# **INTEGRATING CLIMATE** ACTION INTO PUBLIC **INVESTMENT MANAGEMENT: LESSONS FROM ARGENTINA**, **COSTA RICA, AND COLOMBIA**

REGIONAL CLIMATE CHANGE | ECONOMY AND FINANCE PLATFORM

MINISTRIES



# INTEGRATING CLIMATE ACTION INTO PUBLIC INVESTMENT MANAGEMENT: LESSONS FROM ARGENTINA, COSTA RICA, AND COLOMBIA

REGIONAL CLIMATE CHANGE | ECONOMY AND FINANCE PLATFORM | MINISTRIES

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Juan José Galeano and Adriana Samaniego, representing the Ministry of Economy and Finance of Paraguay spearheaded the preparation of this document. Zoila Llempén, Andrea Guardia, Daniela Torres, Raúl Delgado, Huáscar Eguino, and Rudy Loo-Kung drafted the final version.

#### **About the Platform**

The Regional Climate Change Platform of Ministries of Economy and Finance of Latin America and the Caribbean is a unique space for knowledge exchange and collaboration. It aims to strengthen economic and fiscal policies in the region to tackle climate change challenges. Established in August 2022 with support from the Inter-American Development Bank (IDB), the Platform is composed of and led by 26 regional bank member countries, which represent over 98 percent of the greenhouse gas emissions of Latin America and the Caribbean (LAC) and over 90 percent of its GDP. This initiative receives financing from the Fund for Fiscal Policy for Climate Change in LAC, which is managed by the IDB and funded by the International Climate Initiative (IKI) of Germany's Federal Ministry for Economic Affairs and Climate Action.



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# **1. Introduction**

Climate change carries significant economic, social, and environmental consequences across multiple sectors of the economy and has the potential to hinder development (Galindo, Hoffman, and Vogt-Schilb, 2022). According to the Climate Change Knowledge Portal (World Bank, 2021), climate change events such as droughts, floods, storms, and landslides affected approximately 180 million people in the Latin American and Caribbean (LAC) region between 1981 and 2020.

The institutional capacity of LAC governments to address climate change challenges is notably lower than that of governments in other regions (University of Notre Dame Global Adaptation Index, 2019). According to the Global Adaptation Index 2019, the LAC region is among those least prepared, and has the lowest institutional capacity to tackle climate challenges, which include management of disaster situations and any subsequent rehabilitation and reconstruction efforts.

The Inter-American Development Bank (IDB) estimates that to address the climate crisis in the region, between 2 and 8 percent of the gross domestic product (GDP) should be spent annually on infrastructure up to 2030 (Galindo, Hoffman, and Vogt-Schilb, 2022). Current annual infrastructure investment in the region falls slightly below 3 percent of GDP, indicating a significant financing gap for implementing climate resilient infrastructure and decarbonizing the region's economies (Delgado, Eguino, and Lopes, 2021). Incorporating climate change criteria into the entire public investment management cycle is therefore a priority for the region's public investment systems. Several LAC countries have begun this process, and their experiences have yielded significant lessons that can guide other countries. This document analyzes the initiatives that the governments of Argentina, Colombia, and Costa Rica have implemented to incorporate climate change criteria into PIM, with the aim of systematizing the lessons learned from these experiences.

The analysis of the three case studies covers five key dimensions of public investment management: planning, inter-agency coordination, project appraisal and selection, budget and portfolio management, and risk management. To this end, interviews with government officials were conducted and thorough analysis of official publications was carried out. The results reveal that while progress has been made in integrating climate change criteria into planning processes, there are also persistent challenges with coordination at subnational levels of government within public investment systems.

Regarding project appraisal and selection, climate criteria have been integrated by way of updating methodological guides. However, there is a need for standardized information at the project level to ensure the selection process adequately incorporates climate aspects.

Regarding the budget phase, concrete experiences have been identified in implementing budget markers related to climate change, despite a lack of significant progress in ex-post evaluation. This shortfall is not limited to the incorporation of climate aspects; it also reflects a widespread stagnation in the practice of ex-post evaluation within public investment systems. Finally, the document highlights the presence of disaster risk management plans and policies, along with different degrees of progress in integrating climate change criteria into fiscal risk management.

