



# TECHNICAL ASSISTANCE REPORT

## SIERRA LEONE

Climate Module of the Public Investment  
Management Assessment

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# Abbreviations and Acronyms

C-PIMA	Climate Module of the Public Investment Management Assessment
FAD	Fiscal Affairs Department
GDP	Gross domestic product
IFMIS	Integrated Financial Management Information System
IMF	International Monetary Fund
iNAP	Initial National Adaptation Plan
Le	Sierra Leonean Leone
MDA	Ministry, department, or agency
MoF	Ministry of Finance
MoPED	Ministry of Planning and Economic Development
MTNDP	Medium Term National Development Plan
NAMEA	National Monitoring and Evaluation Agency
NAMEMIS	National Monitoring and Evaluation Management Information System
NDC	Nationally Determined Contribution
PIGM	Pre-Investment Guidance Manual
PIMA	Public Investment Management Assessment
PIMIS	Public Investment Management Information System
PIP	Public Investment Program
PPP	Public-private partnership
SOE	State-owned enterprise
SSP	Shared Socioeconomic Pathway

# Preface

In response to a request from the Sierra Leone Minister for Finance for capacity development support, an IMF Fiscal Affairs Department (FAD) mission visited Freetown from 31 January to 13 February 2024. The FAD mission was led by Bryn Battersby and the team comprised Nompumelelo Radebe and Isabela Duarte (all FAD), Phyllis Makau (Public Financial Management Advisor at AFRITAC West 2), June Nyakahuma (FAD Expert) and Ilyas Tufan (IMF Public Financial Management Resident Advisor in Sierra Leone).

The mission met with the Minister for Finance, Mr. Sheku Bangura, Principal Financial Secretary Mathew Dingie, and other senior staff of the Ministry of Finance. The mission also held meetings with ministries, departments, and agencies (MDAs) involved in public investment, environment, and climate change. Discussions were held with senior and technical officials in the Ministry of Planning and Economic Development (MoPED), the Ministry of Environment, the Ministry of Transport and Aviation, and the Ministry of Energy. The mission also held meetings with senior officials from various agencies involved in public investment, including the National Public Procurement Agency, the Auditor General, the Public Private Partnership Unit, the National Disaster Management Authority, the Environmental Protection Agency, the National Monitoring and Evaluation Agency, and the Meteorological Agency. The team also met with senior officials in the Freetown City Council.

The team expresses its gratitude to all the officials that participated in the meetings and to the government more generally for their warm cooperation and collaboration during the mission. The mission is particularly grateful to Mr. Sellu McCarthy, the head of the Climate Finance Unit in the Ministry of Finance, who coordinated and facilitated meetings during the mission. The mission is also grateful to the IMF Resident Representative, Mr. Wayne Mitchell, and his office for the support they provided before and during the mission.

# Executive Summary

**Sierra Leone faces significant climate challenges that impact its infrastructure, including rising temperatures, changing precipitation patterns, and an increased risk of extreme weather events.**

The country experiences a varied climate with distinct rainy and dry seasons, and temperatures have been rising steadily. Climate models predict further increases in temperatures and changes in rainfall patterns, making heavy precipitation more volatile and unpredictable. This poses heightened risks of floods, landslides, and other natural disasters, exacerbating the vulnerability of coastal communities and infrastructure to rising sea levels and coastal erosion. The existing infrastructure, weakened by historical factors, including a decade-long civil war and inadequate maintenance, is particularly susceptible to climate-induced stresses. These challenges underscore the importance of integrating climate resilience into Sierra Leone's infrastructure planning and development.

**Despite its minimal contribution to global emissions, Sierra Leone has committed to ambitious climate mitigation goals as well as a national adaptation strategy.** The country aims to reduce CO<sub>2</sub> emissions by 5 percent against the baseline by 2025, 10 percent by 2030, and 25 percent by 2050, as outlined in its updated Nationally Determined Contribution (NDC). Alongside these mitigation efforts, Sierra Leone has developed its initial National Adaptation Plan (iNAP), which outlines the country's approach to enhancing resilience to climate impacts. The iNAP emphasizes investments in critical infrastructure sectors such as agriculture, renewable energy, and water management to support adaptation initiatives. These actions are integral to Sierra Leone's strategy to address climate change, demonstrating a balanced focus on both reducing its greenhouse gas emissions and adapting to climate-related challenges.

**Sierra Leone has made some progress in public investment management since the 2020 Public Investment Management Assessment (PIMA), but critical gaps are contributing to significant cost overruns in projects, undermining budget credibility and creating fiscal risks.** The National Public Investment Management Policy was approved by the Cabinet in 2021. This facilitated the introduction of the Pre-Investment Guidance Manual and enhancements in procurement and project oversight mechanisms. However, there is still no unified project database or clear criteria for project selection. Serious continuing challenges in the management of multi-year contracts, annual capital budgeting, and effective commitment controls are leading to cost overruns in the capital budget, particularly within the roads sector, of around 1.5 percent of GDP between 2021 and 2023.

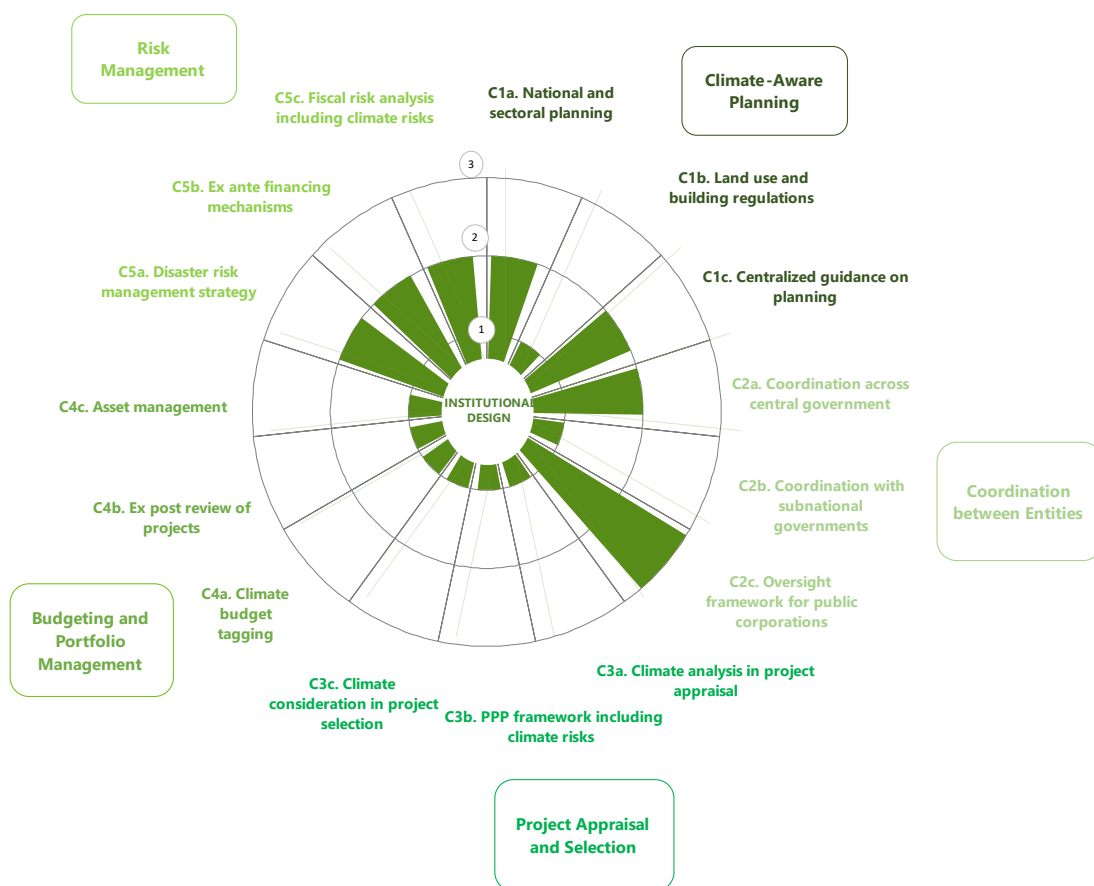
**Addressing these persisting public investment challenges is a prerequisite for effective climate-sensitive public investment management.** A comprehensive review and rationalization of public investments, particularly focusing on high-impact sectors like roads, is needed. The development of clear and transparent criteria for project prioritization and selection and the establishment of a central database to manage and monitor public investments are also key steps that need to be taken. Additionally, strengthening commitment controls and enhancing project oversight are essential to ensure that investments align with available resources and strategic objectives. These efforts should be complemented by capacity building within relevant ministries, departments, and agencies to ensure the effective application of and adherence to new guidelines and regulations.

**Sierra Leone performs moderately well in some areas of the Climate Module of the Public Investment Management Assessment (C-PIMA), but there are key gaps in other areas, often linked to weaknesses in the underlying public investment management framework.** Sierra Leone has established a framework for climate-aware planning through its NDC and iNAP, but there is a disconnect as public investments, national and sectoral development plans, and land use regulations are not fully consistent with the country's climate change commitments. Coordination between various entities involved in climate investment decision-making is not optimal, although oversight frameworks for state-owned enterprises have been enhanced to incorporate climate considerations within a new ownership policy. Existing guidelines for project appraisal fall short of adequately covering climate-related analysis, and the Public-Private Partnership framework lacks provisions for climate risk identification and allocation. Budgeting and portfolio management practices do not sufficiently account for climate-related considerations. Figure 1, Table 1, and Annex 1 present a summary of the results from the C-PIMA diagnostic.

**Reforms to introduce climate sensitivity should simultaneously address the underlying challenges in public investment management.** For instance, the inclusion of climate sensitivity in project appraisal and selection processes should build on efforts to develop a pipeline of appraised projects for selection and the supporting legal and IT infrastructure. The assessment of the vulnerability of public assets to climate change should also be sequenced with the planned development of a comprehensive register of public assets. Enhancing the integration of climate sensitivity within Sierra Leone's public investment management will also require addressing existing capacity and coordination challenges, as well as developing a more cohesive governance framework that fosters collaboration and knowledge sharing among all stakeholders involved in climate-related public investments. Table 2 summarizes recommendations that would support strengthening the core public investment management processes and systems and incorporate climate sensitivity at different stages of the public investment cycle. Annex 1 provides a more detailed set of actions to support these recommendations.



