
MID-TERM REVIEW OF GEF/IADB/WWF PERU PROJECT

Support to the National Platform for Sustainable Cities and Climate Change in Lima

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Review report

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LIST OF ACRONYMS

LMA	Lima Metropolitan Area
AMPE	Peruvian Association of Municipalities
ANA	National Water Authority
ATU	Lima-Callao Urban Transport Authority
IADB	Inter-American Development Bank
MEC	Metropolitan Environmental Commission
NDCs	Nationally Determined Contributions
CS	Project “Support to the National Platform for Sustainable Cities and Climate Change in Lima”
TC	Technical Cooperation
CUSH	Users Commission of the Surco-Huatica Hydraulic Sub-sector
DGCCD	General Directorate of Climate Change and Desertification – MINAM
DGDB	General Directorate of Biological Diversity – MINAM
DGECIA	General Directorate of Education, Citizenship and Environmental Information – MINAM
DGOTA	General Directorate of Environmental Territorial Planning – MINAM
MTR	Mid-Term Review
GEF	Global Environmental Facility
GHGs	Greenhouse Gases
GoP	Government of Peru
GPSC	Global Platform for Sustainable Cities
IAP	Integrated Approach Pilot
ESCI	Emerging and Sustainable Cities Initiative
ICLEI	Local Governments for Sustainability
IMP	Metropolitan Planning Institute
INEI	National Institute of Statistics and Informatics
INTE	Institute for Nature, Earth and Energy
M&E	Monitoring and Evaluation
MINAM	Ministry of Environment
MINCUL	Ministry of Culture
MDSB	District Municipality of San Borja

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MML	Metropolitan Municipality of Lima
MPC	Provincial Municipality of Callao
MVCS	Ministry of Housing, Construction and Sanitation
SDGs	Sustainable Development Goals
OCAI	Office of Cooperation and International Affairs – MINAM
NGO	Non-governmental organization
UN-Habitat	United Nations Human Settlements Programme
PIF	Project Identification Form
PLCC	Local Climate Change Plans
POA	Annual Operation Plan
PPG	Project Preparation Grant
PIR	Project Implementation Report
SEDAPAL	Potable Water and Sewerage Service of Lima
SERFOR	National Forest and Wildlife Service
SERPAR	Lima Parks Service
NEIS	National Environmental Information System
ToR	Terms of Reference
VMDERN	Vice-Ministry of Strategic Development of Natural Resources – MINAM
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

Project Summary

The Project “Support to the National Platform for Sustainable Cities and Climate Change in Lima”, also known as CS in Peru, is a project funded by the Global Environmental Facility (GEF), implemented by the Inter-American Development Bank (IADB) and executed by World Wildlife Fund (WWF). This project’s objective is to “establish and implement a national platform for sustainable cities and climate change in Peru, starting with the Lima Metropolitan Area (LMA).” Component 1 focuses on urban footprint, greenhouse gases and climate risks, including the coastal area. Component 2 addresses water resources management. Component 3 comprises urban ecosystems, including irrigation channels. Component 4 includes the integrated transport system. Finally, Component 5 focuses on information dissemination, capacity building and project coordination. Although the Project is implemented in LMA, it also intends to work at national scale. It officially started in June 2018 and it is scheduled to be complete in June 2022; yet a request for an extension to June 2023 is underway.

Review Objectives and Scope

The objective is to carry out a Mid-Term Review (MTR) of the aforementioned project. The MTR analyzes the project implementation, issues or challenges and corrective actions. It reviews the program performance from its approval in June 2018 to July 31, 2021, also referring in some cases to its design. Conclusions are based on an analysis of relevant documents and interviews with key stakeholders. Based on the information collected, the reviewer has carried out a comparative analysis and has cross-checked data in order to support the selected indicators and answer the review questions.

Project Overall Rating and Key Performance Characteristics

The Project is relevant. Progress towards expected results is moderately satisfactory, with the understanding that product generation will accelerate as planned. The Project implementation and adaptive management are moderately satisfactory. The Project results sustainability is moderately likely. And overall rating is moderately satisfactory¹.

Table 1 MTR Rating and Summary Table of Achievements

Measure	MTR Rating	Achievement narrative
Project Strategy	N/A	The Project is relevant to GEF, IADB and WWF. Despite the multiple changes in local and national administrations, the Project has managed to keep its alignment with local and national priorities. Although its local contribution is limited to LMA, there is room for improvements in terms of engagement with the social, academic, private sectors and media.
Progress towards achieving results	Rating of achieving the goal	The results framework does not include objective-level indicators. Based on the performance in the 5 components, overall performance could be considered as moderately satisfactory, with the understanding that product generation will accelerate as planned.
	Rating of achieving results of Component 1:	It is expected that 3 out of the 5 goals are met during the implementation period as set out in the Project document.

¹ For a description of the rating scale see Annex 5.6.

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	Moderately satisfactory	
	Rating of achieving results of Component 2: Moderately satisfactory	It is expected that 1 out of the 2 goals are met during the implementation period as set out in the Project document.
	Rating of achieving results of Component 3: Satisfactory	It is expected that the 5 goals are met during the implementation period as set out in the Project document.
	Rating of achieving results of Component 4: Moderately unsatisfactory	It is not expected that the 2 goals are met during the implementation period as set out in the Project document.
	Rating of achieving results of Component 5: Moderately unsatisfactory	It is not expected that 3 out of the 4 goals are met during the implementation period as set out in the Project document.
Project implementation and adaptive management	Moderately satisfactory	The Project financial implementation is limited and has involved mainly operational aspects. The Project has had many setbacks, but there is a close and systematic monitoring in place for progress. The implementing agency's support is key. Identified risks are adequate, but in some cases its analysis and mitigation actions are not. Risks of environmental or social damages is limited or null. The Project monitoring tools have been timely developed, yet there is room for quality improvements. There are important areas of opportunity for communication.
Sustainability	Moderately likely	There is a favorable scenario for the results sustainability from a legal and technical point of view, as well as from a financial perspective. However, there are significant political risks at local and national scale, without a bold social participate to curb such risk.

Recommendations

Based on the discussions from the different sections, the MTR has the following recommendations:

Table 2 Summary of recommendations for each responsible party (Action Plan)

#	Recommendation	Responsible Party	Implementation period
1	To accelerate implementation by, i) promptly signing pending contracts so contracted consultants submit their deliverables; and ii) submitting a request for a 1-year extension to GEF.	Project Team (PT)	3 months
		IADB	1 month
2	To improve the Project's governance and communication by, i) by exploring the establishment of Steering Committees across components; ii) creating consultation spaces with civil society; iii) bolstering awareness and communication actions;	PT, MINAM, MVCS, IADB, WWF (i)	1 month (ii, iv, viii)
			3 months (i, iii, vii)

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	<ul style="list-style-type: none"> iv) participating in international events; v) institutionalizing a CS division in MINAM; vi) quickly contacting the resulting institutionality from the 2021-2022 electoral process; and vii) strengthening communication with members of the Advisory Committees. 	<p>PT, MINAM, IADB, WWF (ii)</p> <p>PT (iii, iv, vi, vii)</p> <p>MINAM (v)</p>	6 months (v, vi)
3	<p>To strengthen planning by,</p> <ul style="list-style-type: none"> i) elaborating a theory of change based on the one developed in this report; ii) preparing an indicator system at national scale; iii) developing a comprehensive sustainability strategy; iv) drafting a roadmap for extension at national scale; v) exploring the review of payment schedules in order to foster an integration of different products; and vi) mainstreaming the gender approach. 	<p>PT, MINAM, MVCS, IADB, WWF (i, ii, iii, iv)</p> <p>PT (v, vi)</p>	<p>2 months (v, vi)</p> <p>3 months (i, ii)</p> <p>5 months (iii, iv)</p>
4	<p>To strengthen impact at subnational scale by,</p> <ul style="list-style-type: none"> i) ensuring that profiles match the public investment framework and identifying implementers and sources of fund; ii) assessing the relevance of promoting municipal finances and the ways to carry this out at subnational scale; iii) building direct relationships with development actors working in the agenda of sustainable cities and climate change; iv) consulting with funds or certified implementing agencies their interest in grouping several profiles in one project; v) avoiding duplication of initiatives funded by international partners; and vi) exploring the implementation of a demonstrative physical intervention along with partners. 	<p>PT, MINAM, IADB (i)</p> <p>PT, MINAM, IADB, WWF (ii)</p> <p>PT, MINAM (iii, iv)</p> <p>PT (v, vi)</p>	<p>2 months (ii, v, vi)</p> <p>3 months (iii, iv)</p> <p>6 months (i)</p>
5	<p>Strengthen administrative and technical management by,</p> <ul style="list-style-type: none"> i) hiring more full-time administrative staff and exploring the possibility of increasing the technical staff engagement. 	WWF (i)	1 month (i)

1. INTRODUCTION

1.1 Review purpose

As stated in the Terms of Reference (ToR), the **objectives** of this final review are as follows:

- To review the fulfillment of obligations set out in the Technical Cooperation (TC) agreement and performance indicators;

To make recommendations and identify lessons learned, in order to improve the achievement of goals and results.

More specifically, in line with ToR, this consultancy responds to the following **specific objectives**:

- Preparation of a mid-term analysis for qualitative-quantitative compliance of outputs (physical and financial) and results previously defined in the project design, following its results framework, in order to conclude to which extent defined objectives were met and also assess the possibility of achieve them once the project is complete;
- Identification of institutional strengths and weaknesses of the Project's strategic partners (Implementing Agency, Executing Agency, Beneficiary), as well as assessing the role and performance of the different entities engaged in the project and whether or not synergies/cooperation efforts have taken place with other similar GEF projects in Peru;
- Identification of lessons learned and specific mid-term recommendations to improve the Project implementation in the remaining time. These can include modification of activities, roles, responsibilities, activity schedule, management arrangements and budget allocation, etc.

1.2 Review scope and methodology

1.2.1 Scope

This review analyzes the different phases and aspects of the project:

- **Formulation** phase: Project relevance to GEF, IADB, WWF, Peru and the intervention area; robustness of the project vertical logic and its results framework; use of lessons learned; and complementarity with other projects and initiatives in the same sectoral and geography scope.
- **Implementation** phase: Financing and co-financing, institutional arrangements and participation of key stakeholders, planning, risks management, adaptive management, monitoring and evaluation system (M&E) at project level, communication and knowledge management.
- **Results** phase: Objectives, results, outputs, integration of cross-cutting aspects, factors that help or hinder the achievement of expected benefits and sustainability (financial, social, political, institutional and environmental) of the project's benefits.

1.2.2 Methodology

This review followed a structured process involving **data collection and analysis**, in order to assess **relevance, effectiveness, impact, efficiency and sustainability** of the project results. Furthermore, it followed the Code of Conduct for Consultants under evaluation set out by the United Nations Evaluation Group (UNEG). In this regard, the review adopted a consultative approach, seeking a close collaboration with the main stakeholders in order to provide useful, credible and reliable evidence. The review secured gender equity and women's empowerment, as well as other cross-cutting aspects.

Data collection

It followed two main methods described below.

Documents review: During the preparation and implementation phases of this review, we carried out a detailed examination of relevant documents provided by the Project's management staff, as well as significant national and regional strategies, legal papers and plans, other projects' documentation and similar interventions in Peru. The revised documentation is listed in Annex 5.2.

Interviews: A total of 21 people and 13 institutions (Annex 5.3) were interviewed following a list of questions, with the chance of formulating additional questions in order to deepen into emerging issues. Interviewees were selected based on their relevance, in order to collect information from stakeholders who have interacted with the project. Due to the COVID-19 pandemic, all interviews were online.

Data analysis

The reviewer compiled data obtained from the project results and analyze them considering the project objectives and the expectations set out in the project's logical framework, which provides impact and performance indicators along with its corresponding means of verification. In order to ensure the findings validity and accuracy, we triangulated quantitative and qualitative information from different sources. Conclusions were drawn from relevant information based on an interpretive analysis, where deductive and inductive logics were applied. This systematic approach ensures that all findings, conclusions and recommendations are supported by evidence.

The analytical framework for this review included the following elements:

Review matrix: Based on an initial examination of the Project's available documentation and following the ToR guidelines, a review matrix was prepared (Annex 5.1). This matrix, which guided the data collection and analysis, includes a list of questions for each criterion, as well as quantitative-qualitative indicators to operationalize such questions, information sources and data collection methods. Gender equity aspects were considered across the matrix.

Rating table: This framework was used to specifically rate performance criteria, including M&E quality, implementation quality by implementing and executing agencies, results review and sustainability².

Limitations

As noted, this MTR has been online. Due to COVID-19 restrictions, the reviewer has not traveled to Lima. This is the only limitation of the MTR methods. However, since the project does not imply physical interventions on the ground, it is considered a minor deficiency. As mentioned before, the reviewer has assessed a wide range of relevant documents and interviewed several stakeholders, including

² For a description of the rating scale see Annex 5.6.

beneficiaries of the Project's activities. Enough relevant information was collected. In this regard, findings are supported by evidence from document review and interviews.

1.3 Structure of the Review Report

The following section briefly describes the review context and the project. Section 3 showcases the findings related to relevance, design, effectiveness, impact, efficiency and sustainability of the project. Section 4 outlines conclusions, lessons learned and recommendations. Finally, annexes include the review matrix and the list of documents and people consulted.

2 PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

2.1 Review context

The Lima Metropolitan Area (LMA), which includes the city of Lima, Peru's capital, and the Constitutional Province of Callao, which is also part of it³, gathers circa 30% of Peru's population and a significant percentage of the physical assets and cultural heritage of the country.

Despite some progress, territorial planning and urban management have been historically weak in LMA. Moreover, metropolitan legislators or decision-makers have had limited technical capacity and poor access to studies and appropriate information management tools to design policies that foster urban growth in a sustainable and climate-friendly manner.

This has resulted in the inappropriate use of the territory. LMA has had a disproportionate and disorganized growth, which not addresses the main ecological structure or biophysical matrix (geomorphology or hydrology): a remarkable extension of land has been occupied with medium or low densities in many areas, services and infrastructures have not been distributed in a rational or equitable way (following a center-periphery pattern), and ecosystems have been degraded as well as its capacity to provide regulation, provision and support, and cultural services. Furthermore, this has resulted in a high consumption of goods, resources and services.

The urban growth model has also exacerbated the climate change risks. Climate threats for LMA are significant, including an increase in temperature, decreased rainfall and varying rainfall patterns, rising sea levels, melting glaciers and increasing extreme climate events, such as heat and cold waves, heavy rains and droughts. LMA is strongly exposed to these threats, since a large extent of its territory falls into a coastal area category, and the whole territory as well as its surrounding areas are desert⁴. The rampant disproportionate growth has aggravated this exposure twofold, by occupying key areas for the water resources, such as arid pampas and gullies, intensifying water stress and locating households and infrastructure in flood zones. This disorganized urban expansion has also taken hillsides exposed to landslides. All of this, coupled with a high sensitivity and limited adaptive capacity, for example, in terms of land use planning and the dissemination of climate information, has generated substantial climate change risks.

³ LMA has 43 districts; the Constitutional Province of Callao has 7.

⁴ Lima is the second largest city in the world located in a desert area, after Cairo.

2.2 Brief Project description

In this context, GEF responded the request of the Government of Peru (GoP), through the Ministry of Environment (MINAM), to support LMA in terms of addressing this issue through the project “**Support to the National Platform for Sustainable Cities and Climate Change in Lima**”, also known as CS in Peru. The Project’s **objective** is to “establish and implement a national platform for sustainable cities and climate change in Peru, starting with LMA.” This project is part of the Global Platform for Sustainable Cities (GPSC).

More specifically, the Project aims to foster a climate-friendly sustainable development in LMA that reduces GHG emissions and increases climate change resilience. In this regard, the Project bolsters a comprehensive planning based on: (i) territorial planning; (ii) ecosystems conservation; (iii) climate change adaptation, including water availability; and (iv) transport-oriented development. Therefore, the Project generates information and knowledge tools. Particularly, methodological guidelines, studies, strategies and plans, management tools and platforms, and investment profiles, whilst strengthens capacities through training workshops and knowledge dissemination. The Project is structured based on 5 components, with the following results and outputs:

- **Component 1 – Climate risks analysis and urban development.** It fosters an integrated urban management and planning, where policy making and urban projects consider the urban footprint for LMA, management and investment areas are identified in order to increase climate change resilience in coastal areas, and urban interventions are duly defined to plan urban growth. To achieve the expected results, studies are carried out to support the identification of priority interventions. More specifically, this component considers the elaboration of methodological guidelines to formulate and update Local Climate Change Plans (PLCC), an urban growth study for LMA, a GHG inventory and projections by 2030 and 2050 for LMA, a climate change and disaster risk study for LMA, a climate change adaptation plan for coastal areas, four urban intervention profiles and one coastal adaptation investment profile. All the aforementioned is supported by a satellite imagery.
- **Component 2 – Studies of water resources availability in LMA.** It aims that LMA has the power to increase its water supply capacity based on its water resources, as well as a wider capacity to manage and model its water supply. To achieve the expected results, the component generates knowledge about the status of water ecosystems, city pressures upon them and water availability challenges in LMA, considering scenarios of urban sprawl and climate change identified in Component 1. Particularly, this component includes the elaboration of a comprehensive study of watersheds that supply LMA and its coastal aquifer, as well as a support system or tool for decision-making related to the LMA water system.
- **Component 3 – Ecosystem services and urban biodiversity.** It seeks that LMA includes biodiversity considerations into its metropolitan urban and urban planning policies, as well as to have the much-needed capacity to develop ecosystem-based projects, implement measures to preserve its water channels and execute a demonstrative pilot project in one of them. To achieve the expected results, this component generates knowledge about urban ecosystems and environmental services. Particularly, it comprises the elaboration of an urban biodiversity and ecosystem services strategy, four district plans for biodiversity action, a master plan for water channels and an action plan to recover and revalue the Surco-Huatica irrigation channels.

Component 4 – Mobilization of strategic and eco-efficient investments in LMA for urban accessibility in Lima. It aims that Lima metro has a multimodal accessibility model and transport-

oriented development policies. It also seeks that its stations are built based on feasibility studies with designs that incorporate previous elements. To achieve the expected results, the component funds urban analysis studies, pre-feasibility studies and constructive designs for strategic actions of multimodal accessibility and transport-oriented development in three metro stations of the Integrated Transport System⁵.

- **Component 5 – Strengthening of the Sustainable Cities Partnership at local, national and global scales, and institutional strengthening and coordination.** It aims that urban and environmental information of LMA becomes publicly available, that local authorities and technical experts use this information in urban planning and management processes, and that LMA citizens have a wider knowledge of analysis and studies. To achieve the expected results, this component funds local capacity building activities and interinstitutional coordination through: (i) training workshops aimed to national and district authorities; (ii) implementation of a communications strategy for mass media; and (iii) creation of an information platform to store geospatial data, indicators and modeling developed in the first three components. Furthermore, this component includes the own project management in terms of technical assistance and support for the implementation of its components; M&E activities; and financial audits.

In order to implement this Project, GEF contributes with US\$ **6.422.019** (non-refundable). According to the Project's document, the Government of Peru contributes with a national counterpart of US\$ 979.496. This Project officially started on **June 2018**. Since it is a 48-months project, its closure date is **June 2022**. During the elaboration of this report, a request for a one-year extension is underway (until June 2023).

The Project is implemented by **IADB**, framed in the TC agreement between MINAM and IABD⁶, and executed by **WWF**. The main national counterpart and Project's beneficiary is **MINAM**. Moreover, the Project has 5 advisory committees. In order to streamline technical support, some committees include technical roundtables. For daily management activities, the Project has a specific team (Project's Team). Finally, the Project rely on people who provides technical support to each product – some external consultants and officials.

3. FINDINGS

3.1 Relevance

3.1.1 Is the Project consistent with GEF strategic priorities?

The Project contributes to GEF in terms of sustainable cities. The "CS", which was submitted in December 2016, is framed in the Integrated Approach Pilot (IAP), launched in GEF-6 (2014-2018), with the final aim to support initiatives that contribute in a cross-cutting manner to more than one convention or focal area of GEF. Sustainable cities were one of the three priority subjects chosen for this pilot, since

⁵ See section 3.1.4.

⁶ Namely, the Non-refundable Technical Cooperation Agreement # ATN/FM-16452-PE, signed between MINAM and IADB on June 22, 2018.

they are an important area to address interconnected environmental problems; plus, urban process is intense and accelerated⁷.

The Sustainable Cities IAP fosters integrated models of design, planning and sustainable urban management through projects in 28 cities from 11 countries, including LMA.⁸ Cities participating in the IAP are part of the Global Platform for Sustainable Cities (GPSC), which is administrated by the World Bank and provides support services in terms of planning and integrated urban management, municipal finance and use of sustainability tools and indicators. It also carries out activities for knowledge creation, capacity building and link between cities. In the ongoing financial cycle (GEF-7, 2018-2022), GEF has continued with this pilot through the Sustainable Cities Impact Program.

The Project is also aligned with the GEF-6 focal areas of climate change mitigation and biodiversity. In terms of climate change mitigation, the “CS” considers the update of GHG inventory for LMA, GHG projections by 2030 and 2050 (Component 1), as well as support studies for strategic actions of multimodal accessibility and transport-oriented development in three metro stations of the Integrated Transport System (Component 4). These activities are aligned with Program 3 “Foster low-emission integrated urban systems” of GEF-6 focal area of climate change mitigation. Despite this program is no longer included in the GEF-7 program guidelines, Objective 2 of the climate change focal area “Demonstrate mitigation options with systemic impacts” is specifically linked to the Sustainable Cities Impact Program, including urban transport planning as a key aspect.

By envisioning the preparation of a strategy and plans in terms of urban biodiversity and ecosystem services (Component 3), the “CS” also contributes to the GEF biodiversity focal area. Although programs in GEF-6 focal area did not refer to urban biodiversity, in GEF-7 this aspect is included in Objective 1 “Mainstreaming biodiversity in terrestrial and marine landscapes and sectors”, which is articulated with the Sustainable Cities Impact Program.

3.1.2 Is the Project consistent with IADB strategic priorities?

The Project is part of the IADB Housing and Urban Development portfolio in Peru, which comprises 5 projects under implementation, representing 11% of the financing of this portfolio which sums US\$ 56.7 million. It is aligned with the *AIDB Group Strategy with Peru 2012-2016*, which objective was to contribute towards closing the economic and social gaps between urban and rural areas, by prioritizing areas of housing and urban development, climate change and natural disaster risks management, water resources and transport, among others. Although urban sustainability is not a priority for the *AIDB Group Strategy with Peru 2012-2016*, the “CS” contributes to the productivity priority areas, which includes the development of urban transport infrastructure, and environmental and climate change sustainability.

The Project is aligned with the IADB institutional strategy, since it contributes to the strategic Objective “Provide inclusive infrastructure and infrastructure services” of the *First update of the Institutional Strategy 2016-2019 (2015)*, for which it was considered to address factors such as transport, water, climate change adaptation, among others, in order to make urban areas more inclusive for the poor and vulnerable population. Furthermore, it contributes to the cross-cutting priority area “Climate change and environmental sustainability” of the *Second update of the Institutional Strategy 2020-2023*

⁷ Globally, 55% of the world’s population lived in urban areas in 2018. In 1950, 30% of the world’s population was urban, and by 2050, 68% of the world’s population is expected to be urban. United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Urbanization Projections 2018: Highlights*, P. 1

⁸ In Latin America and the Caribbean, besides LMA, the Sustainable Cities IAP provides support to Asunción (Paraguay), Brasilia and Recife (Brazil), as well as Campeche, La Paz and Xalapa (Mexico). Additionally, it covers cities in China, Ivory Coast, India, Malaysia, Senegal, South Africa and Vietnam.

(2019), through which the IADB plans to provide ongoing support to the development of sustainable cities regionwide. Also, the Project is consistent with the IADB (2021) *Vision 2025*, which prioritizes, among other things, to close infrastructure gaps to provide access to affordable water and public transportation services, expand access to information and increase climate change adaptation, mitigation and resilience.

The Project is also aligned with the IADB Integrated Strategy of Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (2011), which includes integrated urban development and climate-resilient cities among the support priorities.

The Project is consistent with the IADB Sectoral Framework of Housing and Urban Development and follow through the Emerging and Sustainable Cities Initiative (ESCI). According to the current *Sectoral Framework of Housing and Urban Development* (2020), the “CS” supports the climate change mitigation and resilience (Line of Action 2) and picks up the ESCI experience, which between 2021 and 2016 helped 71 cities in 26 Latin American and Caribbean countries in terms of development and implementation of urban sustainability plans, including Trujillo, Cusco and Huancayo in Peru. Therefore, ESCI developed a methodology to identify, organize and prioritize, in a holistic manner, urban interventions when it comes to environmental sustainability and climate change, urban sustainability, fiscal sustainability and governance.⁹

This previous experience laid the foundations for the collaboration between IADB and MINAM for the “CS”, which in turn allowed the adaptation of the ESCI methodology focused on medium-sized cities for its use in a metropolitan area such as Lima-Callao, which can also be useful for other megacities regionwide. Particularly, the Project has used the ESCI methodology as a reference to prepare the guidelines required for local climate change plans, as well as to elaborate ToR for the implementation of its different components.