Drawing from the experience of the three countries studied, as well as from the relevant international practices and literature, several key considerations emerge. First, the integration of climate action into national public investment systems (SNIP, for its acronym in Spanish) is a gradual process and is conditioned by the maturity of each system. Investment planning that incorporates climate change criteria should be supported by national strategies and participatory plans, in which case coordination between entities becomes crucial, especially in decentralized countries. In this regard, establishing high-level coordinating units has proven useful in facilitating such coordination efforts. On the other hand, the experience of those who have already incorporated climate criteria into their appraisal assessments is valuable and underscores a growing need for systematized project-level information within SNIPs. At the budgetary level, it is essential to identify projects aligned with climate objectives in order to mobilize resources for resilient investments. In addition, it is crucial for investment management to address climate criteria from the project cycle's outset, which may

require regulatory adjustments to facilitate this integration into the system. Finally, the variability in the maturity of SNIPs and in integration of climate criteria into the system highlights the need for standardized assessments for prioritizing actions in investment management.

This document is structured in four sections, including this introduction. The second section describes the relationship between public investment and climate change, and presents the main assessment frameworks, guidelines, and/or manuals developed by multilateral agencies to guide countries in the inclusion of climate criteria in investment cycles. The third section delves into the three case studies under consideration, using a methodology developed by the International Monetary Fund (IMF) to analyze the incorporation of climate criteria in different phases of the public investment cycle. Finally, the fourth section presents the main lessons learned from the case studies.

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# CLIMATE CHANGE AND PUBLIC INVESTMENT MANAGEMENT

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## **2. Climate Change and Public Investment Management**

The relationship between public investment and climate change operates in two directions. On the one hand, climate change and extreme natural events cause direct damage to infrastructure, disrupting services and incurring billions of dollars in economic costs every year. On the other hand, the type of infrastructure built today will affect both global greenhouse gas (GHG) emissions and the country's resilience to future natural disasters.

According to the IMF, green and resilient public investment involves investing in infrastructure that is low or zero carbon; can withstand climate-related impacts; addresses climate-related risks in the design and operation of infrastructure; incorporates preparedness and resilience to natural disasters; and has positive impacts on the local environment (such as water and air quality) and natural resources (forests, ecosystems, and biodiversity), among other factors (IMF, 2021).

Incorporating climate change and resilience criteria in public investment cycles is a crucial step toward bridging the resilient infrastructure gap. In addition, it avoids costs arising from natural disasters that can be four times higher than the cost of adopting resilience measures (Delgado, Eguino and Lopes, 2021). Recognizing its importance, multilateral organizations such as the IDB, the IMF, and the World Bank have developed assessment frameworks, guidelines and/or manuals to guide countries in adopting best practices for incorporating climate criteria throughout different stages of the investment cycle.

Eguino, et al. (2024) explore diverse practices for integrating climate action into the public investment cycle, introducing an intervention framework throughout the public investment cycle processes. This includes: (i) adopting national adaptation and decarbonization strategies as tools to guide investments; (ii) establishing climate finance strategies that facilitate access to the resources needed for priority projects; (iii) integrating risk management for climate events into the public investment cycle; (iv) using the social price of carbon in cost-benefit assessments of projects; (v) applying green investment taxonomies; and (vi) adopting prioritization processes for resilient and low-carbon investments.

Another important tool is the C-PIMA, an extension of the IMF's public investment management assessment (PIMA) framework created in 2015. The PIMA aims to help countries improve governance in the planning, resource allocation, and implementation of public investment projects (IMF, 2022). While this tool has proven beneficial for the over 70 countries that have implemented it, the IMF recognized that PIMA did not assess PIM as a mechanism to support climate change mitigation and adaptation. The IMF therefore developed the C-PIMA, which integrates the climate dimension into the PIMA framework, evaluating a country's ability to manage a climate-related infrastructure.

So far, the C-PIMA has been implemented in around 24 countries, assisting governments in identifying potential improvements in public investment institutions and in processes to develop low-carbon and climate-resilient infrastructure. The C-PIMA framework assesses five critical aspects: planning, inter-agency coordination, project appraisal and selection, budget and portfolio management, and risk management. The IMF also considers other cross-cutting issues that directly influence the incorporation of climate change criteria in public investment, such as the legal and regulatory framework, information systems, and the government's institutional capacity. Thus, a SNIP with a strong institutional base provides a firm foundation for integrating climate action into investment management (IMF, 2022).

Finally, the World Bank (2022) has developed a reference guide for climate-smart public investment. This tool seeks to guide public policy makers and private sector actors in their efforts to align public investment with climate change mitigation and adaptation objectives. It outlines the policies and strategic components crucial for integrating climate criteria into public investment, considering the different levels of institutional governance.

