TECHNICAL ASSISTANCE REPORT

ARAB REPUBLIC OF EGYPT

Climate Public Investment Management Assessment

MARCH 2023

PREPARED BY

Eivind Tandberg, Cristian Alonso, Nataliya Biletska, Jacques Charaoui, Katja Funke, Ed Hearne, Mia Pineda, and Tjeerd Tim

Authoring Departments:

Fiscal Affairs Department

DISCLAIMER

This technical assistance was provided with financial support from the Governments of Japan and the Swiss Secretariat for Economic Affairs (SECO).

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

State Secretariat for Economic Affairs SECO

Table of Contents

Acronyms and Abbreviations

BAU ..... Business-as-usual

CC ..... Climate change

EEA ..... Egypt Environmental Agency

EL ..... Environmental Law

ESSG ..... Environmental Sustainability Standards Guide

FAD ..... Fiscal Affairs Department

GFMIS .... Government Financial Management Information System

GHG ..... Green House Gas

IMF ..... International Monetary Fund

ISIPPM ... Integrated System for Investment Plan Preparation and Monitoring

IT ..... Information technology

MoE ..... Ministry of Environment

MoF ..... Ministry of Finance

MPED ..... Ministry of Planning and Economic Development

MRV ..... Monitoring, Reporting and Verification

NCCC ..... National Climate Change Committee

NCCS ..... National Climate Change Strategy

NDC..... Nationally determined contribution

NDRMS .. National Disaster Risk Management Strategy 2030

PBB ..... program and performance budgeting

PC ..... Public corporation

PIM ..... Public investment management

PIMA..... Public Investment Management Assessment

PPP ..... Public-private partnership

SNG..... Subnational government

Preface

In response to a request of the Ministry of Finance (MoF) and the Ministry of Planning and Economic Development (MPED), a team from the IMF's Fiscal Affairs Department (FAD) and Legal Department (LEG) undertook a Public Investment Management Assessment (PIMA) and a Climate PIMA (C-PIMA) during September 27 to November 10, 2022. The mission team was led by Eivind Tandberg and comprised Cristian Alonso (remotely), Jacques Charaoui, and Tjeerd Tim (all FAD), Mia Pineda (LEG), Katja Funke, and Ed Hearne (both FAD experts). Nataliya Biletska, Hosam Hasan, and Mohamed Yehia Abd El Karim (all World Bank), and Dina Mohamed Eldemerdash Elkhishin (World Bank consultant) also contributed to the assessment.

The team was received by Mr. Ahmed Kamaly, Deputy Minister for Planning Affairs, MPED, and Mr. Ahmed Kouchouk, Vice-Minister for Fiscal Policies, MoF who provided advice and orientations ahead of the assessment. At the end of the mission, the team presented them and Dr. Mohamed Maait, Minister of Finance its preliminary conclusions and provided them with a copy of the draft mission report.

The mission met with the departments and services involved in public investment within the MoF and MPED. In particular, within MoF the mission held meetings with the Macro-Fiscal Policy Unit (MFPU), the General Budget Department, the Economic Authorities and Units Budget Department, the Financing Department, the Debt Management Unit, the Accounts and Financial Directorates Department, the Final Accounts Department, and the PPP Central Unit. Within the MPED, the mission met with Mr. Gameel Helmy, Minister Assistant for monitoring affairs, the Planning Affairs Feasibility Studies, the Regional Planning Department, the Plan Preparation and Monitoring Department, and the PPPs Unit.

The mission also met with senior representatives from the Ministry of Agriculture; the Ministry of Environment; the Ministry of International Cooperation; the Ministry of Transport; the Ministry of Housing, Utilities and Urban Communities; the Ministry of Health; the Ministry of Education; the Ministry of Petroleum and Mineral Resources; the Egyptian Natural Gas Holding Company; the Accountability State Authority (ASA); the National Investment Bank (NIB); the New Urban Communities Authority (NUCA); the National Telecom Regulatory Authority; the Egyptian Water and Wastewater Regulatory Agency, the Egyptian Electricity Utility and Consumer Protection Agency, the Gas Regulatory Authority, the National Centre for Planning State Land Uses (NCPSLU), the General Authority for Government Services, Cairo Governorate; and Ismailia Governorate. The team also met with local technical and financial partners at the end of the mission to discuss the assessment and identify future avenues for cooperation.

The mission team would like to thank the Egyptian authorities for their cooperation and participation in constructive discussions on all topics raised during the mission. The mission would especially like to thank staff from the MPED, in particular Mr. Ismail Yousef; and from the MoF, Mr. Alaa Abdel Rahman for their excellent support in organizing the mission, setting up meetings and providing documentation.

The team would also like to extend its thanks to Mr. Said Bakhache, Senior Resident Representative of the IMF in Egypt, and Mr. Karim Badr, local economist, for the outstanding and reliable support they provided to the team during the remote mission. Finally, the team would like to thank the team of interpreters for their extensive linguistic support during the mission.

Executive Summary

Egypt is at high risk from natural hazards and is considered highly vulnerable to climate change due to its dependence on the Nile River. The densely populated Nile Delta is one of the world's three "extreme" vulnerability hotspots. Climate change risks include rising sea levels, droughts, heat waves, sand and dust storms, heavy rain, flash floods, and rockslides. In its NDC, Egypt has committed to low-carbon and climate resilient growth; a challenge that is exacerbated by high population growth, urbanization, and limited fiscal space. Egypt's population is expected to grow by 44 percent from 2022 to 2050.

Egypt is the host of the 27th Conference of parties under the UN Climate Change Convention in November 2022, and this has had major impacts on climate change awareness in the country. A number of policies and measures have been initiated to address climate change. Egypt's National Climate Change Strategy 2050 sets out a pathway for transitioning to a low-carbon and climate-resilient economy and subsequent public infrastructure, including strengthening the legal, regulatory, and institutional requirements for mainstreaming climate change into public investment planning. Egypt has defined quantitative targets for reducing greenhouse gas emissions of three major sectors (energy, transport, and oil) by 23.5 percent by 2030 compared to business-as-usual. Objectives for climate change adaptation, still at an early stage, will focus on vulnerable sectors and developing a climate adaptation plan.

This Climate Public Investment Management Assessment (C-PIMA) assesses five key public investment management practices in Egypt from a climate change perspective. It was conducted jointly with an assessment based on the existing PIMA framework, which is described in a separate report.

The C-PIMA indicates that Egypt has implemented important improvements in climate aware planning and coordination across the public sector, and some initial steps to reflect climate change issues in appraisal and selection of investment projects, but that significant work remains in these areas. Climate change is not fully integrated in national, sectoral, construction and spatial planning frameworks and regulations, Coordination of climate-relevant public investments is largely limited to the central government and the PPP framework does not address climate risks. So far there has been limited progress in ensuring that budgeting, portfolio management and fiscal risk management is climate sensitive. Climate-related investment spending is not systematically identified in budgets. There is no disaster risk management plan, and the fiscal risk statement does not include climate impacts on infrastructure, Figure 1 and Table 1) summarize the C-PIMA findings.