3.1.3 Is the Project consistent with WWF strategic priorities?

The Project is framed in WWF’s work on cities. The “CS” contributes to the “Climate and Energy Program” of *2018-2021 WWF Peru’s Strategic Plan*, which outlines an intervention strategy in different cities with the final aim to incorporate methodological tools and verification indicators of efficiency and sustainability into its planning and management processes. In this regard, WWF Peru seeks to support the achievement of the country’s NDCs by complementing the ongoing efforts related to land use change in the Amazon with the work in urban areas. The aforementioned is aligned with the “Climate and Energy Practice”, which is one of the pillars of WWF’s work at global scale and that also comprises a line of action related to cities.¹⁰ Indirectly, the “CS” also contributes to other areas of WWF’s work, such as forests, water and biodiversity.

The Project consolidates WWF Peru’s role as a key actor in terms of sustainable cities. Component 5 of the “CS”, which harbors the Development of an information platform to store geospatial data, indicators and modeling, is aligned with the Sustainable and Resilient Cities Platform – also known as “My City”. WWF is building this platform since 2018 along with the Peruvian Association of Municipalities

⁹ See: <https://publications.iadb.org/es/guia-metodologica-programa-de-ciudades-emergentes-y-sostenibles-tercera-edicion> and <https://publications.iadb.org/es/guia-metodologica-programa-de-ciudades-emergentes-y-sostenibles-tercera-edicion-anexo-de>

¹⁰ WWF’s line of action on cities is organized in five work areas: One Planet City Challenge (which is the flagship program in this area), Urban Solutions, We Love Cities, Healthy Cities and Financing Sustainable Cities. See: https://www.panda.org/discover/our_focus/climate_and_energy_practice/ and https://www.panda.org/projects/one_planet_cities/

(AMPE) and Periferia Organization.¹¹ This platform, which has 10 partner municipalities by 2021, including the Provincial Municipality of Lima, aims to be a space for research, systematization and information dissemination about Peruvian cities and good practices of sustainable urban development. So far, the platform has carried out the following activities:

- Elaboration of reports and guidelines about urban sustainability, urban growth dynamics, participation in the urban environmental management, green infrastructure and nature-based solutions for climate change adaptation.
- The “Green Cities” initiative, which in partnership with the National Service on Forest and Wildlife (SERFOR), foster urban arboriculture at national scale.
- Preparation of a Sustainable and Resilient Cities Agenda and exchange of good practices with international city networks and mayors regionwide.

The work carried out within the framework of this platform, which joins other previous initiatives in terms of renewables and energy savings, strengthened WWF Peru’s relationships with mayors and build strong leadership on climate management in local governments. Besides being accredited as GEF implementing agency, all the aforementioned helped WWF to be selected as executing agency of the “CS” in replacement of the *Fondo de las Américas* (FONDAM).

3.1.4 To what extent is the Project consistent with the national strategies and needs in terms of sustainable urban development and climate-friendly development?

The Project’s contribution to respond national needs is not substantial, despite the fact that this is an urgent topic due to the high level of urbanization in the country (78% of its population was urban in 2018 and it is expected that 86% to be urban in 2050)¹². As reviewed in Section 3.2.1 of the Theory of Change, although the “CS” includes the development of a National Platform for Sustainable Cities and Climate Change, it is not clear how the Project addresses the national needs, since most of its activities are focused on LMA.

The Project has faced the challenge to respond to changing governmental priorities. The idea of “CS” was born withing the framework of the National Agenda for Sustainable Cities and Climate Change, developed by MINAM since 2014 in order to provide a cross-cutting vision that would articulate actions from different sectors and government levels with jurisdiction in this matter. This Agenda, fostered during COP20 in Lima, considered the development of a National Platform for Sustainable Cities and Climate Change, starting with LMA as a pilot in the GEF-IAP; this would be complemented with the efforts undertaken in a medium-sized city (Piura) and a small city (Caballococha). Also, this platform was considered to be in charge of a general division on sustainable cities that was planned to be created within MINAM. However, as shown in Figure 1, the preparation process and project approval bumped into the national administration change in July 2016 and the corresponding update of the national planning. In this context, the agenda was not continued, nor the sustainable cities issue was institutionalized within MINAM. More recently, the Special Project “Antonio Raimondi National Ecological Park” (PEPENAR) has worked in the development of a 10-year urban environmental sustainability

¹¹ See: <https://www.miciudad.pe/>

¹² United Nations, Department of Economic and Social Affairs, Population Division (2019). World urbanization projections 2018: Highlights, P. 26.

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program that would comprise many projects, including PEPENAR and “CS”. Nevertheless, it is yet unclear if this initiative will succeed due to the national administration change in August 2021.

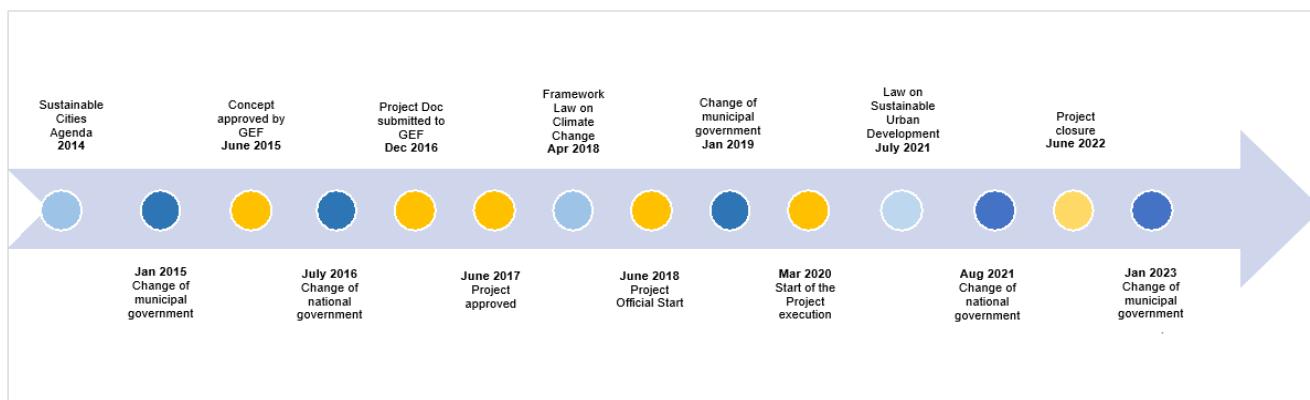


Figure 1 Project timeline

Source: Produced in-house.

The Project is aligned directly or indirectly with the main national planning tools in environmental and urban matters. We revised 13 current national and regulatory planning tools during the preparation and implementation phases of the “CS”, finding out that this has a direct alignment with 8 tools and an indirect alignment with 4 tools. Furthermore, we cannot identify an alignment with the actions included in the Action Plan on Climate Change Adaptation and Mitigation, perhaps because it was prior to the start of project preparation (Table 3).

Table 3 Project alignment with the main national planning tools in environmental and urban matters¹³

Year	Tool	Directly aligned	Indirectly aligned	Not aligned
2010	Action Plan on Climate Change Adaptation and Mitigation			
2011	Bicentenary Plan: Peru towards 2021			
2011	National Environmental Action Plan 2011-2021	Components 2, 3 and 5		
2015	National Climate Change Strategy (under update process)	Components 1 and 4		
2016	Multiannual Sector Strategic Plan for the Housing, Construction and Sanitation Sector 2016-2021	Components 1, 3 and 4		
2017	Multiannual Sector Strategic Plan for the Environmental Sector 2017-2021			
2018	Framework Law on Climate Change	Component 1		
2018	Law on Digital Government ¹⁴			
2020	NDC (under update process)			
2021	Peru’s National Adaptation Plan	Components 1 and 2		

¹³ The Project is considered directly aligned if its objective and/ or components are linked to any of the strategies outlined in the regulatory or planning tool, and indirectly if it contributes to high-level objectives of these tools, such as climate change adaptation and mitigation, land use planning or access to environmental information.

¹⁴ Although this law does not refer specifically to the urban environmental area, during the interviews the Project’s contribution to its fulfillment was pointed out.

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Year	Tool	Directly aligned	Indirectly aligned	Not aligned
2021	National Policy for Disaster Risk Management by 2050	Component 1		
2021	Law on Sustainable Urban Development	Components 1 to 5		
2021	National Housing and Urban Policy	Component 1		

Source: Produced in-house.

The Project is directly aligned with the following tools:

- *National Environmental Action Plan 2011-2021* contemplates the consolidation of the National Environmental Information System (SINIA), with the final aim that by 2021 all regional governments and provincial capitals have and/or implement environmental information systems in its corresponding areas with the integration of the main thematic information systems. It is expected that the “CS”, through its Component 5, allows the addition of relevant urban indicators into the SINIA, which is key to guide decision-making processes at urban level. There is also an alignment with Components 2 and 3, such as the *Strategic Action: Expansion of the green areas coverage in urban environments*.
- *National Climate Change Strategy (2015)*, which includes among its products the promotion of low-carbon and climate-resilient cities, considering climate-resilient and adaptation approaches and models for the elaboration of territorial planning policies and plans at rural and urban levels, as well as climate change vulnerability studies (in watersheds, ecosystems, communities, cities and sectors) in order to propose relevant actions for prevention or reduction of impacts (Component 1). The Project is also consistent with 2 expected products in terms of climate change mitigation: design and implementation of a National GHG Inventory System (Component 1),¹⁵ and the development of programs, projects and activities at national and subnational scale that foster emissions reduction, carbon sequestration and increased carbon sinks, prioritizing the sustainable transport system, among others (Component 4).
- *Multiannual Sector Strategic Plan for the Housing, Construction and Sanitation Sector 2016-2021*, particularly strategic actions 1.1 Elaboration, and dissemination of policies, regulations, plans, programs and other tools for urban development and disaster risk management, and 6.2 Expansion and modernization of water infrastructure and sanitation in the urban sphere (Component 1 and 3, respectively). The Project is also aligned with Component 4 in terms of territorial planning.
- *Framework Law on Climate Change (2018)*, which includes the development of sustainable cities among the purposes of climate change adaptation measures (Art. 15) and gives responsibility to local governments to design and implement PLCC (Art. 8 and XIII Final Complementary Provision). In view of these provisions and given MINAM’s limited experience on climate change at local level, it was included the preparation of guidelines to formulate and update these plans in the Project’s Component 1 and its pilot with LIMA-PLCC, which was not originally planned in the Project’s document. In this regard, the “CS” supports the compliance of this law, by providing tools and capacity building across the different government levels.
- *Peru’s National Adaptation Plan – NAP (2021)*, which includes among its measures the conservation and recovery of natural infrastructure for the provision of the water ecosystem services in climate-vulnerable watersheds (Component 2). The Coastal Adaptation Plan, which will be developed as part of “CS” Component 1, is also aligned to Peru’s NAP.

¹⁵ Although there is already a 2017 GHG inventory for Lima, prepared with the C40 support for PLCC, the “CS” will update the inventory by 2019 and expand its geographic scope by covering the entire metropolitan area, including Callao.

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- *National Policy for Disaster Risk Management by 2050 (2021)*, particularly with its Priority Objective 1 “Improve understanding of disaster risks for decision-making at population and State entities level” (Component 1).
- *Law on Sustainable Urban Development (2021)*, which mainstreams the sustainable cities approach, including climate change adaptation and mitigation based on urban and territorial planning among its guiding principles (Art. 4) and foreseeing the development of a National Urban Observatory (Art. 13), among other important Project’s aspects.
- *National Housing and Urban Policy (2021)*, with its Priority Objective 1 “Ensure the sustainable growth and development of cities and populated areas nationwide through urban and territorial planning” (Component 1).

On the other hand, the Project is indirectly aligned with the following tools:

- *Bicentenary Plan: Peru towards 2021 (2011-2021)*, which includes among its guidelines: to foster integrated natural resources management, integrated water resources management and territorial planning; to foster the adoption climate change adaptation and mitigation strategies in the three government levels, based on scientific studies and research with a preventive approach; and to strengthen the National Environmental Management System by articulating and integrating cross-sectoral environmental actions into the national, regional and local government levels.
Multiannual Sector Strategic Plan for the Environmental Sector 2017-2021, particularly strategic actions 3.2 Foster the incorporation of the climate change adaptation approach and risk management in the planning, implementation and monitoring of plans, programs and public, public-private and private projects, and 4.1 Implement actions for GHG reduction nationwide through NDCs.
Law on Digital Government (2018), which purpose is to improve the provision and access to digital services that facilitate transparency for citizens, as well as to foster collaboration between Public Administration entities, citizen participation and other stakeholders for the development of a Digital Government and a Knowledge Society (Art. 4). When generating and making available to the public environmental and urban data on LMA, the “CS” will contribute to the National Data Infrastructure (Art. 24).
Peru’s NDC (update 2020), which include water, forests and transport among adaptation priorities, as well as disaster risk management and public resilient-infrastructure as cross-cutting areas. However, the emission reduction goal is not separated by sector, nor mitigation priorities are specified in order to meet this. Although the “CS” contribution to the goals established in the NDC is not clear, the Project creates enabling conditions so they are met.

The Project contributes to positioning urban sustainability in the public agenda. Currently, the sustainable cities topic is not consistently mainstreamed into national planning. In this context, the “CS” contributes to integrating this perspective into MINAM’s work and supports ongoing efforts to land the climate change agenda at local level, particularly through guidelines development for both elaboration and update of PLCC and a pilot in LMA, seizing the Lima PLCC and the experiences of Trujillo, Cusco and Huancayo. Moreover, the Project is aligned with the National Housing and Urban Policy for the next 10 years and the Law on Sustainable Urban Development, both approved in July 2021. These plan the creation of a National Housing and Urban Planning Observatory to systematize information and monitor compliance with this policy. It is expected that the “CS” contributes through the creation of the National Platform for Sustainable Cities.

The Project has launched a multisectoral and multilevel governance system that supports the participation of relevant government entities; however, as of July 2021, involvement of the social,

academic, private and media sectors is limited.¹⁶ In the light of a fragmented institutional framework, where urban sustainability competences are distributed among different sectors and government levels with different priorities, the “CS” has successfully established five advisory committees, one for each Project component, as well as thematic roundtables, where agencies from different sectors and government levels have had the opportunity to get closely involved in the design of expected outputs. This has allowed the Project activities to adapt to the emerging needs of its users. In addition to the guidelines for the aforementioned PLCC, the first output on water resources has also included watersheds that were not originally considered. Also, metro stations where the project will focus are currently being reviewed based on an ATU proposal to reinforce its relevance. Although this has promoted the appropriation of the Project by its direct users, there is an improvable connection with some institutional actors, including some MINAM directorates (Biological Diversity, Territorial Planning and Adaptation) and the National Center for Estimation, Prevention and Reduction of Disaster Risk, among others. As of July 2021, a poor engagement of stakeholders from the private, academic and social sectors has been identified, including local government associations (e.g.: AMPE); unions, such as the College of Architects of Peru, the Peruvian Society of Urban Planners or the Peruvian Association of Environmentalists and Ecologists; and the media. Despite not being part of these committees, they are relevant stakeholders for the effectiveness and sustainability of the Project’s results in the medium and long term. The Project expects their involvement in more advanced stages.

3.1.5 Is the Project consistent with LMA strategies and needs?

The Project responds to LMA environmental needs. As outlined in the Project document, the “CS” components address urgent environmental problems in LMA – main urban area countrywide: its high vulnerability to climate change impacts, which will particularly affect water resources availability; degradation of the Lima’s water channel network, which provides ecosystem services and water resources for irrigation of green areas; pressure on ecosystems caused by low-density urban sprawl, which affects local biodiversity; and a fragmented and privatized transport system, which needs to amplify the impact of the metro system under construction. Thus, the Project aims to strengthen urban management, by developing multi-stakeholder governance mechanisms, environmental information for decision-making, integrated planning tools with a sustainability perspective, and investment profiles to facilitate specific projects financing.

The Project is consistent with local planning priorities. The “CS” is taken into account in the Metropolitan Environmental Agenda 2015-2017, which considered collecting and organizing environmental indicators through the creation of the information platform funded by the Project. Moreover, the “CS” is aligned with three of the five components in this agenda: environmental governance and citizenship; natural resources and climate change; green areas and water. On the other hand, the “CS” contributes to Objective 8 “Improve regional environmental quality and disaster risk management” of the Updated Concerted Regional Development Plan 2016-2021 of the Regional Government of Lima, which includes: strengthen management and efficient and sustainable use of water resources for the population and producers in the region, including the rehabilitation of irrigation channels; capacity building for conservation and sustainable use of regional biodiversity; and strengthen institutional capacities to manage climate change and disaster risk. This plan also includes the Regional Environmental Information System in its action line of investment projects.¹⁷

¹⁶ Stakeholder involvement during the design phase is unclear. The Project document reports that over 25 meetings were held to define the Project activities, but it does not specify who the participating organizations were.

¹⁷ It is worth mentioning that the “CS” considers, from the Project document, the GHG inventories and vulnerability studies already carried out in LMA in order to complement them.

During the implementation phase, the “CS” has been included as an enabling condition to comply with Specific Objective 1.1 of the Lima-PLCC 2021-2030 (approved in June 2021), which proposes to include climate governance into city management and integrate the climate change approach into city policies, tools, plans, programs and projects. In particular, the “CS” is expected to provide climate information (updated GHG inventory and climate risk analysis). At district level, the Project is consistent with environmental and climate change initiatives of some LMA districts, such as San Borja and San Isidro.

Furthermore, the implementation of the “CS” is linked to the elaboration of the Metropolitan Development Plans of Lima and Callao 2021-2040. These will translate into urban development plans (5 in Lima and 2 in Callao), which will last for 10 years. The “CS” is considering these plans guidelines to develop studies and public investment profiles. Thus, it has the opportunity to help integrating the environmental and climate change perspective into the implementation of Metropolitan Development Plans.

The Project is helping to catalyze metropolitan governance, but further involvement of non-governmental actors is needed. As mentioned above, the “CS” has enabled a space to improve coordination between authorities from different sectors and to integrate the environmental dimension into urban planning. Through its committee governance system, local authorities have had the opportunity to intervene in the products design to ensure its relevance to changing conditions and its complementarity with other planning and information generation processes. Among other aspects, the “CS” managed to adjust to the PLCC development, which was not mapped in the Project document, adapting its products as needed according to the beneficiaries’ vision.

Although the “CS” is engaging all key government actors at subnational scale, it is not doing the same with non-governmental actors, including those identified in the Project document. For example, it specifically mentions the Institute for Nature, Earth and Energy (INTE) of the Pontifical Catholic University of Peru (PUCP), which has not been included during the implementation because it has lost relevance over time. Although it is not set out in the Project document, the implementation has not involved key actors, such as the Metropolitan Environmental Commission (CAMET), which comprises 24 members of civil society, public and private sector, and the academia and it is in charge of coordinating and arranging the application of environmental policy in Lima, through dialogue and agreements between the different sectors. Generally speaking, as of July 2021, the involvement of academia, NGOs, the private sector and public at large has been weak at the metropolitan and district scales. It is expected to involve them more in later phases of the Project.

3.2 Project design

3.2.1 Analysis of the Project vertical logic/Theory of Change

How clear and well-integrated were the Project objectives, results, outputs and activities? Were they robust considering intermediate states and anticipated long-term environmental impacts, causal pathways for long-term impacts, and implicit and explicit assumptions?

The Project document does not include a Theory of Change that clearly identifies the expected objective, barriers to address in order to achieve this objective and how the Project contributes to reduce or overcome such barriers, through the expected results of planned activities and products, which is showcased in a graphic or figure. In fact, the Project document does not include a graphic illustration of

the problems and solutions, or their interrelation; nor does it identify assumptions. Actually, neither the program nor the other child projects have a Theory of Change¹⁸.

In this regard, it is important to point out that the Project plans to work on two scales: national and subnational, including the metropolitan and very local scales (at intervention level).

At national level, the objective is to develop and implement a Platform for Sustainable Cities and Climate Change in Peru. However, in the Project document it is not clear whether this is limited to the development of a technological platform that stores information or it also includes the creation of a city network that exchange info, and/or the implementation of sustainability measures and climate-friendly development in other cities countrywide, which represent three very different levels of impact. The Project document suggests that the final objective is the latter, with the network being an intermediate result of the former, and the technological platform an intermediate result of the network. Moreover, the Project document does not analyze in detail the problems or barriers to achieving this final objective (sections A1.1 on environmental or adaptation problems, A1.2 on primary problems and A1.3 on barriers to be addressed that exclusively focus on LMA). The Project document neither describes how the objective will be met. It is assumed that the development of good practices in a city with high visibility like Lima, the creation of a platform to store information, the organization of events and the capacity building of national stakeholders will result in the replication of these good practices in other cities countrywide, the creation of an exchange network and the inclusion of these cities' information into the technological platform. This assumption seems unrealistic. For example, while Lima is able to receive technical and financial support from C40 and the Global Covenant of Mayors for Climate & Energy, other cities do not meet the requirements needed. As argued before and after in the document, the chain of impacts implicitly depends on the institutionalization of the sustainable cities agenda in MINAM, which did not seem entirely possible and has not ended up being done.

Instead, the Project document includes a detailed analysis of the issues (A1.2) and barriers that need to be addressed (A1.3) in order to foster sustainable and climate-friendly development in LMA; although these two sections do not dialogue with each other and section A1.3 is not entirely robust. Specifically, the Project document identifies the following barriers: i) lack of organized, official, public and updated information that allows appropriate knowledge of different aspects¹⁹; ii) fragmentation and lack of institutional coordination; iii) lack of integrated planning; and iv) insufficient technical and financial resources. The Project addresses all these barriers, even though the document does not explain them explicitly. In section A1.5 on the proposed alternative scenario, it is highlighted the information generation, institutional coordination, development of integrated plans and strengthening of technical capacities. However, the mobilization of financial resources is not explicitly mentioned, although the development of public investment profiles can help to do so, nor are components with barriers linked in a clear and aggregate manner. No graphic illustration is included.

Generally speaking, **the Project outputs significantly contribute to achieving the results and the part of the Project's objective linked to LMA, yet they modestly contribute to achieving the part of the objective linked to the national scale**, in the sense that it is unlikely that the development of good practice and the creation of a platform for its dissemination will result directly, without other conditions, in a national expansion of sustainable and friendly-climate urban practices. During implementation, the

¹⁸ The document review showcases that the Program design documents and those from Brazil, China, Ivory Coast, India, Malaysia, Mexico, Paraguay, Senegal, South Africa, and Vietnam do not include a Theory of Change nor a comprehensive graphic illustration. Only Brazil's Project document includes a graphic representation, although not entirely clear or comprehensive.

¹⁹ Actually, the Project document identifies a barrier related to the lack of information for all topics and a barrier related to the lack of knowledge about the importance of ecosystems, but the text of the latter refers to the first barrier, which encompasses all the topics.

addition of guidelines to develop PLCC helps to achieve the objective at national scale, but it does not allow to systematically address the potential barriers for a paradigm shift at national scale. Figure 2 suggests a Theory of Change for the Project focused on the subnational level due to its products nature. In its elaboration process, the types of products and activities carried out by the Project have been considered, partially reformulating barriers identified in the Project document, and organizing the products by type rather than by topic or sector. Specifically, it is considered that the Project works in the following areas: i) development of methodological guidelines, ii) studies, iii) strategies, iv) plans, v) management tools and platforms, and vi) investment profiles for demonstrative interventions following the public investment schemes and formats used by the Peruvian State, whilst vii) strengthening capacities through training workshops and knowledge dissemination, and viii) creating spaces for cross-sectoral and multilevel dialogue, agreement and coordination. This would result in more information and knowledge (ii, v, vii, viii), which in turn would result in better planning (i, iii, iv, vi, viii) and management (v, viii) and improved interventions (vi), which embrace and deploy new topics. This would also result in a more sustainable metropolitan area, with a climate-friendly development.

However, it is worth asking to what extent the implementation of a demonstrative physical intervention (e.g.: the recovery of a water channel or a hill and its transformation into a park), not currently contemplated²⁰, could contribute to achieving the Project's objective. Although an intervention of such nature is not required to achieve the proposed objective, it could help to generate knowledge, strengthen capacities and bolster interinstitutional and multilevel coordination. Nowadays, the Project would have the opportunity to partner with some other initiatives, such as PEPENAR and EbA Lomas, in order to carry out a small demonstrative intervention with just few resources.