# CASE STUDIES FROM LATIN AMERICA

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# **3. Case Studies from Latin America**

This section presents case studies on the integration of climate action into the public investment cycle in Argentina, Colombia, and Costa Rica. To ensure comparability across countries at every stage of the investment cycle, the analysis is aligned with the standardized international C-PIMA framework developed by the IMF.

The C-PIMA framework evaluates five key public investment cycle practices from a climate change perspective (Figure 1), aiming to pinpoint areas for enhancing public investment processes to implement low-carbon and climate-resilient infrastructure (IMF, 2021). Based on this framework, the IDB examined the incorporation of the climate dimension in the PIM of the three aforementioned countries. Each case underwent evaluation across five dimensions outlined in the C-PIMA methodology: planning, coordination between entities, project evaluation and selection, budget and portfolio management, and risk management. This assessment involved interviews and desk analysis.



Source: IMF (2021).

The interviews conducted with representatives from the governments of Argentina, Colombia, and Costa Rica<sup>1</sup> draw out lessons regarding the incorporation of climate change criteria in public investment. Argentina and Costa Rica had already undergone C-PIMA diagnoses conducted by the IMF in 2022 (Figure 2). Therefore, the interviews primarily aimed to assess progress on the received diagnosis and identifying areas requiring additional support. In the case of Colombia, where the IMF has not conducted a C-PIMA diagnosis to date, the interviews focused on making a general assessment of the five areas covered in the C-PIMA methodology. The following subsection presents the main results of the case studies.



Source: Authors' elaboration based on C-PIMA reports on Argentina and Costa Rica (manuscripts).

#### 3.1 Planning and Coordination between Entities

This section evaluates the degree to which governments have aligned their national and sectoral plans, as well as their investment portfolios, in accordance with the country's climate objectives. It also analyzes the degree of integration of climate considerations in the coordination between public sector entities, the private sector, and other relevant actors. This process is crucial to give legitimacy to decisions taken, especially in those countries where there is greater decentralization.

#### Argentina

Argentina has made significant progress in incorporating the climate dimension in the planning phase. These advances include the approval of the National Climate Change Adaptation and Mitigation Plan 2022, and the National Sectoral Action Plans, both of which are aligned with the nationally determined contributions.

In terms of coordination between entities, the creation of the National Climate Change Cabinet stands out as the main body in charge of coordinating climate action throughout central government. Its main function is to coordinate the preparation and implementation of the National Adaptation and Mitigation Plan, in collaboration with all areas of the National Public Administration, the Federal Environmental Council, subnational governments and various civil society actors, including the private sector.

<sup>1</sup> Interviews conducted: Argentina, with the National Directorate of Public Investment (NDPI) and the Secretariat of International Economic and Financial Affairs; Costa Rica, with the Head of Public Investment Management at the Ministry of National Planning and Economic Policy (Mideplan); Colombia, with representatives from the National Planning Department (NDP).

However, although the Secretariat for International Economic and Financial Affairs has been working closely with the National Climate Change Cabinet and the Ministry of Environment, the National Directorate of Public Investment (NDPI) was not in contact with the Cabinet prior to the preparation of the C-PIMA. Once the results of the C-PIMA were known, the NDPI was asked to incorporate markers related to climate change in the SNIP, which led to coordination between the NDPI, the National Climate Change Cabinet, the National Directorate of Climate Change and the Finance Secretariat of the Ministry of Economy. Further details on the progress made are provided in the budget and portfolio management section.

#### Costa Rica

Costa Rica has made great progress in planning, which has been possible thanks to the alignment of the National Development and Public Investment Plan (NDPIP)<sup>2</sup>, together with the National Decarbonization Plan, nationally determined contributions, and National Adaptation Policy. Likewise, the Ministry of National Planning and Economic Policy (Mideplan, for its acronym in Spanish) developed the Territorial Productive Strategy for an Inclusive and Decarbonized Economy 2020–2050, which outlines the route for the country toward a decentralized, digitalized and decarbonized economy by 2050.

Regarding coordination between entities, the interviews also show the relevance of the NDPIP as a key instrument in promoting coordination between the Mideplan, responsible for its preparation, and the Ministry of Finance, in charge of ensuring the goals are met. Despite this, institutional arrangements must still be established to facilitate coordination among the entities in the SNIP, since decision-making on public investment is not systematically coordinated either within central government or with subnational governments, which therefore poses a major challenge. Sectoral institutions are in charge of designing and executing investment projects, while Mideplan manages the project prioritization process. The Ministry of Finance, in its role as the budgetary authority, makes the final decision on which projects will be financed.