The weaknesses in the overall framework for public investment described in the PIMA report, including weak project appraisal and the lack of medium-term budgeting, also undermine the capacities for climate-sensitive public investment management. The assessment of climate-sensitive appraisal in the C-PIMA, which is limited to this specific aspect of the appraisal process, is stronger than the overall assessment of the appraisal function in the PIMA. However, the somewhat higher assessment on the climate appraisal dimension is not sufficient to lift the overall quality of appraisal.

The mission proposes three main recommendations to address current weaknesses and further improve the climate change awareness of public investment management. The mission recommends that the government of Egypt integrates strategies and objectives for climate change adaptation and mitigation in all relevant planning processes, reflect climate change considerations in budgeting and portfolio management decisions, and strengthen management of climate-related fiscal risks. The mission outlines

a series of activities to implement these recommendations, and a time-bound action plan for the different activities (Table 2 and Appendix 1).

Figure 1. Climate PIMA Results

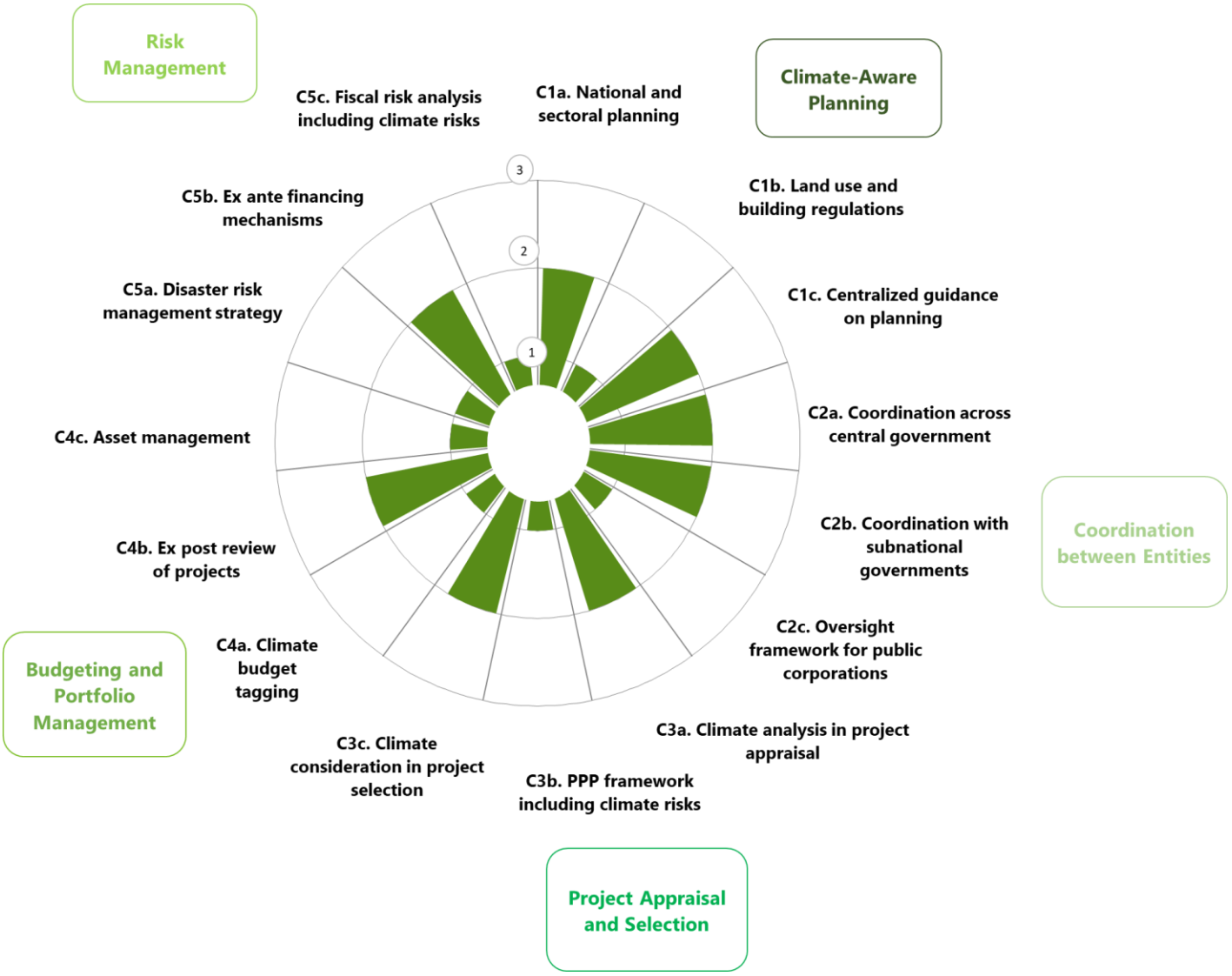


Table 1. Egypt: Summary Assessment

Phase/Institution			Institutional Strength	Reform priority
PIMA Climate Change	C1	Climate-aware planning	MEDIUM. Climate change is not fully integrated in national, sectoral, construction and spatial planning frameworks and regulations, for climate change mitigation and adaptation.	Medium
	C2	Coordination between entities	MEDIUM. The framework to guide and coordinate mostly focusses on climate change (mitigation)-related public investments of the central government.	Medium
	C3	Project appraisal and selection	MEDIUM. Guidelines require climate-related analysis according to standard methodology and vision 2030 specifies climate criteria for project selection, but PPP framework does not address climate risks.	Medium
	C4	Budgeting and portfolio management	LOW. Climate-related investment spending are not identified in a systematic way, hindering active management and oversight,	High
	C5	Risk management	LOW. There is no disaster risk management plan, and the fiscal risk statement does not include climate impacts on infrastructure, but budget contingency can be used for natural disasters.	High

Table 2. Egypt: Summary Recommendations

Recommendations	Priority	Responsible
1. Integrate strategies and objectives for climate change adaptation and mitigation in national, sectoral, construction and spatial planning processes • Publish a climate change chapter in the public investment plans (2024). • Develop centralized guidance and support to agencies for the preparation and costing of climate-aware public investment strategies (2023 – 24). • Integrate national climate objectives and climate-related capital projects in sectoral plans (2024 – 25). • Integrate climate change in construction codes, and urban and spatial planning processes (2023 – 25).	Medium	MPED, MoE, in coordination with other agencies.
2. Reflect climate change considerations more comprehensively in project selection, budgeting, and portfolio management decisions • Identify climate-related investment spending in plans and budgets (2023 – 24). • Introduce more detailed climate change-related methodologies for conducting project appraisal (2024). • Carry out and publish ex-post reviews of climate impacts of investment projects (2024). • Create a register of key infrastructure assets including information on their exposure to climate change-related risks (2024 – 25)	High	MPED, MoF, in coordination with MoE and other agencies.
3. Strengthen management of climate-related fiscal risks • Assess and monitor climate-related risks on key infrastructure assets (2025). • Expand the Fiscal Risks Statement to include climate-related fiscal risks (2024). • Develop comprehensive climate and disaster risk management plan (2023 – 25). • Consider need for additional financing mechanisms to manage climate risks (2024 – 25).	High	MoF, MPED, in coordination with MoE.