From a thematic or sectoral point of view, the Project is comprehensive, encompassing cross-cutting issues, such as urban planning, and deepening into the most important aspects from the point of view of mitigation (land use, transport, ecosystems) and adaptation (coastal areas, water resources, ecosystems). In a thematic or sectoral manner, perhaps three aspects are missing. On one hand, the approach to urban finance is uncertain, when insufficient access to financial resources is identified as a barrier in the Project document. As noted, this only considers the development of public investment profiles, without addressing other aspects of municipal finances. This draws the attention since both the GEF-GPSC and IADB-ESCI consider municipal finances a key component²¹. The mitigation component does not address energy efficiency and renewables in buildings, when, according to the Lima-PLCC, stationary energy was responsible for 40% of GHG emissions in the province in 2015, just slightly behind the transport sector²². On the other hand, the adaptation component does not pay attention directly to health impacts, particularly heat waves; although the recovery and conservation of ecosystems definitely helps to reduce sensitivity to this threat.

This is quite reasonable, because a US\$ 6.4 million Project cannot address all these aspects. It definitely covers many elements, perhaps the most important and those with synergies. For example, in terms of mitigation, there is a close relationship between the urban footprint study, the transportation-oriented development approach and the construction of multimodal transportation stations, while the link between the urban footprint study and energy efficiency in buildings is less direct. However, from this perspective, municipal finances appear to be a decisive element, as they are substantial for all sectors.

²⁰ The Project lowest level is the development of investment profiles.

²¹ One of the three pillars of ESCI was fiscal sustainability and governance.

²² Metropolitan Municipality of Lima (2021: 102), Lima PLCC 2021-2030.

Organization of outputs by typology helps to understand the scope and emphasis of the Project. Table 4 presents a summary.

Table 4 Type of Project outputs²³

Type of Output	Specific Output	Comp.
Methodological guidelines	Methodological guidelines to elaborate and update PLCC	1
	Urban Design Guide for Transport-oriented Development Environments	4
Studies	Historical and trend growth study of urban footprint for LMA	1
	GHG inventory and projections by 2030 and 2050 for LMA	1
	Disaster risks and climate change study for LMA	1
	Comprehensive study of watersheds that supply LMA and its coastal aquifer, and water demand	2
	Urban analysis studies and pre-feasibility studies for three metro stations of the Integrated Transport System in LMA	4
Strategies and plans	Coastal Adaptation Plan for LMA	1
	Urban Biodiversity Strategy for LMA	3
	Action plan to recover and revalue water channels	3
	Project communication and dissemination strategy	5
Management tools/platforms	Decision support system (computerized tool) for hydro-environmental management associated with water supply in LMA	2
	Information platform to store geospatial data, indicators and modeling	5
Public investment profiles/projects	Profiles for urban footprint	4
	Profiles for coastal adaptation plan	1
	Biodiversity profiles at district level in LMA	3
	Profile for the recovery of the Surco-Huatica irrigation channel	3

²³ It is important to clarify that this table refers to outputs and not consultancies. The same consultancy can produce two different types of outputs.

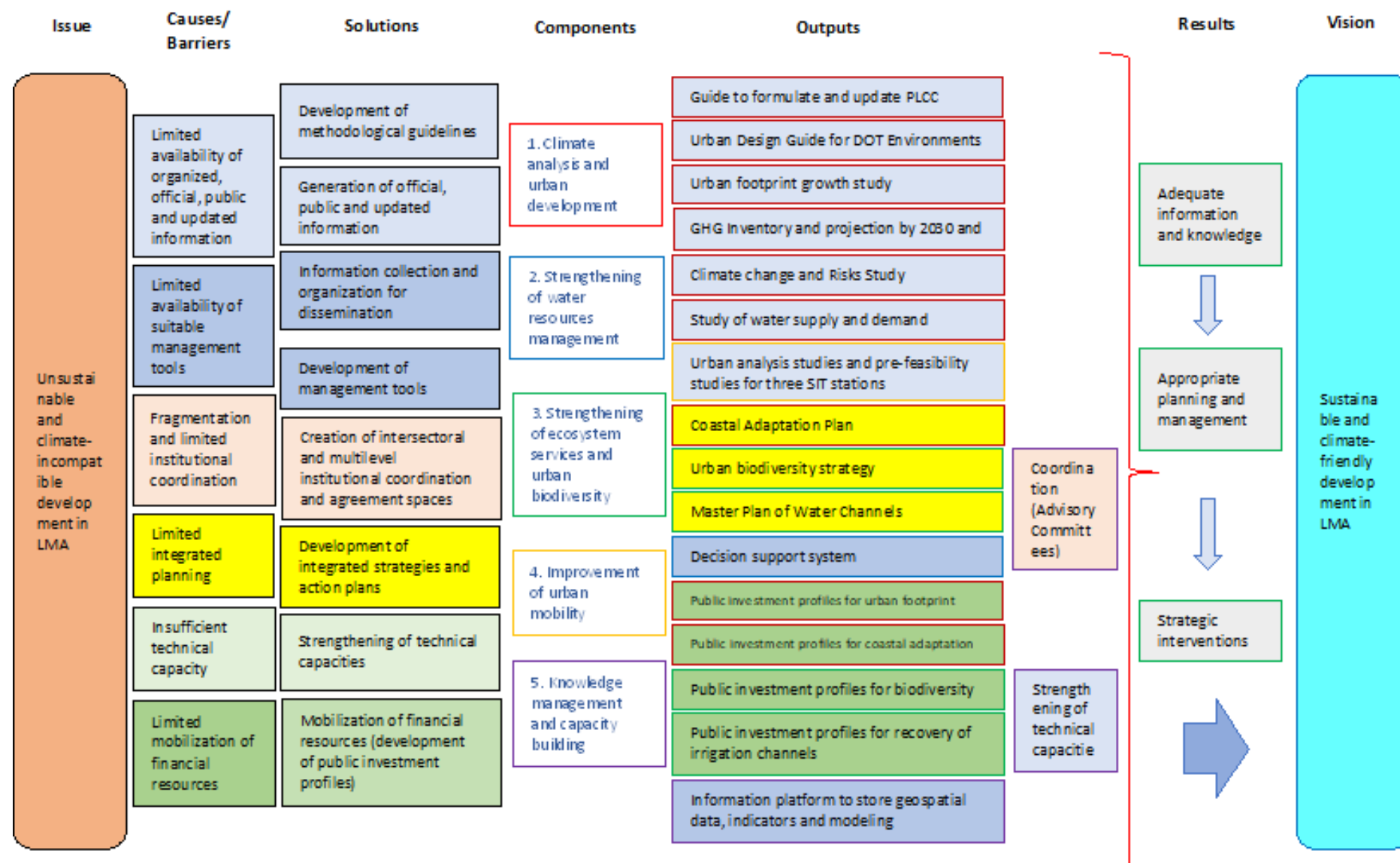


Figure 2 Reconstructed Project's Theory of Change

Notes:

- Colors inside the boxes show the relationships between causes of the issue/barriers to solution, solutions and outputs, in terms of typology. For example, a box filled with light blue refers to the availability of information, such as the issue (limited information availability), solution (information generation) and outputs (Urban footprint studies, GHG and risks).
- Colors in the outline of the boxes register the relationships between components and outputs: all outputs in a component have the same color outline. For example, a box with a red outline refers to Component 1 on climate analysis and urban development. In this regard, studies and profiles included under Component 1 have a red outline.
- Consequently, the color combination inside the box and around the outline illustrates the relationships between the boxes. For example, the GHG inventory has a red outline, indicating that it is part of Component 1, and a light blue color inside, indicating that it contributes to solving the barrier related to the limited information availability.

Assumptions:

- Political and institutional stability
- Political and technical ownership
- Economic and social stability
- Absence of major natural disasters

Source: Production in-house

Having pointed out the above, it is important to bring up two interconnected points. The Theory of Change somehow implicit in the Project document assumes that these components build on each other, contributing to an integrated planning. In fact, the Project document specifies some synergies: the risk study informs the urban footprint study and the coastal adaptation plan; the biodiversity strategy informs the biodiversity action plans; and the information platform includes outputs developed in the other components.

At first, integration would be ensured by two elements: the outputs sequence and the Project governance. Although the Project document does not explicitly state a time sequence, it does suggest it. This makes sense. In theory, the guidelines inform the studies, these the strategies and plans and these the management tools and platforms that integrate information from the studies and seek to support the effective implementation of the strategies and plans. Training workshops would take place in several phases: at the beginning of the studies, strategies and tools, in order to support its development; and at its completion, in order to foster results dissemination and encourage its use. However, in practice, the outputs sequence has not followed this logic except in the information platform of Component 5, which will be nurtured by outputs of Components 1 and 3, and to a lesser extent Component 3, which will partially take up information from outputs of Component 1. Given the limited implementation time available at the actual start of the Project, due to the long delay at the beginning, the approach was to start almost all the processes simultaneously. In this context, the sequence in the development of most of the outputs will be determined not by the content and its logical relationships, but by operational aspects, such as the technical, financial and organizational complexity linked to the elaboration of ToRs and the development and approval of the outputs themselves, as well as the available time of different stakeholders.

For example, this means that the risk study elaboration, which originally goes before the coastal adaptation plan will actually start later. Although the simultaneous launch of all consultancies favors a rapid implementation (key due to the tight schedule because of delays), there is a risk of losing sight of the results and more generally the desired final objective, which not only depends on the outputs implementation but on its strategic integration.

Regarding the Project governance, it could be thought that the components integration would require an intersectoral and multilevel space that encompasses all components. The Project has a space formed by the IADB, WWF, MINAM, and the Project team, and advisory committees by component and technical roundtables for some outputs. This structure has many advantages. The coordination space consisting of the IADB, WWF, MINAM and the Project team allows a concerted and quick implementation of strategies to solve emerging problems. Advisory committees by component and technical roundtables by output ensure a greater participation and ownership²⁴. However, the space between IADB, WWF, MINAM and the Project team is not intersectoral or multilevel, and the advisory committees focus on specific topics, except for Component 1 with a broader horizon.

We should also consider that although there is no explicit reference in the Project document²⁵, interviews suggest the assumption of creating a general directorate, division, unit or team of sustainable cities in MINAM that could contribute to this integration, which was under discussion during the Project formulation. However, this was unsuccessful and MINAM does not have such general directorate. Nevertheless, MINAM has a team that has made progress in managing the sustainable cities agenda:

²⁴ Products generate interest. Working on them helps stakeholders to engage and participate, creating a sense of give and take. If committees were not associated with outputs (with tangible results), fewer stakeholders would probably participate with less intensity and relevant governance processes would not be activated.

²⁵ The Project document refers to the MINAM's general directorates in plural as key stakeholders. Although it mentions an agenda for sustainable cities and climate change in MINAM, it does not include an explicit reference to a general directorate, division or unit with that name.

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the PEPENAR team. Despite the fact that PEPENAR has a limited geographic and thematic horizon, there are discussions to create a sustainable cities program to be managed by this team.

Based on the aforementioned, the outputs integration is fostered through the following strategies:

- Weekly meetings between IADB, WWF, MINAM, Project team
- MINAM's participation in all committees
- Participation of several stakeholders in more than one committee. Engagement of relevant institutions that will later be users of different outputs contributes to establishing synergies between the outputs.
- Inclusion of references in the ToR. In order not to lose the relationship between components and outputs, the team is establishing in the ToR that consultants from one output should communicate/dialogue with consultants from another output, and the outputs themselves should create synergies. Currently, there is coordination between consultants and companies of different components.

However, in the drafting of missing ToRs, the outputs development and its supervision need to ensure that they communicate with each other properly. Thus, authors will be asked to review outputs that would sequentially come later when the outputs that would come before are finished, if necessary. In this regard, if authorized by administrative rules, ToRs should include payment schedules that reserve a payment at the very end.

3.2.2 Analysis of the results framework

How effective was the monitoring and evaluation system (indicators, baselines, goals, methods and sources of verification) in measuring the progress/results of the Project? Were they SMART and consistent with the Project's objectives, results, and outputs?

The Project's results framework is mostly adequate for measuring the achievement of the Project objective at subnational scale, but inadequate at the national scale. Just like the Project activities and outputs, the results framework focuses on LMA, and does not concentrate much at national scale. Originally, indicators in Component 5 would allow to measure at least partially the objective fulfillment at national level. However, indicators refer explicitly to the subnational level and not to the national level, in terms of training (local authorities and technical experts) and awareness (LMA citizens). In this regard, there is no indicator related to the training of national officials nor to raising awareness among urban inhabitants beyond LMA. Originally, the Project carried out such activities, which might be important for other cities in the country to replicate LMA good practices and to establish a national network on sustainable cities and climate change. The only indicator somehow related to the national scale is the technological platform to store information, which is insufficient to achieve the expected changes at national scale.

Although the results framework covers almost all aspects at LMA level, and the indicator system is specific and consistent, it focuses way too much on outputs and **does not allow to measuring the results compliance**. For example, it is included an indicator on the number of people trained, when the most important should be the training result, in terms of the level of technical capacity before and after the Project. Furthermore, the results framework only includes end goals and not mid-term goals, which are always useful to measure progress in meeting final goals.

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How feasible and realistic were the Project's objectives, results, and outputs within the available budget and scheduled time?

Outputs are realistic within the programmed budget. As highlighted, results and objectives seem feasible with the programmed budget at subnational scale, but not at national level.

In theory, most of the goals included in the results framework of the Project document are realistic within the scheduled time. The exception is the outputs of Component 4, which are linked to Line 2 of the Lima Metro, and therefore subject to its execution. While public works of this nature tend to be delayed, goals of Component 4 are not very realistic. As mentioned before, in order to deal with these delays, the advisory committee also approved to work on SIT stations outside Line 2.

Although in theory most of them are realistic within the scheduled time, **in practice many of the goals were not very feasible in Peru**, where the institutional framework for sustainable and climate-friendly cities was not and is not consolidated. Goals were not entirely realistic either, considering administrative and management processes within MINAM, changes of government and potential external shocks that could hinder its implementation, such as a natural disaster (e.g.: earthquakes).

In this regard, although goals could be realistic in a real implementation period of 48 months, they are not feasible within a 29-month period, also taking into account COVID-19 impacts. Therefore, the one-year extension seems reasonable from this perspective.

3.2.3 Lessons learned from other relevant projects (same field) incorporated into the Project design

The Project document neither identify nor integrate lessons learned from similar initiatives, such as the development of the Local Environmental Agenda or Agenda 21 in Lima and Callao between 2003 and 2007,²⁶ and the ESCI, since the lessons learned from its 2016 final evaluation²⁷ are not explicitly considered.

However, the Project document considers methodologies and information generated by some previous projects. Particularly, the "CS" design considers IADB-ESCI methodology (see section 3.1.2) and proposes to recover the experience from other cities supported by the ESCI in Peru, such as Trujillo (2010-2015), Cusco and Huancayo (both in 2015-2017). The "CS" design also considered information from the GIZ TRANSfer project, which between 2013 and 2016 provided technical assistance for the development of the Nationally Appropriate Mitigation Action (NAMA) of Peru's Sustainable Transport, focused on improving the integration of different transport means in Lima, among other aspects.²⁸ Similarly, it considered studies developed by the World Bank in the framework of the project for the construction of the Lima Metro Line 2 (2015-2021).²⁹

²⁶ This process was supported by UN-Habitat. Besides Lima and Callao, support in Peru included Arequipa and Chiclayo. In 2009, a publication of this agency systematized this national experience. At regional scale, local environmental agendas were developed in 21 cities from five different countries (Brazil, Colombia, Cuba and Ecuador; besides Peru). In 2012, a publication of this agency systematized the regional experience and developed guidelines to integrate climate change mitigation and adaptation. See: Encalada, S., Zucchetti, A. and Peralta, M.: SCP/AL21 in Peru, UN-Habitat, Rio de Janeiro, 2019, and García, J.: From Local Environmental Agendas to the Cities and Climate Change Initiative. Guidelines for a South-South Cooperation strategy in Latin America and the Caribbean, UN-Habitat, Rio de Janeiro, Brazil, 2012.

²⁷ See: <https://publications.iadb.org/publications/spanish/document/Evaluaci%C3%B3n-de-la-Iniciativa-Ciudades-Emergentes-y-Sostenibles-del-BID.pdf>

²⁸ During COP18 (2012), it was agreed to develop NAMAs for reducing emissions in developing countries. The TRANSfer project supported NAMA in the transport sector of different countries. See: <http://www.transferproject.org/>

²⁹ See: <https://projects.worldbank.org/en/projects-operations/project-detail/P145610>

During its implementation phase, the Project has also considered information and methodologies from other previous experiences, particularly: the Lima Water Project, carried out between 2008 and 2014 with the Government of Germany support, which focused on both modeling and simulation of the water supply and sanitation system in Lima for informed decision-making;³⁰ the HydroBID tool, created to support the management and planning of water resources in Latin America and the Caribbean and used in Peru since 2015;³¹ the GHG inventory for Lima by 2017, prepared with the C40 support within the PLCC framework; and the ongoing GEF project “Conservation, Management, and Rehabilitation of Fragile Lomas Ecosystems” (known as “EbA Lomas”), which uses an ecosystem-based adaptation approach for the sustainable management of the *Lomas de Lima*; it has developed a geographic information portal.³²

3.2.4 Link and complementarity of the Project with other interventions within the sector

The Project document foresees the link and complementarity with some initiatives. In its design, the “CS” was expected to work closely with the GEF EbA-Lomas project, implemented by the United Nations Development Program (UNDP), and the GEF project on energy efficient industrial clusters, implemented by the United Nations Industrial Development Organization (UNIDO). Similarly, such document plans coordination efforts with the aforementioned Sustainable Transport NAMA and the Housing NAMA, led by the Ministry of Housing and IADB, as well as the involvement of organizations such as the French Development Agency (AFD), World Bank, Development Bank of Latin America (CAF), the *Transitemos* Foundation, and *Lima Cómo Vamos*, among others. **During implementation, the Project has managed to coordinate with some of them,** such as EbA-Lomas and the Transport NAMA. However, there is no evidence of synergies with the other initiatives and organizations mentioned in the Project document.

During the implementation phase, we look for articulation with other initiatives particularly through the Project’s governance system. The “CS” committees, in which stakeholders who are developing other projects in parallel participate, have allowed the Project team to identify other relevant initiatives and build synergies from the institutional point of view within the ToR elaboration for the different Project components. For example, the “CS” established a complementarity with the efforts undertaken by the Independencia District for hills reforestation within the framework of a European Union³³ support; it also receives technical advice from the C40 to update the GHG inventory and the study on heat waves. Furthermore, the “CS” is looking to establish synergies with transport projects that are being developed with the Japan International Cooperation Agency (JICA) and the German government. On the other hand, the Project has been aware of initiatives that go against its objectives. For example, in relation to the recovery of water channels, it was identified a planned intervention to roof a channel in the District of Chorrillos, while the “CS” proposes to make a linear park where the canal is not covered. Thus, the aim is to make these initiatives compatible during the elaboration the investment profile.

³⁰ See: <http://lima-water.de/es/index.html>

³¹ See: <https://www.hydrobidlac.org/>

³² See: <https://www.pe.undp.org/content/peru/es/home/projects/eba-lomas.html> and <https://geolomas.maps.arcgis.com/home/index.html>

³³ See: <https://predes.org.pe/lanzamiento-del-proyecto-independencia-sostenible-con-economia-circular-y-participacion-ciudadana-conto-con-presencia-del-minam/>

However, we can identify an opportunity to build further synergies with initiatives outside the public sector, both at local and international scales. So far, there is limited articulation with civil society initiatives, such as *Mi Ciudad*, *Lima Cómo Vamos* or Cities for Life Forum,³⁴ which are particularly relevant to establish an information platform (Component 5). At international scale, there is no clear articulation with initiatives, such as GEF's Global Platform for Sustainable Cities or with networks of cities with a long history of urban sustainability, such as ICLEI. There is also no close relationship with organizations of the United Nations system, such as UNDP, UNEP and UN-Habitat, nor with bilateral cooperation agencies, such as the Spanish Agency for International Development Cooperation (AECID) or the Swiss State Secretariat for Economic Affairs (SECO), all of which work in the area of cities and climate change, just like those mentioned in the Project document. The articulation of the Project with the support provided by the Korea International Cooperation Agency (KOICA) on water is not clear either.

3.3 Effectiveness

3.3.1 Has the Project been effective to achieve the planned objectives, results and outputs?

The results matrix of the Project document includes 16 indicators at result level and 18 indicators at output level. Given the close relationship between them, the results indicators do not provide additional information. The Project results matrix does not include indicators at objective level, so its fulfillment cannot be evaluated.

As of June 30, 2021, when 75% of the Project implementation period has passed, **the Project is expected to meet 61% or 11 of the 18 output goals established in the implementation period set out in the Project document (June 2022).** The Project is expected to meet another 5 goals (27%) within one more year (until June 2023). It is quite uncertain whether the Project will meet the goal related to participation in GPSC events, because this largely depends on the evolution of the COVID-19 pandemic and the measures given by GEF and governments to fight this back.

By components, it is expected to meet goals of Component 3 during the implementation period set out in the Project document. For Components 1, 2, 4 and 5, it is not expected to meet goals during the implementation period set out in the Project document (June 2022), but definitely within an additional year (June 2023). Using GEF rating, **performance is satisfactory on results of Component 3, moderately satisfactory on results of Components 1 and 2, moderately unsatisfactory on results of Components 4 and 5.** See Table 5.

As noted in Section 3.2.2, in the results matrix these are actually formulated as outputs, thus it is not possible to measure the results quality level. At the moment of preparing this MTR, only one output (HydroBID) has been produced. Its quality is quite remarkable, and very appreciated by its users.

As outlined in the Relevance section, the Project has developed and it is in elaboration process of **outputs not provided for in the results framework.** In particular, this includes guidelines to develop PLCCs; a software to support the municipal government in preparing its own GHG inventory and two related training programs; a public investment profile for coastal adaptation; three studies on water channel sustainability, a decision support system for the CUSH, and an action plan for a water channel

³⁴ See <http://www.limacomovamos.org/> and <https://www.ciudad.org.pe/>

that is part of the historical and cultural heritage of Lima. Furthermore, as indicated in the Relevance section, the scope of some outputs was expanded, such as HydroBID, where two watersheds were added to the four originally planned.³⁵

Regarding **indicators included in the GEF Tracking Tool (TT)**, in terms of increased biodiversity (core indicator 4, indicator 4.1) and climate change mitigation (core indicator 6, indicator 6.1), **there have been no changes with respect to the baseline**, since outputs related to Components 3 and 4, respectively, have not been completed. Specifically, the biodiversity strategy and plan, as well as plans associated to water channels have not been completed. Therefore, there has not been increase in green area or its health, nor in the existing regulations or its monitoring and compliance. Similarly, GHG emissions have not been cut yet, since the design of non-motorized transport have not started – not even defined in which stations they will be. It is worth mentioning that the Project's contribution to these indicators will be indirect, since it does not include the execution of specific physical interventions in green areas or in the SIT. On the other hand, it should be mentioned that the Project contributes to 2 TT indicators not considered during the Project design. Particularly, the Project contributes to indicators 7.3, by creating multi-stakeholder coordination mechanisms for water resources management, and 11.1 in terms of direct beneficiaries, in this case linked to training processes. See section 5.5.

Section 3.4 analyzes the Project impacts as of June 30, 2030.

³⁵ In the Project document, the "CS" covered only the four traditional basins of Lima (Rimac, Mantaro, Chillón and Lurín). Due to urban sprawl outside the supply area of these basins, other basins have been necessarily considered: Chancay-Guaral in the North and Cañete in the South. The "CS" now considers the six basins.

Table 5 Matrix of progress towards results (achievement of direct effects with respect to end-of-the-project goals)

Results	Indicators	Baseline	Goal	Progress by June 30, 2021	Rating	Rationale
Component 1: Strengthening of urban and sustainable comprehensive planning and management					Moderately satisfactory	3 of the 5 goals are expected to be met during the implementation period set out in the Project document.
1.1 LMA has comprehensive studies on GHG emissions, urban growth footprint and risks to be incorporated into policies and projects	1.1.1 Number of GHG studies for LMA, including AFOLU	0	1	0	On the way to be achieved	Company is being selected. Completion of this output is expected by May 2022.
	1.1.2 Number of risk and vulnerability studies for LMA	0	1	0	On the way to be achieved	These two outputs will be carried out in a single contract, together with output related to indicator 1.4. ToR of this contract have been approved and are in No Objection request phase. Completion of this output is expected by June 2022.
	1.1.3 Number of urban growth studies for LMA	0	1	0	On the way to be achieved	
1.2 LMA identifies key management and investment areas to increase climate resilience in coastal areas	1.2.1 Number of coastal adaptation plans	0	1	0	Not on the way to be achieved	Company is being selected. Completion of this output is not expected during the implementation period set out in the Project document. Specifically, completion of this output is expected by July 2022.
1.3 LMA defines urban interventions to plan for future growth	1.3.1 Number of districts with intervention proposals for sustainable urban development	0	4	0	Not on the way to be achieved	This output will be carried out in a single contract, together with outputs of indicators 1.1.2 and 1.1.3. ToR have been approved and are in No Objection request phase. Completion of this output is not expected during the implementation period set out in the Project document. Specifically, completion of this output is expected by September 2022.
Component 2: Planning for urban water management					Moderately satisfactory	1 of the 2 goals are expected to be met during the implementation period set out in the Project document.

