, from the constitutional, conventional and legal point of view there is a solid legal framework which establishes and guarantees the right to sharing environmental information. This right implies two state obligations: to facilitate and propitiate free access to environmental information, and to generate environmental data of different nature, including on climate change. Nevertheless, the specific legislation of some entities of interest to SINAMECC may contemplate aspects of confidentiality of information that must be adequately considered in the operation of the system. Generally, no substantial issues are found, related to the sharing of data from public institutions, while for private sector, confidentiality agreements might need to be in place. Finally, data affecting personal privacy should be strictly voluntary and may only be collected prior consent. In any case, in principle, generation of data at aggregated level was found not to be an issue, as long as individuals or legal entities are not individualized.

Workshops to raise awareness about the importance of open data for SINAMECC were held with key stakeholders from sectors such as Energy and Transport, Waste and Agriculture, Forestry and Land Use (AFOLU).

The project generated draft agreements and legal agreements for the transfer of information for the process of implementation of the SINAMECC. Three types of legal agreements were identified and developed:

- A directive issued by the Ministry of the Environment and Energy
- An inter-institutional cooperation agreement for access, transfer, entry and use of information and data included in the National Climate Change Metrics System-SINAMECC
- An agreement on confidentiality, non-disclosure and use of information.

The first document is a unilateral act of the MINAE and is enforceable only by those bodies that are attached to it. The second is a document that must be negotiated between the MINAE and the other sources of information in the public sector not MINAE and the third is for agreements with the private sector. The ministerial directive was revised by the DCC, the Legal Directorate of MINAE and is in the process of being issued. The specific agreements and confidentiality agreements were duly drafted and reviewed by the MINAE Legal Directorate. All that remains to be done is to propose them to the sources of information, make the corresponding legal revisions, make the necessary corrections and sign the agreements.

The activity highlighted the importance of the following aspects, when developing a legal framework for data sharing:

- Determining the focal points and departments in charge;
- Estimating the periodicity of the information;
- Identifying methodological sheets to determine the values required and the possibility of modifying them;
- Protecting the confidentiality of the primary sources;
- Formatting data to match the data that institutions already have available;
- Avoiding duplication and inconsistency of data when provided by more than one source;
- Avoiding multiple reports to different institutions;



- Seeking interoperability between systems when possible.

Finally, since ICAT was supporting similar projects in both Costa Rica and the Dominican Republic, focused on establishing a robust legal framework for national level MRV, the project organised a learning exchange between the two countries.

## 3.2 Integrating sustainable development and transformational change in SINAMECC

### 3.2.1 Description

One of the ambitions of SINAMECC is to be able to transcend from the assessment of GHG emissions of climate actions alone, and include two modules to assess their sustainable development and transformational change impacts of such actions. For this reason, ICAT Phase I in Costa Rica focused on developing tailor-made guidance for SINAMECC, to guide the assessment of the sustainable development and transformational change impacts of mitigation actions.

The sustainable development impacts of mitigation actions are intended as those environmental, social, and economic impacts that can arise from the implementation of a climate policy of actions. Their assessment in this context is essential to promote evidence-based policy-making, and exploit synergies between the climate and the sustainable development agendas. The assessment of transformational change impacts, on the other hand, builds upon the sustainable development module, but it is a broader concept. Transformational Change is intended, according to the ICAT methodology, as a fundamental, sustained change of a system that disrupts established high-carbon practices and contributes to a zero-carbon society in line with the Paris Agreement goals and the UN SDGs. The ambition of Costa Rica is to establish a domestic carbon market which uses this concept as additionality criteria.

To support Costa Rica in the integration of these two concepts in SINAMECC, the project developed two draft guides describing how to include the analysis and transformational change and sustainable development in SINAMECC, and presented these to key stakeholders.