Section I. Climate Change in Egypt

A. CLIMATE CHANGE AND PUBLIC INFRASTRUCTURE

1. Egypt is highly vulnerable to climate change. Egypt is at high risk from natural hazards and is highly vulnerable to climate change due to its primary dependence on the Nile River,[1] ranking 107th of 182 countries in the 2021 ND-Gain Country Index.[2] The densely populated Nile Delta is one of the world's three "extreme" vulnerability hotspots.[3] Future projections identify climate change risks as related to sea level rises, droughts, and increases in the frequency and intensity of extreme weather events, such as heat waves, sand and dust storms, heavy rain, flash floods, and rockslides. If climate change is not mitigated and Egypt does not sufficiently adapt, key economic and social sectors in Egypt will be impacted, including energy, water management, agriculture, tourism, health, fisheries, coastal zones, and the Suez Canal. Given Egypt's geographical position and economic capacity, some of these could have a regional and global impact as well.

2. Egypt has committed to a low-carbon and climate resilient development strategy. In its recently updated nationally determined contribution (NDC), Egypt has included quantitative targets for reducing the Green House Gas (GHG) emissions of the three major GHG-emitting sectors (energy, transport, and oil) by 23.5 percent by 2030 compared to a business-as-usual (BAU) scenario. The NDC's objectives for climate change adaptation, still in an early stage, will focus on vulnerable sectors[4] and developing a climate adaptation plan.[5]

3. The challenges of low-carbon and climate resilient growth are exacerbated by high population growth, urbanization, and limited fiscal space. Egypt's population is expected to grow by 44 percent from 2022 to 2050.[6] More than 50 percent of its people will then be living in an urban environment. This not only requires decoupling population growth and GHG emissions, but also reshaping densely populated urban areas with legacy infrastructure into low-carbon, climate-resilient environments. Authorities have indicated that the investments needed will be high, and the ability to finance them limited. While a more effective public investment management framework will not directly positively impact fiscal space, a more effective framework will help to achieve greater climate change effects using the same amount of resources.

4. Egypt is introducing an institutional climate change governance framework to support its climate change objectives. Egypt's National Climate Change Strategy (NCCS) 2050 sets out a pathway for transitioning to a low-carbon and climate-resilient economy and subsequent public infrastructure, including strengthening the legal, regulatory, and institutional requirements for mainstreaming climate change into public investment planning. Box 1 includes an overview of the five key objectives of the

[1] Climate Risk Profile: Egypt (2021): The World Bank Group.

[2] The ND-GAIN Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. Egypt was ranked 92nd in 2000 and is now ranked 107th Norway has the highest score and is ranked 1st. University of Notre Dame (2020): Notre Dame Global Adaptation Initiative.

[3] Climate Risk Profile: Egypt (2021): The World Bank Group.

[4] The sectors included are Water Resources & Irrigation, Agriculture, Coastal Zones, Urban Development, and Tourism.

[5] The government of Egypt has only recently begun developing a National Climate Adaptation Plan.

[6] UN World Population Prospects 2022.

NCCS 2050. Its new National Climate Change Committee (NCCC), the main decision-making body for climate change, comprises the prime minister and ministers of key ministries. It shapes its working agenda through various technical working groups and is supported by the Ministry of Environment (MoE).

Box 1. NCCS 2050 Goals and Costing

Goal 1: Sustainable economic growth and low-emissions development, e.g.:

- Egypt aims to increase the share of renewable energy sources in the Egyptian energy mix, reduce GHG emissions associated with fossil fuel use, increasing energy efficiency, and increase sustainable production of goods and waste management.

Goal 2: Adaptive capacity and resilience to climate change, e.g.:

- Egypt aims to protect its citizens from the negative health impacts of climate change, minimize loss and damage to country assets, ecosystems and resources, develop resilient infrastructure and services, implement disaster risk reduction systems and strengthen the women's response considerations to help them adapt to climate change.

Goal 3: Climate change action governance, e.g.:

- Define roles and responsibilities of all stakeholders, improve the international climate-change related profile of Egypt to attract further investments and financing opportunities, sectoral policy reforms for climate change adaptation and mitigation, enhance institutional, procedural and legal climate change-related arrangements.

Goal 4: Climate financing infrastructure, e.g.:

- Promote local green banking, green credit lines, green bonds, private sector engagement in climate finance, and promotion of green jobs.

Goal 5: Scientific research, technology transfer, knowledge management, awareness, e.g.

- Strengthen the role of scientific research and technology transfer for climate change mitigation and adaptation, facilitating the dissemination of climate-relevant knowledge management among government institutions and citizens.

The NCCS 2050 includes a summary overview of the cost of mitigation and adaptation programs in the different sectors discussed under the five goals of the NCCS 2050 goals, equivalent to 80 percent of 2022 GDP:

Mitigation program costs	Million USD	Adaptation program cost	Million USD
Industry	130	Agriculture	52,400
Electricity	144,153	Transport	1,273
Petroleum	1,689	Civil Aviation	9
Transport	57,477	Irrigation, Water Resources	59,108
Civil Aviation	25	Biodiversity	199
Housing and Utilities	31		
Waste	7,627		
Required funding	211,133	Required funding	112,990

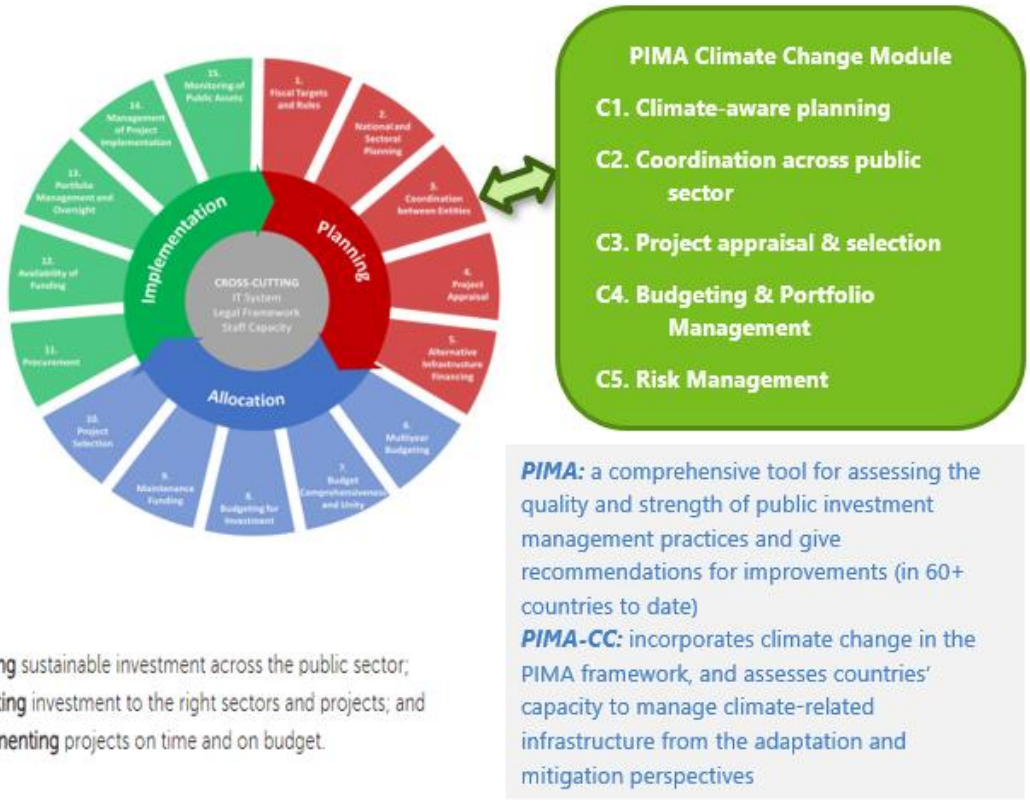
Source: NCCS 2050

Section II. Climate Assessment of Public Investment Management in Country

A. CLIMATE PIMA FRAMEWORK

5. The Climate PIMA assesses five key public investment management practices from the climate change perspective and is an extension of the existing PIMA framework. Figure 2. describes the main elements.