**Figure 1. Sierra Leone – Climate Public Investment Management Institutional Design**



**Table 1. Sierra Leone – Summary of Climate Public Investment Management - Institutional Design**

Institution		Institutional Strength	Reform priority
C1	Climate-aware planning	PARTLY MET. There is some alignment between plans and commitments and limited centralized guidance, but building codes and urban planning requirements do not consider the effects of climate change.	Medium
C2	Coordination between entities	PARTLY MET. There is weak coordination of decision-making on climate investments across the public sector, but the SOE oversight framework has been strengthened to require climate considerations.	High
C3	Project appraisal and selection	NOT MET. A framework to guide project appraisal and selection exists but this does not include climate-related analysis. The PPP framework does not incorporate climate risk identification and allocation.	High
C4	Budgeting and portfolio management	NOT MET. Climate related investments are not readily identifiable in the budget and there are no audits of climate impacts of projects. Maintenance and asset management policies do not consider climate change.	High
C5	Risk management	PARTLY MET. Some climate change vulnerability and hazard analysis is undertaken, a contingency fund exists, and the Fiscal Risk Statement addresses climate change, but only qualitatively.	Medium

**Table 2. Recommendations**

	<b>Recommendation</b>	<b>MDAs, priority, timing</b>
1.	Create a centralized database for all public investments, including PPPs and SOEs, that are both state and development partner-funded and incorporate multi-year contracts and commitments. This should be accessible to the MoF and NAMEA and inform budget decision-making.	MoPED By December 2024 <b>High priority</b>
2.	Undertake a comprehensive review of all projects underway and in the pipeline, and ensure that only appraised projects are included in the PIP and selected for funding.	Public Investment Committees, MoPED and MoF, by December 2024 <b>High priority</b>
3.	Overhaul the annex of PIP that is included in the budget documents so that it is comprehensive and includes information on total costs, multiyear commitments, project duration, and total variations.	MoPED By December 2025
4.	Ensure commitment and payment controls are applied by enforcing the provisions of the Public Financial Management Act (2016) on excess spending as per Section 56 (5) and Section 120 (1 c).	MoF Immediately <b>High priority</b>
5.	In conjunction with Recommendation 2, develop and implement multi-criteria analysis, which incorporates climate change, to guide prioritization and selection of projects in the PIP.	MoPED By December 2025
6.	Expand the sustainability analysis required in the Project Appraisal Report and Review Template to cover climate-related analysis of project proposals in line with a standard methodology.	MoPED By June 2025
7.	Identify and highlight climate-related projects in budget documents. This should build on current plans to implement a climate-sensitive tagging framework and be summarized in a short budget chapter.	MoF By December 2027
8.	Develop the planned asset register and update maintenance manuals to ensure critical infrastructure (energy, transport, communications, health, and education) is resilient to climate change.	National Asset and Government Property Commission By December 2027
9.	Gradually incorporate climate vulnerability analysis into asset registries that are being developed and include quantitative analysis of both long-term and discrete fiscal risks (such as risks to specific infrastructure-providing SOEs and PPPs) of climate change in the Fiscal Risk Statement.	MoF (Fiscal Risk Department) with the Ministry of Environment and National Asset and Government Property Commission By December 2028
10.	Clarify and strengthen the climate-relevant roles, responsibilities, and capabilities within the public investment management process, particularly for MoPED and MoF, through targeted training and a review of legal mandates.	MoPED, MoF, Environmental Protection Agency, and Ministry of Environment, with MDAs By December 2024 <b>High priority</b>

# I. Progress in Public Investment Management Reforms

## A. Findings from the 2020 Public Investment Management Assessment

1. The 2020 Public Investment Management Assessment (PIMA) identified significant weaknesses in the design and effectiveness of Sierra Leone’s public investment management institutions (Table 3). The PIMA found that despite a 60 percent increase in the volume of public capital stock between 2008 and 2018, there was no corresponding increase in public infrastructure outputs during this period due to inefficient public investment resulting from institutional weaknesses. The design for all institutions except budget comprehensiveness and unity was assessed to be lower than the average for other African and low-income developing countries that have undertaken the PIMA. Similarly, the effectiveness for most institutions was also assessed to be low when compared to the average for these countries, with the exception of coordination, budget comprehensiveness and unity, and maintenance funding. To address these weaknesses, the PIMA outlined a set of recommendations to support institutional reform in various public investment management areas.

Table 3. Summary of 2020 PIMA Findings

Phase / Institution		Design	Effect.	Rec.	
Planning	1	Fiscal rules	Red	Yellow	
	2	National and sectoral planning	Yellow	Red	1
	3	Coordination	Yellow	Yellow	
	4	Project appraisal	Red	Red	2
	5	Alternative infrastructure financing	Red	Red	2
Allocation	6	Multi-year budgeting	Yellow	Red	3
	7	Budget comprehensiveness and unity	Yellow	Yellow	
	8	Budgeting for investment	Yellow	Red	3
	9	Maintenance funding	Red	Red	4
	10	Project selection	Red	Red	5
Implementation	11	Procurement	Red	Red	6
	12	Availability of funding	Red	Red	7
	13	Portfolio management and oversight	Red	Red	8
	14	Project implementation	Yellow	Red	8, 9
	15	Management of public assets	Red	Yellow	

Source: Koshima, Y. et al. (2020) [Sierra Leone Public Investment Management Assessment](#). IMF Technical Assistance Report. March 2020.

Notes: Green is fully met, yellow is partially met, and red is not met for the design (Design) and effectiveness (Effect.) criteria. See the PIMA Handbook at <https://www.imf.org/en/Publications/Books/Issues/2022/07/12/PIMA-Handbook-Public-Investment-Management-Assessment-1st-Edition-50166> for detailed descriptions and criteria for each institution.

**Weaknesses were identified across all three phases of the public investment cycle**<sup>1</sup>. Weaknesses in the planning phase included circumvention of appraisal requirements for some projects (especially in the roads sector) limited central government capacity to challenge appraisals, and exclusion of implicit contingent liabilities for State-Owned Enterprises (SOEs) and Public Private Partnerships (PPPs) in the financial analysis of investments. In the allocation phase, weaknesses included a lack of a clear prioritization pipeline and selection criteria for appraised projects, financing and implementation of some projects without appraisal, and inadequate funding for routine maintenance. The main challenges in the implementation phase included weaknesses in the procurement and contract management system, funding delays and unpredictable payments for capital projects, and inadequate project oversight and portfolio management.

**2. Some progress has been made in strengthening institutions since the 2020 PIMA.** A notable improvement in the design of public investment management institutions has been the finalization and publication of the Pre-investment Guidance Manual in 2022, which sets out the requirements for the preparation, submission, screening, evaluation, and selection of project proposals. Other key improvements include the extension of the Public Investment Program (PIP) to include a list of capital projects for local councils for publication in the annual budget; promulgation of the 2020 Public Procurement Regulations, which, among other things, set the threshold and procedures for managing contract modifications and coordination between the Ministry of Finance (MoF) and National Public Procurement Authority; and more recently, the establishment of the National Monitoring and Evaluation Agency (NAMEA) to lead monitoring and evaluation of the Medium-term National Development Plan (MTNDP), including all public sector programs and government and donor funded projects.

**3. Despite this progress, considerable gaps remain in some public investment management institutions.** One of the biggest gaps is that there is no comprehensive database that consolidates key information on public investments to aid decision-making on prioritization and selection of projects for inclusion in the project pipeline and the budget, as well as subsequent monitoring. Different entities hold different information in line with their mandates, but this undermines effective coordination of public investment management across the government. There is also no pipeline of appraised and prioritized projects and a lack of criteria to inform decision-making in this regard. Failure to prioritize projects has resulted in a PIP that includes an avalanche of projects for which there is insufficient funding, thus resulting in underfunding and consequent cost overruns on the capital budget. Box 1 summarizes progress and continuing challenges since the 2020 PIMA, as well as the new MTNDP priorities.

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<sup>1</sup> Please refer to the IMF Technical Assistance Report by Koshima, Y. et al. (2020) for additional details on the findings of the PIMA.

## Box 1. Overview of Progress, Challenges and Reform Priorities in Public Investment Management

There has been both progress and setbacks in the improvement of public investment management since the 2020 PIMA, highlighting the enduring challenges that require persistent attention and ongoing targeted reforms. The MTNDP for 2024-2030 responds to these with a set of reform priorities aimed at consolidating these gains, addressing challenges, and streamlining public investment processes.

### Progress and reforms since the 2020 PIMA

- Approval of the National Public Investment Management Policy.
- Publication of the Pre-investment Guidance Manual, which also covers SOEs and local councils.
- Establishment of the Project Preparation Facility to fund feasibility studies.
- Inclusion of capital projects for local councils in the PIP and annual budget.
- Promulgation of the Public Procurement Regulations (2020).
- Establishment and operationalization of NAMEA.

### Challenges

- No clear pipeline of projects.
- Cost overruns on the capital budget.
- No central database for all public investment projects.
- No clear criteria to guide the prioritization and deprioritization of projects.
- Weak coordination and management of variations and contract amendments.
- Lack of transparency (e.g., non-publication of appraisal reports, including for PPPs).

### MTNDP PIP Reform Priorities (2024-2030)

- Rationalization of projects in the PIP.
- Implementation of the PIP in line with the National Public Investment Management Policy.
- Development of bankable projects in line with the 'Big Five Game Changer' agenda.
- Development of a Public Investment Management Information System.

Source: MTNDP (2024-2030) and Mission team.

## B. Review of Progress in Implementing 2020 PIMA Recommendations

**4. Nine key recommendations were set out in the 2020 PIMA.** The targeted recommendations were intended to facilitate institutional reform to strengthen infrastructure governance and public investment management and prevent further deterioration of infrastructure quality and outputs. The overall assessment is that while some progress has been made in implementing most of the recommendations, weaknesses remain in key areas such as project appraisal and capital budgeting. A summary of progress on the status of implementation of each recommendation is detailed below:

**Recommendation 1: Publish a Road Sector Master Plan; review sectoral strategies prepared before the MTNDP to ensure alignment: Some progress.** The Government of Sierra Leone launched the new MTNDP on January 30, 2024, which sets the country's development and strategic priorities over

the next seven years, including key policy actions and targets for each sector. The Ministry of Planning and Economic Development (MoPED) has been supporting MDAs and local councils over the past few years to develop their sector plans and will continue to do so to ensure alignment of priorities and projects with the new MTNDP. The ministry has also developed a template to standardize development planning across local councils. The PIP will be an important vehicle through which capital projects outlined in the MTNDP are prioritized and funded. It is, therefore, important that the authorities rationalize the PIP to weed out projects that are no longer required or viable given current funding constraints. However, the Roads Master Plan is still not finalized, which continues to weaken investment planning and project prioritization in the roads sector. This has significant implications for other sectors because the roads sector consumes the largest portion of the capital budget and has high-cost overruns (see Box 2).

**Recommendation 2: Develop project appraisal templates and guidelines; publish the appraisals of all approved projects including PPPs: Some progress.** Section 6 of the Pre-Investment Guidance Manual provides comprehensive guidance to MDAs on the procedures to be followed when conducting project appraisals, including feasibility studies, though the scope of the manual does not extend to PPPs. It also specifies the thresholds<sup>2</sup> under which a project would need to prepare a feasibility study and undergo appraisal. Annex 5 of the manual outlines the Project Appraisal Report and Review Template to be used by entities. Although systematic appraisal of projects supported by external sources is done, this is not always the case for domestically financed projects. This is because some projects bypass appraisal by being included as small projects under a bigger project, i.e., a program, or because of contract modifications. Poor capacity within MoPED and MDAs to conduct and challenge appraisals, particularly for complex projects, is another contributing factor. Capacity building of staff in both MoPED and MDAs through training should be prioritized to ensure effective application of the Pre-Investment Guidance Manual. Appraisal reports for approved projects, including PPPs, should also be published as recommended in the 2020 PIMA, as failure to do so weakens accountability.

**Recommendation 3: Publish an annex of the annual budget detailing key project and budget information; clarify criteria for deprioritization of ongoing projects as new: Some progress.** The 2024 Budget extended the publication of capital projects to include those of local councils for the first time. The addition of projects for local councils in the PIP implies that the budget now includes a comprehensive list of capital projects for central and local government as funded by both government and development partners<sup>3</sup>. Published information includes the name and location of each project, project status, implementing agency, source and type of funding, and the medium-term baseline estimates for each project. Notwithstanding this, some critical information such as total project costs, cumulative spending including paid and unpaid invoices, and multi-year commitments has still not been published and should be incorporated into the report to enhance budget credibility and transparency. With support from the World Bank, MoPED is in the process of developing a project costing methodology and template for key sectors such as roads and energy to improve the quality of project costing. There are still no

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<sup>2</sup> Appraisals are only required for category 2 and 3 projects. Category 2 projects are generally projects with a value of \$3 million to \$50 million that are not identified as high risk or of special concern, and category 3 projects have a value of \$50 million or more and identified as high risk or as having special concern e.g., sets a new precedence or high innovative ([Government of Sierra Leone Pre-Investment Guidance Manual, 2022](#)).