2.1 LMA has a strategic planning of all watersheds that provide water to the city	2.1.1 Number of water resources management plans carried out for all watershed in LMA	0	1	0	Not on the way to be achieved	Company has been hired. Completion of this output is not expected during the implementation period set out in the Project document. Specifically, completion of this output is expected by August 2022.
2.2 A system has been established for the comprehensive management and modeling of water resources	2.2.1 Number of computerized systems for the analysis and planning of water resources	0	1	0	On the way to be achieved	Company has been hired. Completion of this output is expected by August 2021.
Component 3: Monitoring and analysis of urban biodiversity					Satisfactory	The 5 goals are expected to be met during the implementation period set out in the Project document.
3.1 LMA has a biodiversity strategy that is incorporated into urban policies	3.1.1 Number of biodiversity strategies for LMA	0	1	0	On the way to be achieved	Company has been identified. Contract is expected to start in August 2021. Completion of this output is expected by June 2022.
3.2 LMA has information on urban biodiversity indicators for the design of policies and planning strategies	3.2.1 Number of urban biodiversity indicator sets for LMA	0	1	0	On the way to be achieved	
3.3 LMA districts have the capacity to develop urban projects with an ecosystem conservation approach	3.3.1 Number of public investment projects related to biodiversity defined along with relevant authorities	0	4	0	On the way to be achieved	
3.4 LMA has a plan for water channels conservation	3.4.1 Number of plans for water channels	0	1	0	On the way to be achieved	Company has been identified. Contract is expected to start in August 2021. Completion of this output is expected by May 2022.
3.5 LMA has a greater capacity to develop demonstrative projects in one of the water channels	3.5.1 Number of studies for an investment project in one of LMA water channels	0	1	0	On the way to be achieved	
Component 4: Catalyze investments for urban mobility in Lima					Moderately unsatisfactory	The 2 goals are not expected to be met during the implementation period set out in the Project document.
4.1 Lima Metro stations have incorporated non-motorized mobility aspects into their design and foster transport-oriented development processes	4.1.1. Number of metro stations that have constructive designs considering multi-modality and the development around them	0	3	0	Not on the way to be achieved	Company has been identified. Contract is expected to start in October 2021. Completion of this output is not expected during the implementation period set out in the Project document. Specifically, completion of this output is expected by October 2022.
4.2 Lima Metro system has a station design model that includes integrated non-motorized mobility policies and guidelines for transport-oriented development	4.2.1 Elaboration of a guide for the design of Lima Metro stations	0	1	0	Not on the way to be achieved	

Component 5: Strengthening partnerships for sustainable cities at local, national and global scales					Moderately unsatisfactory	3 of the 4 goals are not expected to be met during the implementation period set out in the Project document.
5.1 Urban and environmental information on LMA is widely available	5.1.1 Number of running platforms on urban and environmental information	0	1	0	Not on the way to be achieved	ToR have not been completed. Completion of this output is not expected during the implementation period set out in the Project document. Specifically, completion of this output is expected by April 2023.
5.2 Local authorities and technical experts use urban and environmental information in urban planning and management processes	5.2.1 Number of experts receiving training in the use of environmental, urban, risk and climate change information	0	50	29	On the way to be achieved	This result is obtained via trainings carried out through other consultancies. In this regard, the number of people trained will increase until the last consultancy is completed, which is planned by August 2023. Since over half of the goal has already been met, and outputs 1.1.1 and 2.2.1 include training sessions, this goal will probably be achieved before the end of the implementation period set out in the Project document.
5.3 Lima contributes to the GEF-CPSC	5.3.1 Number of GEF events that the city participates to share experiences	0	6	1	Not on the way to be achieved	Compliance with this goal depends on COVID-19 evolution, which has hindered GEF events and the chance for Peruvians to participate in these events. Due to this pandemic, it is unlikely that Project stakeholders participate in 5 GEF events between July 2021 and June 2022.
5.4 LMA citizens have extensive knowledge of the studies that have been developed	5.4.1 Number of communication strategies designed to disseminate the results of each Project's component	0	4	0	Not on the way to be achieved	An individual consulting firm has been hired to design the strategy, and it is also in charge of designing the ToR to hire a company for its implementation. However, the Project carries out some communication and dissemination actions. Completion of this output (at design level) is expected by September 2021. The strategy implementation is not expected to be completed during the implementation period set out in the Project document, but until January 2023.

3.3.2 What factors are helping and hindering the achievement of objectives and expected results?

What factors are helping to achieve the objectives and expected results? What factors are hindering to achieve the objectives and expected results?

The achievement of the Project's objectives and results was negatively affected by several factors. A key aspect was **changing the executing agency**. Based on IADB's bad experiences in projects with MINAM as the executing agency, and because of the significant time that an agreement takes with the Foreign Ministry, it was decided to outsource this Project execution. In the Project document, the *Fondo de las Américas* (FONDAM) was responsible for the Project's execution. FONDAM is an institution founded in 1997 with vast experience in the administration of cooperation funds of the USA government, focused on sustainable environmental development, forests and water conservation, sanitation and childhood. However, the approval process at GEF took a long time. When it concluded, and the project was about to begin, FONDAM did not have too much time left. Moreover, there was a change in FONDAM's management, and the new directorate considered that the resources available for the Project's execution were insufficient. Therefore, a new executing agency had to be found. A tender was called and WWF was selected and hired. Defining who was in charge of the Project's execution and how took about a year and a half. There were also **delays at MINAM related to political changes and the location of the Ministry's focal point**. The initial idea expressed in the design was for the Project to be coordinated by a general directorate, division or unit of sustainable cities, but this was never created. When the Project formally started, in June 2018, the then Vice-Minister assigned the responsibility of supervising the Project to the PEPENAR team. However, there was a change of Vice-Minister and this responsibility was reassigned to the General Directorate of Climate Change (DGCC). Later, there was another change of Vice-Minister and this responsibility was again reassigned back to PEPENAR. These changes created delays. Furthermore, some of appointments were not considered appropriate from an efficiency point of view. Although it makes sense that the DGCC coordinates this Project, since it has a marked character on climate change mitigation and adaptation. Yet, the truth behind is that this directorate has limited human resources to address this vast workload, which led to slow processes while coordinating the Project. Coupled to this, MINAM has expensive requirements, and this is a project with new and complex topics. The elaboration of the Operations Manual, a MINAM's requirement, but not of GEF, IADB or WWF, which had to be reviewed by 5 offices, took three quarters.

In the short term, the achievement of the Project's objectives and results was also undermined by the **complex governance system**. First, unlike many GEF projects, which include four tiers (GEF itself, implementing entity, executing entity, and project team), this Project involves five tiers, by adding an executing entity other than the beneficiary (WWF). Moreover, the Project established 5 advisory committees and thematic roundtables in different sectors and at different levels, instead of creating a steering committee and a technical committee, as it is usual in many GEF projects. Creating this structure and identifying and involving many stakeholders in such different, and sometimes innovative areas³⁶, takes time. Furthermore, the Project granted the advisory committees extremely detailed monitoring functions that are not quite common in GEF projects. As mentioned before, ToR are done collectively,

³⁶ From the sectoral point of view, MINAM is used to collaborate with environmental stakeholders, but not so much with others, particularly with the transport sector, which is necessary in Component 4. Sometimes there was no relationship with beneficiary actors and it had to be built.

and it must be approved by consensus. Selection of firms is also participatory and it is approved by consensus. Outputs are also unanimously approved. This governance system contributes to the sustainability of results in the medium term, but hinders performance in the short term, by delaying processes.

The long time elapsed between the Project design and its approval also slowed down the achievement of the Project's results and objectives, since we had **to update the context analysis and some of Project's activities**. A decisive aspect was the implementation of the Provincial Municipality of Lima's PLCC – not originally contemplated in the Project document. On the other hand, the execution of some complementary activities, such as the Lima Metro Line 2, made less progress than expected. This has led to review the Project's work in Component 4, related such infrastructure progress.

Besides all the aforementioned, we have to add the **limited human resources for the Project management**. The Project document assumed that this was going to be managed by a Sustainable Cities Team within MINAM to be paid for by the ministry, but it didn't work. The Project had to reallocate funds to cover and hire a coordination team, which took time. Furthermore, given budget constraints, the team is small, especially considering the thematic complexity and the institutional and governance arrangements in place. For most of the Project implementation, there have only been two people fully dedicated to the Project, who were not able to cover all the project aspects. On specific topics, the team depends on inputs from technical experts hired part-time, who do not always respond immediately, and who are not widely based in Peru. For example, the call for the selection of an expert consultant on the national platform had up to 2 extensions, due to the lack of candidates. This also created delays.

As detailed in section 3.5 on Efficiency, the Project has to reasonably comply with IADB's administrative processes, where WWF is not familiar with, leading to a **learning curve**. This has been quite difficult since there were many parallel processes for all components.

Finally, the **COVID-19 pandemic** has also negatively affected the achievement of objectives and expected results – stakeholders had to adjust to a new normality with virtual scenarios. For example, this hampered certain administrative processes, particularly the hiring of two consultancies. It also affected the participation of Project's stakeholders in GEF-hosted events. The Project Coordinator participated in a GEF meeting in 2019, but the pandemic made that GEF events were suspended.

From another perspective, the achievement of objectives and expected results **has benefited** from the fact that, as mentioned in sections 3.1.4 and 3.1.5, some policies and strategies fostered some of the aspects promoted by the Project and that some stakeholders were already committed to such agenda. The inclusion of the Project team in MINAM has also contributed positively, as well as in terms of the environmental sector countrywide.

3.4 Impact

3.4.1 Are there signs that the Project has contributed to, or made progress towards its expected impacts?

As of July 31, 2021, **the Project's impact has been limited**. As explained in section 3.1, most of its outputs have not been executed; therefore, progress in achieving results has been limited. In this regard, as of July 31, 2021, **the Project has a significant potential impact**, as indicated in sections 3.1 on Relevance and 3.2 on Project design, but a modest real impact. In fact, at the time of writing this report, only two products (Guidelines to develop PLCC and HydroBID) are about to be completed. Nevertheless,

although the documentary review and interviews highlight its usefulness, in the first case to inspire other cities and in the second case in terms of water resources management, with a general positive potential impact on urban sustainability in other cities and water availability in LMA, at the moment such guidelines as well as the tool have not been used – thus, its impact is more hypothetical than real. As of July 31, 2021, the Project has improved the technical capacity of some officials (trained in the framework of the HydroBID development and more indirectly through their participation in advisory committees (29 and 56, respectively)) to understand evidence and use it in developing strategies and action plans.

Based on the aforementioned, and in line with the previous sections, it should be noted that **the impact will potentially be more visible at subnational scale than at the national level**. Positive impacts on LMA can be expected in terms of availability of strategic information/evidence; bold strategies and action plans (evidence-based); public investment profiles; management tools and strategic and practical platforms; and institutional and technical capacity to i) generate evidence; ii) understand evidence and use it in developing strategies and action plans; iii) implement strategies and action plans, and iv) use tools to manage the implementation of strategies and action plans for the promotion of sustainable and climate-friendly development at metropolitan, municipal and district scales. It can also be expected that the Project will result in a more compact, rational and equitable territorial planning, less GHG emissions and reduced climate risks.

Variety and depth of potential impacts is smaller at national scale. At this level, positive impacts can be anticipated in terms of the availability of robust methodological guidelines to foster sustainable and climate-friendly development at metropolitan, municipal and district scales, thanks to the elaboration of guidelines to develop PLCC; and to a certain extent, as part of the 76 national officials trained with a greater institutional and technical capacity to i) generate evidence; ii) understand evidence and use it in developing strategies and action plans; iii) implement strategies and action plans, and iv) use tools to manage the implementation of strategies and action plans for the promotion of sustainable and climate-friendly development at metropolitan, municipal and district scales. It is also expected a better access to information on the LMA's experience, and also greater awareness countrywide depending on how the communication strategy is designed and executed. However, as of July 31, 2021, without an institutionalization of national scope, based on the planned activities of the Project, it seems unlikely that it will have a significant impact on the creation of a Peruvian network on sustainable and climate-friendly cities, and that a significant number of Peruvian cities systematically plan and implement sustainable and climate-friendly practices.

It is worth mentioning that, as noted before, **the Project will generate positive impacts not considered in the results matrix** at subnational and national scales, particularly related to beneficial effects in terms of intersectoral and multilevel governance – an aspect where there are already tangible positive impacts despite a highly fragmented institutional context. Furthermore, it is important to highlight that the Project contributes to incorporating innovative topics in public management, such as urban sustainability and transport-oriented development.

At the moment of writing this report, it was evidenced that the Project has a very limited potential to generate positive impacts in Latin America and the Caribbean and other regions, due to the little importance that the planned activities provide to exchanges with other cities regionwide and worldwide.

3.4.2 Cross-cutting elements

The Project directly contributes to the Sustainable Development Goal (SDG) 11 “Make cities inclusive, safe, resilient and sustainable”, especially target 11.b of substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, climate change mitigation and adaptation, and resilience to disasters.

Although this objective is not mentioned in the Project document, the Framework Program Document, dated April 2015, refers that the Sustainable Cities IAP would bolster the SDG in this matter. On the other hand, as shown in the following table, the different “CS” components have the potential to contribute towards SDG 6 (water), 13 (climate change), 14 (oceans), 15 (land ecosystems) and 17 (partnerships).³⁷

Table 6 Potential contribution of Project components to the SDGs

Project components	SDGs to which it contributes
1. Climate, risk and urban development analysis based on ESCI methodology	13: Take urgent action to combat climate change and its impacts 14: Conserve and sustainably use the oceans, seas and marine resources
2. Studies on water resources availability in LMA	6: Ensure access to water and sanitation for all
3. Ecosystem services and urban biodiversity	6: Ensure access to water and sanitation for all 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss
4. Strategic and eco-efficient investments in LMA	13: Take urgent action to combat climate change and its impacts
5. Coordination and Institutional Strengthening	17: Revitalize the global partnership for sustainable development

Source: Produced in-house.

The Project seeks to contribute indirectly to improving the life quality of LMA population. Although the “CS” is not intended to reduce poverty, it aims to generate socio-economic co-benefits for the population through its components: particularly, the urban footprint and risk studies (Component 1) emphasize LMA expansion, which are mostly the result of informal land occupation; studies on water resources availability (Component 2) were adjusted to incorporate drinking water sources in precarious human settlements; recovery of water channels (Component 3) will mainly benefit low-income population living on its peripheries; and finally, support to metro stations (Component 4) will foster public transport in less thriving areas of LMA, where population has limited access to private vehicles. The Project also aims to increase disaster resilience, improve air quality and access to green public spaces, which will benefit the whole population. Despite the above, to date there is no evidence of the “CS” contribution to the generation of socioeconomic benefits for the population. This is because the Project’s nature focuses on research and planning activities, and also because the Project’s results framework is limited to identifying outputs to be generated, without monitoring direct effects and impacts on the population.

³⁷ Note that the Voluntary National Reports on the Implementation of the 2030 Agenda, published in 2017 and 2020, do not establish a link between this project and the SDGs.

The Project does not have a systematic gender approach. The Project document did not carry out an in-depth gender analysis³⁸ nor an action plan to foster gender equity, which is reflected in the lack of mainstreaming of the gender approach into the ToRs for the development of its different components. From the 10 ToRs already prepared for Components 1 to 4, only those corresponding to the development of guidelines for PLCCs refer to the gender approach. Despite that five more focus on aspects where it is vital to consider the differentiated capacities, needs and vulnerabilities of people according to their gender, namely, ToRs regarding disaster risks and climate change adaptation, coastal adaptation, biodiversity, water channel recovery and transport. Therefore, there are no mechanisms in place to ensure the mainstreaming of the gender perspective and its appropriate approach into different Project's outputs. On the other hand, although the Framework Program Document highlights gender as a priority for the IAP and that its mainstreaming would be supported through the GPSC, there is no evidence of this in the case of the "CS".

Women's participation in the Project's activities is equitable, but there are important variations.

The 2020 PIR indicates that 71% of the project staff is female (including consultants). Moreover, as shown in Table 7, women represent between 33-62% of head members in the five advisory committees of the Project, while their participation as alternates is more variable. Considering that some people participate in more than one committee, women represent 47% of the total head members (10 out of 21) and 39% of alternates (9 out of 23). On the other hand, in the HydroBID training workshop, the only one with a list of participants, 5 women participated out of a total of 29 participants (17%). These variations in participation are likely to be a reflection of the presence of women in the invited institutions, which is not under the control of the Project team.

Table 7 Women's participation in Project committees

Committee	Total number of members	Head women	Head men	% of Head women	Alternate women	Alternate men	% of Alternate women
Committee 1	14	5	3	62%	1	5	16%
Committee 2	10	2	3	40%	0	5	0%
Committee 3	15	5	3	62%	4	3	57%
Committee 4	7	1	3	33%	2	1	66%
Committee 5	10	3	3	50%	1	3	33%

Source: Produced in-house based on the list of committee members.

Note: Six head members do not have alternates.

3.5 Efficiency

3.5.1 Financing and co-financing

To analyze financial execution, it is important to consider the total budget and the procurement plan. This includes 95% of the total project budget excluding WWF's administrative expenses.

³⁸ The Project document is limited to mentioning that the "CS" would take care of the equitable participation of women in the workshops for capacity building.

As of June 30, 2021, financial execution is very limited. As of that date, when 75% of the execution time had been invested (the Project spent 36 out of the 48 months of execution time), **the Project had spent USD 531,620, in other words, 8% of its total budget³⁹**. At that moment, the Project had spent in USD 290,796 procurements, equivalent to 4.5% of the total budget and 4.8% of the projected procurement value. Considering budget reviews⁴⁰ as of June 30, 2021, the Project had executed 13% of the planned budget in such reviews.

Documents and interviews suggest that financial execution **may accelerate in the next months** as contracts have been signed. However, available documentation points out that signed contracts will only allow a **moderate progress**, as most of the procurement budget has yet to be committed to contracts. Specifically, as of June 30, 2021, the Project had signed contracts for a value of USD 1,322,705, i.e., 21% of the total project budget and 22% of the projected procurement value. In other words, as of June 30, 2021, the Project has yet to sign contracts worth 88% of the planned procurements. Even if the amounts included in the contracts signed as of June 30, 2021 were executed immediately (as of June 30, 2021, 22% of its amount had been spent), the financial execution would be minimal.

The Project had no expenses in 2018. In 2019, expenses were only operational, related to administrative costs of WWF and the Project team. **Non-operating expenses started in 2020**, but they were low, since most of them still corresponded to the Project team, in Components 1 and 5. Non-operating expenses began to be more visible, although still modest, in 2021. From the point of view of financial execution, this has been consistently minimal, taking into account both the original and revised schedules, with an exception in 2019. That year the Project executed 4% of the resources planned in the Project document, but 91% of those planned in the budget review. However, in 2020 the Project only executed 11% of what was planned in the Project document and 19% in the documentary review.

Relatively speaking, execution has been higher, but still minimal, in Components 5 and 2. In absolute terms, execution has been higher in Components 5, 2 and 1, but we must take into account that expenditures in Components 1 and 5 include the Project team salaries. In fact, as of June 30, 2021, expenses related to the Project coordinator's salary represented 93.5% of the expenses in Component 5, while the technical assistant's salary represented 32% of the Component 1 expenses. Non-operating expenses in Components 1 and 5 have been low. Thus, from the point of view of the components, we can determine that **as of June 30, 2021, the Project had had a relatively acceptable financial performance only in Component 2**, where 87% of the total procurements value has been committed and 20% paid. In Components 3 and 4, expenses have been negligible.

For the reasons stated above, calculating the actual Project's administration costs requires considering both WWF's administrative costs and salaries of the Project coordinator and the technical assistant that are paid through the Components, in particular 5 and 1, respectively. Available financial information shows that these expenses are planned to represent 8% of the total budget, which is above the limit established by the GEF for this type of project. **As of June 30, 2021**, the Project had spent USD 379,222 on **administrative expenses**: WWF's administrative expenses and salaries of the Project coordinator and technical assistant. This **represented 71% of the total Project expenses** up to that date. In other words, non-operational expenses represented only 29% of total expenses as of June 30, 2021. If we only consider costs related to the components, the salaries of the Project coordinator and the technical

³⁹ Note that here the resources executed or spent by WWF are considered and not the resources disbursed by IADB to WWF. As of June 30, 2021, the latter amounted to 664,233, equivalent to 10% of the total budget.

⁴⁰ It is important to point out that the Project has not properly carried out budget reviews. Technically, the Project has been updating the components' amount as procurement plans have been approved. The term budget review is used only in that sense, and to facilitate reading.

assistant represented 48% of the expenditure as of June 30, 2021. It is also important to highlight that as of June 30, 2021 WWF had executed 75% of its expected costs for the entire Project's life cycle.

Although this makes somehow sense because 75% of the Project execution time had passed, it is a concern that the Project had executed only 8% of its total budget globally. This is explained in section 3.3.2, yet it is still a concern because an extension will imply that administrative costs are extended from 4 to 5 years. Without an increase in GEF resources, additional counterpart resources, or balances, this will necessarily imply that the resources available for investment are reduced and the ratio of administrative expenses versus investment expenses increases. This is quite delicate because given the minimal execution, the Project team would need to expand.

Fortunately, the Project has balances. During the preparation of the extension request, we analyze the budget availability to finance the Project team. The analysis determined the existence of balances in the awarded consultancies (the value of the signed contracts is lower than expected). These balances are expected to be allocated to Components 1 and 5 and the administrative costs of the executing agency, so no additional resources are required and the Project scope is not undermined. In fact, balances not only cover administrative costs of the extension, but also expand the resources available for Components 1 and 5. The additional amount of administrative costs represents the same annual monetary value established for these purposes.

Given both WWF and IADB controls, the accounting and financial systems established for Project management and the production of accurate and timely financial information are adequate.

Regarding co-financing, **as of April 30, 2021, the Project had mobilized 19% of the total counterpart planned for the total Project duration, when 73% of the Project implementation period had passed** (35 of the 48 months planned for implementation). The main explanation is the poor execution of the IADB's counterpart (as of April 30, 2021, IADB had mobilized 19% of its total counterpart planned for the total Project duration). This entity counterpart constituted 99.7% of the total counterparts in the Project document. Thus, the performance of all the counterparts is particularly marked by the performance of this counterpart. The Bank's counterpart is related to a loan to fund the Lima metro Line 2, related to activities of Component 4. The execution of works on this line is significantly delayed due to conflicts between the Peruvian State, specifically the Ministry of Transport, and the companies in charge of construction. These conflicts are still being solved; thus, it is very likely that the execution level of the expected IADB's counterpart will be modest at the end of the planned execution period, in June 2022. Based on the aforementioned, this would mean that probably the execution level of the total counterpart planned for the Project will be minimal at the end of the expected execution period.

The execution of MINAM's counterpart has been more successful. As of April 30, 2021, based on estimated information, MINAM had mobilized 65% of its expected counterpart for the total Project duration. This counterpart corresponds to the technical assistance provided by ministry officials. There is no evidence that the other two sources of counterpart, the Municipality of San Borja and the *Comisión de Regantes Surco*, have mobilized counterparts. In the Project document, these stakeholders provide counterparts in terms of the recovery and conservation of green areas along the water channels and its ecosystem services and biodiversity, maintenance and improvement of infrastructure, supervision and communication.

On a year-basis, IADB's counterpart was executed in a single year (2020), while MINAM has been mobilizing counterpart resources on a regular basis (2019, 2020, and 2021).

It is important to point out that the previous analysis is based on the information available as of July 30, 2021. At that moment, the information on MINAM's counterpart was based on preliminary information,

still under validation. The Municipality of San Borja and the CUSH have not presented counterpart reports (thus, there might be counterparts not reported yet). The Project team is strongly requesting these two stakeholders to provide the reports. However, we must take into account the high turnover of public officials and that some of them are not familiar with these administrative processes.