### 3.2.2 Results and lessons learned

The two guidance documents were developed using as a basis the ICAT Sustainable Development and Transformational Change methodologies, and "operationalising" them to fit the specific case of Costa Rica. Although still at an early stage of development, the two documents provided an opportunity to discuss important issues related to the assessment of their respective impacts, and included a series of activities which helped to enhance the understanding of the links between Costa Rica's climate actions and sustainable development. For example, as part of the work on the sustainable development guidance, an exercise was conducted to link SDGs targets to the ten axes of Costa Rica's Decarbonisation Plan, proposing ten sets of SDGs targets and indicators (one set per axis) to map synergies and trade-offs between the implementation of the decarbonisation plan and the 2030 Agenda for Sustainable Development (Figure 4).

SDG indicator	Focus Area 1	Focus Area 2	Focus Area 3	Focus Area 4	Focus Area 5	Focus Area 6	Focus Area 7	Focus Area 8	Focus Area 9	Focus Area 10	TOT
2.1.2											
2.3.1											
2.3.2											
2.4.1											
3.4.1											
3.6.1											
3.9.1											
3.9.2											
3.9.3											
4.7.1											
6.3.1											
6.4.1											
6.4.2											
6.5.1											
6.6.1											
7.1.2											
7.2.1											
7.3.1											
8.1.1											
8.3.1											
8.5.2											
8.9.2											
9.1.2											
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10.5.1											
11.1.1											
11.2.1											
11.3.1											
11.4.1											
11.6.1											
11.6.2											
11.7.1											
12.2.1											
12.3.1											
12.4.2											
12.5.1											
12.6.1											
14.1.1											
14.5.1											
15.1.1											
15.1.2											
15.3.1											
TOT indicators	11	10	10	9	11	10	9	11	9	9	47

Figure 4. Mapping between SDGs indicators and the ten axes of the decarbonisation plan of Costa Rica.

### 3.3 Applying MRV to the transport sector

#### 3.3.1 Description

ICAT I had a special focus on applying the lessons learned from the activities described above, to the transport sector, which is an area where decarbonisation has revealed to be challenging in Costa Rica, as in many other parts of the world.

Under this deliverable, the project developed:

- A guide for the implementation of the MRV of mitigation actions in the transport sector;

- An approach to assess the ex-ante and ex-post GHG impacts of transport mitigation actions, in line with the SINAMECC guide;
- A report presenting how to analyse possible sustainable development indicators for the actions in the transport sector and how these could be included in SINAMECC.

### 3.3.2 Results and lessons learned

The results of the activities conducted were summarised in a report analysing how to assess the impact of the transport sector using as case study the Great Metropolitan Area (GAM). The report presents the indicators to be used for the assessment of the GHG emissions of transport, including the information necessary to calculate the impacts on those indicators, and a description of the sources from which this information can be retrieved. Based on these data needs, an MRV framework for the collection of the necessary information was developed, and an ex-ante analysis of the GHG impacts of transport mitigation actions in the GAM was conducted.

Under this module, the project also developed, in collaboration with the Ministry of Transport, a document exploring what indicators can be used to assess the sustainable development co-benefits of mitigation actions in the transport sector. The final list of ten indicators includes was then connected to specific targets from the Sustainable Development Goals (SDGs). Each indicator was also characterised and prioritised with respect to different parameters, such as the methodological soundness for producing it, the experience in developing it, the cost, complexity, etc. This exercise has been particularly useful to give a taste of the benefits and challenges of assessing sustainable development impacts of mitigation actions.

The analysis of the climate and sustainable development impacts of transport policies have underlined several barriers, hampering the assessment of impacts in this sector, such as: difficulty in accessing qualified financial and human resources, lack of knowledge of specific technical issues in support institutions, high planning and scheduling time needed to establish a new measurement process within the public sector, and relationship or coherence with national priorities.

## 3.4 Implications of the ETF for SINAMECC

### 3.4.1 Description

With the introduction, at COP24, of the MPGs for the ETF of the Paris Agreement, it was necessary for Costa Rica, as well as for all other countries, to gain a better understanding of the ETF's requirements, and analyse them in light of their current capacity. This was crucial, in order to foresee and tackle possible gaps in the current MRV, and to inform the development of SINAMECC, being this the key instrument through which data will be fed into the Biennial Transparency Report (BTR).

For this reason, ICAT has supported an analysis of the implications of the ETF for SINAMECC, and produced a report summarizing the outcomes of the analysis.