<sup>3</sup> See annexes 5a - 5e of the 2024 Government Budget and Statement of Economic and Fiscal Policies [BUDGET-SPEECH-2024.pdf \(mof.gov.sl\)](#)

criteria to guide the deprioritization of projects, which further constrains resource availability for new public investment projects.

**Recommendation 4: Require MDAs to publish a maintenance policy and create a separate budget line item for routine maintenance; include the Roads Maintenance Fund Administration in budget documentation: Some progress.** The maintenance of roads, transport, and government facilities and buildings is centralized and budgeted for by the sector MDA, i.e., the Road Maintenance Fund Administration, the Ministry of Transport and Aviation, and the Ministry of Works and Public Assets. However, the maintenance policies for these MDAs are not published, and, except for the Ministry of Works and Public Assets, their maintenance budget information is not included as a separate budget line item in the published detailed estimates. MoPED, working jointly with the MoF, must ensure that a separate budget line item is created in the detailed estimates of expenditure to outline the total budget and spending for maintenance in the roads and transport sectors. This should also be extended to all MDAs with a maintenance budget for capital projects. The Road Maintenance Fund Administration budget is now included in published budget documents in line with the 2020 PIMA recommendation.

**Recommendation 5: Publish project selection criteria; develop the methodologies for prioritizing projects; and design and maintain a prioritized pipeline of appraised projects, including PPPs: Some progress.** Section 8 of the Pre-Investment Guidance Manual (PIGM) outlines the process to be followed by MoPED when prioritizing projects for selection. It notes that the prioritization and selection of projects should be based on projects that have passed the implementation readiness check. Although the PIGM provides general principles to guide the development of multicriteria analysis on which prioritization decisions on new projects can be made, it does not set or indicate the specific prioritization or weighting criteria to be used. The annual Budget Call Circular outlines the conditions that must be met for project proposals to be included in the PIP. These include (i) clear objectives; (ii) duration; (iii) reasonable estimates of cost for each activity; and (iv) clear inputs, outputs, and indicators. However, the circular does not specify the criteria of how projects will be prioritized and selected if they meet these conditions and are included in the PIP. Given that neither the PIGM nor the Budget Call Circular stipulates clear project prioritization and selection criteria, MoPED should lead the development of the criteria using guidance provided in the PIGM as a starting point. The absence of clear criteria for prioritizing and selecting projects has resulted in significant under-financing of domestically funded capital projects as the number of projects has increased over the years (and in some cases, the scope of existing projects expanded) with no matching increase in allocated resources. As a result, cost overruns on the capital budget have continued to increase. Box 2 provides a more detailed analysis of the range of specific causes and impact of cost overruns across the domestic capital budget.

## Box 2. Causes and Impact of Capital Budget Cost Overruns

Cost overruns on domestically funded projects are a significant pressure on public investment spending and the budget more generally. Total cost overruns on the domestic capital budget amounted to Le 3.1 billion (an aggregate loss of 1.5 percent of GDP) from 2021 to 2023. Table 4 summarizes those cost overruns that contributed more than five percentage points to the total overrun. A significant portion of the total cost overruns arise from road projects. The total cost overruns for road projects were between 52 and 78 percent of the total capital budget overrun from 2021 to 2023.

There are four main causes of these cost overruns:

### 1. Failure to prioritize projects

One of the principal causes of cost overruns is the failure to prioritize projects in line with available resources. Despite the inclusion of instructions for the preparation of the capital budget and new project proposals in the Budget Call Circular and PIGM, the scrutiny and review of projects for selection and inclusion in the budget is weak due to a lack of clear prioritization criteria and inadequate information on the status of ongoing projects to inform deprioritization.

### 2. An unrealistic capital budget

The envelope for domestic capital expenditure is typically set as a residual amount after factoring expenditure to be included in the recurrent budget. Multi-year commitments of all ongoing projects are not considered during the finalization of the overall macro-fiscal framework that sets overall ceilings for the annual budget. Indeed, there is no evidence that multi-year commitments are collected and tracked by the MoF. This leads to much lower than required public investment budgets for MDAs to meet their non-discretionary multi-year contractual commitments.

### 3. Weak commitment controls

Expenditure authorization for capital spending is not guided by the approved budget. Section 56 of the Public Financial Management Act (2016) prohibits commitments in excess of an allotment or an appropriation. Table 4 highlights that the expenditure authorized for selected MDAs far exceeds the approved original budget by the end of the year. The government exercises discretion in executing the approved budget by reducing some MDAs' spending while others can spend above the original budget. There is also anecdotal evidence that both commitments and payments that exceed the appropriated budget are authorized. This reflects weak commitment controls and poor budget management and significantly undermines budget credibility.

### 4. Poor Oversight of Ongoing Projects

The lack of regular review and reporting on ongoing projects contributes to cost overruns. The in-year variations and authorization of excess expenditure are not informed by a detailed progress report on performance, nor the re-appraisal of projects modified above the set threshold of 25 percent. As a result, several projects continue to receive allocations for many years, some more than double the initial costed budget, without a proper account of performance and outputs.

Source: Mission.



**Table 4. Major Capital Expenditure Deviations by MDA (2021-2023)**

MDA	2021				2022				2023			
	Original Budget (Le)	Actuals (Le)	Deviation (Le)	Percentage contribution to total deviation	Original Budget (Le)	Actuals (Le)	Deviation (Le)	Percentage contribution to total deviation	Original Budget (Le)	Revised Budget (Le)	Deviation (Le)	Percentage contribution to total deviation
SLRA	270.0	539.0	269.0	52.5	339.8	1,342.8	1,002.9	59.3	79.0	751.2	672.2	78.0
MoAFS	111.8	149.7	37.9	7.4	97.7	253.6	155.9	9.2				
MoBSE					369.8	518.9	149.0	8.8				
NCRA	12.0	103.5	91.5	17.8								
MoHS	30.6	114.9	84.3	16.4	30.9	111.2	80.3	4.7				
MoE	45.5	124.4	78.9	15.4	37.0	160.4	123.4	7.3	74.6	190.9	116.3	13.5
Stat SL	3.0	70.5	67.5	13.2								
SALWACO					62.3	151.6	89.3	5.3				
<b>Total</b>	<b>472.9</b>	<b>1,102.0</b>	<b>629.1</b>	<b>122.7</b>	<b>937.6</b>	<b>2,538.4</b>	<b>1,600.8</b>	<b>94.6</b>	<b>153.6</b>	<b>942.1</b>	<b>788.5</b>	<b>91.5</b>
<i>Total Domestic Capital Budget</i>	<i>1,179.1</i>	<i>1,691.9</i>	<i>512.8</i>	<i>100.0</i>	<i>1,190.3</i>	<i>2,882.6</i>	<i>1,692.4</i>	<i>100.0</i>	<i>1,204.0</i>	<i>2,065.6</i>	<i>861.6</i>	<i>100.0</i>

Source: Ministry of Finance and mission calculations.

Note: The initialisms in the table are: (SLRA) Sierra Leone Roads Authority; (MoAFS) Ministry of Agriculture and Food Security; (MoBSE) Ministry of Basic and Secondary Education; (NCRA) National Civil Registration Commission; (MoHS) Ministry of Health and Sanitation; (MoE) Ministry of Energy; (Stat SL) Statistics Sierra Leone; (SALWACO) Sierra Leone Water Company. Since the table aims to highlight the MDAs with the highest budget overruns for each year, the budget deviations for an MDA, which had a budget surplus or did not have a material budget overrun in any of these years, are not presented among the relevant year's figures.

**Recommendation 6: Improve the procurement system for public investment, including coordination between the National Public Procurement Agency and the MoF; capacitate and create awareness about the Independent Procurement Review Panel: **Some progress.**** The Public Procurement Regulations (2020) provide for joint review and approval of procurement plans by the MoF and the National Public Procurement Agency. However, some coordination gaps remain between the two entities. Compliance with the submission of procurement plans by MDAs is about 60 percent, and there is no enforcement mechanism between the two entities. Furthermore, some procurement contracts for major public investments are awarded at a price above the approved budget, with some having multi-year commitments, and there are no proper control measures for this (see Box 2). According to the agency, MoF maintains a list of contracts awarded for all public investment procurements. Given its mandate, the National Public Procurement Agency should maintain a database of all contracts awarded to effectively manage all contracts for capital projects, including contract variations, price adjustments, and contract amendments to ensure compliance with the law. The shift to the e-procurement system, which is currently being developed and is at the tendering stage, could help address this problem if designed and managed appropriately. The Independent Procurement Review Panel is fully operational and has already issued several judgments on cases that it has reviewed since its establishment. The agency should continue to create public awareness of the role and work of the panel.

**Recommendation 7: Implement recommendations of FAD's in-depth assessment of quarterly allotment and commitment control processes: **Little progress.**** No significant progress has been made in implementing FAD's previous recommendations on the quarterly allotment and commitment control processes in relation to the capital budget, as overspending and cost overruns are still eminent in public investment projects due to weak commitment controls. Box 2 highlights this as one of the key causes of cost overruns in the capital budget.

**Recommendation 8: Operationalize the National Monitoring and Evaluation Department to produce annual reports on public investment projects; and assess the resource needs for the Audit Service to undertake regular ex-post audit of major capital projects: **Some progress.**** The department has recently been transformed into a standalone agency (National Monitoring and Evaluation Agency, or NAMEA). Although still relatively new, NAMEA is fully operational and is mandated to lead the government's overall monitoring and evaluation activities. It is presently finalizing the development of Sierra Leone's monitoring and evaluation framework and will play a critical role in strengthening oversight on the implementation of the MTNDP and public investments. While MoPED officials indicate the agency has published some annual reports on public investment, none of these are available on NAMEA's website. However, it publishes information on selected major projects through a dashboard on the National Monitoring and Evaluation Management Information System (NANEMIS), which was developed to support the project cycle management. The Auditor General has established a public investment audit unit that undertakes ex-post audits of some major capital projects as part of its financial and performance audits. Greater collaboration between the Auditor General and NAMEA could further enhance performance oversight on public investments.

**Recommendation 9: Require a project to be reappraised and reselected when (i) an increase in total costs exceeds a threshold or (ii) the project is ongoing for a certain number of years: **Little progress.**** Section 149 of the Procurement Regulations (2020) sets a variation threshold of 25 percent and specifies the procedure to be followed for modifications above 25 percent, as the regulations require

that these be treated as new projects. However, this provision is not always adhered to in practice. The authorities indicated that despite selected projects exceeding the 25 percent threshold, some have never been submitted for reappraisal or reselection. Similarly, none of the long-standing projects have been reappraised. While in some cases, projects that exceed the threshold have been tendered as new contracts in line with the regulations, most have been tendered under the principle of ‘single sourcing’, and the Auditor General has at times identified some irregularities in this regard.