It is also necessary to underline that in reality the counterpart in terms of staff has been vast at national and subnational scales, even beyond the entities mentioned in the Project document. Based on the governance structure, many officials have participated in the ToR development, selection of consulting firms, and outputs approval. Around 10-15 people participate in each meeting of the advisory committees, who dedicate 1-2 hours and then take work home. It is quite difficult to quantify this counterpart, but there is a lot of support from the institutions.

Tables 8, 9 and 10 showcase data on financing and co-financing, respectively.

Table 8 Project finances per year

	2018 (June18-Dec18)					2019 (Jan19-Dec19)					2020 (Jan20-Dec20)					2021 (Jan-Jun21)					Accumulated (Jun 1, 2018-Jun 30, 2021)					Total Project budget	
	Planned		Actual	Percentage		Planned		Actual	Percentage		Planned		Actual	Percentage		Planned		Actual	Percentage		Planned		Actual	Percentage			
	Prodoc	Review		S/Prodoc	S/Review	Prodoc	Review		S/Prodoc	S/Review	Prodoc	Review		S/Prodoc	S/Review	Prodoc	Review		S/Prodoc	S/Review	Prodoc	Review		S/Prodoc	S/Review	Prodoc	Review
Result 1	1,350,000	-	0	0%	1,135,000	0		0%	-	343,800	26,400	#DIV/0!	8%	-	1,431,800	40,900	#DIV/0!	0.03	2,485,000	1,775,600	67,300	3%	4%	2,485,000	2,496,150		
Result 2	200,000	-	0	0%	200,000	0		0%	400,000	119,769	29,942	7%	25%	-	359,884	59,884	#DIV/0!	17%	800,000	479,653	89,827	11%	19%	800,000	750,000		
Result 3	325,000	-	0	0%	320,000	0		0%	150,000	0	3,000	2%		-	466,331	1,600	#DIV/0!	0%	795,000	466,331	4,600	1%	1%	795,000	777,219		
Result 4	681,500	-	0	0%	340,750	0		0%	340,750	0		0%		-	519,872	4,155	#DIV/0!	1%	1,363,000	519,872	4,155	0%	1%	1,363,000	1,299,681		
Result 5	203,395	-	0	0%	202,262	29,100	19,400	9.6%	152,262	138,200	69,662	46%	50%	-	274,920	35,851	#DIV/0!	13%	557,919	442,220	124,913	22%	28%	557,919	677,869		
Final review	-	-	0	#DIV/0!	35,000	0		0%	-	-	-	#DIV/0!	-	-	35,000	-	#DIV/0!	-	35,000	35,000	-	0%	0%	35,000	35,000		
Audit	-	-	0	#DIV/0!	-	-	-	#DIV/0!	-	-	-	#DIV/0!	-	-	45,000	-	#DIV/0!	-	45,000	-	-	0%	0%	45,000	45,000		
Administrative Costs	-	-	0	#DIV/0!	-	-	-	#DIV/0!	-	-	-	#DIV/0!	-	-	20,000	-	#DIV/0!	-	20,000	-	-	0%	0%	20,000	20,000		
Total	107,000	-	0	0%	107,000	80,275	80,275	75%	107,100	80,275		0%		-	80,275	160,550	#DIV/0!	200%	321,100	240,825	240,825	75%	100%	321,100	321,100		
Total	2,866,895	-	-	0%	2,340,012	109,375	99,675	4%	91%	1,150,112	682,044	129,004	11%	19%	65,000	3,168,083	302,941	466%	10%	6,422,019	3,959,502	531,620	8%	13%	6,422,019	6,422,019	

Source: Financial information provided by the Project team

Table 9 Co-financing by type

Name of Co-financer	Type of Co-financer	Type of Co-financing	Co-financing planned at the beginning of the Project			Effective co-financing in the medium term		
			In Kind	In cash	Total	In Kind	In cash	Total
IADB	GEF	Loans		300,000,000	300,000,000		56,073,024	56,073,024
MINAM	Beneficiary government	In Kind	103,328		103,328	66,889 ⁴¹		66,889
Municipality of San Borja	Beneficiary government	In Kind	438,084		438,084			
Comisión de Regantes Surco	Other	In Kind	438,084		438,084			
Total					300,979,496	66,889	56,073,024	56,139,913

⁴¹ Estimated amount provided by MINAM at the end of June 2021. At the moment of writing this review report this figure has not been validated.

Table 10. Co-financing by year

Institution	2019 (Sept–Dec)			2020			2021 (Jan–April 30, 2021)			Accumulated (Sept 2019–April 30, 2021)			Total Planned	
	Planned	Real	Planned/Real	Planned	Real	Planned/ Real	Planned	Actual	Planned/ Real	Planned	Actual	Planned/ Real	Planned	Planned/ Real
IADB				224,722,741	56,073,024	25%				224,722,741	56,073,024	25%	300,000,000	19%
MINAM	25,832	11,825	46%	25,832	40,548	157%	25,832	14,516	56%	77,496	66,889	86%	103,328	65%
Municipality of San Borja	73,014			219,042			219,042			511,098			438,084	0%
<i>Comisión de Regantes Surco</i>													438,084	0%
Total	98,846	11,825	11.96%	244,874	40,548	17%	244,874			588,594	56,139,913	9538%	300,979,496	19%

Source: Project team.

3.5.2 Institutional arrangements and stakeholder participation

From the executing agencies point of view, changes in the institutional arrangements after the design caused delays in the Project implementation. In the Project document, FONDAM was designated as the executing agency of the “CS” and it was established that the Project coordination would be located in MINAM, which would also provide technical inputs through consultative committees. However, as explained in section 3.3.2, the executing agency was changed, selecting WWF after a long bidding process. Also, the location of the Project’s focal point within MINAM changed twice. All this caused significant delays in the Project’s implementation, which actually began in March 2020, almost two years after its official start in June 2018.⁴²

Collaboration between executing and implementing agencies has involved a learning curve. Since undertaking the role of executing agency in February 2019, WWF has faced a learning curve related to IADB’s administrative processes, which are complicated and time-intensive. One aspect that has triggered particular challenges is the management of multiple parallel procurement processes for the Project’s components implementation (it includes 12 consultancies, 10 in progress or in contracting process). Based on the aforementioned, WWF has recently strengthened its administrative staff. The Project has had a procurement specialist from the very beginning, including among its activities the elaboration of the Operations Manual, trainings and execution of all contracts through WWF’s administration officer and the additional internal support for operational issues. Until May 2021, his dedication was part-time. In May 2021, it became full-time (100%), and a consultant specialized in procurements with experience in IADB’s policies was hired. Since July there is also a part-time Officer (analyst) for additional administrative support. In the next months, it is planned to hire a Procurement Officer (analyst) and a Procurement Assistant, in order to cover the Project’s procurements. Moreover, meetings are held once a week to ensure close coordination and support. Interviewees agree that, thanks to these efforts, the Project’s administration has been streamlined in the last semester. On the other hand, WWF has also faced financial constraints by having to assume the predefined management commission for FONDAM, which corresponds to 4% of the budget. This has been low given the Project scope and complexity, not covering WWF’s standard management costs.

Full-time staff from the executing agencies is limited and cannot always cover the multiple areas of specialization addressed by the Project. As indicated in section 3.3.2, the Project document did not include resources for the Project team, since this role was expected to be covered by a sustainable cities unit created in MINAM with public resources. Since such unit was never created, after being initially assigned to PEPENAR, the Project management passed to the hands of MINAM’s Climate Change Directorate, which had limited capacities due to its already extensive work agenda; implementation was quite slow. Given this situation, the budget was modified to hire a coordinator and an assistant, who joined in June 2020, and MINAM returned the focal point to PEPENAR. Furthermore, since May 2021 a WWF’s administration officer has been fully dedicated to the project. Although these measures have helped to streamline the Project management, there are currently only three people fully dedicated to “CS” by the executing agency, which is still insufficient given the large number of activities and complexity of its governance system. Coupled to this is the challenge of providing technical monitoring and hiring national consultants for studies that require a high degree of specialization.

⁴² The Project launch meeting took place in the fall of 2018.

From the **implementing agency** point of view, IADB **has provided a significant support**; although procedures followed to ensure robustness and suitability of processes take time. IADB is providing thorough support, with a scrutiny level more typical of a loan than of technical assistance – yet not strictly necessary and comprehensive – involving technical teams in different areas, and administrative, financial and legal staff. This support has included workshops to train the executing agency and a careful review of ToR, selection processes, and deliverables. Currently, IADB has one person to exclusively monitor the Project, participating in weekly coordination meetings. Interviews suggest that IADB also plays an important catalytic role in positioning topics in Peru and LMA, since its technical contributions are widely respected. In this regard, IADB's involvement adds significant technical value and facilitates the adoption of more ambitious processes than what would have been accepted nationally and locally without it. Therefore, it is a strategic ally to raise the bar and to validate outputs and processes.

The governance system has allowed for active stakeholder's participation, but decision-making processes have been slow. As explained in section 3.1.4, the "CS" governance system, through its five advisory committees, has closely involved agencies from different sectors and government levels in the Project's activities design and monitoring. It has also been able to conduct some consultations with CSOs, including through remote meetings due to the COVID-19 pandemic. However, as detailed in section 3.3.2, the creation of these advisory committees was extensive (they were installed between May and June 2020) and has led to repetitive review and consultation processes to ensure the approval of documents and outputs, which has caused more delays to the Project. One particular aspect has affected the Project's efficiency: the lack of a steering committee to concentrate decision-making, which have been assigned to the advisory committees. Although the foregoing has allowed a high interaction level between stakeholders, it has also required more time from a large number of stakeholders with high workloads, which has led to longer consensus-building processes.

3.5.3 Planning

The project has suffered many delays, which is reflected in its activities progress and financial execution. As shown in Figure 1 (section 3.1.4), almost two years passed between the Project's approval in June 2017 and its execution in March 2020, mainly due to political changes and institutional arrangements established for its management. This has also slowed down ToRs preparation and outputs approval during the last year (see sections 3.3.2 and 3.5.2 for further details). In this context, less than a year before the Project's planned closing date (June 2022), 7 out of 12 "CS" activities are under contract, 2 are in preparation/design phase, and only 2 show some progress in the outputs (Table 11). Work on the communications and dissemination strategy has not yet begun. All the aforementioned is the Project's rationale to request an extension.

Monitoring of the Project's progress is close and systematic. The Project team meets once a week with PEPENAR, IADB and WWF to review the progress on "CS" and agree on next steps. In this regard, a matrix is used that specifies the progress level in each output or activity, next steps, responsible organization and deadline, as well as rating its status through a traffic light. Based on this tool, as of June 14, 2021, only three products had delays as planned. Although this focus on outputs and activities is desirable to speed up implementation, it is yet not clear to what extent articulation is being monitored for different "CS" outputs and results (see section 3.2.1).

Table 11 Progress of Project activities

Activity	Preparation phase	Design	Hiring	Implementation	Sustainability
1.1. GHG inventory			In process		
1.2. Disaster risk and urban growth studies		ToR under development			
1.3. Coastal Adaptation Plan			In process		
1.4. Acquisition of orthomosaic based on satellite images			In process		
1.5. PLCC guidelines				4 of 5 products delivered	
2.1. Comprehensive study of watersheds that supply LMA				2 of 6 products delivered	
2.2. Operational Support System for decision-making associated with LMA supply system			Completed		
3.1. Urban Biodiversity and Ecosystem Services Strategy, Biodiversity Action Plans			In process		
3.2. Plan to recover and revalue Surco-Huatica water channels			In process		
4.1. Transport-oriented development studies for three SIT stations of Lima and Callao			In process		
5.1. National Platform for Sustainable Cities and Climate Change	Hiring a specialized consultant				
5.2. Communication and Dissemination Strategy					

Source: Produced in-house based on the Project document.

3.5.4 Risk management

Risks identified in the Project document and the PIRs are adequate, but in some cases their probability was underestimated and mitigation actions result inadequate (see Table 12). In particular, the probability of risks related to changes in political spheres and public agenda as a consequence of electoral processes was underestimated and continues to be underestimated, which have significantly affected the Project's progress up to date and threaten both its effectiveness and results sustainability. Also, some of the mitigation actions are not realistic in terms of the Project's influence on the public agenda. Furthermore, risks related to the selection of executing agencies were overlooked. On the other hand, MINAM's implementation capacity, especially the focal point, was not identified as risk. Coupled to this, there are unexpected events, such as the COVID-19 pandemic, which was nevertheless identified in the PIR and managed properly.

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It should also be mentioned that, during its preparation, the Project was subjected to IADB's **safeguards** filter and was assigned Category C, which corresponds to very limited or no social or environmental risks. The aforementioned seems appropriate given the Project's activities nature, which focus on information generation and planning tools. There have been no changes related to this during implementation. In this regard, this Project is not expected to cause any environmental or social damage.

Table 12 Comments on the risk matrix

Risk	Level	Mitigation Action	Comments
Political risk: Changes of public sector representatives (at technical and political level) affect the Project design and execution	Intermediate	A strong execution unit will be created to ensure adequate coordination between all institutions and stakeholders, with clearly defined roles and responsibilities and decision-making channels.	Risk level was underestimated. Mitigation action is not under the Project's full control; thus, it has not been fully implemented.
Lack of continuity on public policies can affect the sustainable cities and climate change agenda	Intermediate	The Project has been careful enough to involve authorities at different levels in the preparation process and it will continue to do so. Moreover, a communication strategy will be launched so Lima citizens get to know the Project's objectives.	Risk level was underestimated. The Project's influence on the public agenda was underestimated. So far, the communication strategy has not been implemented.
Insufficient financial resources	Intermediate	The Project aims to incorporate MINAM's national policies, but further financing will be sought.	Mobilization of additional resources has been limited (see section 3.5.1)
Implementation risk: Delays in the adoption and execution of policies and measures identified in the Project	Intermediate	The local government, MINAM and the implementation agency will be closely involved to ensure the timely execution of activities.	Involvement has occurred through advisory committees, but its influence on the public agenda has been underestimated.
Limited communication	Intermediate	The Project will include a communication strategy between the different stakeholders to develop good relationships between all of them.	Communication has occurred through advisory committees.
Reliability of public data	High	The Project will map the different indicators and its availability and sources to have a clear scenario of what happens.	There is no evidence of the systematic implementation of this mitigation action, beyond requiring consultants to use the available information.
Execution, coordination and appropriation of results	Intermediate	MINAM has selected an executing agency with experience that facilitates coordination and execution with all stakeholders.	Risk level was underestimated. FONDAM's time horizon was not considered and WWF Peru's level of experience was not adequately assessed.

Source: Produced in-house based on the Project document.

3.5.5 Adaptive management

The Project has adapted to a changing context. As detailed in previous sections, the “CS” has adapted to the political and institutional changes since its design, from changing the executing agency and focal point in MINAM, to adjust the Project activities and outputs. For example, including the elaboration of PLCC guidelines, which was not originally considered, and replacing the metro stations selected for the transport-oriented development studies due to conflicts around Metro Line 2. This has been favored by the active participation of public sector stakeholders in the Project’s advisory committees, which also reflects in an update of the Project’s results framework. On the other hand, the Project has been able to adapt to the new reality due to COVID-19 pandemic, continuing the design and monitoring of activities through virtual meetings as of March 2020.

Lessons learned have been documented to a limited extent in the PIRs and there are no adequate spaces to share them with partners. So far, no exercise has taken place to recover and communicate the Project’s lessons learned. However, the Project team hopes to obtain inputs from the consulting companies hired for different “CS” activities - companies are asked to include lessons learned in their final reports. At Project level, PIRs limit to identify three lessons: involvement of high-level authorities to speed up administrative processes, especially at the beginning of Project execution; feasibility of continuing the work virtually due to COVID-19 pandemic; and maintaining bilateral contact with Project partners, even formally, to ensure their continued participation.⁴³ During this review, several additional lessons have been identified, which are included in section 4.2. Since the Project is part of the IAP, which is oriented to the “proof of concept” and plans to collect lessons learned from its subsidiary projects through the GPSC, it will be critical to strengthen this aspect in the remaining implementation period.

3.5.6 Monitoring and evaluation system

The Project has adequate financial resources for monitoring and evaluation (M&E). The Project document allocates USD 100,000 for M&E, considering three outputs: MTR that is the object of this report, a final review and a financial audit, scheduled for the Project’s closure in 2022. The Project document assigned the M&E responsibility to the executing agency and MINAM, without anticipating any resources for an *ad hoc* coordinating team.

The Project’s monitoring tools have been developed in a timely manner. Since the establishment of the coordinating team in 2020, it has assumed the tasks of monitoring and follow-up, among others, generating different tools, both for internal use (e.g.: monthly progress reports and the monitoring matrix for outputs execution) and accountability purposes with partners and donors (semi-annual/quarterly monitoring reports for MINAM, annual declaration before the Peruvian Agency for International Cooperation, PIR for GEF).

Some of the monitoring tools can be improved. When reviewing the PIRs, it is observed that they are somewhat. For example, they do not include gender information or document lessons learned in detail. Furthermore, the results framework and other monitoring tools are focused almost exclusively on the Project’s outputs, without even considering the results achieved as a result of such outputs. On the other hand, in the implementation phase, the Project is using a different results framework than the one included in the Project document. For example, the matrix included in the Project document includes five indicators for Component 1, while the results framework currently used only includes two indicators for

⁴³ Note that this third lesson does not seem to be consistently integrated into the Project’s management (see section 3.5.7).

that component. We have also identified changes in units of measurement (e.g.: people trained instead of training events) and the inclusion of additional financial information. Although these changes respond in a pragmatic way to the adjustments in the Project, they were not formalized and therefore this may generate a lack of clarity regarding the fulfillment of goals.

3.5.7 Communication and knowledge management

Communication to the public and knowledge management are incipient. Component 5 of the “CS”, which plans the development of an information platform and a communication strategy, is in the initial phase of development, since it depends on the inputs generated in Components 1-4. Currently, consultants have been hired to develop the Project’s graphic identity, the communications strategy and action plan. However, some dissemination activities have been carried out regarding the results of Component 2: water resources – the most advanced component. These activities have included 2 events held on January 25 and June 28, 2021 (the second broadcast live on Facebook) and the publication of an entry on IADB’s blog⁴⁴. Communication to the public is expected to be boosted in the next stages.

Communication with members of the advisory committees is insufficient during the implementation phase of activities. Although the Project has closely worked with the advisory committees during the ToRs design and the consultant hiring processes, some of the people participating in the committees show no clarity about the Project’s current progress, next steps and expected schedule.

3.6 Sustainability

3.6.1 To what extent are there legal and regulatory, political and institutional, technical, financial, sociocultural and/or environmental risks to maintain the Project long-term results?

- Did the Project develop a robust sustainability strategy? Did the Project implement it?

The Project document explicitly addresses the Project’s sustainability in section 9. This lays exclusively in the appropriation of institutions, with a particular focus on MINAM. According to page 20 of the Project document, this ministry would ensure the Project’s results sustainability at metropolitan and national scales by inserting these into its planning and structure tools, including the incorporation of the sustainable cities platform into a strategic public policy, and financing this agenda as part of its relevant actions. As mentioned before, the results sustainability lies in the appropriation of other institutions, considering both government agencies and academia, NGOs and cooperation actors. **The exit strategy includes relevant elements, but is not comprehensive enough**, neglecting key factors, such as legal or technical aspects. Furthermore, **it is based on a strong assumption** (the creation of a sustainable cities directorate, division or team in MINAM). Its full compliance would not have been enough to secure the Project’s results sustainability at metropolitan or national scales.

As of June 30, 2021, **the exit strategy has been only partially implemented**. As explained above and argued below, the sustainable cities agenda has not been fully formalized at MINAM. Moreover, as

⁴⁴ See: <https://blogs.iadb.org/ciudades-sostenibles/en/how-to-improve-urban-planning-and-water-governance-by-strengthening-water-management-in-cities/>

outlined in section 3.1.5, and pointed out below, the Project has not engaged all stakeholders who are key for the results sustainability. Although the participation of government entities has been outstanding, the involvement of civil society and cooperation actors has been minimal. The following subsections systematically analyze progress and limitations related to the main sustainability factors: legal and regulatory, political and institutional, technical, financial, sociocultural, and environmental and climate change aspects.

What factors can favor or hinder the achievement of sustainable results? Have they been addressed during Project management?

Aspects related to the legal and regulatory framework

At national level, many **laws, strategies and plans contribute** to the Project's results sustainability. Among these is the Framework Law on Climate Change, which calls for activating a climate-friendly development agenda at metropolitan and municipal scales. In a less explicit and more indirect manner, both NDC and NAP foster climate action. In addition, some of the ongoing initiatives will contribute to the Project's results sustainability. These include the National Housing and Urban Planning Policy, with a 10-year horizon, and the Law on Sustainable Urban Development, promoted by the MVCS.

At subnational scale, the Provincial Municipality of Lima's PLCC clearly contributes to the Project's results sustainability at metropolitan level. However, the Provincial Municipality of Callao does not seem to have a policy that explicitly promotes the results sustainability. In both cases, with a 20-years validity, and in process of completion and approval, the metropolitan development plans are a fundamental link. Although their drafts are not distinguished by a marked environmental bias, the Project studies can adjust this, particularly by influencing urban development plans, with a 10-years validity; these two local governments will have to formulate them as a corollary of the metropolitan plans. This will be key for the Project's results sustainability.

Coupled to this, **part of the Project's outputs are actually strategies and plans**. Interviews indicate the municipalities' willingness to approve them through ordinances, thus consolidating not only these results, but also generating enabling conditions for other Project's results sustainability.

Aspects related to the political and institutional framework

The Project's results sustainability will largely depend on two electoral processes: the 2021 national elections and the 2022 subnational elections. The result of those elections will be critical for the Project's results sustainability, in the sense that elected officials and their appointees in key positions embrace or not the sustainable and climate-friendly cities agenda.

The risk is relatively moderate, but by no means negligible at national scale, because most of the Project's results are and will be, as argued in section 3.3, at subnational level and thus its sustainability will depend on the appropriation of metropolitan and municipal administrations. However, the national government, especially MINAM, but also in a less essential way, the MVCS, and other ministries, play a fundamental facilitating and stimulating role for the results sustainability at subnational scale. It will be crucial that the Project team quickly connects with the new national representatives.

Therefore, the risk is more significant at subnational level. In this regard, the one-year extension could be decisive. With the current closing date (June 2022), the Project team would not be able to build relationships with the elected government from the December 2022 elections that will take office in

January 2023. It would not even be able to influence campaigns. Yet, this would be feasible if the Project extends for one year, until June 2023. We have to keep in mind that it is not entirely sure whether candidates will support or not the green agenda crosswise. For instance, the Lima administration for the 2015-2018 period did not embrace this agenda. This risk is higher because the involvement of civil society and the deployment of communication and dissemination actions have been limited, as stated below. A change of government could result in filing studies, strategies, plans and profiles, preventing them from translating into concrete interventions.

It is worth mentioning that we could face a devastating combined effect if national and subnational elections result in belligerent officials or actors with no interest in the green and climate agenda. The vast universe of actors mitigates this risk, because it is unlikely that all elected officials and their appointees follow just one single direction. By integrating a variety of stakeholders, the Project and its results are more resilient: if there is only one actor, sensitivity to changes is greater; with many actors, it is unlikely that many will change, and the many that remain will balance the few new ones entering.

A key factor for the results sustainability is the institutionalization of the sustainable cities agenda in MINAM. This was the fundamental pillar of the sustainability strategy in the Project document. It is indeed essential to achieve results at the national scale and to provide sustainability to the results achieved and to be achieved at subnational scale, as recognized by subnational governments. Although MVCS' efforts in promoting the green agenda are quite notable and highly relevant, MINAM has a leading role to play. Therefore, it is crucial that the ministry forms a general directorate, division or unit in charge of the sustainable and climate-friendly cities agenda that can be led at national scale, giving continuity and expanding the scope of this Project's roadmap. This could happen through the strengthening and restructuration of PEPENAR, expanding its thematic, geographical and temporal horizon, while it forms a stronghold of environmental urban planners within the ministry, who are already familiar with the Project's procedures and results. This will be subject to the results of the 2021 presidential elections.

For the Project's result sustainability, **it would also be crucial that intersectoral and multilevel governance spaces continue.** This does not seem entirely likely, because advisory committees have been created in relation to outputs development. Although it is likely that bilateral and even tripartite relations will remain informally, it seems unlikely that the Project's formal coordination and agreement spaces will continue once the outputs that activate them have concluded. Based on this, dialogue, agreement and coordination between multiple stakeholders seem more like a partial result, subject to the Project's duration, than a medium and even short-term result, likely upon completion and that can underpin other Project's results sustainability.