Figure 2. Climate Public Investment Management Assessment Framework



- **Planning** sustainable investment across the public sector;
- **Allocating** investment to the right sectors and projects; and
- **Implementing** projects on time and on budget.

PIMA: a comprehensive tool for assessing the quality and strength of public investment management practices and give recommendations for improvements (in 60+ countries to date)

PIMA-CC: incorporates climate change in the PIMA framework, and assesses countries' capacity to manage climate-related infrastructure from the adaptation and mitigation perspectives

6. The CC PIMA covers the following specific issues:

- *C1. Climate-aware planning:* Is public investment planned from a climate change perspective? This is necessary to ensure that long- and medium-term plans contribute to meeting climate objectives and facilitate effective prioritization and decision-making.
- *C2. Coordination between entities:* Is there effective coordination of decision making on climate change-related public investment across the public sector? In addition to the central government, subnational governments (SNGs), public corporation (PCs) and private sector entities play key roles in realizing climate-related public investment. Climate adaptation investments will often take place at the SNG level, and both PCs and private sector entities may play key roles for instance in energy production.

- *C3. Project appraisal and selection*: Do project appraisal and selection include climate-related analysis and criteria? This is necessary to ensure that the most effective and efficient investments are prioritized. This serves to maximize the climate impacts of public investments within available resources.
- *C.4 Portfolio management and oversight:* Is climate-related investment spending subject to active management and oversight? Public investment projects are subject to numerous implementation challenges – climate investments are no exception. Because the climate benefits may be less tangible and more difficult to quantify than other project benefits, systematic and consistent benefits management over the project lifecycle is critical.
- *C5. Risk management:* Are fiscal risks relating to climate change and infrastructure incorporated in budgets and fiscal risk analysis and managed according to a plan? The likelihood of climate related disasters is expected to increase over time. The impacts of these risks on public infrastructure must be systematically assessed and monitored, to facilitate adequate and effective risk mitigation.

B. DETAILED ASSESSMENT

C1. Climate-aware Planning (Strength: Medium; Reform Priority: High)

7. Egypt has started incorporating climate into public investment plans, but they do not yet consider climate targets adequately. Egypt's NDC and NCCS 2050 contain various objectives, some quantitative targets for mitigation, and some qualitative measures for adaptation. The NCCS 2050 also includes measures to strengthen of the climate governance framework, including measures to mainstream climate change into public investment management. Through the Unified Planning Law,[7] (UPL), the Ministry of Planning and Economic Development (MPED) has introduced a comprehensive approach to integrating climate change, as part of broader sustainability considerations, into long-term, medium-term, and annual national planning processes. Authorities are now implementing the framework, in particular through the introduction of the Environmental Sustainability Standards Guide (ESSG),[8] which, e.g., provides broad guidance to identify green infrastructure projects. Climate change considerations and targets have not yet been fully integrated into national and sectoral public investment plans; so far, the attention has focused more on mitigation than adaptation, and plans lack information about costs of public investment projects, and their effects on climate targets.

8. Construction and spatial planning regulations do not effectively address climate-related risks, the recently introduced green building code has not yet proved its effectiveness. The Ministry of Housing's green building code provides guidance for energy efficient construction in the built environment, but does not address other key sectors, such as industry and energy. Further, it does not cover adaptation. The government is developing a climate vulnerability map that includes spatial climate change risk information for the entire country up to the year 2100. Authorities are not yet defining a comprehensive and consistent set of locally specific restrictions on construction in areas exposed to climate change risks or a comprehensive register of up-to-date construction and spatial planning climate change mitigation and adaptation requirements. The effectiveness of construction and spatial planning

[7] Articles 1, 2, and 7 of the Unified Planning Law 18/2022, adopted in June 2022.

[8] The ESSG was introduced through cabinet meeting resolution 115, 2020.

regulations is further constrained by limited powers to ensure compliance with climate change-relevant building codes and spatial plans (if they would exist).

9. There is limited centralized guidance available to agencies on the costing and planning of public investment with a climate change perspective. The ESSG includes high-level guidance on introducing climate change into the various phases of the public investment cycle. The Egypt Environmental Agency (EEA) provides specialized training on technical environmental issues related to climate change. In line with the NCCS 2050, various line ministries are implementing climate change units in their ministries. However, currently there is no mechanism for systematic technical or financial support to planners of government agencies that are trying to integrate climate change considerations into their public investment planning.

10. The reform priority is to firmly integrate climate change adaptation and mitigation in construction codes, and spatial and urban planning and investment planning frameworks. The central government should develop clear guidance, and centrally organized technical support, on how to equally integrate climate change adaptation and mitigation considerations into its investment planning activities. Authorities should include a climate change public investment chapter in all the relevant development plans; these chapters would outline an overview of all climate change-related investments across the different sectors including its expected effects. Climate change adaptation and mitigation should be fully integrated into construction and spatial and urban planning regulations.

C2 Coordination Between Entities (Strength: Medium; Reform Priority: Medium)

11. Decision-making on public investment from a climate change perspective is coordinated at the central government level. The NCCC holds a supervisory role for steering climate change activities and integrating climate change into national development planning across the central government and the rest of the public sector. The MoF budget guidelines contain references to climate change–relevant planning documents, acts, and regulations. Mainstreaming climate change into the investment planning framework is the responsibility of MPED. The MPED instructions on preparing investment plans include guidance on identifying and reporting green projects and such guidance is provided in the ESSG.[9] However, the ESSG focusses on certain elements of climate change mitigation and to a lesser extent on adaptation and it does not include concise guidance on how to assess and classify the projects according to their expected effects related national climate change targets and risks.

12. Major public investments at the local level are funded by the central government and there is some coordination with local governments on climate-relevant projects. The UPL covers the entire public sector and requires the local governments to base their priorities on the national plans. The NCCC is tasked with coordinating climate change across the public sector, but there is no law in place that defines climate change–related roles and responsibilities for local governments and there is no information-sharing mechanism between various governmental levels that is actively used for climate-aware planning purposes. For example, the 2015 Environmental Law stipulates that MoE oversees the development of cooperative links with regional and local governments but does not provide clear requirements on information-sharing by the MoE.

[9] The ESSG provides guidance on defining “green projects”. The government has committed to increasing the percentage of green projects as a percentage of total investments from 30% in 2021/22 to 50% in 2024.

13. The public corporation (PC) framework does not require all PCs to develop a climate change strategy and that their investments be consistent with national climate targets, other than generally applicable acts and regulations. PC ownership rights and monitoring are exercised on a bilateral basis between the shareholding entity and the PCs. These PCs need to comply with generally applicable laws concerning, e.g., energy efficiency, and the government expects PCs to comply with all national and sector guidelines. There are no legal requirements that the climate-related investments of PCs be fully consistent with national climate targets, policies and guidelines.