In addition, the recent enactment of two laws—Law 22,363, Regional Development Law, and Law 10,234, Law for Strengthening Territorial Competitiveness, to promote the attraction of investments—has empowered subnational governments to design and implement projects, which further increases the challenge of coordination between central and subnational governments.

#### Colombia

Colombia has made progress in integrating climate management into public investment planning. First, the influence of Law 1931 (2018), which establishes the Guidelines for Climate Change Management, and Law 1523 (2012), which establishes the National Disaster Risk Management Policy, is significant. Based on these regulations, Colombia has developed both the Comprehensive National Climate Change Plan and the National Disaster Risk Management Plan. Additionally, the government has implemented the Resilient Investment Toolbox to guide the incorporation of disaster risk analysis and climate change adaptation criteria in the formulation of projects, with the aim of reducing impacts and losses caused by the effects of climate change.

Second, although the country has no cross-sectoral National Infrastructure Plan, it has formulated a National Development Plan (NDP) 2022–2026 and sectoral public investment plans. The NDP followed a participatory process that received more than 6,500 proposals and its bases are inspired by ideas contributed by the over 250,000 Colombians who participated in the 51 Regional Binding Dialogues. One of the five transformations outlined in the NDP is productive transformation, internationalization and climate action. This transformation considers five catalysts: (i) living nature (revitalization with social inclusion); (ii) economic transition to achieve carbon neutrality and consolidate climate resilient territories; (iii) fair, safe, reliable and efficient energy transition; (iv) productive economy through reindustrialization and bioeconomy; and (v) development financing as an enabling mechanism for a productive economy. In this way, Colombia hopes to achieve productivity that will promote the country's sustainable development and competitiveness, allow it to leave behind its dependence on extractive activities, and open the way to new sectors that take advantage of the country's territorial potential in harmony with nature.

<sup>2</sup> The latest approved plan is the NDPIP 2023-2026.

Regarding coordination between entities, in 2016 the national government approved the National Climate Change System Decree, SisClima (Decree 298). The SisClima is an intersectoral commission that Colombia created to articulate policies, instruments, and entities on climate change. It is made up of state, private, and non-profit entities, and its purpose is to coordinate and organize GHG reduction actions and measures, as well as implement projects which contribute to climate change adaptation.

SisClima provides a vision of working at regional level through the formation of Regional Climate Change Nodes—regional governance bodies that facilitate coordination between national, regional, and local institutions. Each node is composed of a unique combination of key governmental and non-governmental institutions in each region, reflecting its idiosyncrasies. In this way, SisClima can enable all stakeholders to commit to working together on climate change management throughout the national territory.

#### 3.2 Project Appraisal and Selection

This section assesses whether the project selection and prioritization process, together with the appraisal process that determines which projects will advance to the investment stage, successfully integrate analysis linked to the investments' impact on mitigation and adaptation.

Incorporating climate considerations in the project appraisal and project prioritization stages is crucial, as it directly influences the assessment that determines the viability of projects and their selection. In both cases, SNIPs must have systematized information available at the project level to ensure an adequate evaluation and prioritization process.

#### Argentina

While provincial environmental agency guidelines require that all investment projects must submit an environmental impact assessment, Argentina's SNIP does not require the incorporation of climate change criteria in the evaluation of investment alternatives. Likewise, disaster risk analysis is not required for the appraisal process, although there are agencies that consider it.

Regarding project selection, the National Budget Office, in coordination with the NDPI, defines the investment ceilings for each sector based on government priorities and analysis by project, while the final selection of projects for the budget proposal is made by each agency. Until a few years ago, Argentina had no standard investment budget prioritization criteria. However, due to C-PIMA, the need arose to make them explicit.

As a result, the Cabinet of Ministers and the Secretariat of Finance published two joint resolutions (2022 and 2023) with general criteria for the prioritization of projects by the agencies. These criteria include climate change adaptation and mitigation. For example, it is a requisite to evaluate and report whether the main objective of the project is the reduction of the greenhouse effect, or whether the project has components or activities that contribute significantly to the reduction of emissions. It is worth noting that, according to the second resolution, issued in 2023, the NDPI will soon release the conceptual and methodological guidelines for the application of these prioritization criteria.