On the other hand, from the institutional point of view there is a **very significant appropriation of the outputs**, since potential users are actively participating in ToRs preparation and selection of consulting firms, and will play a key role in outputs approval. This will boost its use. For example, the most leading authorities in water resources management (ANA, SENAMHI, SEDAPAL), together with MINAM, signed an act of commitment to foster smart water management, associated with sustainability in the use of outputs of Component 2. The remarkable engagement of technical experts and mid-level officials, who are often not subject to changes in government, will contribute to the Project's results sustainability regardless changes in administrations.

At national scale, the existing platforms and its planned expansion are a double-edged sword for the sustainability of the platform to be created by the Project. The National Observatory of Housing and Urbanism promoted by the MVCS, framed in the policy and the bill⁴⁵, and the National Environmental

⁴⁵ This observatory would be a platform that collects and processes information and monitors compliance with the policy. One of the issues it considers is sustainable urban development. The MVCS has already made progress: *GeoVivienda*

Information System managed by MINAM will help to highlight the importance of urban environmental indicators and information and knowledge about sustainable and climate-friendly cities. At the same time, there is a potential tension between these three platforms. In particular between the platform to be created by the Project and the other two, which have a solid institutional anchor point, unlike the “CS” platform, especially if there is no sustainable and climate-friendly cities division or unit within MINAM in charge of its management. Although the advisory committee of Component 5 allows its articulation, considering the integration of *GeoVivienda* and *GeoPlan* into the Project’s platform, the overlapping of platforms with unequal institutional anchors is a risk for the sustainability of the platform to be created by the Project.

Aspects related to technical capacity

No major difficulties are expected in technical terms for LMA, given the basic capacities, the stakeholder’s participation in outputs development and training events. Although based on the existing differences this is somewhat less true in Callao.

On the other hand, **there may be difficulties from a technical point of view to provide sustainability to the national platform**, since part of the information on urban environmental indicators, in particular related to air quality and green areas, must be generated by the municipalities. In fact, one of the challenges for the “CS” platform sustainability is the generation of robust and regular information by municipalities that can nurture the platform, since the capacity of Lima/Callao is higher than the other municipalities countrywide (e.g.: equipment to monitor air quality – there are 12 in Lima, and the number will increase, and only 10 in cities other than Lima). Although support from INEI, DGE CIA and MVCS contributes to solving part of these challenges, given their technical robustness, historical experience, institutional links and regulatory capacity, technical gaps at subnational level should be considered as a risk.

Financial aspects

The development of public investment profiles will help mobilize financial resources to translate some recommendations from studies and consolidate some of strategies and plans, particularly related to densification in safe areas, increased coastal resilience, recovery and conservation of green areas, and water channels rehabilitation. This is quite positive. **However, profiles do not ensure that these investments will be made.** In this regard, although profiles are a step forward regarding simple ideas, they are a step behind the files, which do commit resources. ESCI evaluation identified the difficulty of frequently translating preliminary drafts on site. Thus, it will be critical to link the profiles with institutional commitments, such as metropolitan development plans, municipal development plans and other plans, such as the Lima PLCC. It is worth remembering that, although the IADB-ESCI and GEF’s Sustainable Cities IAP do contemplate it, **the “CS” does not include support for strengthening municipal finances** – an aspect that can help financing profiles that the Project will develop. Furthermore, the profiles cover a small part of the interventions considered in the developed plans. In general, the availability of financial resources will largely depend on the sign of changes in the national government in 2021 and subnational in 2022. Furthermore, profiles cover a small part of the interventions considered in the plans. In general, availability of financial resources will largely depend on changes in the national government in 2021 and subnational in 2022.

It is important to mention in this context that at the moment **the Project has not made significant efforts to mobilize resources beyond the national and local governments.** The Project has not built relationships with development agents who work on the sustainable and climate-friendly cities agenda,

and *GeoPlan*, which are platforms that select geospatial information to understand what is the scope that they give as a ministry compared to what must be achieved. It is also a repository at level of diagnosis and proposal.

either bilateral such as the cooperation agencies of Germany, Korea, Spain, France, Japan and Switzerland; regional, such as CAF and ECLAC; multilateral, such as UNDP, UNEP, UN-Habitat, UNCDF; financing funds that cover these topics, such as the Green Climate Fund, Climate Investment Funds (CIF) or the Adaptation Fund, among others; or city networks with focus on sustainability, such as C40, ICLEI, the Global Covenant of Mayors for Climate & Energy, or United Cities and Local Governments (UCLG), etc. Relationships with these institutions have been specific and indirect, through initiatives supported by other stakeholders, such as the Japanese and Korean cooperation agencies in terms of transport for Lima. In this regard, from a sustainability point of view, it might have made more sense to complement the profiles elaboration with a concept note for an international fund, including the GEF itself, for example; but not necessarily within the framework of its Sustainable Cities Impact Program, which could give continuity and greater scope to the Project's results, in collaboration with IADB or another regional or multilateral agency.

Along the same line, the Project has not built robust partnerships with Peruvian non-governmental entities that could help mobilize financial resources, either its own or through its partners and the networks to which they belong.

Sociocultural aspects

Given its focus on elaboration of studies and development of strategies, plans, tools and profiles, and without physical interventions on the ground, this factor results less relevant in this Project than in other GEF projects. In any case, it is crucial that in spite of changes in government with uncertain results at national and subnational scales, civil society may be able to contribute towards the Project's results sustainability, by voting for candidates who embrace the urban sustainability agenda and also then putting pressure on elected leaders to implement it, regardless their political orientation. More specifically, civil society ownership can encourage authorities to use the information generated and the tools developed, and thus implement strategies, plans and profiles developed by the Project.

The reference here is to civil society in its broadest sense, encompassing academia, media, unions, non-governmental organizations and public opinion, as well as institutional agencies of agreement between the government and citizenship, such as the Metropolitan Environmental Commission (CAMET) of Lima. Engagement of the private sector is also key, especially to reduce pressures against the green agenda, and turn it into an agent of change. However, at the moment of elaborating this MTR, this does not seem entirely possible, given the **limited involvement of civil society** in the Project's governance system and the still modest communication efforts (see section 3.5.7). The expected launch of the latter seems essential for the results sustainability.

Environmental and climate aspects

Unlike other GEF projects that include physical interventions on the ground, this Project's results sustainability is not significantly influenced by environmental and climate aspects. Rather than overshadowing its results, extreme weather events could reinforce the ownership of the Project's results and contribute to its sustainability.

4. CONCLUSIONS, LESSONS LEARNED AND RECOMMENDATIONS

4.1 Conclusions

Relevance

The Project is relevant to GEF, IADB and WWF. The Project contributes to GEF's efforts on sustainable cities by being part of the IAP, and it is aligned with the GEF-6 biodiversity and climate change mitigation focal areas. Furthermore, it is consistent with IADB's institutional strategy and sector priorities in terms of climate change, housing and urban development. It also enables continuity to the ESCI, which methodology is resumed for Component 1. The "CS" also contributes to the "Climate and Energy Program" of WWF Peru's Strategic Plan (2018-2021) and consolidates WWF Peru's as a key stakeholder in sustainable cities matters countrywide.

Despite multiple changes in national and local governments, the Project has managed to keep consistency with national and local priorities. At national scale, the Project is directly or indirectly aligned with the main national planning tools in environmental and urban matters. The Project also helps positioning urban sustainability on the public agenda. At local level, the Project responds to LMA's environmental needs, it is consistent with the priorities established in local planning, and it is helping to catalyze metropolitan governance through its multisectoral and multilevel governance system. Despite initial intentions, its contribution at local level is restricted to LMA. There is a need for broader participation of the social, academic, private and media sectors.

Project design

The Project does not have a Theory of Change that articulates its different components. Neither it includes a graphic illustration of problems and solutions, nor assumptions are identified for the Project to achieve its objectives. On the other hand, the Theory of Change in the Project document assumes that components are built on each other, contributing to an integrated planning. However, in real life most of them are developed in parallel, which poses a challenge for its integration.

The Project does not fully integrate activities to meet its objectives at national scale and it does not directly address the municipal finance issue. Generally speaking, The Project's outputs significantly contribute to achieving the expected results and part of the objective related to LMA, but it only contributes modestly to achieving the part of the objective link to the national scale. From a thematic or sectoral point of view, the Project comprehensively covers urban and environmental planning with a climate change emphasis. However, its approach to urban finance is mild, despite being a key factor for the Project's sustainability.

The results framework is focused on outputs at local level. This is mostly adequate to measure the fulfillment of the Project's objective at subnational scale, but it does not allow knowing the fulfillment of the Project's objective at national scale, nor the achievement of results by focusing on outputs monitoring.

Goals are realistic within the programmed budget, but it was not considered that institutionality would affect the implementation timeframes. In this regard, goals are not realistic given the lack of

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institutionality for sustainable cities countrywide, nor before administrative and management processes in MINAM.

The Project design does not include lessons learned from similar initiatives, but it considers methodologies and information generated by some previous projects. These are also being resumed throughout the implementation phase.

Coordination has been made with some of the complementary initiatives identified in the design phase, such as EbA-Lomas and the transport NAMA. During the implementation, articulation with other initiatives has been pursued through the Project's governance system, which is focused on the public sector. Therefore, it was identified an opportunity to create further synergies with initiatives in other sectors both at local and international scales.

Effectiveness

As of June 30, 2021, the performance in achieving goals established in the Project's results framework is moderately satisfactory: it is satisfactory in the results of Component 3, moderately satisfactory in the results of Components 1 and 2, and moderately unsatisfactory in the results of Components 4 and 5. More specifically, it is expected to meet goals of Component 3 during the implementation period set out in the Project document; for Components 1, 2, 4 and 5, it is not expected to meet goals during the implementation period set out in the Project document (June 2022), but definitely within an additional year (for June 2023). To date, there has been no progress in the GEF TT indicators initially considered, but there has been progress in others (see below). This **progress reflects the delays for the Project's start**, which was affected by several factors, including the change of executing agency and focal point within MINAM as a result of changes in government, the complex governance system and limited human resources. The results matrix focuses on outputs; thus, it is not possible to measure effects achieved through them.

Impact

As of July 31, 2021, the Project's impact has been limited, since most of its outputs have not been executed. However, the Project has a significant potential impact, especially at subnational scale, while at national scale both range and depth of potential impacts are smaller. It is worth mentioning that the Project will have positive impacts not considered in the results matrix at national and subnational scales, particularly in terms of benefits coming from intersectoral and multilevel governance.

The Project directly contributes to SDG 11 in terms of cities, while its different components have the potential to contribute to SDG 6 (water), 13 (climate change), 14 (oceans), 15 (land ecosystems) and 17 (partnerships). Through its information generation and planning activities, the Project aims to indirectly contribute to improving the quality of life of LMA population in different areas, including access to green spaces and public transport, air quality and disaster resilience.

Women's participation in the Project's activities is equitable, but this does not have a systematic gender approach. From the 10 ToRs already prepared for Components 1-4, only those related to the development of PLCC guidelines refer to the gender approach. This despite that 5 more ToRs focus on aspects where it is crucial to consider differentiated capacities, needs and vulnerabilities of people according to their gender.

Efficiency

The Project's financial execution is limited. As of June 30, 2021, when 75% of the Project implementation period has passed, the Project had spent USD 531,620, or 8% of its total budget. At that moment, it was urgent to speed up contracting processes and its execution, since signed contracts represented only 22% of the planned procurements value and expenses only 22% of the signed contracts value. In this regard, **most of the expenses have been operational** and not substantive: expenses not related to operational aspects represented only 29% of total expenses and 48% of expenses in the Project's components. Regarding co-financing, as of April 30, 2021, the Project had mobilized 19% of the total counterpart planned for the Project's life cycle. Although this does not reflect the large counterpart in terms of staff at national and subnational scales.

The Project has suffered many delays, but monitoring of the Project's progress is close and systematic. Main factors that contributed to delays are changes in the institutional arrangement after the Project's design, the learning curve in terms of collaboration between executing and implementing agencies, the slow decision-making processes within the governance system framework, as well as reduced staff fully dedicated to the Project, who cannot always cover the different areas. Despite this, the accounting and financial systems established for the Project management and the generation of accurate and timely financial information are suitable. The implementing agency's support is key in technical and strategic terms.

Risks identification is adequate, but in some cases their probability was underestimated and mitigation actions result inadequate. Furthermore, MINAM's implementation capacity, especially the focal point, was not identified as risk. Coupled to this, there are unexpected events, such as the COVID-19 pandemic, which was nevertheless identified in the PIR and managed properly. In terms of safeguards, the risk of environmental or social damage is very limited or null (GEF Category C) both during design and execution.

Although the Project has adapted to a changing context, the lessons learned have been documented to a limited extent in the PIRs and no spaces have been created to share them with partners.

The Project has adequate financial resources for M&E and the Project monitoring tools have been developed in a timely manner, yet their quality can be improved.

There are important opportunity areas for communication. Communication to the public and knowledge management are incipient. On the other hand, communication with members of the advisory committees is insufficient in the implementation phase of activities.

Sustainability

The Project's exit strategy needs to be strengthened, because it ignores fundamental factors, such as legal or technical aspects, and it is based on a strong assumption: the creation of a directorate, division or team on sustainable cities within MINAM, which has not happened yet. This strategy should consider the institutionalization of the sustainable cities agenda in MINAM and the continuity of intersectoral and multilevel governance spaces.

There are several factors that contribute to the Project's results sustainability, in particular existing laws, strategies and plans at national and subnational scales, as well as the development of public investment profiles, which will help mobilize financial resources to translate some recommendations from studies and partially consolidate some of strategies and plans.

However, the Project's results sustainability will largely depend on the institutional and public policy changes as a result of the 2021 national elections and the 2022 subnational elections. Engagement of civil society, which could mitigate this risk, has been limited.

4.2 Lessons learned

1. Focus on sustainable cities is highly relevant in an urbanized and urbanizing world. It is critical that international funds associated with sustainable and climate-friendly development, such as GEF, and its implementing agencies, such as IADB, and executing agencies, such as WWF, directly foster sustainability and climate change mitigation and adaptation in cities. The IAP and subsequent GEF's Sustainable Cities Program have a major strategic relevance. This is particularly important in Latin America and the Caribbean, where 81% of the population was urban in 2018 and 88% is projected to become urban in 2050⁴⁶.

2. Although capitals inspire the roadmap of other cities in a specific country, progress in one capital is usually insufficient to generate systemic changes in other cities countrywide. The widespread replication of a local practice often requires the review of political and regulatory frameworks and institutional structures at national scale, increased awareness and capacity building through guides, dissemination of information and good practices, direct training, financial resources availability and the establishment of economic incentives, among others.

3. During the design phase, it is vital to assess the executing agency's capacity to carry out its functions. This review should consider the institution life cycle, since the approval of GEF projects usually takes time. The selection of the executing agency shall also respond to a bold interest in carrying out these functions. Furthermore, the definition of the governmental focal point of a project must analyze both relevance and efficiency. Although a specific general directorate may be more relevant in terms of agenda, its appointment may result inconvenient if its workload is not proportional to its human resources, even if these are elevated with respect to other directorates.

4. Governance processes are key to generate paradigm shifts at urban level. Often one of the major barriers to sustainable and climate-friendly urban development is the limited consensus and cooperation between agencies whose actions must be synergistic, mainly because of institutional fragmentation and lack of communication mechanisms. The creation of task forces within a project can build relationships that favor consensus-building and institutional cooperation over a longer timeframe. This type of impact, often not explicitly included in the GEF projects' Theory of Change, is critical to make systemic changes that these projects need. However, this impact may be limited (reduced to 2-3 stakeholders and not contemplate a broader group) if these relationships are confined to very specific aspects, such as the development of quite specific outputs, and are not articulated with longer-term elements.

5. When users of an output engage in the definition of its scope, development and approval, this increases its usefulness and appropriation, leading to an improved sustainability of the Project's results. HydroBID success and the bold commitment of entities in charge of water resources management countrywide is an example of this.

6. The benefits of group work and the involvement of users in the outputs elaboration must be balanced according to efficiency and agility in the execution. Lessons 3 and 4 do not imply involving

⁴⁶ United Nations, Department of Economic and Social Affairs, Population Division (2019). World Urbanization Projections 2018: Highlights, p. 25.

all stakeholders in all processes. For example, selecting consulting firm, an administrative rather than a strategic activity, can be carried out exclusively by the Project team.

7. Sustainable and climate-friendly urban development and its management are complex challenges that need horizontal and multi-level integration. This requires addressing very diverse and dispersed issues, from physical planning to governance, from infrastructure to ecosystems, and from climate change mitigation to adaptation. The key is not only in sectoral amplitude, but also in sectoral integration. Sustainable and climate-friendly urban development is no longer a multisectoral challenge but intersectoral. This is a challenge when it comes to manage projects, because they break down its contents into outputs with sectoral angles in order to speed things up. Defining time sequences that prompt synergies between outputs can be helpful. However, sometimes implementation delays result in the simultaneous launch of all outputs, sacrificing synergy between outputs and, more broadly, the intersectoral aspect of sustainable and climate-friendly urban development. In these cases, besides requiring all consultants to communicate during the outputs elaboration, it might be useful to condition a final payment upon review of outputs at the completion of others, so integration between all of them could be a fact.

8. Often one of the critical barriers to sustainable and climate-friendly urban development is the minimal investment in physical works that promote it. Many cities have bold plans and strategies that were not implemented, while other plans and strategies not inspired by sustainable and climate-friendly development are translated into physical works. To deal with this, it is important that projects translate plans and strategies into investment profiles, following the current public investment formats and models in the countries where they operate. Although useful, these profiles do not ensure that the physical work will be executed. To achieve further results, it may be necessary to support the strengthening of municipal finances, often weak and highly dependent on national transfers, as well as to build direct relationships with development stakeholders actively engaged in sustainable and climate-friendly cities agenda. In some cases, if the scale of the interventions is minimal, it might be more effective to group profiles into ambitious projects for international financing, at least at PIF and PPG levels, rather than preparing isolated profiles.

9. Stakeholder participation has to go beyond the public sector. Multilevel and intersectoral governance implies involving not only government entities at national, metropolitan and district scales, but also civil society (academia, NGOs, private sector, unions, media, public at large), cooperation spaces (e.g.: CAMET) and active international partners related to the sustainable and climate-friendly city sphere, including city networks. This includes the creation of exchange spaces and the design and implementation of broad and differentiated awareness and communication campaigns. International visibility of results can also contribute to its ownership at national and subnational scales. This is key for both effectiveness of a development project and sustainability of its results.

10. International projects are subject to externalities, with a probability and impact often underestimated. Although instability in Peru for the 2016-2021 period has been unlikely high, political instability was more likely and usually with a greater impact than originally estimated. Moreover, projects are subject to economic (sharp drop in the price of basic commodities for a country), social (social unrest) or natural events (earthquakes, extreme weather events, health emergencies, such as the COVID-19 pandemic) that are difficult to predict and with huge potential impacts.

11. Integrating the sustainable cities approach into the institutional framework is key to the continuity of the Project's results. As highlighted in Lesson 7, sustainable and climate-friendly urban development is an intersectoral challenge. Although many other stakeholders play an important role, the Ministry of Housing and Urban Development and the Ministry of Environment play a leading role. Despite the fact that sustainable and climate-friendly urban development falls into many divisions within these

ministries, it is important to have a specific unit or division that promotes this agenda in a systematic and energetic way. This might require creating a unit or division for this specific purpose, capable of giving continuity to the project and positioning this topic on the public agenda. The team in charge must have the appropriate technical capacities, including both urban planning and environment and climate change, as well as aspects related to governance. When facing incipient processes, it is also important to seize previous efforts and build from them.

12. Execution of demonstrative physical interventions can help catalyze systemic changes by generating knowledge, strengthening capacities, and bolstering interinstitutional and multilevel coordination. On occasion, projects more focused on information, planning and governance, such as the “CS”, can associate with projects more focused on physical interventions, in order to jointly execute a demonstrative intervention even without committing significant own resources.

13. Due to financial and operational constraints, a cooperative project cannot cover all aspects of the sustainable and climate-friendly urban development, and must choose only a few ones. This selection must consider the centrality of the aspects and the creation of synergies. From this perspective, it is important to work on cross-cutting aspects to the different sectors, such as urban planning and municipal finances, and build synergies, such as between urban planning and risk management and urban planning and sustainable transport (transport-oriented development).

14. It is critical that projects include a theory of change from its design, which clearly identifies the expected objective, barriers and how the project contributes to reduce or overcome them through the expected results of planned activities and outputs – showcased in a graphic or figure. Similarly, it is key that the project document includes a graphic illustration of both problems and solutions, and its interrelation, as well as assumptions. This provides a shared vision to stakeholders, which can help build partnerships and coordinated work.

15. The results framework should be aligned with the theory of change, measure results, and set realistic goals. It is crucial that the results framework is aligned with the project’s theory of change, or at least with its objectives. For instance, referring to national and subnational scales when the Project aims to have an impact on both. Moreover, it is key that the results framework measures results, not only outputs, and includes mid-term goals. Also, goal setting should be realistic, considering potential externalities that may delay implementation.

16. A project shall have enough human resources for management purposes. This should include a coordinator, who deals with management and public relations, a technical assistant and an administrative assistant, who are familiar with GEF’s procedures and implementing and executing agencies. In thematically complex projects, the team should also include technical experts in some fields. This could mean significant financial resources, sometimes above of what GEF’s policies indicate.

17. Sustainability or exit strategies must be comprehensive, considering legal and regulatory, political and institutional, technical, financial, and environmental and climate change aspects. Furthermore, they should be linked to the theory of change, ensuring that they can overcome barriers that the Project document identifies as critical.

18. Given that the context may have changed substantially between the design and start phases of a project, it is critical that projects have the flexibility to reflect those changes and adjust its activities to a new reality. This is decisive for the relevance, ownership, effectiveness and sustainability of a project’s results, especially when there are multiple changes of government during its design and implementation.

4.3 Recommendations

Based on this MTR findings, the evaluator recommends the following actions:

Recommendation 1: In line with the findings in sections on Effectiveness and Efficiency, the Project should accelerate implementation and look for an extension. About the former, the Project team must sign the missing contracts promptly and put some pressure on consultants to send their deliverables as soon as possible. Furthermore, IADB, in coordination with MINAM and WWF, must consolidate and send to the GEF a one-year extension request. This is urgent, and should be done with no delay.

Recommendation 2: In line with the findings in sections on Relevance, Efficiency and Sustainability, the Project should improve its governance and communications. In particular:

- The Project team, in consultation with MINAM, MVCS, IADB and WWF, should explore the possibility of creating 2 steering committees, with national and metropolitan focuses, which are crosswise to the components and operate beyond outputs elaboration. It is important to note that these high-level committees would meet occasionally (twice a year) and that their functions would be strategic and non-operational, so they would not slow down processes or deadlines. The Project team, in coordination with MINAM, MVCS, WWF and IADB, should secure the presence of at least two CSOs on these committees. The national committee should include AMPE, because its environmental work is currently weak, while the metropolitan committee should include a non-institutional member of CAMET.
- The Project team, in coordination with MINAM, WWF and IADB, should create consultation spaces with civil society at national and metropolitan scales, organizing events or joining events organized by others (e.g.: participating in a CAMET's meeting).
- The Project team should reinforce awareness and communication actions and speed up the hiring of the team in charge of preparing and implementing the communication strategy, which should include training actions and broad and differentiated communication campaigns. In this regard, the Project team should ensure that the awareness strategy includes a specific training workshop for the media and journalists with a national scope (ideally including local media in different parts of the country).

As allowed by COVID-19 restrictions, the Project team should encourage the participation of key project stakeholders in international events, starting with the COP26 (2021), and including activities of the GPSC. Where possible, institutional representatives should participate in these events and not the Project team, in order to build more sense of ownership.

- MINAM should institutionalize the sustainable and climate-friendly cities agenda to provide sustainability to the results achieved and to be achieved at subnational level, as well as leading this agenda at national scale, allowing continuity and extending the Project scope. This could happen through the strengthening and restructuration of PEPENAR, expanding its thematic, geographical and temporal horizon, while it forms a stronghold of environmental urban planners within the ministry, who are already familiar with the Project's procedures and results. MINAM should also increase its level of management, to boost hierarchy, and expand its team with experts on public investment, among others.

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- The Project team should promptly update the map of stakeholders and their positions, identifying changes from the 2021 national elections, and quickly getting in touch with the new actors to join them into the Project and thus mitigate the risk of non-continuity; starting with the new ministers at MINAM and MVCS.
- If the Project duration is extended by one year (June 2023), the Project team should act in line with the municipal elections of December 2022 by i) lobbying the campaign to position the sustainable cities topic; ii) presenting the Project to main candidates to see their position and try to secure their support and ii) quickly getting in touch with elected officials.
- The Project team should strengthen communication with members of advisory committees, informing them on a more regular basis about progress in outputs development, next steps, and what expectations. Furthermore, even when 2021 elections have not resulted in a change of direction, the Project team should contact senior managers of relevant organizations to keep them interested in the Project and give an update on the progress made.