14. The coordination of climate-related public investment should be increased across the public sector. The government should identify climate change responsibilities for entities in the public sector involved with public investment planning and consider introducing climate change responsibilities in the legal mandates of key agencies. Additionally, the government could develop a climate change-information sharing and investment coordination mechanism, between the central government, sub-national governments, and other identified government agencies. Box 2 provides an example of how different government agencies across the public sector are developing and coordination a nationwide transition to a carbon-neutral energy system in the Netherlands.

Box 2. A Governance Approach for a Nationwide Energy Transition in the Netherlands

To develop a locally grown, national carbon-neutral energy system that will be approved by local legislature, all 12 provinces, 21 district water boards, and 352 local governments in the Netherlands are working together with regional and national energy network managers and social stakeholders on 30 regional energy strategies. These regional strategies aim to deliver a coordinated (public) investment strategy in renewable energy, energy transition in the built environment and an accompanying upgraded energy system. If these combined results are insufficient, all the relevant government entities have agreed on formal mechanisms to seek compliance with the overall climate targets according to previously agreed decision-making methodology that, as a last resort, could involve the central government intervening judicially to ensure compliance.

A national platform was set up to facilitate the entire process and acts as process coordinator, develops a clear delivery framework for all stakeholders, builds a common data and information base, supports capacity building of involved entities, and develops communities of practice to share knowledge and experiences.

Source: IMF Staff analysis

C3. Project Appraisal and Selection (Strength: Medium, Reform Priority: High)

15. The appraisal of public investment projects requires climate-related analysis to be conducted according to a standard methodology with central support. The MPED has issued an Addendum to its Circular for preparation of an investment plan—Guidance on Sustainability Analysis. This Guidance provides that an environmental impact assessment should be conducted for each major infrastructure project and include climate aspects (mitigation and adaptation). For instance, such aspects include an indicator on environmental sensitivity of the site if relation to the proximity to coastal areas, Nile River or natural reserves, carbon footprint, energy and water use efficiency, use of renewable energy whenever possible and others. In some sectors, i.e., energy and construction, public investment projects have to meet standards for energy efficiency and thus would be taken into account in the project design. The framework for green bonds that Egypt has implemented requires that all projects submitted for consideration to be financed from green bond proceedings includes a standardized environmental

assessment. The green bond financing framework has been subject to verification by an independent external party. Green bond proceedings can finance new and existing projects. The MoF selected projects for green bond financing from a pool of pre-selected projects. The specific requirements for climate-related analysis are more stringent than the general requirements for project appraisal. This has the somewhat paradoxical implication that a project may be deemed to have significant positive climate impacts, while the overall costs and benefits of the project are highly uncertain.

16. Climate related aspects are not considered explicitly in the PPP framework, neither for risk allocation nor for contract management. The appraisal of PPP projects should follow the process as provided in the PPP executive regulations, underpinning the PPP Law 2010. The recent amendment to these regulations includes a provision that allows the private sector to submit an unsolicited project proposal that uses innovative technologies that reduce carbon emissions. The Dry Port PPP project, which includes climate related aspects, is under consideration by the PPP Central Unit of the MoF.

17. Selection of public investment projects for funding from the state budget includes a requirement for projects to apply environmental sustainability standards. The Circular of the MPED for preparation of an investment plan includes this explicit climate related criterion. Egypt's vision 2030 includes (among others) climate-related projects which indicates that climate is included among criteria used by the government for the selection of public infrastructure projects. Based on discussions with sectoral ministries, some projects have been developed with climate related aspects including both mitigation and adaptation.

18. A systematic approach to the application of a climate change assessment is critical for effective project appraisal and selection. Taking climate change into account in a meaningful and systematic way requires that all government entities apply a common methodology regarding what the implications of climate change are for the country and use a consistent baseline for assessing climate impact in the project appraisal. While the Guidance on Sustainability Analysis provides a systematic approach to assessing climate aspects in public investment projects, detailed methodologies and the consistent baseline for climate impacts have yet to be developed.

C4. Budgeting and Portfolio Management (Strength: Low; Reform Priority: High)

19. Climate-related public investment expenditures in the central government are not yet identified in budget documents. Tagging an expenditure allocation or a set of allocations would be useful in setting performance expectations and accountabilities, as well as in exercising control in the various phases of the public investment cycle. It may also be used to attract financing from international climate finance or sovereign Green Bonds. While the recent issuance of green bonds mentioned a few projects to be financed by the proceeds, the identification of projects was not based on a definition of climate-related spending. While not a prerequisite, the gradual shift to a program budgeting system could be expedient in developing and applying the identification of planned climate-related public expenditures, sources of financing and outputs and outcomes in the budget and related documents. This information should be similarly used for relevant PPPs, climate-related transfers to local administrations, economic authorities and public business sector corporations that implement climate-related investments.

20. Ex-post reviews are limited to reviews of climate-related impacts stemming from a few sectors. Since 1998, a few National Communications and a Biennial Report have been prepared and published in the EEA website. However, these reviews have not assessed the actual climate-related environmental impacts of public investments or projects and do not cover the impact of climate change on

projects or the exposure of infrastructure assets to climate-related disasters. Line ministries have represented that their performance in relation to climate-related outcomes are being reviewed. However, mirroring the extensive gap on the transparency of the Central Audit Organization's documents, audit reports are not readily accessible.

21. Climate-related risks are not explicitly addressed in the government's asset management policies and practices. While maintenance due to exposure to climate change have been undertaken on several occasions, well-defined asset management policies and practices, as well as general methodologies for routine maintenance needs, are still emerging. Asset registers, albeit widely present across ministries and the various levels of government, are not required to contain information on the exposure or damage to infrastructure assets due to the impacts of climate change.

22. Key infrastructure assets should be assessed for climate change implications. Asset registers in Egypt should include climate change-related information, including about location-specific climate change risks. The government could start by systematically monitoring climate implications on some key public assets, defining a set of criteria to select assets to be covered and clearly identifying reporting responsibilities within government. This endeavor could be treated as a pilot. Systematic monitoring could then be gradually expanded to cover the entire budget, as it develops in parallel an operational definition of climate-related public investment expenditure and a centralized asset register.

C5 Risk Management (Strength: Low; Reform Priority: High)

23. While the National Disaster Risk Management Strategy 2030 (NDRMS) mentions climate change as a risk it does not assess or address this risk. The NDRMS is a high-level risk management strategy, which discusses various risks at a high level. The strategy acknowledges that climate risks should be assessed and planned for but the finalization of work in this direction is pending. Government entities are mostly focused on preparing or managing hazards that have occurred in the past.

24. Introducing specific financing mechanisms that are targeted at managing the exposure of public infrastructure to climate-related risks have not been a focus for the government. While there is no such specific financing mechanism in place, the budget contingency reserve can be used for this purpose. Without a comprehensive and consistent assessment of climate-related risks and their implications (see above), it will be difficult to define potential financing needs and design efficient financing mechanisms.