#### Costa Rica

Costa Rica has made significant progress in the appraisal of investment projects. Firstly, in September 2021, the Regulation for the operation of the SNIP was modified, thus giving Mideplan the power to grant the declaration of feasibility of investment projects to all entities that make up the SNIP. Secondly, the cost-benefit analysis methodology used in the SNIP was updated, including the concepts of sustainable infrastructure, decarbonization, and social price of carbon. This update was carried out within the framework of the support requested by Mideplan to the IDB.

Regarding the selection and prioritization of projects, a methodology was developed for prioritizing public investment projects that incorporates aspects of decarbonization in the projects. This methodology was developed within the framework of the technical assistance provided by the IDB to Mideplan and resulted in the publication of a technical standard, which ensures its applicability. It includes sustainability and decarbonization evaluation matrices for projects, with a differentiated analysis, depending on whether they are simple or complex projects.

Among the challenges that remain is the need for standardized information on investment projects since the current asymmetry of information is hindering the prioritization process, even where a single methodology is available. In this sense, the information provided in the project bank is a useful tool to ensure that sectors process this information in a standardized manner.

#### Colombia

Regarding appraisal, Colombia has an adjusted general methodology for the identification, preparation, and appraisal of public investment projects, created by the NDP. Likewise, the formulation of public investment projects contains aspects related to climate change adaptation and climate-related risks that depend on the use and application of the Resilient Investment Toolbox. This Toolbox includes guidelines for incorporating climate change adaptation measures in project design.

In relation to the investment prioritization process, it has been observed that there is no centralized process at the national level. Instead, prioritization varies according to the source of financing of the projects. For example, projects financed with budget from the General Royalties System must follow the guidelines and orientations that the system establishes, including the methodology for prioritization of projects to be financed, which considers a focus on closing territorial gaps. In accordance with Article 36 of Law 2056 of 2020, this methodology establishes that the use of resources must be prioritized in sectors that contribute to closing gaps,<sup>3</sup> including environmental development. According to the NDP, this dimension refers to making use of natural resources without depleting the base on which they are sustained. This involves conserving and restoring strategic environmental areas to maintain the supply of biodiversity and ecosystem services, promoting ecological connectivity, fostering climate change adaptation and mitigation, reducing deforestation, and carrying out economic activities for conservation, among others.

On the other hand, unlike the General Royalties System, projects financed by the national general budget have no defined prioritization methodology. The executive branch entities receive information on their share of investment from the budget. With this quota, each institution distributes the budget among the projects included in the Annual Operational Investment Plan, which contains the portfolio of viable projects that could be allocated resources. In this sense, it is up to each sector to prioritize its investments in accordance with the government's objectives and the goals set forth in the NDP, in which case the NDP validates the investment programming.

#### 3.3 Budget and Portfolio Management

This section evaluates whether investments related to climate change (and their operation and maintenance costs) are considered and reported in the annual budget and other fiscal instruments. It also analyzes whether asset management and ex-post evaluation include climate considerations.

To incorporate climate criteria into the budget process, it is necessary to identify and signal which projects contribute to environmental objectives to effectively mobilize private and public resources for resilient investments. A SNIP with strong institutional arrangements is needed to provide a firm basis for incorporating climate action into ex-post evaluation.

<sup>3</sup> See https://colaboracion.dnp.gov.co/CDT/Normatividad/Anexo percent20No. percent201 percent20- percent20Priorizacion percent20inversion percent20regalias.pdf.

#### Argentina

Following the results of the C-PIMA, Argentina, for the first time, included a budget marker related to climate change in its 2022 Investment Plan. However, due to the lack of precise guidelines, its scope was limited. To improve this situation, and with the support of the IDB, methodological and operational guidelines are being developed which the entities in charge of public investment projects will be able to apply, resulting in a more effective implementation of the scoreboard. This will allow the results of the 2023 budget formulation process, reported by the agencies, to be further consolidated, particularly in the field of climate change.

With regard to investment follow-up, it is worth noting that greater emphasis has been placed on the appraisal process. An important advance has been the linkage in 2021 between the Integrated Financial Information System Internet and Bank of Public Investment Projects, which allows for financial monitoring of projects. In addition, the NDPI performs a detailed and qualitative monthly monitoring of a selected set of projects agreed on with the Chief of the Cabinet and the authorities from each ministry. However, the monitoring does not include climate change criteria.