Recommendation 3: In line with the findings in sections on Project design, Impact and Sustainability, the Project should reinforce its planning. More specifically:

- The Project team, in coordination with MINAM, MVCS, WWF, and IADB, should review the theory of change proposed in this review and refine it for their own use. This should be used in training and, in some case, in communication campaigns, as well as in the development of the sustainability strategy and the expansion roadmap (see below).
- The Project team, in coordination with MINAM, MVCS, WWF, and IADB, should develop an indicator system, with realistic goals at national level for the remaining implementation period.
- The Project team, in coordination with MINAM, MVCS, WWF, and IADB, and in consultation with other relevant governmental and non-governmental stakeholders, should develop a comprehensive sustainability strategy aligned with the theory of change. This strategy should consider at least the following aspects:
 - o Ensure that the Project studies contribute to adjusting the metropolitan development plans of Lima and Callao, with a 20-years validity, and in process of completion and approval, respectively, especially by influencing urban development plans, with a 10-years validity; these two local governments will have to formulate them as a corollary of the metropolitan plans.
 - o Foster municipalities' approval for strategies and plans developed by the Project (via ordinances). This will not only secure these results, but it will also generate the enabling conditions for other Project's results sustainability.
 - o Explore ways in which the Project can influence the public budgeting processes, in order to secure resources for the projects that were designed, in addition to their inclusion in the new government planning.
- In addition, the Project team, in close collaboration with MINAM and MVCS, and in consultation with other key stakeholders, including other ministries, city networks (including AMPE), academia, civil society and the private sector, should explore the possibility of developing a comprehensive analysis of how a sustainable and climate-friendly cities agenda could be promoted at national scale, as well as defining a roadmap to advance on that goal during and after the Project, including

the identification of potential financing sources. Considering that this is not an activity included in the Project document, the Project could use existing balances for this, by contracting a consulting firm with enough experience and time to carry out this exercise. Given its 1800 district and provincial municipalities in Peru, the roadmap should probably consider that it will be possible to advance only progressively or incrementally at national scale, replicating LMA experience first in the departmental capitals, where there is more capacity, and then to other cities. Below some considerations:

- This roadmap needs to be urgently developed to seize the Project activities, including the communication strategy. In this regard, the Project team must ensure that this analysis and roadmap nurture the communication strategy to be soon developed.
The roadmap should consider lessons of Agenda 21 and ESCI in the country, which together include the cities of Arequipa, Chiclayo, Cusco, Huancayo and Trujillo. The roadmap must be updated 3 months after the Project completion (in March 2022 or March 2023, depending on whether the extension is confirmed) in light of the LMA experience systematization, which the Project team must perform.
- The Project team should review the consultants' ToRs and payment schedules to encourage outputs articulation at the end. This may be legally unfeasible in signed contracts, but can be done in a more informal way. If authorized by administrative rules, it should be included in the ToRs under preparation. Thus, authors will be asked to review outputs that would sequentially come later when the outputs that would come before are finished, if necessary.
- The Project team should mainstream the gender approach into outputs. For example, preparing a checklist with minimum elements to be considered by the contracted consultants, based on good practices of gender inclusion in urban planning, urban transport-oriented development projects and climate change adaptation.

Recommendation 4: In line with the findings in sections on Project design, Impact and Sustainability, the Project should reinforce its impact at subnational scale. Therefore:

- The Project team, MINAM, and IADB should ensure that the profiles match the public investment framework, and identify who will be responsible for executing them and with what money, including whether or not a counterpart will be required.
- The Project team, MINAM, WWF, and IADB should ensure that the exit strategy elaboration includes the relevance of boosting municipal finances and the ways to do so at subnational scale.
- The Project team, together with MINAM's focal point, should build direct relationships with development stakeholders who work on sustainable and climate-friendly cities agenda, in order to mobilize technical and/or financial cooperation and create synergies, including the following:
 - Bilateral, such as the cooperation agencies of Germany, Korea, Spain, France, Japan and Switzerland
 - Regional, such as CAF and ECLAC
 - Multilateral, such as UNDP, UNEP, UN-Habitat, UNCDF
 - Financing funds that cover these topics, such as the Green Climate Fund, Climate Investment Funds (CIF) or the Adaptation Fund, among others
 - City networks with focus on sustainability, such as C40, ICLEI, the Global Covenant of Mayors for Climate & Energy, or United Cities and Local Governments (UCLG), etc.

- It should also strengthen its link with the GEF- GPSC
- The Project team, together with MINAM's focal point, should consult with funds (e.g.: GEF, Green Climate Fund, or Adaptation Fund) or accredited implementing entities to see if they are interested in grouping multiple profiles in a single project, in order to have a major scale and impact whilst reducing transaction costs.
- In the short term, the Project team, in coordination with advisory committees, should secure no duplications with initiatives funded by international partners. For example, the Project team, in coordination with the Component 2 advisory committee, should improve synergies with KOICA's support in the water field.
- The Project team should explore the implementation of a demonstrative physical intervention, such as the effective recovery of a water channel or the protection and conversion of a hill into a park, along with partners, in particular PEPENAR and EbA-Lomas

Recommendation 5: The Project should reinforce administrative and technical management. In particular:

WWF should accelerate the already planned hiring of a new administrative officer to replace the current one and a procurement assistant for the Project. Moreover, it should explore the possibility of boosting the involvement of technical staff, since technical demands within the next months will be considerably high.

5 ANNEXES

5.1 Evaluation matrix

Table 13 Evaluation matrix

Evaluation criteria	Questions	Indicators	Sources	Method
1. Project relevance: To what extent is the Project strategy consistent with the priorities of GEF, IADB, WWF, the country and the intervention area?				
.1.1. Is the Project consistent with GEF strategic priorities?	<ul style="list-style-type: none"> How does the Project contribute to GEF strategic priorities? 	<ul style="list-style-type: none"> Existence of a clear relationship between Project objectives and GEF strategic priorities 	<ul style="list-style-type: none"> Project document GEF strategic documents Interviews with IADB, WWF, MINAM and Project team 	<ul style="list-style-type: none"> Document analysis Interviews
.1.2. Is the Project consistent with IADB strategic priorities?	<ul style="list-style-type: none"> How does the Project contribute to IADB strategic priorities, in sectoral and geographic terms? 	<ul style="list-style-type: none"> Existence of a clear relationship between Project objectives and IADB strategic priorities, in sectoral and geographic terms 	<ul style="list-style-type: none"> Project document IADB strategic priorities, including ESCI Interviews with IADB 	<ul style="list-style-type: none"> Document analysis Interviews
.1.3. Is the Project consistent with WWF strategic priorities?	<ul style="list-style-type: none"> How does the Project contribute to WWF strategic priorities, in sectoral and geographic terms? 	<ul style="list-style-type: none"> Existence of a clear relationship between Project objectives and WWF strategic priorities, in sectoral and geographic terms 	<ul style="list-style-type: none"> Project document WWF strategic priorities Interviews with WWF 	<ul style="list-style-type: none"> Document analysis Interviews
.1.4. To what extent is the Project consistent with the national strategies and needs in terms of sustainable urban development and climate-friendly development?	<ul style="list-style-type: none"> How does the Project contribute to the country needs, priorities and strategies in terms of sustainable urban development and climate-friendly development? Has the Project been appropriated to the country? What was the level of stakeholder participation in the design and implementation of the Project? 	<ul style="list-style-type: none"> Level of alignment between Project objectives and national priorities, policies and strategies for sustainable urban development and climate-friendly development Perception of the Project ownership level by the country Perception of the level of stakeholder participation in the design and implementation of the Project 	<ul style="list-style-type: none"> Project document National policies and strategies (National Development Plan, National Climate Change Plan, Nationally Determined Contribution) Interviews with MINAM, MVCS, MINCUL, SENAMHI, ANA, INEI, WWF Peru and Project team 	<ul style="list-style-type: none"> Document analysis Interviews

Evaluation criteria	Questions	Indicators	Sources	Method
.1.5. Is the Project consistent with strategies and needs of LMA and the Provincial Municipality of Callao	<ul style="list-style-type: none"> To what extent does the Project respond to metropolitan and district needs in the intervention area? Have all relevant metropolitan and district stakeholders been included during Project implementation? 	<ul style="list-style-type: none"> Level of alignment between Project objectives and the needs of LMA, Callao and districts Perception of the level of local stakeholder participation in the Project implementation 	<ul style="list-style-type: none"> Project document PIRs Development plans for LMA, Callao and San Borja Interviews with municipalities of Lima, Callao and San Borja, WWF Peru and the Project team 	<ul style="list-style-type: none"> Document analysis Interviews
2. Project design: Was the project internally consistent and robust in its design?				
2.1. Analysis of the Project vertical logic/Theory of Change	<ul style="list-style-type: none"> How clear and well-integrated were the Project objectives, results, outputs and activities? Were they robust considering intermediate states and anticipated long-term environmental impacts, causal pathways for long-term impacts, and implicit and explicit assumptions? 	<ul style="list-style-type: none"> Consistency between the Project objective, results, outputs and activities Robustness of the theory of change, in terms of causal pathways and assumptions Completeness of risk and assumption identification during the Project planning and design Extent to which planning documents anticipated or reflected relevant risks/externalities 	<ul style="list-style-type: none"> Project document Interviews with IADB, WWF Peru, Project team, MINAM and LMA 	<ul style="list-style-type: none"> Document analysis Interviews
2.2. Analysis of the results framework	<ul style="list-style-type: none"> How effective has the M&E system (indicators, baselines, goals, methods and sources of verification) been in measuring the Project progress/results? Are they SMART⁴⁷ and consistent with the Project objectives, results, and outputs? How feasible and realistic are the Project objectives, results, and outputs within the available budget and scheduled time? 	<ul style="list-style-type: none"> Quality of the results framework in the Project document Viability of objectives, results and outputs within the Project budget and timeframe 	<ul style="list-style-type: none"> Project document PIRs Interviews with IADB, WWF Peru, Project team, MINAM and LMA 	<ul style="list-style-type: none"> Document analysis Interviews

⁴⁷ For specific, measurable, achievable, relevant, and time-based.

Evaluation criteria	Questions	Indicators	Sources	Method
2.3. Lessons learned from other relevant projects (same field) incorporated into the Project design	<ul style="list-style-type: none"> Were relevant lessons learned from other projects properly incorporated into the Project design? 	<ul style="list-style-type: none"> Examples of consideration of relevant lessons learned/Project recommendations in the Project design 	<ul style="list-style-type: none"> Project document 	<ul style="list-style-type: none"> Document analysis
2.4. Link and complementarity of the Project with other interventions within the sector	<ul style="list-style-type: none"> Were other interventions within the sector clearly identified in the program and Project documents? To what extent does the Project support (and not duplicate) activities and objectives not addressed by other donors? Has the intervention been coordinated with other donors to seek complementarity and synergies? 	<ul style="list-style-type: none"> Other interventions in the sector duly described and its possible links with the analyzed program and Project Level of consistency and complementarity of the program and the Project with other donors' projects and programs in the region 	<ul style="list-style-type: none"> Project document PIRs Interviews with IADB, WWF, Project team, MINAM, UN-Habitat, C40, ICLEI 	<ul style="list-style-type: none"> Document analysis Interviews
3. Effectiveness: To what extent has the Project made progress in achieving objectives and expected results?				
3.1. Has the Project been effective to achieve the planned objectives, results and outputs? ⁴⁸	<ul style="list-style-type: none"> To what extent has the Project made progress in achieving the planned objectives? To what extent has the Project made progress in achieving the planned results? What has been the quality of the results achieved? To what extent has the Project made progress in achieving the planned outputs? What has been the quality of the outputs? What has been the progress in achieving the goals established in the GEF Tracking Tool? Have there been any unplanned activities and results? Has it been positive or negative? 	<ul style="list-style-type: none"> Level of achievement of the goals with respect to the objectives Level of achievement of goals with respect to results Level of achievement of goals with respect to outputs Quality level of results Quality level of outputs Level of compliance with the goals established in the GEF TT Existence of unplanned activities and results and its impact 	<ul style="list-style-type: none"> Project document PIRs Interviews with IADB, WWF Peru, Project team, MINAM, MVCS, MINCUL, SENAMHI, ANA, INEI, LMA, municipalities of Lima, Callao and San Borja 	<ul style="list-style-type: none"> Document analysis Interviews

⁴⁸ Using the results matrix of the Project document (GEF Project Endorsement) and the annual intermediate goals established in the POA.

Evaluation criteria	Questions	Indicators	Sources	Method
3.2. What factors are helping and hindering the achievement of objectives and expected results?	<ul style="list-style-type: none"> Nature of factors that are hindering the achievement of objectives and expected results Nature of factors that are hindering the achievement of objectives and expected results 	<ul style="list-style-type: none"> Nature of factors that are hindering the achievement of objectives and expected results Nature of factors that are hindering the achievement of objectives and expected results 	<ul style="list-style-type: none"> Project document PIRs Minutes of the Advisory Committees meetings Interviews with IADB, WWF Peru, Project team, MINAM, MVCS, MINCUL, SENAMHI, ANA, INEI, LMA, municipalities of Lima, Callao and San Borja 	<ul style="list-style-type: none"> Document analysis Interviews
4. Efficiency: Is the Project running efficiently?				
4.1. Financing and co-financing	<ul style="list-style-type: none"> Is there a difference between planned and actual expenses? Why?⁴⁹ Did leverage of funds (co-financing) occur as planned? Were the accounting and financial systems established for Project management and generation of accurate and timely financial information adequate? Have financial resources been used efficiently? Could financial resources have been used more efficiently? 	<ul style="list-style-type: none"> Level of discrepancy between planned and executed budget (total, by year and component) Level of discrepancy between planned and leveraged co-financing Availability and quality of financial reports Level of management expenses and discrepancy with those planned Costs related to the results achieved compared to the costs of similar projects from other organizations 	<ul style="list-style-type: none"> Project document Progress reports Financial reports Audit reports Budget execution analysis reports and adjustments made by the Project team Cost-benefit estimates of the Project or similar projects Interviews with IADB, WWF, MINAM and Project team 	<ul style="list-style-type: none"> Document analysis Interviews
4.2. Institutional arrangements and stakeholder participation	<ul style="list-style-type: none"> To what extent were capacities of the executing entities analyzed during the design phase? To what extent were the roles and responsibilities of the different stakeholders discussed? Are the roles and responsibilities of the different stakeholders clear in the design? How effective have institutional arrangements, including 	<ul style="list-style-type: none"> Evidence of execution capacity analysis Evidence of clear roles and responsibilities Number and types of partnerships established between the Project and local bodies/organizations Scope and quality of interaction/exchange between Project implementers and local partners 	<ul style="list-style-type: none"> Project document PIRs Minutes of the Advisory Committees meetings Interviews with IADB, WWF Peru, Project team, MINAM, MVCS, MINCUL, SENAMHI, ANA, INEI, LMA, municipalities of Lima, Callao and San Borja 	<ul style="list-style-type: none"> Document analysis Interviews

⁴⁹ This includes a detailed analysis of the execution of Project disbursements.

Evaluation criteria	Questions	Indicators	Sources	Method
	coordination channels, proven to be during implementation? <ul style="list-style-type: none"> To what extent have effective partnerships been established for Project implementation with relevant stakeholders at different levels? How effective was the collaboration between institutions responsible for the Project implementation? Do stakeholders have an active role in making decisions about the Project that guide its implementation? To what extent does the Project use local skills, experience and knowledge in the design, implementation and evaluation of its activities? 	<ul style="list-style-type: none"> Number, type, and quality of mechanisms implemented to foster stakeholder's participation at each phase of the Project design, execution, and monitoring 		
	<ul style="list-style-type: none"> How efficient is the performance of the implementing entity? 	<ul style="list-style-type: none"> Quality of the supervision and support of the implementing entity 	<ul style="list-style-type: none"> Project document PIRs Minutes of the Advisory Committees meetings Interviews with IADB, WWF Peru, Project team, MINAM 	<ul style="list-style-type: none"> Document analysis Interviews
	<ul style="list-style-type: none"> How efficient is the performance of the executing entity? 	<ul style="list-style-type: none"> Quality of the execution of the executing entity Level of discrepancy between the actual and projected amount of the budget and staff time dedicated to the Project 	<ul style="list-style-type: none"> Project document PIRs Minutes of the Advisory Committees meetings Interviews with IADB, WWF Peru, MINAM, MVCS, municipalities of Lima, Callao and San Borja 	<ul style="list-style-type: none"> Document analysis Interviews
4.3 Planning	<ul style="list-style-type: none"> Have the tasks scheduled in the Project's Annual Operating Plans (POA) been fulfilled? 	<ul style="list-style-type: none"> Difference between the actual and planned schedule the Project execution 	<ul style="list-style-type: none"> Project document PIRs Minutes of the Advisory Committees meetings 	<ul style="list-style-type: none"> Document analysis Interviews

Evaluation criteria	Questions	Indicators	Sources	Method
	<ul style="list-style-type: none"> Has the Project experienced any delays in its execution? If so, why? 	<ul style="list-style-type: none"> Number of activities scheduled/completed according to POAs Cause and total of delays 	<ul style="list-style-type: none"> Interviews with IADB, WWF Peru, Project team and MINAM 	
	<ul style="list-style-type: none"> Has the results framework been used as a management tool during implementation? 	<ul style="list-style-type: none"> Extent to which the results framework has been used as a management tool 	<ul style="list-style-type: none"> PIRs Interviews with IADB, WWF Peru, Project team and MINAM 	<ul style="list-style-type: none"> Document analysis Interviews
4.4 Risk management, including social and environmental safeguards	<ul style="list-style-type: none"> Were all relevant risks identified in the Project document? How well have new risks been identified? For example, COVID-19?⁵⁰ What has been the quality of the risk mitigation strategies? Have they been enough? How have environmental and social safeguards been managed? Is there any risk of environmental or social damage? 	<ul style="list-style-type: none"> Quality of risk analysis in Project document/Completeness of risk identification during Project planning and design Extent to which the planning documents anticipated or reflected the risks that the Project has already faced during implementation Quality of existing information systems to identify and analyze new risks Quality of risk mitigation strategies developed and followed Consistency of risk analysis and implementation of mitigation measures with international standards Existence of risks related to environmental or social damage and its management 	<ul style="list-style-type: none"> Project document PIRs Minutes of the Advisory Committees meetings Interviews with IADB, WWF Peru, Project team and MINAM 	<ul style="list-style-type: none"> Document analysis Interviews
4.5. Adaptive management (changes in Project design and results during execution)	<ul style="list-style-type: none"> Did the project undergo significant changes as a result of workshop, steering committee, or other review procedures?⁵¹ What monitoring measures (if any) and/or adaptive management have 	<ul style="list-style-type: none"> Responsiveness of the implementing and executing agencies to recommendations made through PIRs 	<ul style="list-style-type: none"> Project document PIRs Minutes of the Advisory Committees meetings 	<ul style="list-style-type: none"> Document analysis Interviews

⁵⁰ The Project risk analysis to date and the identification of mitigation measures and its relevance and implementation to date will be examined (review of the *ex-ante* risk matrix and the updated matrix). Potential future risks will also be studied for the proper Project execution. Also, the risk matrix will be updated.

⁵¹ This will include an analysis of the modifications of the Agreement to date, including its relevance and impact on the Project design (changes in outputs, results, execution model, etc.) and possible relevant changes to the initial design. This contemplates the critical analysis of the changes that the results matrix (product and result indicators, baselines, goals) may have to date.

Evaluation criteria	Questions	Indicators	Sources	Method
	<ul style="list-style-type: none"> been taken in response to the PIRs? How were lessons learned from the adaptive management process documented, shared with and internalized by key partners? 	<ul style="list-style-type: none"> Examples of changes in the Project strategy/approach as a direct result of recommendations made Proportion of adaptive management processes documented and shared with partners 	<ul style="list-style-type: none"> Interviews with IADB, WWF Peru, Project team and MINAM 	
4.6. Monitoring and Evaluation System (M&E)	<ul style="list-style-type: none"> Did the Project have a robust M&E system to monitor and evaluate the achievement of results, including clear roles and responsibilities? Were there enough financial resources? Did the Project meet the progress reporting schedule? Were they fully and adequately completed (in compliance with guidelines and providing necessary strategic information)? 	<ul style="list-style-type: none"> Robustness of the M&E system Financing of the M&E system Relevance and quality of monitoring and progress reports 	<ul style="list-style-type: none"> Project document Progress and monitoring reports Interviews with IADB, WWF Peru, MINAM and Project team 	<ul style="list-style-type: none"> Document analysis Interviews
4.7 Communication and knowledge management	<ul style="list-style-type: none"> How effective are the communications in ensuring stakeholder awareness of the Project? Are there effective external communication mechanisms? Has knowledge management been effective? 	<ul style="list-style-type: none"> Existence of an internal communication plan, communication protocols and feedback mechanisms Level of stakeholders' awareness about Project results and activities/Project visibility Number and type of external communication mechanisms or activities implemented, including other cities in Peru, Latin America and the Caribbean and the world (e.g.: GPSC members) Existence of a knowledge management strategy Scope and relevance of activities included in the Plan Number and type of activities and outputs developed Impact of activities and outputs developed 	<ul style="list-style-type: none"> Project document Communication documents Interviews with IADB, WWF Peru, Project team, MINAM, MVCS, MINCUL, SENAMHI, ANA, INEI, LMA, municipalities of Lima, Callao and San Borja 	<ul style="list-style-type: none"> Document analysis Interviews

Evaluation criteria	Questions	Indicators	Sources	Method
5. Sustainability: To what extent are there financial, institutional, socioeconomic and/or environmental risks to maintain the Project long-term results?				
5.1. To what extent are there financial, institutional, socioeconomic and/or environmental risks to maintain Project long-term results?	<ul style="list-style-type: none"> • Did the Project come up with a solid sustainability strategy? Did it include a specific exit strategy? Was it implemented? • What are the main challenges that could affect the Project's results sustainability? Have they been addressed during the Project management? • What factors can help or hinder the achievement of sustainable results? 	<ul style="list-style-type: none"> • Existence and robustness of a sustainability and exit strategy • Level of implementation of the exit strategy • Scope of obstacles and / or risks to the Project's results sustainability 	<ul style="list-style-type: none"> • Project document • PIRs • Interviews with IADB, WWF Peru, Project team, MINAM, MVCS, MINCUL, SENAMHI, ANA, INEI, LMA, municipalities of Lima, Callao and San Borja 	<ul style="list-style-type: none"> • Document analysis • Interviews
6. Impact: To what extent has the Project contributed or allowed progress towards sustainable and climate-friendly development at metropolitan, municipal and district scales in the intervention area (LMA and Callao), Peru, Latin America and the Caribbean, and the world?				
6.1. Are there signs that the Project has contributed to, or made progress towards its expected impacts?	<ul style="list-style-type: none"> • To what extent has the Project increased the availability of robust methodological tools or guidelines to foster sustainable and climate-friendly development at metropolitan, municipal and district scales? • To what extent has the Project increased the availability of information/strategic evidence to foster sustainable and climate-friendly development at metropolitan, municipal and district scales? • To what extent has the Project resulted in robust (evidence-based) strategies and action plans to foster sustainable and climate-friendly development at metropolitan, municipal and district scales? • To what extent has the Project resulted in management tools and strategic and practical platforms to foster sustainable and climate- 	<ul style="list-style-type: none"> • Number and relevance of additional methodological tools or guidelines to foster sustainable and climate-friendly development at metropolitan, municipal and district scales • Number and relevance of additional studies that offer strategic evidence to foster sustainable and climate-friendly development at metropolitan, municipal and district scales • Number and relevance of additional strategies and action plans to foster sustainable and climate-friendly development at metropolitan, municipal and district scales • Number and relevance of management tools and strategic and practical platforms to foster sustainable and climate-friendly development at metropolitan, municipal and district scales • Evidence of greater institutional and technical capacity to i) generate evidence; ii) understand evidence and use it in developing strategies 	<ul style="list-style-type: none"> • Progress and monitoring reports • Interviews with IADB, WWF Peru, Project team, MINAM, MVCS, MINCUL, SENAMHI, ANA, INEI, LMA, municipalities of Lima, Callao and San Borja 	<ul style="list-style-type: none"> • Document analysis • Interviews