## C. Ongoing Public Investment Management Reform Priorities

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**5. The most pressing priority is to review and rationalize all public investments, with an emphasis on road projects that have expanded well beyond their original scope.** The capital budget has experienced significant cost overruns, primarily in the roads sector. The recent introduction of the MTNDP might incorporate new priorities and projects that need to be included in the PIP. MoPED has indicated that a rationalization of the PIP has been initiated several times in the past, leading to some projects being removed from the PIP. A stringent rationalization of the PIP is urgently needed, with clear criteria for project prioritization, deprioritization, and selection. MoPED should develop Project Adjustment Guidelines and conduct a thorough review of the project portfolio for both central and local governments within the current year.

**6. The creation of a bank of appraised projects is also crucial.** The 2020 PIMA recommended that MoPED maintain a prioritized pipeline of appraised projects, including PPPs. In its current form, the PIP does not actually represent a pipeline of appraised projects ready for selection. Furthermore, the PIP includes long-standing projects for which there is no clear account of performance or duration, and some ongoing projects have also been modified to the extent that a reappraisal is required but has never been undertaken. The rationalization process should remove all projects in the PIP for which there is no record of appraisal, and if deemed to be important, such projects should be reappraised to inform their inclusion in the PIP. The Budget Call Circular should also set appraisal as one of the conditions for inclusion in the PIP and budget.

**7. A rationalized PIP should be used to develop a central database to manage public investments.** A central database, which in some countries is managed through the development of a Public Investment Management Information System (PIMIS), would include information on all ongoing projects and the pipeline, such as project duration and status, total estimated costs, allocated or required budget, cumulative spending, and multiyear commitments. Although pockets of this information may exist within different entities<sup>4</sup>, the fragmentation may lead to risks related to incomplete information (i.e., not covering all projects, e.g., for SOEs and PPPs), inconsistent (i.e., not the same across institutions) and inconclusive (i.e., contains inadequate data). These risks undermine informed decision-making, budget credibility, and, ultimately, fiscal policy.

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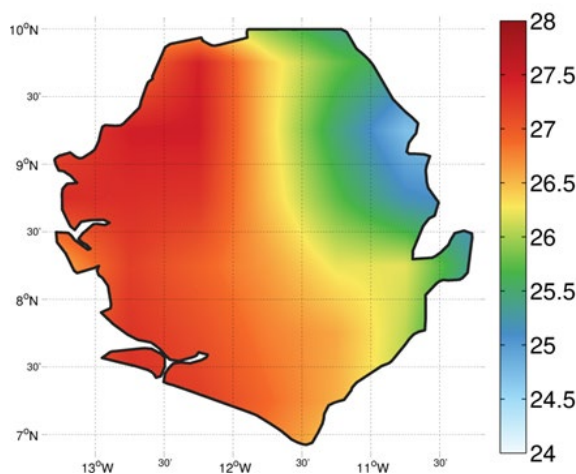
<sup>4</sup> For example, project duration and status information in MoPED, capital budget allocations, spending and multiyear commitments in MoF, details on public investment contracts awarded and variations in the National Public Procurement Agency, and implementation progress in NAMEA.

## II. The Climate PIMA

### A. Climate Change and Public Infrastructure

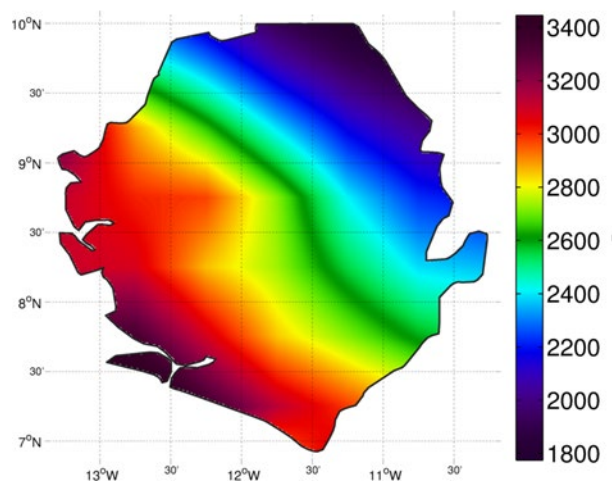
8. **Sierra Leone is exposed to a range of climate-related challenges, including rising temperatures, changing precipitation patterns, and heightened risk of climate-related extreme weather events.** The climate in Sierra Leone is characterized by two distinct seasons: a rainy season running from May to November and a dry season from December to May. Average temperatures range from 28°C in the coastal areas to 24°C inland (Figure 2) and have increased by 1.32°C relative to the 1950-1980 period. Average annual rainfall varies spatially, ranging from 1800 mm in the northwest to 3400 mm in coastal areas per year (Figure 3). Climate models project that temperatures in the country will increase from 27.5°C to 27.7°C in 2050 and from 27.6°C to 28.1°C by 2070 across the 1-2.6 and 2-4.5 Shared Socioeconomic Pathway (SSP) emission scenarios (Figure 4). In a high emission, fast-warming scenario (SSP3-7.0), average temperatures could increase to 28.9°C by 2070. Average rainfall is expected to increase, and already heavy precipitation rates are expected to become more volatile and unpredictable (Figure 5), heightening the risks associated with heavy rainfall and drought events.<sup>5</sup>

**Figure 2. Sierra Leone: Average Annual Temperature (1991-2020, degree Celsius)**



Source: FAD Climate Dataset (Massetti and Tagklis, 2023), using Climate Research Unit data (Harris et al., 2020).

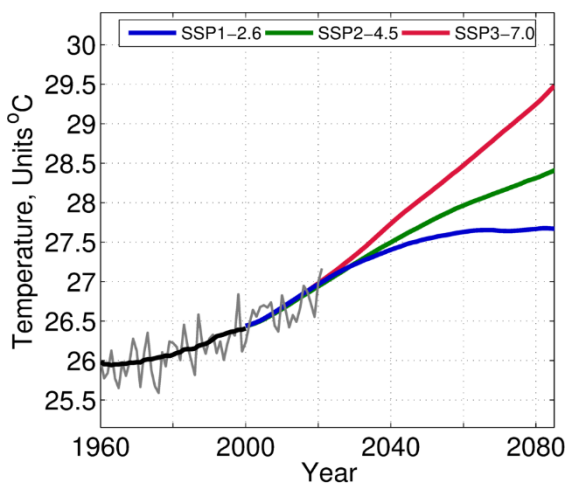
**Figure 3. Sierra Leone: Average Annual Precipitation (1991-2020, millimeters per year)**



Source: FAD Climate Dataset (Massetti and Tagklis, 2023), using Climate Research Unit data (Harris et al., 2020).

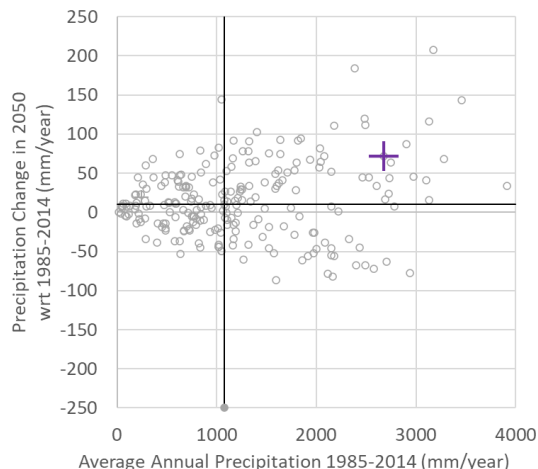
<sup>5</sup> It is important to note that there are significant uncertainty surrounding precipitation projections, which underscores the complexity and challenges in predicting future climate patterns accurately. For more information on projected climate risks for west Africa see Doherty et al. (2022) ([metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/services/government/west-africa-climate-risk-report-final.pdf](https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/services/government/west-africa-climate-risk-report-final.pdf)).

**Figure 4. Sierra Leone: Average Annual Temperature Under Different SSP Scenarios (1960-2080, degrees Celsius)**



Source: IMF Climate Dataset (Masseti and Tagklis, 2023), using Climate Research Unit data (Harris et al., 2020), and CMIP6 data (Copernicus Climate Change Service, Climate Data Store, (2021): CMIP6 climate projections).  
 Note: The grey line describes the historical mean annual temperature based on observations. The black line describes the 30-year moving average of historical data around each 30-year period. The colored lines describe the median of projected changes among the available climate models.

**Figure 5. Cross-Country Comparison of Average Precipitation and Changes by 2050 (1985-2014 climatology and SSP2-4.5 Scenario)**



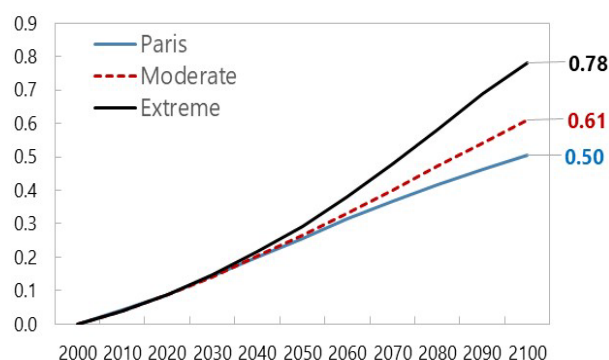
Source: IMF Climate Dataset (Masseti and Tagklis, 2023), using Climate Research Unit data (Harris et al., 2020), and CMIP6 data (Copernicus Climate Change Service, Climate Data Store, (2021): CMIP6 climate projections). Note: Each circle indicates a country, and the cross indicates Sierra Leone. It shows projected precipitation change in 2050 relative to 1985-2014 climatology using the SSP2-4.5 emission scenario.

**9. The impact of rising sea levels on coastal communities and the projected increased frequency and intensity of natural disasters amplify climate risks.** Sea levels are projected to rise from 0.5 m in the Paris scenario to 0.78 m in an extreme scenario by 2100 (see Figure 6), threatening the significant share of the population that lives in coastal communities or relies on coastal resources for their livelihoods.<sup>6</sup> Coastal erosion and flooding episodes are already displaying the impact of rising sea levels in some areas, such as Konakriddlee, Lakka, Hamilton, and Plantain Island.<sup>7</sup> Sierra Leone is also exposed to a broad range of climate-related natural disasters, including floods, landslides, storms, and wildfires (Figure 7). The country has one of the highest percentages of informal population residing in hazard-prone areas in Sub-Saharan Africa<sup>8</sup>, which could increase the human toll of natural disasters. In 2017, a landslide in the western area killed more than 1,000 people.<sup>9</sup> Changing precipitation patterns, unplanned urban occupation of flood- and landslide-prone areas, and increased erosion from deforestation could further intensify the frequency and impact of disasters.<sup>10</sup> Changing climate patterns could also heighten

<sup>6</sup> USAID. Sierra Leone’s Climate Change Adaptation Plan - A Briefing Note on Processes and Prospects for West Africa  
<sup>7</sup> WA BiCC (2019). Climate Change Adaptation Plan: A Priorities Plan for the Sierra Leone Coastal Landscape Complex.  
<sup>8</sup> [Sustainable Cities: Urban Areas and Climate Change in Sierra Leone \(worldbank.org\)](https://www.worldbank.org/)  
<sup>9</sup> [Sierra Leone - Rapid damage and loss assessment of August 14th, 2017 landslides and floods in the western area \(worldbank.org\)](https://www.worldbank.org/)  
<sup>10</sup> See [Landsat Image Gallery - A Growing City and a Deadly Landslide \(nasa.gov\)](https://www.nasa.gov/)

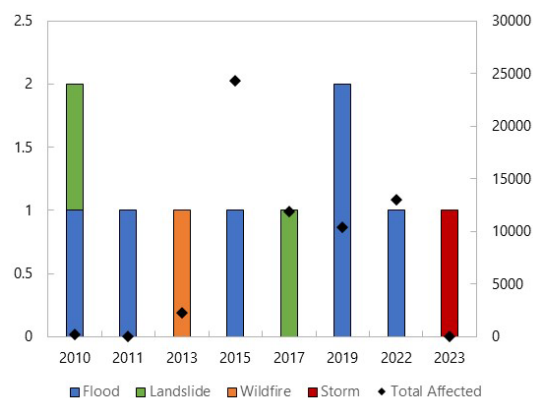
health risks, as increasing temperatures and heavy rains increase the prevalence of malaria, dengue fever, cholera, and other communicable diseases.<sup>11</sup> The average annual cost of disaster response in Sierra Leone has been estimated at USD20 million (some 0.5 percent of non-iron ore GDP). The cost of very severe events could exceed USD69 million.<sup>12</sup>

**Figure 6. Sierra Leone: Sea Level Rise**  
(Relative to 2000 level, m)



Source: IMF Staff based on projections from Kopp et al. (2014) derived from the Coastal Impact and Adaptation model database (Diaz, 2016). Note: Local Sea-Level Rise probabilistic projections until 2100 under three emission scenarios (Paris – Representative Concentration Pathway 2.6; Moderate – 4.5; Extreme – 8.5).