For its part, the Ministry of Public Works is developing an ex-post evaluation methodology that contains climate change criteria and could be applied three to five years after the operation of a project. In addition, NDPI formulated an ex-post evaluation methodology that was launched with pilot projects in 2021, and in 2022 worked with the Ministry of Public Works to extend this evaluation to 11 projects. However, climate change criteria are not yet included in these evaluations.

Regarding the management of green infrastructure assets, according to the C-PIMA there is no specific requirement or guidance for ministries to document the deterioration of these assets. Similarly, there is no methodology for assessing maintenance needs arising from climate change.

#### Costa Rica

At the time of the C-PIMA assessment, Costa Rica had not yet identified capital expenditures related to climate change in the budget, although it had already initiated actions in that direction. The interviews conducted show that progress has been made since the C-PIMA in the search for green financing. With technical assistance from the IDB, Mideplan has applied the Carbon Bonds Initiative taxonomy for the classification of sustainable infrastructure assets, determining their alignment with decarbonization and sustainable financing objectives. This categorization aligns projects with the criteria necessary to access sustainable financing mechanisms.

Regarding the monitoring of investments, according to the C-PIMA, neither a legal requirement nor specific methodologies have been established to carry out ex-post reviews or external audits on the impact of capital projects on climate adaptation or mitigation outcomes. Finally, according to the C-PIMA, Costa Rica has no policies for asset maintenance that take climate-related risks into account. Likewise, there are no standardized methodologies for estimating normal maintenance needs, nor for infrastructure assets exposed to climate change.

#### Colombia

From the interview conducted with the Colombian government, important advances were noted in terms of incorporating climate actions in the budget and management of the public investment project portfolio. First, in 2022 the Ministry of Finance and Public Credit, the Ministry of Environment and Sustainable Development, the NDP, the Financial Superintendence of Colombia, and the National Administrative Department of Statistics formed the Green Taxonomy Roundtable to define governance on the matter, establish the first pilots with the financial sector, project proponents, and indicate the steps to follow to build the adaptation module, among other aspects. One of the main objectives of the Roundtable is to promote the

effective mobilization of private and public resources for investments, aimed at complying with the country's environmental policy. This tool will make it possible to define whether an asset or activity has environmental contributions. Although it cannot gage the impact on GHG reduction, it will be effective in determining whether the asset or activity is contributing to environmental objectives. It should be noted that the taxonomy exercise has already launched its first pilots with the financial sector, from the Financial Superintendence, and with proponents of territorial projects from the NDP. However, the taxonomy currently has a greater degree of depth for the mitigation component, thus there is an opportunity for improvement to strengthen the adaptation component. Also, the taxonomy is not mandatory in the country, given that the financial sector is studying it and initiating its appropriation in its operations.

On the other hand, Colombia has an ex-post evaluation methodology for investment programs and projects approved in 2004 by the NDP. This methodology assesses whether there were changes in the environmental components that were considered in the appraisal process, such as analysis of environmental risks, and measures for prevention, mitigation, correction and compensation of any negative environmental impacts that the project may cause. Likewise, the methodology must evaluate any changes in risk prevention or mitigation measures, as well as in the levels of threat and vulnerability of the project.

#### 3.4 Risk Management

This section assesses whether disaster management strategies and investment management incorporate climate change risks.

#### Argentina

The C-PIMA results show that Argentina has a National Plan for Risk Reduction and Civil Protection (PLANGIR), which identifies climate risks and mitigation measures. There is also a contingency budget (FONGIR), a trust fund (FONAE), and a conditional credit line with the IDB to prevent and respond to climate damage to public infrastructure. However, the C-PIMA report notes that the government neither identifies nor analyzes the fiscal risks associated with climate change and disasters in public infrastructure assets in the medium and long term.

In this regard, during the interviews it was reported that, with the support of a consultancy with IDB and resources from the German fund, two monthly training sessions will be held for the Undersecretariat of Macroeconomic Planning to include the fiscal risks associated with climate change in macroeconomic projections. It was also indicated that Argentina has been working on the implementation of sustainable bond markets.

#### Costa Rica

The C-PIMA assessment notes that Costa Rica has a National Risk Management Policy 2016–2030, and a National Risk Management Plan 2021–2025, both of which include plans to respond to disaster risks and climate impacts, particularly on public infrastructure assets. In addition, the C-PIMA indicates that the Ministry of Finance is in the process of finalizing the National Strategy for the Financial Management of Disaster Risk, which will propose a comprehensive approach to financing and consider a broader set of risk management instruments. Finally, Costa Rica publishes an annual fiscal risk report that includes a section on the impact of natural disasters but does not consider other climate-related risks.