Evaluation criteria	Questions	Indicators	Sources	Method
	<p>friendly development at metropolitan, municipal and district scales?</p> <ul style="list-style-type: none"> To what extent has the Project resulted in increased institutional and technical capacity to i) generate evidence; ii) understand evidence and use it in developing strategies and action plans; iii) implement strategies and action plans, iv) use tools to manage the implementation of strategies and action plans to foster sustainable and climate-friendly development at metropolitan, municipal and district scales? To what extent has the Project resulted in a more compact, rational and equitable territorial planning? To what extent has the Project resulted in lower GHG emissions? To what extent has the project resulted in lower climate change risks? To what extent has the Project resulted in progress regarding the promotion of sustainable and climate-friendly development in Peru, at national scale and in other metropolises and municipal and district governments? To what extent has the Project resulted in progress regarding the promotion of sustainable and climate-friendly development in Latin America and the Caribbean and other regions, particularly at subnational scale? 	<p>and action plans; iii) implement strategies and action plans, iv) use tools to manage the implementation of strategies and action plans, to foster sustainable and climate-friendly development at metropolitan, municipal and district scales</p> <ul style="list-style-type: none"> Evidence of progress towards a more compact, rational and equitable territorial planning as a result of the Project Evidence of lower GHG emissions as a result of the Project Evidence of lower climate change risks as a result of the Project Evidence of progress regarding the promotion of sustainable and climate-friendly development in Peru, at national scale and in other metropolises and municipal and district governments Evidence of progress regarding the promotion of sustainable and climate-friendly development in Latin America and the Caribbean and other regions, particularly at subnational scale 		
6.2. Cross-cutting elements	<ul style="list-style-type: none"> Did the Project successfully integrate the fulfillment of SDGs, 	<ul style="list-style-type: none"> Contribution to SDGs 	<ul style="list-style-type: none"> Progress and monitoring reports 	<ul style="list-style-type: none"> Document analysis Interviews

Evaluation criteria	Questions	Indicators	Sources	Method
	poverty alleviation, generation of socioeconomic benefits, and women's empowerment?	<ul style="list-style-type: none"> Promotion of sustainable livelihoods (e.g.: creation of jobs, income generation) Integration of gender equity in the Project design (gender analysis and gender action plan) Proportion of implementing partners and participants (women) in workshops, training courses or knowledge sharing during implementation Evidence of activities that incorporate gender into planning or activities as a result of the Project 	<ul style="list-style-type: none"> Interviews with IADB, WWF Peru, Project team, MINAM, MVCS, MINCUL, SENAMHI, ANA, INEI, LMA, municipalities of Lima, Callao and San Borja 	

5.2 List of reviewed documents

The following documents were reviewed in detail

Project documents:

- Justification material for the preparation of the Project (ProDoc, CEO Endorsement, IADB Safeguard Policy Filter Report 2016).
- Project Risk Matrix.
- Technical Cooperation Agreement ATN/FM-16452-PE and its amending agreements.
- Project Operations Manual and general provisions of the Advisory Committees.
- Program planning tools, such as Work Plans, Annual Operating Plans (POAs), Procurement Plans, Project Results Matrix, in its different versions.
- Monitoring and supervision documents (semi-annual reports, monitoring matrices, annual declarations for APCI, financial reports, PIRs, etc.).
- Minutes of IADB's monitoring missions and meetings.
- Project financial statements.
- Outputs, such as ToRs for specialized consultants, ToRs and contracts for studies, and training workshop modules
- GEF:
 - o GEF-6 Programming Directions (2014)
 - o Sustainable Cities Integrated Approach Pilot: Program Framework Document (2015)
 - o Child projects from Brazil, China, Ivory Coast, India, Mexico, Malaysia, Paraguay, Senegal, Vietnam, South Africa
 - o GEF-7 Replenishment Programming Directions (2018)
 - o GEF Guide to Policy Guidelines for the Project Cycle (Annex 12)
 - o Global Platform for Sustainable Cities: <https://www.thegpsc.org/>
 - o Project EbA-Lomas: <https://www.pe.undp.org/content/peru/es/home/projects/eba-lomas.html> y <https://geolomas.maps.arcgis.com/home/index.html>
- IADB
 - o IADB Integrated Strategy for Climate Change Adaptation and Mitigation, and Sustainable and Renewable Energy (2011)
 - o Update of the Institutional Strategy 2010-2020 (2015)
 - o Assessment of IADB-ESCI (2016)
 - o Methodological Guide for the Emerging and Sustainable Cities Program: Third Edition and Annex of Indicators (2016)
 - o IADB Group Strategy with Peru 2017-2021 (2017)
 - o Second Update of the Institutional Strategy (2019)

- Housing and Urban Development Sector Framework Document (2020)
- Vision 2025, Reinvent in the America: A Decade of Opportunities (2021)
- WWF
 - Climate and Energy Practice:
 - https://wwf.panda.org/discover/our_focus/climate_and_energy_practice/ y
 - https://wwf.panda.org/projects/one_planet_cities/
 - Mi Ciudad : <https://www.miciudad.pe/>
- Government of Peru
 - Action Plan for Climate Change Adaptation and Mitigation (2010)
 - Bicentenary Plan 2011-2021 (2011)
 - National Environmental Action Plan 2011-2021 (2011)
 - Peru's iNDCs (2015)
 - National Climate Change Strategy (2015)
 - Multiannual Sector Strategic Plan (PESEM) 2016-2021: Housing, Construction and Sanitation Sector (2015)
 - Sustainable cities and climate change (presentation, 2016)
 - Multiannual Sector Strategic Plan (PESEM) 2017-2021 of the Environmental Sector (2016)
 - Voluntary National Reports on the Implementation of the Agenda 2030 (2017 and 2020)
 - Framework Law on Climate Change (2018)
 - Law on Digital Government (2018)
 - Peru's NDCs: Update report 2021-2030 (2020)
 - National Policy for Disaster Risk Management by 2050 (2021)
 - National Plan for Climate Change Adaptation (2021)
 - Sustainable Urban Development Law (2021)
 - National Housing and Urban Planning Policy, with a time horizon by 2030 (2021)
- Local governments:
 - Concerted Regional Development Plan 2016-2021 of the Regional Government of Lima (2016)
 - Metropolitan Municipality of Lima (2021: 102), Lima PLCC 2021-2030
 - Plan MET 2040: <https://imp.gob.pe/plan-met-2040-2/>
- Other sources of information:
 - *Encalada, S., Zucchetti, A. y Peralta, M.: SCP/AL21 en Perú, ONU-Hábitat, Río de Janeiro, 2019*
 - *García, J.: De las Agendas Ambientales Locales a la Iniciativa Ciudades y Cambio Climático. Lineamientos para una estrategia de Cooperación Sur-Sur en América Latina y el Caribe, ONU-Hábitat, Río de Janeiro, Brasil, 2012.*
 - *Naciones Unidas, Departamento de Asuntos Económicos y Sociales, División de Población (2019). Proyecciones de urbanización mundial 2018: Highlights*
 - <http://www.transferproject.org/>
 - <https://projects.worldbank.org/en/projects-operations/project-detail/P145610>

- <http://lima-water.de/es/index.html>
- <https://www.hydrobidlac.org/>
- <https://predes.org.pe/lanzamiento-del-proyecto-independencia-sostenible-con-economia-circular-y-participacion-ciudadana-conto-con-presencia-del-minam/>
- <http://www.limacomovamos.org/> and <https://www.ciudad.org.pe/>

5.3 List of people and institutions interviewed

Table 14 List of people and institutions interviewed

#	Name	Institution	Date
1	Alberto Baradiarán		July 7
2	José Luis Alcántara	MINAM/PEPENAR	July 7
3	Elisabet Olivares		
4	Daniela Freundt	WWF Peru	July 8
5	Mariela Cánepa	MINAM/former WWF Peru	
6	Patricio Zambrano	IADB	July 9
7	Jaime Fernández-Baca		
8	Claudia Amico		
9	Tamara Cusi Alva	Ministry of Housing, Construction and Sanitation (MVCS)	July 12
10	José Carlos Fernández Salas		
11	Carmen Mejía Solano	MINAM – General Directorate of Education, Citizenship and Environmental Information (DGE CIA)	July 12
12	Claudia Ato	Lima-Callao Urban Transport Authority (ATU)	July 13
13	Diana Porlles	Metropolitan Municipality of Lima	July 13
14	Rogelio Campos	MINAM – General Directorate of Climate Change and Desertification (DGCCD)	July 13
15	Margoth Espinosa		
16	Aníbal Sánchez	National Institute of Statistics and Informatics (INEI)	July 15
17	Oscar Felipe Obando	National Meteorology and Hydrology Service (SENAMHI)	July 15
18	Iván Rodríguez	Potable Water and Sewerage Service of Lima (SEDAPAL)	July 16
19	Shirley Mozo	Ministry of Culture	July 19
20	Gonzalo Llosa	Project team	July 15 and 20; August 12
21	Hernán Tello		

5.4 Protocol for semi-structured interviews

Table 15 Protocol for semi-structured interviews

	National government	Subnational governments	IADB	WWF	Project team	International partners
General						
How long and since when have you been involved with the Project and what has been the nature of your involvement?	X	X	X	X	X	X
Relevance						
How does the Project contribute to GEF strategic priorities?			X	X		X
How does the Project contribute to IABD strategic priorities, in sectoral and geographic terms?			X			
How does the Project contribute to WWF strategic priorities, in sectoral and geographic terms?				X		
How does the Project contribute to the country needs, priorities and strategies in terms of sustainable urban development and climate-friendly development?	X		X	X	X	X
To what extent does the Project respond to metropolitan and district needs in the intervention area?		X		X	X	
What was the level of stakeholder participation in the design and implementation of the Project, including relevant metropolitan, municipal and district stakeholders?	X	X	X	X		
Has the Project been appropriated to the country?	X	X	X	X	X	S
Project design						
How clear and well-integrated were the Project objectives, results, outputs and activities?	X	X	X	X	X	
Were they robust considering intermediate states and anticipated long-term environmental impacts, causal pathways for long-term impacts, and implicit and explicit assumptions?			X	X	X	

	National government	Subnational governments	IADB	WWF	Project team	International partners
How effective has the M&E system (indicators, baselines, goals, methods and sources of verification) been in measuring the Project progress/results? Are they SMART ⁵² and consistent with the Project objectives, results, and outputs?			X	X	X	
How feasible and realistic are the Project objectives, results, and outputs within the available budget and scheduled time?	X	X	X	X	X	
Were relevant lessons learned from other projects properly incorporated into the Project design?			X	X		
Were other interventions within the sector clearly identified in the program and Project documents?			X	X	X	
To what extent does the Project support (and not duplicate) activities and objectives not addressed by other donors?	X	X	X	X	X	X
Has the intervention been coordinated with other donors to seek complementarity and synergies?	X	X	X	X	X	X
Effectiveness						
To what extent has the Project made progress in achieving the planned objectives?	X		X	X	X	
To what extent has the Project made progress in achieving the planned results?	x		X	x	x	
What has been the quality of the results achieved?	x	X	X	x		X
To what extent has the Project made progress in achieving the planned outputs?	x	X	X	x	x	
What has been the quality of the outputs?	x	X	X	x	x	X
What has been the progress in achieving the goals established in the GEF Tracking Tool?			X	X	X	
Have there been any unplanned activities and results? Has it been positive or negative?	x	X	X	x	x	
What factors are helping and hindering the achievement of objectives and expected results?	X	X	X	X	X	
Impact	X			X	X	
To what extent has the Project increased the availability of robust methodological tools or guidelines to foster sustainable and climate-friendly development at metropolitan, municipal and district scales?	X	X	X	X	X	X

⁵² For specific, measurable, achievable, relevant, and time-based.

	National government	Subnational governments	IADB	WWF	Project team	International partners
To what extent has the Project increased the availability of information/strategic evidence to foster sustainable and climate-friendly development at metropolitan, municipal and district scales	X	X	X	X	X	X
To what extent has the Project resulted in robust (evidence-based) strategies and action plans to foster sustainable and climate-friendly development at metropolitan, municipal and district scales?	X	X	X	X	X	X
To what extent has the Project resulted in management tools and strategic and practical platforms to foster sustainable and climate-friendly development at metropolitan, municipal and district scales?	X	X	X	X	X	X
To what extent has the Project resulted in increased institutional and technical capacity to i) generate evidence; ii) understand evidence and use it in developing strategies and action plans; iii) implement strategies and action plans, iv) use tools to manage the implementation of strategies and action plans to foster sustainable and climate-friendly development at metropolitan, municipal and district scales?	X	X	X	X	X	X
To what extent has the Project resulted in a more compact, rational and equitable territorial planning?	X	X	X	X	X	X
To what extent has the Project resulted in lower GHG emissions?	X	X	X	X	X	X
To what extent has the project resulted in lower climate change risks?	X	X	X	X	X	X
To what extent has the Project resulted in progress regarding the promotion of sustainable and climate-friendly development in Peru, at national scale and in other metropolises and municipal and district governments?	X	X	X	X	X	X
To what extent has the Project resulted in progress regarding the promotion of sustainable and climate-friendly development in Latin America and the Caribbean and other regions, particularly at subnational scale?			X	X		X
Did the Project successfully integrate the fulfillment of SDGs, poverty alleviation, generation of socioeconomic benefits, and women's empowerment?	X	X	X	X	X	
Efficiency						
Is there a difference between planned and actual expenses? Why?				X	X	
Did leverage of funds (co-financing) occur as planned?				X	X	
Were the accounting and financial systems established for Project management and generation of accurate and timely financial information adequate?			X	X	X	

	National government	Subnational governments	IADB	WWF	Project team	International partners
Have financial resources been used efficiently? Could financial resources have been used more efficiently?			X	X	X	
To what extent were capacities of the executing entities analyzed during the design phase?			X	X	X	
To what extent were the roles and responsibilities of the different stakeholders discussed? Are they clear in the design phase?	X		X	X	X	
Are the roles and responsibilities of the different stakeholders clear in the design?	X	X	X	X	X	
How effective have institutional arrangements, including coordination channels, proven to be during implementation?	X	X	X	X	X	
To what extent have effective partnerships been established for Project implementation with relevant stakeholders at different levels?	X	X	X	X	X	X
Do stakeholders have an active role in making decisions about the Project that guide its implementation?	X	X	X	X	X	X
To what extent does the Project use local skills, experience and knowledge in the design, implementation and evaluation of its activities?	X	X	X	X	X	X
How efficient is the performance of the implementing entity?				X	X	
How efficient is the performance of the executing entity?	X	X	X			
Have the tasks scheduled in the Project's Annual Operating Plans (POA) been fulfilled?	X	X	X	X	X	
Has the Project experienced any delays in its execution? If so, why?	X	X	X	X	X	
Has the results framework been used as a management tool during implementation?			X	X	X	
Were all relevant risks identified in the Project document?			X	X	X	
How well have new risks been identified? For example, COVID-19	X	X	X	X	X	
What has been the quality of the risk mitigation strategies? Have they been enough?	X	X	X	X	X	
Did the project undergo significant changes as a result of workshop, steering committee, or other review procedures?			X	X	X	
What monitoring measures (if any) and/or adaptive management have been taken in response to the PIRs?			X	X	X	

	National government	Subnational governments	IADB	WWF	Project team	International partners
How were lessons learned from the adaptive management process documented, shared with and internalized by key partners?			X	X	X	
Did the Project have a robust M&E system to monitor and evaluate the achievement of results?			X	X	X	
Did the M&E plan have enough financial resources?			X	X	X	
Did the Project meet the progress reporting requirements/schedule?			X	X	X	
How effective are the communications in ensuring stakeholder awareness of the Project?	X	X	X	X	X	X
Are there effective external communication mechanisms?	X	X	X	X	X	X
Sustainability						
Did the Project come up with a solid sustainability strategy? Did it include a specific exit strategy? Was it implemented?			X	X	X	
What are the main challenges that could affect the Project's results sustainability? Have they been addressed during the Project management?	X	X	X	X	X	X
What factors can help or hinder the achievement of sustainable results?	X	X	X	X	X	X
General						
What lessons can be learned from the design and implementation of this Project?	X	X	X	X	X	X
Do you have any recommendation?	X	X	X	X	X	X

5.5 GEF Core indicators

Table 16 GEF Core indicators⁵³

Core Indicator 1	Terrestrial protected areas created or under improved management for conservation and sustainable use				(Hectares)			
	Hectares (1.1+1.2)							
	Expected				Achieved			
	PIF stage		Endorsement		MTR		TE	
Indicator 1.1	Terrestrial protected areas newly created							
	Hectares							
Name of Protected Area	WDPA ID	IUCN category	Expected		Achieved			
			PIF stage		Endorsement		MTR	
		(select)						
		(select)						
		Sum						
Indicator 1.2	Terrestrial protected areas under improved management effectiveness							
	METT Score							
Name of Protected Area	WDPA ID	IUCN category	Baseline		Achieved			
			PIF stage		Endorsement		MTR	
		(select)						
		(select)						
		Sum						
Core Indicator 2	Marine protected areas created or under improved management for conservation and sustainable use				(Hectares)			
	Hectares (2.1+2.2)							
	Expected				Achieved			
	PIF stage		Endorsement		MTR		TE	
Indicator 2.1	Marine protected areas newly created							
	Hectares							
Name of Protected Area	WDPA ID	IUCN category	Expected		Achieved			
			PIF stage		Endorsement		MTR	
		(select)						
		(select)						
		Sum						
Indicator 2.2	Marine protected areas under improved management effectiveness							
	METT Score							
Name of Protected Area	WDPA ID	IUCN category	Baseline		Achieved			
			PIF stage		Endorsement		MTR	
		(select)						
		(select)						
		Sum						
Core Indicator 3	Area of land restored				(Hectares)			
	Hectares (3.1+3.2+3.3+3.4)							
	Expected				Achieved			
	PIF stage		Endorsement		MTR		TE	
Indicator 3.1	Area of degraded agricultural land restored							
	Hectares							
	Expected				Achieved			
	PIF stage		Endorsement		MTR		TE	
Indicator 3.2	Area of forest and forest land restored							
	Hectares							
	Expected				Achieved			
	PIF stage		Endorsement		MTR		TE	

⁵³ Along with this document an editable Word file of the Core Indicators is submitted.

Indicator 3.3	Area of natural grass and shrublands restored				
		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR TE	
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored				
		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR TE	
Core Indicator 4	Area of landscapes under improved practices (hectares; excluding protected areas)				(Hectares)
		Hectares (4.1+4.2+4.3+4.4)			
		Expected		Expected	
		PIF stage	Endorsement	MTR TE	
			119,059	0	
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity				
		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR TE	
			321	0	
			118,738	0	
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations				
Third party certification(s):		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR TE	
Indicator 4.3	Area of landscapes under sustainable land management in production systems				
		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR TE	
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided				
Include documentation that justifies HCVF		Hectares			
		Expected		Achieved	
		PIF stage	Endorsement	MTR TE	
Core Indicator 5	Area of marine habitat under improved practices to benefit biodiversity				(Hectares)
Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations				
Third party certification(s):		Number			
		Expected		Achieved	
		PIF stage	Endorsement	MTR TE	

Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial				
			Number		
			Expected		Achieved
			PIF stage	Endorsement	MTR TE
Indicator 5.3	Amount of Marine Litter Avoided				
			Metric Tons		
			Expected		Achieved
			PIF stage	Endorsement	MTR TE
Core Indicator 6	Greenhouse gas emission mitigated				(Metric tons of CO ₂ e)
			Expected metric tons of CO ₂ e (6.1+6.2)		
			PIF stage	Endorsement	MTR TE
		Expected CO ₂ e (direct)		51,100	0
		Expected CO ₂ e (indirect)		1,753,559	0
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector				
			Expected metric tons of CO ₂ e		
			PIF stage	Endorsement	MTR TE
		Expected CO ₂ e (direct)		51,100	0
		Expected CO ₂ e (indirect)		1,753,559	0
		Anticipated start year of accounting			
		Duration of accounting			
Indicator 6.2	Emissions avoided Outside AFOLU				
			Expected metric tons of CO ₂ e		
			Expected		Achieved
			PIF stage	Endorsement	MTR TE
		Expected CO ₂ e (direct)			
		Expected CO ₂ e (indirect)			
		Anticipated start year of accounting			
		Duration of accounting			
Indicator 6.3	Energy saved				
			MJ		
			Expected		Achieved
			PIF stage	Endorsement	MTR TE
Indicator 6.4	Increase in installed renewable energy capacity per technology				
		Technology	Capacity (MW)		
			Expected		Achieved
			PIF stage	Endorsement	MTR TE
		(select)			
		(select)			
Core Indicator 7	Number of shared water ecosystems (fresh or marine) under new or improved cooperative management				(Number)
Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation				
		Shared water ecosystem	Rating (scale 1-4)		
			PIF stage	Endorsement	MTR TE
Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its implementation				
		Shared water ecosystem	Rating (scale 1-4)		
			PIF stage	Endorsement	MTR TE

Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees								
		Shared water ecosystem	Rating (scale 1-4)						
			PIF stage	Endorsement	MTR	TE			
		Number of Consultive Committees implemented		0	1				
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products								
		Shared water ecosystem	Rating (scale 1-4)						
			Rating			Rating			
			PIF stage	Endorsement	MTR	TE			
Core Indicator 8	Globally over-exploited fisheries Moved to more sustainable levels								(Metric Tons)
Fishery Details			Metric Tons						
			PIF stage	Endorsement	MTR	TE			
Core Indicator 9	Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products								(Metric Tons)
			Metric Tons (9.1+9.2+9.3)						
			Expected			Achieved			
			PIF stage	PIF stage	MTR	TE			
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)								
	POPs type		Metric Tons						
			Expected			Achieved			
			PIF stage	Endorsement	MTR	TE			
	(select)	(select)							
	(select)	(select)							
	(select)	(select)							
Indicator 9.2	Quantity of mercury reduced								
			Metric Tons						
			Expected			Achieved			
			PIF stage	Endorsement	MTR	TE			
Indicator 9.3	Hydrochlorofluorocarbons (HCFC) Reduced/Phased out								
			Metric Tons						
			Expected			Achieved			
			PIF stage	Endorsement	MTR	TE			
Indicator 9.4	Number of countries with legislation and policy implemented to control chemicals and waste								
			Number of Countries						
			Expected			Achieved			
			PIF stage	Endorsement	MTR	TE			
Indicator 9.5	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities								
		Technology	Number						
			Expected			Achieved			
			PIF stage	Endorsement	MTR	TE			
Indicator 9.6	Quantity of POPs/Mercury containing materials and products directly avoided								
			Metric Tons						

			Expected		Achieved	
			PIF stage	Endorsement	PIF stage	Endorsement
Core Indicator 10	Reduction, avoidance of emissions of POPs to air from point and non-point sources					(grams of toxic equivalent gTEQ)
Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment					(Number)
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female		0	5	
		Male		0	24	
		Total				

5.6. GEF rating scales ⁵⁴

Rating for effectiveness (progress towards results)

- Highly satisfactory: The objective/result is expected to be achieved or exceeded with respect to all its final goals, without major shortcomings.
- Satisfactory: The objective/result is expected to be achieved with respect to all its final goals, with only minor shortcomings.
- Moderately satisfactory: The objective/result is expected to achieve most of its final goals, but with significant shortcomings
- Moderately unsatisfactory: The objective/result is expected to achieve its final goals, with major shortcomings.
- Unsatisfactory: The objective/result is expected not to achieve most of its final goals.
- Highly unsatisfactory: The objective/result is expected not to reach any of its final goals.

Rating for efficiency (Project implementation and adaptive management)

⁵⁴ GEF (2020): GEF/C.59/Inf.03 GEF Project and Program Cycle Policy Guidelines (2020 Update), and Guidelines to carry out MTRs.

Highly satisfactory: Implementation of the 7 components (institutional arrangements, work planning, financing and co-financing, M&E, stakeholder participation, reporting and communications) is resulting in efficient and effective implementation and adaptive management.

- Satisfactory: Implementation of most of the 7 components is resulting in efficient and effective implementation and adaptive management, except for only a few aspects that are under remedial action.
- Moderately satisfactory: Implementation of some of the 7 components is resulting in efficient and effective implementation and adaptive management, with some components requiring remedial action.
- Moderately unsatisfactory: Implementation of some of the 7 components is not resulting in an efficient and effective implementation and adaptive management, most of the components require remedial actions.
- Unsatisfactory: Implementation of most of the 7 components is not resulting in efficient and effective implementation and adaptive management
- Highly unsatisfactory: Implementation of none of the 7 components is resulting in an efficient and effective implementation and adaptive management

Rating for sustainability

- Likely (L). There is little or no risks to sustainability; results on track to be achieved by the project completion and expectations to continue in the future
- Moderately Likely (ML). There are moderate risks to sustainability; anticipation that at least some results will be sustained
- Moderately Unlikely (MU). There are significant risks to sustainability; key results will not be sustained upon Project completion, although some outputs and activities may be sustained
- Unlikely (U). There are severe risks to sustainability; Project results and key outputs will not be sustained.