25. The government does not conduct a fiscal risk assessment incorporating climate-related risks to public infrastructure. While government entities maintain asset register including information on the condition of the asset, climate vulnerability is not assessed systematically nor recorded. The registers are maintained decentrally, and central government entities would not have access to the information needed to assess climate-related risks in a consistent and comprehensive manner. Such an assessment could feed into the Fiscal Risk Statement, which has been initiated and the coverage of which is being expanded by the MoF.

26. Assessing the expected impact of climate-related risks on public infrastructure and defining strategies for how to address them adequately through a disaster risk management strategy and financing arrangements would be a high reform priority. The efficient management of climate-related hazards as well as slow moving climate change requires information on the existing and newly developed infrastructure and its exposure to implications of climate change. Building a

comprehensive database of key infrastructure including information on the exposure to climate change related implications could provide a basis for developing a strategy for managing the risks from this exposure. A risk-based approach, initially focusing on particular infrastructure assets or regions with high vulnerability could be followed. If the assessment reveals that emergency financing could be required beyond what can be mobilized from budget contingencies or reallocations, options for introducing specific financing mechanisms should be explored. Box 3 shows an example for a disaster risk insurance mechanism introduced in Indonesia.

Box 3. State Asset Insurance Scheme in Indonesia

Indonesia's asset management policies and practices address climate-related risks. The country has put in place a State Asset Insurance Policy program to insure public assets against disaster risks, in the context of the National Disaster Risk Financing and Insurance strategy (DFRI). In 2019 the government introduced a state building insurance scheme, as the first phase of the State Asset Insurance mechanism. The scheme provides insurance for natural disasters, funded by a pool of private insurers. This scheme was introduced for the Ministry of Finance's buildings in 2019 and extended to buildings belonging to other ministries in 2020. The estimated insurance value of the government buildings to be covered by this scheme amounts to IDR371 trillion, approximately 13 percent of GDP. The insurance premium for disaster risks is estimated to be 0.2 percent of building values. The overall scope of assets to be covered in future includes buildings, bridge, transportation modes, and other government properties. The assets covered have to be located in disaster-prone areas, have high probability to be damaged or lost in case of natural disaster, and have significant contribution to public services.

Source: Indonesia Ministry of Finance.

C. CROSS-CUTTING ISSUES

Legal Framework

27. The general legal framework for PIM has been recently updated, but its interaction with the climate change framework remains to be defined. The newly enacted PFM law and UPL contain elements that may support climate-related policies, such as the principle of sustainability, the requirement for a medium-term budget framework, and more broadly, the transition to program-based budgeting. Many laws are in place that may significantly impact the PIM framework, particularly from a climate perspective. Some of these laws are listed in Box 4.

Box 4. Laws Shaping Egypt's Climate Framework

- Law on Environment Protection (Law 4/1994)
- Promulgating the establishment of the National Climate Change Council (M Decree 1912/2015)
- Promulgating the establishment of the Ministry Environment (Presidential Decree 275/1997)
- Law on Local Administration (Law 43/1979)
- Promulgating the establishment of regional planning authorities (PM Decree 495/1977)
- Law on Mineral Resources (Law 198/2014)
- Law on Gas Market Activities (Law 196/2017)
- Law on Oil Pipelines (Law 4/1988)
- Promulgating the establishment of the Ministry of Petroleum (Presidential Decrees 409 and 1451/1973)
- Promulgating the establishment of the Egyptian General Petroleum Corporation (Law 135/1956)
- Law on Water Resources and Irrigation (Law 147/2021)
- Waste Management Regulation (Law 202/2020)
- Promulgating the functions of the Ministry of Water Resources and Irrigation (Decree 365/1978)
- Law on Electricity (Law 87/2015)
- Law on Renewable Energy (Decree 203/2014)
- Building Law (Law 119/2008)
- Law on the State's responsibility in providing buildings with needed infrastructure (Law 138/2006)
- Law on Public Roads (Law 84/1968)
- Law on the General Reconstruction Provisions (Law 62/1974)
- Law on Urban Planning (Law 3/1982)
- Law on Investments (Law 72/2017)
- Promulgating the establishment of the New Urban Communities Authority (Law 159/1979)

28. Institutional arrangements for tackling climate change across government need to be clarified. As per the general PIM framework, the MPED and the MoF lead the investment planning and budget planning, while specific projects or programs that may have climate-related aspects are implemented at the level of line ministries, economic authorities, and local administrations. On the other hand, the NCCC is a coordinating body for concerns stemming from climate change that is composed of the Prime Minister, representatives from some ministries or agencies as an additional function in their current job responsibilities and other members appointed by the Prime Minister. The MoE serves as a technical secretariat to the NCCC. However, the NCCC's and the MoE's roles in each stage of the PIM cycle lacks definition, potentially leading to an overall weakness in mainstreaming climate change considerations in public investment. Climate-related laws could also more clearly set out whether there is a role of regulators of natural resources (i.e. those involved in land use, water, and petroleum) in the achievement of climate-related sectoral objectives, to clarify how these objectives can be taken into account in the exercise of their regulatory functions.

IT Systems and Data Management

29. Climate tagging is not yet supported by existing IT applications, but opportunities exist to implement climate change monitoring and reporting functionality. The on-going reform to implement a program and performance budgeting (PBB) is an excellent opportunity to introduce a tagging system in the Government Financial Management Information System (GFMIS). Concurrently, specific tagging fields could be added to the Integrated System for Investment Plan Preparation and Monitoring (ISIPPM) system to be interfaced with the GFMIS. Egypt will then have a budget tool for monitoring and tracking of climate-related expenditures.

Capacity Building

30. Climate-related skills need to be further developed. The issuance of the Guidance on Sustainability Analysis and the project appraisal and selection for the 2020 green bond constituted important steps toward building skills that incorporate climate change in the investment process. Authorities have indicated that capacity building is skewed more toward climate change mitigation than adaptation, reflecting CD support from the international community. Much more capacity is needed at all levels of government to ensure the effective implementation of climate change considerations into development planning. At the MoF level, it is essential to develop the capacity to monitor and mitigate climate risks, including by preparing a climate section in the fiscal risk statement.

RECOMMENDATIONS

Issue 1. Integrate strategies and objectives for climate change adaptation and mitigation in national, sectoral, construction and spatial planning processes.

Recommendation 1. Integrate national climate strategies and objectives for both climate change adaptation and mitigation in national, sectoral, construction and spatial planning processes:

- Publish a climate change chapter in the public investment plans.
- Develop centralized guidance and support to agencies for the preparation and costing of climate-aware public investment strategies.
- Integrate national climate objectives and climate-related capital projects in sectoral plans.
- Integrate climate change in construction codes, and urban and spatial planning processes.

Issue 2. Climate change considerations are inadequately integrated into all stages of the PIM-cycle.

Recommendation 2. Reflect climate change considerations more comprehensively in project selection, budgeting, and portfolio management decisions:

- Identify climate-related investment spending in plans and budgets.
- Introduce more detailed climate change-related methodologies for conducting project appraisal.
- Carry out and publish ex-post reviews of climate impacts of investment projects.
- Create a register of key infrastructure assets including information on their exposure to climate change-related risks.

Issue 3. The impact of climate-related risks on public infrastructure assets is neither being assessed in a systematic and consistent manner nor is there a plan for how to address these risks.