**Figure 7. Sierra Leone: Climate-Related Natural Disasters**  
(Number of disasters and people affected (RHS))



Source: EM-Dat and IMF staff calculations.

**10. Weak social development indicators, high dependency on rain-fed agriculture, and poor infrastructure compromise Sierra Leone’s capacity to cope with climate-related shocks.** Sierra Leone is ranked as one of the 10 percent most vulnerable countries to the impacts of climate change partly due to its poor readiness to adapt to climate shocks.<sup>13</sup> Poverty and food insecurity levels are high and increasing (see Figure 8), particularly among the rural population. Agricultural production, which represents some 60 percent of employment and 50 percent of total value added, relies mostly on small-scale farmers with poor access to irrigation and transportation systems. High production and consumption concentration on rain-sensitive crops and low levels of insurance penetration and financial inclusion amplify the potential linkages between climate change and food insecurity.<sup>14</sup> The decade-long civil war (1991-2002), multiple economic and health shocks, and insufficient maintenance have compromised infrastructure, and the country’s vulnerability level of infrastructure is among the 30 percent highest in sub-Saharan Africa (see Figure 9).

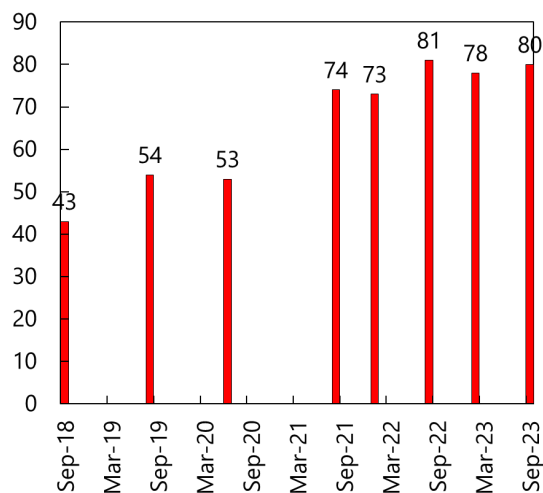
<sup>11</sup> USAID (2016), Climate Risk Profile Sierra Leone ([Template \(climatelinks.org\)](https://www.climatelinks.org)).

<sup>12</sup> World Bank (2022), Crisis and Disaster Risk Finance Diagnostic ([World Bank Document](#)).

<sup>13</sup> IMF-Adapted ND-Gain Index ([IMF-Adapted ND-Gain Index | Climate Change Indicators Dashboard](#)).

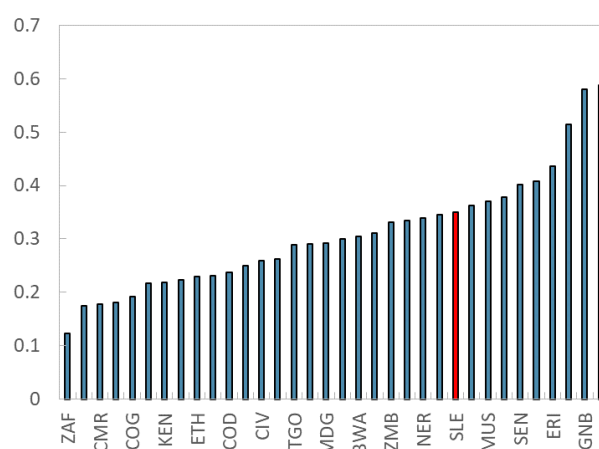
<sup>14</sup> World Bank (2023). Sierra Leone Economic Update.

**Figure 8. Sierra Leone: Food Insecurity**  
(Percent of national households)



Source: World Food Program and IMF staff calculations.

**Figure 9. Sierra Leone and Sub-Saharan Africa: Vulnerability Score, Infrastructure**



Source: IMF-Adapted ND-Gain Index

Note: The infrastructure vulnerability score can vary from 0 to 1. Countries with higher scores are considered more vulnerable.

**11. The vulnerability of energy, water, sanitation, and transportation systems to changing precipitation patterns and deforestation is another source of risk and climate resilient infrastructure will be key to mitigate the impact of shocks.** Hydropower represents a large share of energy generation, but generation capacity is insufficient to meet demand, particularly during the dry season. The country relies on Independent Power Producers for additional power generation at a significant fiscal cost.<sup>15</sup> Changing precipitation patterns could increase dependency on non-renewable sources. Water and sanitation systems are vulnerable to storm surges, sea level rise, and flooding. The Guma Valley Dam, the main source of clean water in Freetown, is threatened by unpredictable rainfall patterns and loss of forest cover in catchment areas.<sup>16</sup> Roads, which are the primary mode of transportation, often flood during the rainy season, and coastal communities such as Kroobay and Moa Wharf lack flood escape routes.<sup>17</sup>

## B. Climate Change Objectives and Strategy

**12. Sierra Leone has been working to mainstream climate change in its strategic economic planning, but weak capacity still represents a challenge.** Since 2020, the country has taken strong action to strengthen its framework for climate change adaptation and mitigation, including by developing a National Climate Change Policy and an initial National Adaptation Plan (iNAP), updating its NDC, and establishing a National Disaster Management Agency. The recently launched Medium-Term National Development Plan (2024-2030) includes the need to advance climate resilience and environmental action

<sup>15</sup> [Sierra Leone: Eighth Review Under the Extended Credit Facility Arrangement, Request for a Waiver of Nonobservance of Performance Criterion, and Financing Assurances Review \(imf.org\)](#)

<sup>16</sup> WFP, Asset Impact Monitoring from Space, Western Area Peninsular National Park Extended Analysis, January 2024.

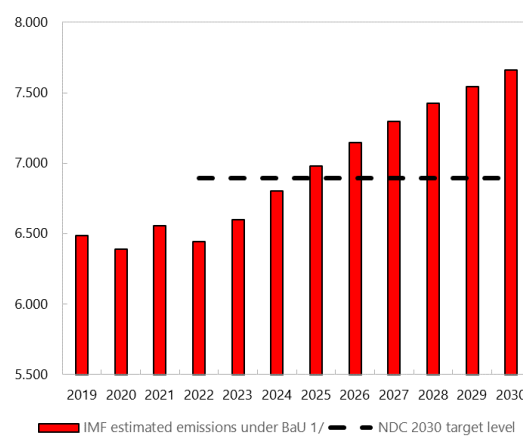
<sup>17</sup> 2021 National Adaptation Plan ([SierraLeone\\_iNAP\\_Final.pdf \(unfccc.int\)](#)).

as one of the three enablers of the “Big 5 Game Changers”<sup>18</sup>. However, operationalizing these strategies remains a challenge due to weak capacity and lack of resources. Building capacity and strengthening cooperation between MDAs, stakeholders, and development partners will be key for the implementation of climate plans.

**13. Sierra Leone has made notable commitments to reduce greenhouse gas emissions despite its negligible contributions to global emissions.** According to the 2021 updated NDC, the country has committed to reducing CO<sub>2</sub> emissions to 5 percent by 2025, 10 percent by 2030, and 25 percent by 2050 (Figure 10). To achieve these targets, the country has identified interventions in priority sectors, including renewable energy, waste management, and agriculture, forestry, and other land use. The development of an NDC implementation plan, designed with the support of local communities through established regional NDC committees, is at an advanced stage.

**14. The development and improvement of infrastructure is an important part of Sierra Leone’s climate mitigation and adaptation strategy.** The country’s climate strategic plans recognize the key role of investment in infrastructure—including water and sanitation, health facilities, energy systems, and transportation—for strengthening resilience and achieving climate goals. Interventions outlined in the iNAP and NDC include investments in energy efficiency and sustainable energy generation, adaptative infrastructure for increased agricultural productivity, and improved transportation systems in rural areas (see Box 3 for details).

**Figure 10. Sierra Leone: Greenhouse Gas Emissions – Business-as-Usual and 2030 NDC Target**  
(Million metric tons of CO<sub>2</sub> equivalent)



Source: IMF Climate Dashboard and United Nations Framework Convention on Climate Change. 2022.

1/ IMF estimated greenhouse gas emissions excluding land-use, land-use change and forestry under a Business-as-Usual assumption.

<sup>18</sup> The Big 5 Game Changers include plans to reduce food insecurity, strengthen human capital development, support youth employment, invest in infrastructure, technology, and innovation, and modernize the public sector.



### Box 3. Infrastructure for Adaptation and Mitigation

The 2021 iNAP and updated NDC outline a list of actions requiring investment in infrastructure to support Sierra Leone's adaptation and mitigation goals. These actions include interventions in agriculture, renewable energy, transportation, and water and waste management.

Climate-resilient investments in agriculture prioritize infrastructure to support adaptive approaches in rural areas, including irrigation and water harvesting systems, construction of feeder roads, and establishment and maintenance of seed banks.

Interventions to reduce greenhouse gas emissions and pollution include infrastructure to support the installation of off-grid solar systems, enhance waste management, and improve capacity to monitor and control water, sanitation, and hygiene activities in informal settlements. Priority is also given to investments in sustainable transportation infrastructure for economic diversification and reduced emissions.

Finally, the plans outline the need to invest in physical infrastructure to support research and development, including the construction of weather stations for data gathering and of structures to support hydrological and water use monitoring.

A plan for implementing and financing the NDC, designed in consultation with regional stakeholders, is under development.

Source: Mission

**15. Competing development needs and limited fiscal space heighten the challenges of building infrastructure for climate resilience.** Sierra Leone is assessed as being at high overall risk of public debt distress, and meeting the country's climate objectives will require concerted efforts to rationalize priority spending and identify sources of sustainable climate financing. A strong policy framework will be needed to catalyze private investment and development partners' support. The Ministry of Finance established a Climate Finance Unit in 2023 to strengthen coordination and support the mobilization of climate finance.