#### Colombia

Regarding risk management, Colombia has the National Disaster Risk Management Plan (PNGRD, for its acronym in Spanish) 2015–2030, updated in 2022. The PNGRD is an instrument pertaining to the National Disaster Risk Management System, created by Law 1523 of 2012, which defines objectives, programs, actions, responsible parties and budgets via which the processes of risk awareness, risk reduction and disaster management are executed within the framework of national development planning.

To guide the implementation of the PNGRD, Colombia developed the Resilient Investment Toolbox, which contains guidance on how to incorporate disaster risk analysis into public investment projects. The Toolbox focuses on climate change adaptation in a prospective manner, without addressing mitigation issues. To date, a guide has been developed for application to the water and sanitation sector and is expected to be developed for other sectors. It should be noted that the Toolbox is a guidance tool, and its use is not mandatory.

In relation to fiscal risks, it was concluded from the interview conducted that disaster risk is the country's main contingent liability, currently valued at 4.2 percent of GDP by 2023 (2.8 percent associated with earthquakes, 1.0 percent with floods and 0.4 percent with droughts). In this regard, the objective of Colombia's Financial Protection Strategy for Risks of Disasters, Epidemics, and Pandemics is to reduce vulnerability and the fiscal impact caused by disasters. The strategy focuses on understanding fiscal risk; carrying out financial management of disaster risk; implementing catastrophic risk insurance actions for public assets, with coordination between the public and private sectors; and strengthening the financial management of territorial entities. Currently, a financial protection strategy is under way for the transportation sector, which is in the process of being published, and those for the agriculture and environment sectors are being developed. In addition, there are six territorial strategies prepared in line with the risks and needs at the local level.



LESSONS LEARNED ON INTEGRATING CLIMATE ACTION INTO PUBLIC INVESTMENT MANAGEMENT

### 4. Lessons Learned on Integrating Climate Action into Public Investment Management

Drawing from the pivotal role of public investment management in fostering more resilient public services, as well as its importance in mitigating the effects of climate change, the case studies in the region outline 10 key takeaways concerning the incorporation of climate change criteria into the SNIPs:

# Integrating climate action into SNIPs

Integrating climate action into SNIPs across LAC is a step-by-step process that builds on the maturity of each system According to the IMF (2022), the incorporation of climate change criteria into PIM is directly influenced by the maturity of the country's SNIP. A robust SNIP with well-established institutional structures provides a solid foundation for integrating climate action into investment management. Conversely, deficiencies within the system, or in any of its phases, hinder the possibility of including a climate perspective to PIM. For instance, countries which lack project prioritization methodologies, such as Colombia, struggle to make progress on the integration of climate change criteria in project prioritization processes. Similarly, countries such as Costa Rica, with no established ex-post evaluation methodologies, also fail to conduct specific ex-post evaluations for resilient investments.



#### 4

The climate-smart investment planning process should be based on national strategies and/or plans that reflect the country's most pressing priorities and needs and should be founded on participatory processes to ensure legitimacy. Aligning investment portfolio planning with climate objectives is essential for fostering resilience and sustainability. In this endeavor, stakeholders' engagement plays a pivotal role. The diagnosis of SNIPs in Argentina, Colombia, and Costa Rica reveals progressive progress in integrating climate change criteria into their national and sectoral planning, with notable progress in this area. These countries have encouraged the involvement of public and private entities and other stakeholders in the elaboration of their plans. This collaborative approach has facilitated consensus-building around each country's vision for addressing climate change.



Coordination among entities plays a critical role in managing resilient investments, especially in countries with greater decentralization. In some countries the creation of high-level institutions has facilitated coordination. The public investment project cycle involves collaboration between various entities, both public and private. Therefore, incorporating climate change criteria into SNIPs requires smooth coordination among these stakeholders. The experience of evaluated countries shows that creating institutions to centralize coordination can facilitate this process. For instance, Argentina and Colombia have established the National Climate Change Cabinet and the National Climate Change System, respectively, to enhance coordination. Conversely, Costa Rica faces significant challenges due to the fragmented roles of actors within the public investment system.