Recommendation 3. Strengthen management of climate-related (fiscal) risks

- Assess and monitor climate-related risks on key infrastructure assets.
- Expand the Fiscal Risks Statement to include climate-related fiscal risks.
- Develop comprehensive climate and disaster risk management plan.
- Consider need for additional financing mechanisms to manage climate risks.

Appendix 1. Action Plan

Actions	2023	2024	2025	Responsible Agency	TA support ?
Recommendation 1: Integrate national climate strategies and objectives for both climate change adaptation and mitigation in national, sectoral, construction and spatial planning processes. (Priority: Medium)					
Publish a climate change chapter in the public investment plans.		Publish a climate change chapter in the public investment plans, outlining aggregate information about climate change targets and summarizing the sectoral and project-specific plans and effects of climate-change-related investment projects.	Gradually expand the content of the climate change chapter.	MPED, MoE, line ministries.	
Ensure that climate change mitigation and adaptation are both adequately addressed at all stages of the PIM-cycle.	Review all relevant PIM-related guidelines, circulars, regulations, decrees, and acts to ensure that climate change mitigation and adaptation are adequately reflected.	Update guidelines, circulars, regulations, decrees and acts in accordance with the review so that both climate change mitigation and adaption are adequately reflected.		MPED, MoE, line ministries	
Integrate national climate objectives and climate-related capital projects in sectoral plans.		Develop detailed guidance on the preparation and content of sectoral and sub-sectoral plans from the perspective of climate change.	Integrate climate change into the sectoral plans once the sectoral plans as they are updated.	MPED, line ministries.	
Integrate climate change in construction codes, and urban and spatial planning frameworks and processes.	Review alignment of construction and building codes in the context of climate change mitigation targets and climate change risks.	Review urban and spatial planning plans in the context of climate mitigation targets and climate change risks.	Integrate climate change considerations into construction and building codes and urban and spatial plans, and the accompanying regulations to support compliance.	MoE, MPED, MoH, NCPSLU, and other relevant ministries.	
Develop centralized guidance and support to agencies for the preparation and costing of climate-aware public investment strategies.			Develop guidelines and a centralized support function for planners on technical issues related to climate-aware investment planning, ensuring compliance of projects with construction codes, and urban	MoE, MEPD	

			and spatial planning regulations.		
Recommendation 2: Reflect climate change considerations in project selection, budgeting and portfolio management decisions (Priority: High)					
Create a register of key infrastructure assets including information on their exposure to climate change-related risks (C4, C5)		Create a register of key infrastructure assets including information about their exposure to climate change-related risks.	Create a risk monitoring system for key infrastructure assets.	MEPD, and relevant line ministries.	
Identify climate-related spending in investment plans and budgets, develop a climate tagging system for mitigation and adaptation in the GFMIS and ISIPPM systems (C4, IT).	Develop a climate tagging system to identify climate-related spending in investment plans and budgets.	Integrate the tagging system into, and, between, the GFMIS and ISIPPM systems.		MPED, MoF.	
Introduce detailed climate change-related methodologies for conducting project appraisal (C3).		Publish climate-change related criteria and processes for project selection in project appraisal methodologies. The project appraisal methodologies should include standardized assumptions, including standard shadow prices for GHGs in economic analysis of project proposals.		MPED, MoE.	
Carry out and publish ex-post reviews of climate impacts of investment projects (C4).		Publish guidance on completion of ex-post reviews in the context of climate change mitigation and adaptation. Pilot the review process on several recently completed major projects.	Start using findings of pilot reviews to refine project appraisal, selection, and implementation procedures in the context of climate change.	MPED, MoE	
Recommendation 3: Strengthen management of climate-related (fiscal) risks (Priority: High)					
Assess and monitor climate-related risks on key infrastructure assets (C5).			Use the asset register to identify and quantify key climate related fiscal risks to infrastructure assets.		

Expand fiscal risks statement to include climate-related fiscal risks (C5).	Expand the Fiscal Risk Statement to include quantitative analysis of the fiscal risks related to climate change. This should start with an assessment of long-term fiscal sustainability under different climate change scenarios and climate-related natural disasters.	Include a quantitative assessment of discrete fiscal risks related to climate change.	Include a quantitative assessment of climate change fiscal risks directly related to infrastructure assets.	MoF, MPED	
Develop a comprehensive climate and disaster risk management plan (C5).	Develop a register with public infrastructure assets exposed to climate change risks, building on the information provided by the asset register and the climate vulnerabilities map, and feeding back information into the register.	Determine how damages to key infrastructure would be assessed in a timely manner in case of a disaster and define a mechanism for prioritizing the repair or replacement of key infrastructure assets.	Formalize the assessment and disaster risk management procedures, including a clear allocation of roles and responsibilities, in a disaster risk management strategy and plan.	MoE, MPED, Agencies responsible for disaster management.	
Consider the need for additional financing mechanisms to manage climate risks (C5).		Assess the financing needs related to managing the implications of climate-related disaster	Identify and determine financing mechanisms as to be used in to close the financing gap, e.g., contingencies, credit lines, CAT bonds, prudent debt levels.	MoE, MPED, Agencies responsible for disaster management.	
Cross-cutting					
Define roles and responsibilities for SNGs and key organizations in each stage of the PIM cycle; formalize for key agencies.	Define roles and responsibilities for SNGs and key organizations (e.g., NCCC, MoE, and NCPSLU) in each stage of the PIM cycle.	Formalize identified roles and responsibilities for SNGs and key organizations into the legal framework that mandates their responsibilities and activities.		MPED and MoE.	

Appendix 2. C-PIMA Questionnaire

C1. Climate-aware planning: Is public investment planned from a climate change perspective?				
	QUESTION	**NOT MET**	**PARTIALLY MET**	**FULLY MET**
C1.a	Are national and sectoral public investment strategies and plans consistent with NDC or other overarching climate change strategy on mitigation and adaptation?	National and sectoral public investment strategies and plans are not consistent with NDC or other overarching climate change strategy.	National public investment strategies and plans are consistent with NDC or other overarching climate change strategy for ***some*** sectors.	National and sectoral public investment strategies and plans are consistent with NDC or other overarching climate change strategy for ***most*** sectors.
C1.b	Do central government and/or sub-national government regulations on spatial and urban planning, and construction address climate-related risks and impacts on public investment?	Central government and/or sub-national government regulations on spatial and urban planning, and construction do not address climate-related risks and impacts on public investment.	Central government and/or sub-national government regulations on spatial and urban planning, ***or*** construction (through building codes) addresses climate-related risks and impacts on public investment.	Central government and/or sub-national government regulations on spatial and urban planning, ***and*** construction (through building codes) address climate-related risks and impacts on public investment.
C1.c	Is there centralized guidance/support for government agencies on the preparation and costing of climate-aware public investment strategies?	There is no centralized guidance/support for government agencies on the preparation and costing of climate-aware public investment strategies.	There is centralized guidance/support for government agencies on the ***preparation*** of climate-aware public investment strategies.	There is centralized guidance/support for government agencies on the ***preparation and costing*** of climate-aware public investment strategies.
C2. Coordination between entities: Is there effective coordination of decision making on climate change-related public investment across the public sector?				
C2.a	Is decision making on public investment coordinated across central government from a climate-change perspective?	Decision making on public investment is not coordinated across central government from a climate-change perspective.	Decision making on public investment is coordinated across ***budgetary central government*** from a climate-change perspective.	Decision making on public investment is coordinated across ***all central government, including externally financed projects, PPPs and extra-budgetary entities***, from a climate-change perspective.
C2.b	Is the planning and implementation of capital spending of SNGs coordinated with the central government from a climate-change perspective?	The planning and implementation of capital spending of SNGs is not coordinated with the central government from a climate-change perspective.	The central government issues guidance on the planning and implementation of capital spending from a climate-change perspective and information on major climate-related projects of SNGs is shared with the central government	The central government issues guidance on the planning and implementation of capital spending from a climate-change perspective, information on major climate-related projects of SNGs is shared with the central government and is published