**Table 5. Strategies and Plans to Support Climate Change Objectives in Sierra Leone**

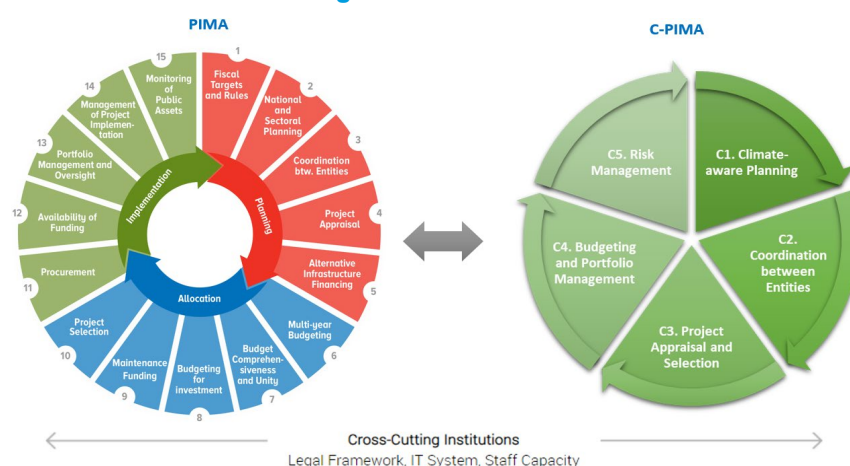
Key Strategies and Plans	Coverage
Medium-Term National Development Plan (2024-2030)	The MTNDP (2024-2030) identifies the need to advance climate resilience and environmental action as one of three enablers of the “Big 5 Game Changers”. The plan includes actions to strengthen the environmental governance architecture, promote the sustainable management of natural resources, and enhance the integration and mainstreaming of disaster risk management into national and sectoral plans. The MTNDP also outlines as a priority investment in climate-smart agriculture and renewable energy.
Initial National Adaptation Plan	The iNAP (2021) focuses on integrating climate change adaptation measures into key sectors, particularly agriculture and food security, water resources and energy, coastal zone management, environment, and disaster management. Investment in hard and soft infrastructure is identified as a cross-cutting priority. The plan establishes ambitious goals for resource allocation, compliance, risk awareness, and capacity development, aiming to halve vulnerabilities by 2030.
NDC Update	The updated NDC submitted in 2021 outlines Sierra Leone's commitment to reduce CO2 emissions to 5 percent by 2025, 10 percent by 2030, and 25 percent by 2050. Adaptation and mitigation goals are to be achieved through targeted interventions in priority sectors and the implementation of REDD+ (Reducing Deforestation and Forest Degradation) programs. An NDC implementation plan is under development.
National Disaster Preparedness and Response Plans	The plan provides strategies for enhanced disaster preparedness and outlines general guidance to support communication and coordination during response and recovery to national disasters. A Disaster Risk Financing Strategy is expected to be launched in H1-2024.
<b>Institutions</b>	<b>Climate-related Responsibilities</b>
Climate Change Directorate, Environmental Protection Agency	The Directorate has the mandate to serve as a National Climate Change Secretariat and focal point for all climate actions in Sierra Leone. The Directorate coordinates the development of national plans and provides technical and capacity support on climate-related issues.
Ministry of Environment and Climate Change	The ministry regulates the various agencies implementing climate adaptation and mitigation plans, including the Environmental Protection Agency, the National Disaster Risk Management Agency, the Sierra Leone Meteorological Agency, the National Protected Area Authority, and the Forestry Department. They are also leading and coordinating the recently established inter-ministerial committee on climate change. The Ministry is planning a functional and managerial review to formally incorporate climate change as part of its mandate.
Presidential Initiative on Climate Change, Renewable Energy, and Food Security	Established in 2023 with the mandate to coordinate and elevate issues related to climate change, renewable energy, and food security. The initiative is also tasked to represent the country in climate-related forums and strengthen cooperation with international partners.
Sector ministries and local councils	Line ministries and local councils play a critical role in the development and implementation of climate-relevant infrastructure projects and climate-related rules and regulations.

Source: Mission

## C. Climate Module of the Public Investment Management Assessment (C-PIMA) Framework

16. The C-PIMA assesses five key public investment management practices from the climate change perspective and is an extension of the existing PIMA framework. Figure 11 describes the main elements.

Figure 11. Climate Public Investment Management Assessment Framework



17. The C-PIMA covers the following specific issues (see Annex 2 for the C-PIMA Questionnaire):

- *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 across the public sector:* 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, SOEs, and private sector entities play key roles in realizing climate-related public investment. Climate adaptation investments will often take place at the subnational government level, and both SOEs 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 with available resources.
- *C.4 Budgeting and Portfolio management:* Is climate-related investment spending clearly identified in the budget and subject to active management and oversight? Because the climate benefits may be less tangible and more difficult to quantify than other project benefits, systematic and consistent management and oversight of benefits 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.

## D. Detailed Assessment

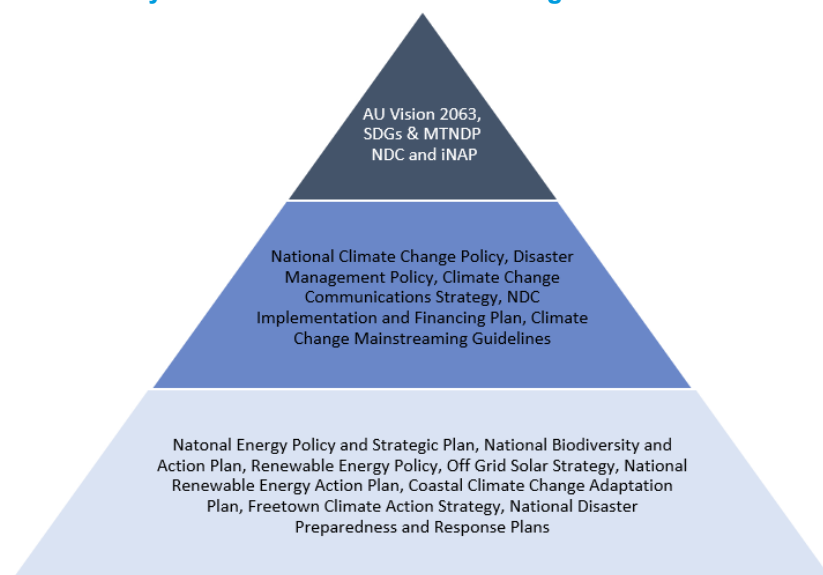
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### C1. Climate-aware Planning (Strength: **Partly Met**; Reform Priority: **Medium**)

**18. National and sectoral planning processes should consider the factors needed to mitigate climate change and adapt to its consequences.** This is especially relevant to promoting climate-sensitive public investment. To achieve this, public investment should be planned in a manner that is consistent with the government's climate change objectives and international commitments. Government regulations on urban planning and construction must be developed with climate impacts and exposure to climate-related risks in mind. In addition, MDAs should be provided with appropriate guidance and support to incorporate climate change considerations into their public investment strategies. The 2020 PIMA identified a significant gap in this area, with sectoral and national development plans exhibiting inconsistencies. Since the 2020 PIMA was undertaken, MoPED has introduced a standardized planning template for Local Councils, but irregularities still exist between sectoral and national development plans, especially in the roads sector.

**19. Sierra Leones's updated NDC and iNAP are the overarching strategic policy documents on climate planning (Figure 12), but steps could be taken to integrate them fully into national and sectoral investment plans.** The NDC and iNAP set out the country's long-term goals of reducing CO<sub>2</sub> emission levels by 2050, enhancing adaptive capacity, and halving vulnerability by 2030. Mitigation and adaptation measures are defined in these strategic sectors: energy, agriculture, food security, forestry and land use, blue economy, water resources, fisheries, coastal zone management, tourism, disaster management, gender and social inclusion, infrastructure, waste, and industry. While mitigation and adaptation objectives are set as priorities in the recently launched MTNDP (2024-2030), key investment projects outlined in the climate planning documents are not clearly identifiable. Sectoral strategic plans are also not aligned with the MTNDP and climate strategies, which creates a fragmented approach in planning. For example, the objectives in the National Sustainable Agriculture Development Plan (2010-2030) are inconsistent with strategies like climate-smart agriculture that are set out in the NDC and iNAP. Similarly, the National Energy Policy and Strategic Plan (2009) is outdated and does not outline key climate-related energy projects that can help achieve climate goals.

**Figure 12. Sierra Leone’s Key National and Sectoral Planning Documents**



Source: Mission

**20. Some sub-national government investment plans directly take climate change mitigation and adaptation into consideration.** This includes local council development plans like the Transform Freetown Strategy (2019-2022), and Freetown’s first Climate Action Strategy (2022-2030). As part of this strategy, Freetown has committed to reduce greenhouse gas emissions by at least 44 percent by 2050 compared to the base year (2018) level, with an interim target of 13 percent below base year levels by 2030. The strategy, which strongly aligns with the Government of Sierra Leone’s NDC and iNAP focuses on urban energy, mobility, and sanitation as part of its mitigation efforts; and on ecosystems and land restoration, disaster risk management, water and urban planning to foster adaptation. Box 4 sets out the key focus areas of Freetown City Council’s Climate Action Strategy.

#### Box 4. Key Focus Areas of Freetown's Climate Action Strategy

Freetown's Climate Action Plan is a comprehensive framework designed to address the challenges posed by climate change through targeted interventions across seven key areas. It strategically outlines objectives and actions to enhance the city's resilience against environmental risks, improve the health and well-being of its residents, and ensure sustainable urban development. The plan's emphasis is on practical, localized solutions that span disaster risk management, heat resilience, environmental stewardship, water security, sanitation, urban mobility, and energy systems.

##### **Key Area 1. Resilience – Disaster Risk Management & Climate Resilient Infrastructure**

Freetown aims at promoting the safety of communities in the face of climate change and extreme climate events by raising awareness of disasters and developing risk and hazard maps at the ward level, supporting floodproof development of new neighborhoods, implementing action plans for high-risk areas and mainstreaming disaster risk management across sectors and strengthening collaboration among levels of government.

##### **Key Area 2. Resilience – Heat**

Climate resilience to heat impacts for a more livable, cool, and sustainable city will be achieved by mapping the exposed and vulnerable areas and developing heat-sensitive infrastructure and architecture.

##### **Key Area 3. Resilience – Environmental Management:**

Enhancing nature in urban environments and the natural ability of ecosystems to buffer climate change by focusing on the restoration of biodiversity and a circular economy.

##### **Key Area 4. Healthy City – Water**

Creating water security for all users in Freetown. In addition to protecting water supply catchment areas and areas at risk of flooding, water quality and access to the most vulnerable communities will be improved.

##### **Key Area 5. Healthy City – Sanitation**

A smart and sustainable waste management system will free Freetown from waste.

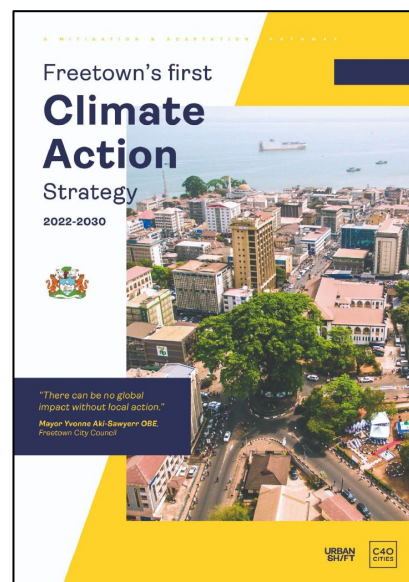
##### **Key Area 6. Urban Mobility**

Building a cleaner, safer, and more equally accessible public transport system coupled with transit-oriented development to minimize car travel and devolution of maintenance of local roads for better urban planning controls.

##### **Key Area 7. Urban Energy**

Through the supply of off-grid renewable sources of power, clean cooking solutions, and energy efficiency, Freetown will transition to a clean, accessible, and equitable city energy system.