Incorporating climate considerations in the appraisal stage is crucial, as it directly impacts the evaluation criteria determining project viability. The case studies reviewed reveal different levels of progress in this area. Notably, Costa Rica has enhanced its cost-benefit analysis methodology by including sustainability analysis in the appraisal process. In Colombia, the formulation of public investment projects incorporates aspects related to climate change adaptation and climate-related risks through the use and application of the Resilient Investment Toolbox. However, Argentina currently lacks standardized appraisal criteria that includes climate change components.



integrated climate change criteria into their appraisal methodologies offers valuable insights for other countries in the region. Several LAC countries are adopting tools that influence the analysis of public investment alternatives. For instance, Chile and Peru have begun to use the Social Price of Carbon (PS CO2) in project cost-benefit analysis to account for the societal cost of GHG emissions, based on their impacts on climate and health and other damages to society. Peru also has a long-term social discount rate, impacting investment decisions, not only for environmental projects but also for projects with high initial costs and long-term benefits (e.g., electric transportation initiatives, sanitary landfills, etc.). While the governments of Colombia, Chile and Costa Rica have not yet approved the rate, research studies have already made estimates for these countries.

To ensure that project appraisal and prioritization methodologies incorporate climate change criteria, it is essential that SNIPs have organized and available information. Even in countries with advanced investment systems, standardized project information is still required for an effective prioritization and appraisal process (World Bank, 2022). Standardizing the presentation in the project database implies requesting information in a consistent manner from the different sectors. In addition, countries should have reliable systems for gathering and analyzing climate data. This includes historical data and projections of climate change at the project level, as well as estimates of economic losses associated with climate events (IMF, 2022). As previously mentioned, the maturity of the SNIP and its information systems directly influence this aspect.



At the budgetary level, it is necessary to identify and designate projects that contribute to environmental objectives in order to effectively mobilize private and public resources for resilient investments. Many countries, both within and outside the LAC region, are using tools such as green taxonomies. These tools help signal the importance of climate action in national policies and redirect resources toward climate change objectives during budgeting allocation. They also facilitate the mobilization of external financing and enable monitoring of progress in financing policies aligned with climate change mitigation and adaptation. From the case study experiences reviewed, Argentina is in the process of incorporating a budget tagging related to climate change, while Colombia and Costa Rica have developed sustainable taxonomy tools to promote access to green financing mechanisms.



It is essential to assess and manage disaster risks early in the project cycle for optimizing public investment outcomes. The sooner the evaluation of risk and vulnerability to climate change in SNIP processes, the better the response of public investment. Therefore, in addition to having disaster risk management plans and policies in place, it is advisable to include disaster risk analysis in the appraisal process of investment projects. This ensures that project design considers the vulnerability of the project to climate, in terms of damage to physical assets, as well as the possibility of interruption in the availability of the service. Colombia provides an example of this practice with its guide for integrating disaster risk analysis into public investment. On the other hand, climate change can pose budget risks, due to the possible damage to public infrastructure. Therefore, fiscal risk analyses should account for these risks, and risk mitigation strategies should include climate considerations. Case study reviews show that Argentina and Costa Rica are in the process of incorporating climate change criteria into the quantification of fiscal risks, while Colombia already has financial protection strategies for disasters which include fiscal risk management.



Integrating climate change criteria into investment management may require regulatory adjustments to enforce such criteria. Incorporating sustainability elements into SNIPs will require adjustments to countries' legal and regulatory framework, as well as to their guidelines and methodologies. Therefore, a comprehensive review of the existing structure and procedures across all phases of the SNIP should be conducted to identify which aspects need to be adapted. This entails reviewing laws, regulations and methodologies related to planning, investment prioritization, public budgeting, and both ex-ante and ex-post evaluations, among other aspects.



The maturity levels of SNIPs vary among countries, as does the progress in integrating climate change criteria. Therefore, standardized diagnostics should be used to help countries prioritize their actions for mainstreaming climate change into investment management. While improvement may be needed across all stages, it is essential for countries to identify priority areas for action. This entails considering the current operational state of their SNIPs and the progress made in including climate change criteria. Standardized diagnostics offer valuable insights, since they provide information on the status of the systems, identify the reforms needed for the SNIPs, and enable comparisons between countries. For instance, in the case studies evaluated under the C-PIMA dimensions. it was observed that there is significant progress in the inclusion of resilience criteria in the planning phase, while priority actions are required in the appraisal and investment prioritization processes. These diagnoses have prompted countries to initiate processes to introduce climate action in their SNIPs. Based on this premise, the IDB is undertaking a comprehensive diagnosis on the inclusion of climate change criteria in LAC countries.



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