			and is published alongside data on central government projects.	alongside data on central government projects***, and there are formal discussions between central government and SNGs on the planning and implementation of climate-related investments.***
C2.c	Does the regulatory and oversight framework for public corporations ensure that their climate-related investments are consistent with national climate policies and guidelines?	The regulatory and oversight framework for public corporations does not promote consistency between their climate-related investments and national climate policies and guidelines.	The regulatory and oversight framework for public corporations ***promotes consistency*** between their climate-related investments and national climate policies and guidelines.	The regulatory and oversight framework for public corporations ***requires that their climate-related investments be consistent*** with national climate policies and guidelines.
C3. Do project appraisal and selection include climate-related analysis and criteria?				
C3.a	Does the appraisal of major infrastructure projects require climate-related analysis to be conducted according to a standard methodology with central support?	The appraisal of major infrastructure projects does not require climate-related analysis to be conducted according to a standard methodology.	The appraisal of major infrastructure projects requires climate-related analysis to be conducted according to a standard methodology.	The appraisal of major infrastructure projects requires climate-related analysis to be conducted according to a standard methodology***, and a summary of appraisals is published or subject to independent external review.***
C3.b	Does the framework for managing longer-term public investment contracts, such as PPPs, explicitly address climate-related challenges?	The referred framework does not include explicit consideration of climate change for risk allocation or contract management.	The referred framework includes explicit consideration of climate change with respect to how risks are allocated between the parties in infrastructure contracts.	The referred framework includes explicit consideration of climate change with respect to how risks are allocated between the parties in infrastructure contracts, ***and contract managers in government departments and agencies are mandated to address climate-related challenges.***
C3.c	Are climate-related elements included among the criteria used by the government for the selection of infrastructure projects?	Either there are no explicit selection criteria or climate-related elements are not included among the criteria used by the government for the selection of projects for financing.	Climate-related elements are included among the criteria used by the government for the selection of all major ***budget-funded projects***, and the criteria are published.	Climate-related elements are included among the criteria used by the government for the selection of ***all major projects, including externally financed projects, projects financed by extra-budgetary entities, and PPPs***, and the criteria are published.

C4. Budgeting and portfolio management: Is climate-related investment spending subject to active management and oversight?				
C4.a.	Are planned climate-related public investment expenditures, sources of financing, outputs and outcomes identified in the budget and related documents, monitored, and reported?	Planned climate-related public investment expenditures are not identified in the budget and related documents.	***Some*** planned climate-related public investment expenditures are identified in the budget and related documents, including investment expenditures funded externally, by extra-budgetary entities, and PPPs.	***Most*** planned climate-related public investment expenditures, ***sources of financing, and outputs and outcomes*** are identified in the budget and related documents, including investment expenditures funded externally, by extra-budgetary entities, and PPPs, ***and expenditure on these projects is monitored and reported.***
C4.b.	Are ex-post reviews or audits conducted of the climate change mitigation and adaptation outcomes of public investments?	No ex-post reviews or audits are conducted of the climate change mitigation and adaptation outcomes of public investments.	Ex-post reviews or audits are conducted for selected major public investments of ***either the climate change mitigation or adaptation outcomes.***	Ex-post reviews or audits are conducted ***and published*** for selected major public investments of ***both the climate change mitigation and adaptation outcomes.***
C4.c.	Do the government's asset management policies and practices, including the maintenance of assets, address climate-related risks?	Neither the government's asset management policies and practices nor methodologies for estimating the maintenance needs of climate change-exposed infrastructure assets address climate-related risks.	Methodologies prepared by the government for estimating the maintenance needs of ***some*** climate change-exposed infrastructure assets address climate-related risks.	Methodologies prepared by the government for estimating the maintenance needs ***and associated costs*** of ***most*** climate change-exposed infrastructure assets address climate-related risks, ***and government asset registers include climate-related information of these assets.***

C5. Risk management: Are fiscal risks relating to climate change and infrastructure incorporated in budgets and fiscal risk analysis and managed according to a plan?				
C5.a.	Does the government publish a national disaster risk management strategy that incorporates the potential impact of climate change on public infrastructure assets and networks?	Either there is no published national disaster risk management strategy, or the strategy does not identify the key climate-related risks to public infrastructure assets and networks.	The government publishes a national disaster risk management strategy that identifies the key climate-related risks to public infrastructure assets and networks in terms of hazards, exposure, and vulnerability.	The government publishes a national disaster risk management strategy that identifies ***and analyses*** the key climate-related risks to public infrastructure assets and networks in terms of hazards, exposure and vulnerability, ***and includes the government's plans to mitigate and respond to these risks.***
C5.b.	Has the government put in place ex ante financing mechanisms to manage the exposure of the stock of public infrastructure to climate-related risks?	The government has not put in place any ex-ante financing mechanisms to manage the exposure of the stock of public infrastructure to climate-related risks.	There is an annual contingency appropriation in the budget ***or other financing mechanisms*** that is available to meet the costs of climate-related damages to public infrastructure.	There is an annual contingency appropriation in the budget ***and other financing mechanisms*** that are available to meet the costs of climate-related damages to public infrastructure.
C5.c.	Does the government conduct and publish a fiscal risk analysis that incorporates climate-related risks to public infrastructure assets?	The government does not conduct a fiscal risk analysis that incorporates climate-related risks to public infrastructure assets.	The government conducts and publishes a fiscal risk analysis that incorporates a ***qualitative*** assessment of climate-related risks to public infrastructure assets over the medium term.	The government conducts and publishes a fiscal risk analysis that incorporates a ***quantitative*** assessment of climate-related risks to public infrastructure assets over the medium term ***and policies to mitigate these risks, and a qualitative assessment of the risks that may arise over the long-term.***

Appendix 3: Detailed C-PIMA Scores

C1. Climate-aware planning	
C1.a.	National and sectoral planning
C1.b.	Land use and building regulations
C1.c.	Centralized guidance on planning
C2. Coordination between entities	
C2.a.	Coordination across central government
C2.b.	Coordination withsubnational governments
C2.c.	Oversight framework for public corporations
C3. Projection appraisal and selection	
C3.a.	Climate analysis in project appraisal
C3.b.	PPP framework including climate risks
C3.c.	Climate consideration in project selection
C4. Budgeting and portfolio management	
C4.a.	Climate budget tagging
C4.b.	Ex post review of projects
C4.c.	Asset management
C5. Risk management	
C5.a.	Disaster risk management strategy
C5.b.	Ex ante financing mechanisms
C5.c.	Fiscal risk analysis including climate risks