Source: [Freetown's First Climate Action Strategy \(2022-2030\)](#)



**21. Urban planning and building regulations in Sierra Leone do not consider climate change, which increases vulnerability to natural disasters through human activity.** The primary legislation that governs urban planning and development management is the Town and Country Planning Act (1946), which is outdated and does not consider the integration of climate change actions in urban

planning and development. The national government approved the Local Government Act (2022), which intended to devolve the preparation of land use plans to local councils, but they lack the technical capacity to prepare and implement land use plans. The authority to issue building permits at a national level sits with the Ministry of Lands, Housing, and Country Planning. In 2004, this function was decentralized, but legislation was approved to restore it to central government in 2022, thereby creating unresolved devolution issues that strain coordination in development planning. The Directorate of Country Planning at the Ministry of Lands, Housing, and Country Planning receives applications for planning permission. While the application form includes a checklist that requires an assessment of flood risk and the likely impact on biodiversity and geological conservation, it does not explicitly provide an assessment of likely climate change impacts. Still, the government (with support from the World Bank) is implementing the [Resilient Urban Sierra Leone](#) project, which focuses on improving capacity in urban management in secondary cities and Freetown as well as improving the integration and mainstreaming of disaster and climate change considerations into territorial planning and infrastructure design. The completion of this project should see an upgrading of Sierra Leone's climate-sensitive urban planning framework.

**22. The Environmental Protection Agency has provided some centralized guidance and assistance in the integration of climate objectives with development planning.** The agency-produced Guidelines for Mainstreaming Climate Change Adaptation and Mitigation into Development Planning provide a standardized approach for the preparation of climate-aware public strategies at all levels of government. The guidelines were developed through a series of consultative workshops with representatives from MDAs, local governments, non-governmental organizations, and the private sector and are aligned to key national climate change documents like the National Climate Change Policy, third national communication, iNAP, and updated NDC. The guidelines are focused on preparing strategies and plans and do not provide guidance on the preparation and costing of individual climate-sensitive public investments at the project level. Nevertheless, the guidelines, coupled with irregular workshops provided by the agency, provide a starting point for expanding centralized guidance and assistance on climate-sensitive public investment management.

**23. Sierra Leone has adopted some commendable strategies and plans to steer climate action, but implementation is weakened by gaps in the national planning process.** The country's overarching planning instrument, the medium-term national development plan MTNDP (2024-2030), is not yet clearly aligned with the strategies set out in the NDC and iNAP. Similarly, several sectoral plans, such as the National Energy and Sectoral Plan, are outdated despite having energy as one of the priority sectors selected to deliver the NDC. Box 5 in the next section summarizes the key elements of Sierra Leone's NDC implementation plan, which was developed to form the basis for disaggregating national targets to the sectoral level to deliver on various climate ambitions and can be leveraged to improve consistency in planning. There are serious weaknesses in Sierra Leone's spatial and urban planning that stem from outdated regulations or the lack thereof. Building codes are not readily accessible and do not address climate change issues. The Resilient Urban Sierra Leone project should lead to improved climate-sensitive urban planning. The Town and Country Planning Act (1946) could also be reviewed and updated to manage climate change-related risks and their impacts on public investments at the national and local council levels.

## C2. Coordination Between Entities (Strength: **Partly Met**; Reform Priority: **High**)

**24. The adoption of a whole-of-government approach to climate change facilitates the coordination of actions across all levels of the public sector.** Such coordination needs to take place within the central government and between the central government and the wider public sector. Climate-related decision-making should incorporate externally financed projects, extra-budgetary units, and PPPs. Moreover, public investments undertaken by local governments should comply with national strategies linked to climate change. Finally, the regulatory and oversight framework for public corporations should ensure that their climate-related investments are also consistent with national strategies for climate change. As indicated in the 2020 PIMA, the absence of a pipeline of all projects from central and local government, including PPPs and SOEs, reduces the effectiveness of coordination. Some progress has been made since the PIMA as MoPED has supported MDAs and local councils in developing sectoral plans to the extent that the PIP published in the annual budget now includes a list of capital projects for both central government and local councils. However, weak coordination between entities continues to undermine effective public investment management practices and climate-sensitive public investment management.

**25. While the Environmental Protection Agency provides regulatory oversight on climate change issues, decisions on public investment planning from a climate-change perspective are largely taken in isolation.** Mechanisms for coordinating climate change across central government exist in the regulatory framework, but they are not in effect. The Ministry of Environment has instituted the inter-ministerial committee on climate change to provide a coordinating mechanism for addressing broader climate and environment issues at the political level. The Environmental Protection Agency Act (2022) mandates the Climate Change Secretariat to serve as the focal point for all climate actions, but its role in coordinating public investments from a climate perspective is not stated in the Act, suggesting the need for legal clarity or climate-focused laws. In 2022, the Environmental Protection Agency coordinated the preparation of the Plan for Implementing and Financing the Nationally Determined Contributions (Box 5), which provides an example of the assignment of actions (including projects) across central government to achieve the NDC and iNAP targets. In 2023, the Presidential Initiative on Climate Change, Renewable Energy, and Food Security was established to provide coherence in the coordination and implementation of the new MTNDP (2024-2030) but it does not yet have a clear mandate and is understaffed. No platform yet brings all these parties together to coordinate public investment from a climate perspective. Still, this high-level political support indicated by the establishment of the Presidential Initiative could serve as a driver of enhanced coordination of climate-related public investments across the government.



### Box 5. Key Elements of Sierra Leone’s Draft Plan for Implementing and Financing the Nationally Determined Contributions (2023-2030)

Sierra Leone is in the final stages of drafting an implementation plan for the NDC to provide a structure for achieving the objective of a sustainable, low-carbon, and resilient country through a well-governed and sustained financing architecture run by stakeholders working at different levels of government.

The plan provides a framework for preparing for NDC implementation, which includes aligning processes with development outcomes; prioritizing policies and measures; assessing capacities, institutions, and regulatory frameworks; and engaging stakeholders. It also provides costing implementation options, formulating strategies for financing, and scaling up finance in a more coordinated and sustainable manner (Figure 13).

In the long term, the plan will form the basis for disaggregating national targets to the level of sectors to deliver on various ambitions. This will provide an opportunity for sectors to draw on the plan to develop sectoral roadmaps in a more harmonized manner for delivering climate-informed development projects.

To narrow the focus to key sectors and activities the plan could support till 2030, eight mitigation and seven adaptation activities were selected because of their trialability, measurability, scalability, local appropriateness, benefit distribution potential, and alignment with national development goals and climate mainstreaming approaches.

Figure 13. Excerpt from the NDC Implementation Plan (2023-2030)

Activities	Responsible	Potential collaborators	Outcome targets	Progress markers	Proposed budget (million USD)	Timeline		
						2023-2025	2026-2028	2029-2030
Increase access to sustainable and clean energy systems	Ministry of Energy	Renewable Energy Association of Sierra Leone UNIDO UNSE4ALL Millennium Challenge Corporation USAID FCDO UNOPS	30% of the rural population have access to clean energy  200 rural communities have solar-powered businesses owned by women  Enrolment rate in primary schools increases due to access to energy  Provide a national emissions profile for new and renewable forms of energy	Number of rural households with access to clean energy  Number of connected women-led or -owned businesses within mini-grid locations  Percentage increase in the enrolment of children in primary schools within mini-grid locations  Extent of emissions from the energy sector	15			

Source: Government of Sierra Leone, Plan for Implementing and Financing the NDC, September 2022.

**26. Planning and implementation of subnational government capital spending is not directly coordinated with the central government from a climate perspective.** Regional climate change committees for subnational coordination were established in 2020, but there is no evidence of any formal discussions between the central government and these committees or the coordination of public investment with these committees. Local council capital projects are included in the PIP published in the annual budget, but these are not identifiable from a climate change perspective. Instead, a looser coordination framework exists, with some councils (e.g., Freetown – see Box 4 in the previous section)

independently mainstreaming climate change considerations throughout their operations with the NDC and iNAP targets in mind.

**27. Sierra Leone has prepared a new ownership policy for state-owned enterprises, which requires SOEs to integrate climate change considerations in their operations and investments.** Sierra Leone SOEs operate in sectors including energy, water, agriculture, and roads, all of which are both highly exposed to climate change risks and important for the country to achieve its climate objectives. To enhance SOE governance and debt transparency, the SOEs Ownership and Governance Commission Bill, which will implement the new SOE ownership and governance policy, was submitted to Parliament in early 2024. The SOE ownership and governance policy provides for compliance with the relevant environmental Acts and policies and maintenance of environmentally sustainable operations to support the achievement of national climate objectives. SOEs are required to identify, assess, and adopt measures to minimize exposure to climate risks and report to the oversight entity on their climate-related activities and investments. Climate-resilient investments will be included in annual aggregate SOE reports. The full implementation of this new policy will strengthen the oversight framework for SOEs, promote transparency, and ensure alignment with climate objectives.

**28. Public investment coordination in Sierra Leone is generally weak, and coordination on climate-related investment decisions is no exception.** The existing regulatory framework should be updated to clearly define and strengthen the roles of different entities that handle climate change issues. For example, the Environmental Protection Agency Act (2021) mandates the Climate Change Secretariat to serve as the focal point for all climate actions. Still, this role doesn't cover coordinating climate-related public investments, resulting in loose coordination across the public sector in this area. MoPED plays a central role in public investment management in Sierra Leone, but a lack of technical capacity in climate-related analysis and a lack of mandate makes it difficult for them to take a coordinating role, with entities making climate-related decisions in isolation as a result. The need to more clearly define climate change mandates and coordinating authorities is a high priority and is frequently cited as a source of confusion and delay in advancing the climate change agenda from an investment perspective. Capacity building should be leveraged to support coordination, particularly in key central agencies such as MoPED. This would help to facilitate a more coherent climate-related public investment strategy across all levels of the public sector.

### **C3. Project Appraisal and Selection (Strength: Not Met; Reform Priority: High)**

**29. Rigorous project appraisal should include the impact of projects in climate change adaptation and mitigation and the potential impact of climate change on new infrastructure.** However, the 2020 PIMA found several gaps in processes for the appraisal and selection of projects. These include the lack of guidelines and criteria for appraising projects, partial and, in some cases, non-appraisal of projects (especially in the roads sector), and the absence of a clear pipeline for appraised projects, and non-publication of appraisals. Since 2020, the authorities have strengthened this institution by developing the PIGM, which gives comprehensive guidance to MDAs, local councils, and SOEs on the preparation of feasibility studies and project appraisals. Although the manual is yet to be fully institutionalized, it still provides a good framework to guide project appraisal and feasibility studies. Notwithstanding this, there remain shortcomings which limit the extent and usefulness of climate-related risk analysis in the appraisal and selection process.

**30. The PIGM does not require climate-related analysis on major infrastructure projects to be conducted in line with a standard methodology.** A standard climate-related methodology would require that project proposals include a detailed assessment of the impact of projects on greenhouse gas emissions and the exposure of projects to damage from climate-related disasters before projects are included in a public investment plan or pipeline or are selected for funding in the budget. The Project Appraisal Report and Review Template (PIGM annex 5) outlines information to be included in a project appraisal report and submitted to MoPED for review. Although it provides useful guidance for key appraisal elements such as economic, financial, and risk analysis (including mitigation measures), the sustainability analysis component only focuses on the analysis of the environmental impact of projects. There is no specific mention of climate-related analysis other than through reference to some climate elements, such as air and water quality, in the guidelines for environmental impact assessments (PIGM Annex 9). The guidelines for Environmental, Social, and Health Impact Assessments issued by the Environmental Protection Agency require project proposals to include a description of the project's contribution to climate emission abatement relating to the prevention of air, water, soil, and groundwater pollution. However, as with the PIGM, there is no dedicated section on climate-related analysis other than this brief mention.