### 3.4.2 Results and lessons learned

Taking the MPGs for transparency as a starting point, the report explored, often using a tabular format, the reporting requirements of the ETF, in terms of GHG Inventory, tracking of NDC progress and implementation, impacts of climate change and adaptation actions, and support provided and received. Changes in reporting requirements from the Convention to the Paris Agreement were analysed through a comparative analysis, in order to identify differences between the two. Finally,

the reporting requirements of the ETF were assessed one by one, pointing out possible challenges that Costa Rica could face to meet the demands of each individual requirements of the MPGs.

Overall, the report found that the new reporting requirements presented by the ETF, through the MPGs, represent a challenge for developing countries, Costa Rica being one of them. Some of the conclusion from the report were:

- Data, processes and institutional arrangements, capacities and availability of technological tools will likely represent challenges for many countries;
- A tool like SINAMECC represents a great opportunity to solve several of these challenges, especially those related to the definition of processes and institutional arrangements, data management and technological tools. SINAMECC has the conditions to be able to support Costa Rica and other developing countries with the implementation of the ETF by structuring and simplifying processes.
- It is essential that SINAMECC should be strengthened and adapted according to the MPGs, both in conceptual design, as well as in functionalities in the platform, the modules of mitigation, adaptation and means of implementation.
- Executing a first exercise to develop a BTR before 2024 would be extremely beneficial for Costa Rica, to advance the restructuring and improvement of processes needed to present a complete BTR. This could generate valuable early lessons learned that could be useful for other developing countries.
- The adoption of the ETF is seen as a great opportunity to strengthen decision-making and the creation of public data, since better data and reports could lead to more efficient actions.

## 4 Future activities under ICAT Phase II

In ICAT Phase II, Costa Rica will focus on developing further the analysis of the impacts associated with sustainable development and transformational change to support the implementation of the Decarbonisation Plan in a way that it takes a holistic approach to sustainable development, exploits synergies with the SDGs, and strengthens the efforts to establish a domestic carbon market.

More specifically, the project will be sub-divided into two main blocks:

- Developing and piloting the sustainable development and transformational change components of SINAMECC
- Developing capacity-building and knowledge products, to train key stakeholders and increase awareness of the public.

### 4.1 Develop and pilot sustainable development and transformational change components of SINAMECC

The first part of the project will attempt to review and refine the chapters of the SINAMECC guide associated with sustainable development and transformational change, with UNEP DTU and the DCC of Costa Rica working in close collaboration. Pilots of the sustainable development and transformational change guides will be performed in different sectors

Furthermore, the approach to assess transformational change impacts of mitigation actions will be piloted as an approach to demonstrate "additionality" for entities participating in the domestic market mechanism in Costa Rica. An element of Costa Rica's efforts to decarbonize the economy is to design a market-based mechanism aiming at mobilizing private sector finance to implement innovative zero-carbon technologies. To ensure that activities under the market-mechanism contribute to deep and permanent decarbonization, this activity will explore the opportunities for designing an "additionality" mechanism based on transformational change. The aim is that the market-mechanism will only include activities that have a transformative impact on the economy and the society in Costa Rica. A set of criteria will be developed and piloted to assess if an "additionality" mechanism based on transformational change is viable in this context.

The results of the pilots will be used to generate the data needed to inform policy making, so that policy makers and other decision takers can apply a more evidence based approach when designing plans and policies to meet the targets set out in the Decarbonization plan.

## 4.2 Capacity building and training

In the second part, the project will focus on develop training material for operationalizing the sustainable development and transformational change components of the SINAMECC Operational Guidance, in order to ensure cross-sectoral institutionalization of the Operational Guidance, as well as awareness among the broader public.

Knowledge products and briefs about Transformational Change and Sustainable Development as frameworks for monitoring and reporting impact of NDC actions and policies will be developed, in order to engage stakeholders more broadly.

Training sessions for key actors in the concepts of sustainable development and transformational change, as well as in the processes of measuring impact as described in the SINAMECC Operational Guidance, will take place. This will aim to equip the members of the inter-ministerial committee which is going to produce the new NDC, with an understanding of the importance of integrating Sustainable Development and Transformational Change in policy-making.

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