**31. The framework for managing longer-term public investment contracts does not explicitly include consideration of climate change for risk allocation and contract management.** Given that PPPs commit the government over the term of the contract, which can be as long as 30 years, it is important that risks from climate change – either adaptation exposures or mitigation risks, or both – are considered as part of the contractual arrangements as these are likely to arise at some point during the term of the contract. Appropriate risk sharing should, therefore, be specified. Section 4(1)(r) of the PPP Act (2014) provides for the sharing of risks between the contracting authority and the private partner in a PPP agreement. The Act further requires that the PPP project proposal stipulates key allocations of risk between the contracting authority and private partner. However, the Act does not specify the nature of the risks to be considered. It merely explains that risk transfer means “the allocation of the probability of losses or other harmful consequences to the project.”

**32. Sierra Leone has two main templates for project selection: the selection criteria matrix and the project readiness checklist.** The selection criteria matrix (PIGM annex 3) is used to pre-screen projects to determine whether they should proceed to the appraisal and feasibility study stage. The project readiness checklist is used to assess whether a project is ready for implementation (PIGM Annex 7) and to inform decision-making on whether it should be prioritized and selected for inclusion in the PIP and annual budget. Although MoPED is responsible for undertaking this analysis, the final decision on whether projects should be selected for inclusion in the budget vests with the Ministerial Investment Committee, which also includes the MoF. Section 8 of the PIGM outlines broad criteria for prioritization of projects for selection. However, climate change is not included among the criteria for project selection. The stipulated criteria for prioritization follow the sequence below:

1. Determine existing investment commitments.
2. Establish the fiscal space for new projects.
3. Define the high-level priority projects.
4. Prioritize new projects.
5. Subject prioritized projects to available fiscal space.

**33. Climate-related elements are not among the criteria used for the selection of infrastructure projects.** The selection criteria matrix for the pre-screening of projects includes a sustainability analysis component, which requires entities to identify any significant potential threats to the project due to climate change that will need further investigation to establish possible mitigation measures. For a project proposal to get a positive assessment in the selection criteria matrix, it needs to get a 'pass' across all criteria included in the selection matrix, which covers sustainability analysis on climate change, among other things. In the case of climate, this implies that the project proposal must adequately demonstrate that it has considered all potential threats to the project due to climate change and possible measures for adaptation. The project should only move to the appraisal and feasibility study stage if MoPED is satisfied that climate and all other criteria are met. The readiness checklist has a provision that assesses whether entities have stipulated in the Project Appraisal Report and Review Template, whether the major environmental and social impacts of the project proposal have been properly identified, and whether appropriate mitigation measures have been designed where required. However, it does not specify any technical or analytical elements of climate change that must be addressed to satisfy the criteria and focuses only on resilience to climate change and not mitigation. Other than this provision in the pre-screening checklist, there are no explicit references to climate change that could be used as criteria for project selection.

**34. There is considerable scope to enhance the climate-related components of project appraisal, the PPP framework, and project selection criteria.** The project appraisal process should integrate climate-related analysis by aligning the Project Analysis and Review Reporting Template with a standard methodology (Box 7). Appraisals should be published and independently reviewed, a step that has yet to be fully implemented since the 2020 PIMA recommendation. The ongoing review of the PPP framework presents an opportunity to explicitly incorporate climate risk allocation in the framework for preparing long-term contracts and to ensure contract managers in MDAs are mandated to address climate-related challenges, building on the current environmental standards required by the Public-Private Partnership Act (2014) (Box 6). The project selection process would benefit from including climate change as a criterion within the multicriteria analysis, as guided by the PIGM. This integration would ensure the development of a robust project pipeline that aligns with the nation's public financial management reform agenda and international best practices for mainstreaming climate adaptation and mitigation. Annex 4 provides an example of multicriteria analysis from Rwanda after it updated its project selection criteria to incorporate climate change.

### Box 6. Incorporating Climate Change in PPP Evaluation, Planning and Management

Climate change is increasing the uncertainty and complexity inherent in planning, implementing, and managing infrastructure investment. This challenge can be particularly pronounced in PPP projects as the private partner requires a degree of stability and certainty to incentivize investment. To address this challenge, the World Bank has developed a wide-ranging toolkit to assist authorities in factoring climate change considerations into the design and management of PPPs. The toolkit provides practical guidance across a range of critical issues at the intersection of climate change and project finance. The core elements are as follows:

- **Introductory Phase:** climate policies digest, national governance framework on climate change;
- **Phase 1:** project alignment with climate policies; climate considerations in project selection; value of investment accounting for climate actions;
- **Phase 2:** interactions between climate and PPPs; climate considerations on technical feasibility; climate considerations on commercial feasibility and bankability;
- **Phase 3:** climate considerations on risk allocation; climate considerations on financial structure; integration of climate requirements into the procurement process; and
- **Phase 4:** drafting of climate-smart tender documentation.

Adopting the approaches detailed in the toolkit can help improve institutional design for public investment and bolster the chances of attracting private finance to public projects.

Source: The World Bank (2022) [Climate Toolkits for Infrastructure PPPs](#).

### Box 7. Example of Key Technical Elements in Climate-Related Analysis

The assessment and integration of climate-related factors in project appraisal are essential to ensure that potential greenhouse gas emissions and the vulnerability of projects to climate-induced disasters are thoroughly evaluated and addressed. Below is an illustration of the key technical elements that could constitute a climate-related analysis, encompassing both adaptation and mitigation strategies. These elements can help to quantify and manage the climate change impacts and risks of public investment projects.

#### Climate change adaptation

Hazard analysis to identify climate-related hazards such as cyclones, tornadoes, high winds and extreme temperatures that could cause damage to public infrastructure assets.

Risk mapping and screening to identify and map climate risks to which the project is exposed to build resilience measures.

Loss and damage estimation (i.e., consequences of climate change that go beyond set adaptation measures)

Vulnerability analysis to assess the exposure of the project to projected changes in climate conditions.

Use of risk scenarios to understand how climate-related disasters and risks may impact the project under different scenarios.

- Dealing with climate uncertainty in project design e.g., through climate-robust physical design features, delaying full implementation until better information is available, by implementing in stages, by doing 'no regrets' elements first, or using real options.

#### Climate change mitigation

- Estimation of business-as-usual greenhouse gas emissions and net greenhouse gas impacts of alternative technologies.
- Estimation of marginal abatement cost curves to measure and compare the financial cost and abatement benefit of actions taken.
- Use of parameters such as the social cost of carbon, shadow price of carbon, appropriate long-term discount rates.

Source: Mission

## C4. Budgeting and Portfolio Management (Strength: **Not Met**; Reform Priority: High)

**35. Effective management of the government's portfolio of climate-related investment projects at all stages of the project cycle is critical for achieving climate change mitigation and adaptation targets.** Failure to assess the additional costs arising from climate change geophysical risks may lead to an underestimation of future asset maintenance costs and erode public assets. The adoption of good practices in budgeting, review, and asset maintenance will provide the government with greater insights into the fiscal risks posed by climate change. The 2020 PIMA for Sierra Leone identified gaps in budgeting practices, with capital expenditures not fully capturing multiannual commitments and lacking alignment with international classifications. Asset management was also fragmented, lacking a standardized approach to maintenance across sectors and systematic inclusion in the budget. Progress has been made with the introduction of a Pre-Investment Guidance Manual and the budget's extension to cover local council projects. However, challenges remain with no unified public investment database and unclear project prioritization criteria, leading to persistent underfunding and cost overruns.

**Climate-related public investment spending is not clearly identified in the budget and related documents, though there were plans in place for this to happen.** The 2024 Budget Call Circular that Climate Budget Tagging would be piloted for the 2024 budget. Six MDAs were identified for the piloting: the Ministry of Environment and Climate Change, the Ministry of Agriculture and Food Security; the Ministry of Tourism and Culture Affairs; the Environmental Protection Agency, the Sierra Leone Meteorological Agency and the National Protected Area Authority. Guidelines with templates were to be issued, but this has not happened.

**36. There is no clear definition of what constitutes climate-related expenditures and projects.** There are allocations to activities that relate to climate in the 2024 Budget. These are activities and programs such as environmental health and sanitation, environmental and impact assessment for all civil works under the Ministry of Education, and forest management and sustainability. If these costs are correctly defined as climate change-related activities according to a standardized methodology and then tagged, analysis and report generation regarding budgetary allocation for climate mitigation could be feasible. However, no standardized methodology exists in Sierra Leone, and a tagging framework is not in place. The Constitution, Public Financial Management Act (2016), and its attendant regulations all serve as guidelines for planning, allocating, and accountability of public funds. Section 34 of the Public Financial Management Act (2016) mandates the Ministry of Finance to include information in the form of annexes to various budget documents. This gives the Ministry of Finance the chance to generate annexes for inclusion in various budget documents, which could include a statement on climate-sensitive expenditure, including capital expenditure. Box 8 gives a sample of the tagging frameworks being followed in other countries.

### Box 8. Green and Climate Budget Tagging

There are four key steps in designing a climate or green tagging system:

- Define what is climate or green, considering emerging public and multilateral definitions (e.g., The Organization for Economic Cooperation and Development's Development Assistance Committee 'Rio Markers' and national climate and green policy objectives);
- Decide what budget measures to tag in terms of sectors, type of budget items (e.g., capital, current), and down to what administrative level;
- Develop a classification system that is linked to the definition of what is climate/green, with a clear definition of each category accompanied by guidance for those implementing; and
- Identify information needs, which entails developing a weighting system.

Weighting systems are either binary (the full cost of a spending item is tagged, or none is), e.g., Indonesia, Philippines, and Ireland (for green bonds); or countries use scaled or weighted approaches (the most common approach) in which a certain proportion of an item is tagged - as in the Jordan Public Expenditure Review. In Bangladesh, expenditures are weighted by relevance and by estimating the share of spending that would still take place in the absence of climate change.

The choice of tagging method involves a trade-off between simplicity and more detailed accuracy, which requires more capacity to implement. In any case, centralized guidance is required on what constitutes climate-relevant expenditures to apply weights to, e.g., an indicative list of activities (Indonesia, European Union) or linked to national climate policy (Bangladesh, Philippines).

The most comprehensive approach to tagging is that adopted in France. Its 2021 Green Budget covered the whole budget - including tax expenditures - and tracked spending not only against climate change objectives but also against other environmental objectives based on the European Union Taxonomy of Sustainable Environmental Outcomes. Moreover, the tagging system also tracks expenditures that are detrimental to the achievement of environmental goals.

The French Green Budget was prepared by a working group of representatives from the MoF (Budget Directorate, Treasury and Economic Analysis Directorate, Tax Policy Directorate) and the Ministry of Ecological and Inclusive Transition.<sup>37</sup> The second step was to integrate an annex on green budgeting into the performance budget circular for 2021, thus explaining the approach to line ministries and agencies. In April 2020, line ministries discussed with the Budget Directorate how this methodology should be applied in preparing their 2021 budget proposals. In most cases, the analysis went down to the lower level of the French program budgeting framework, namely "actions" or, in some cases, "sub-actions." A final step was for the working group to conduct a consistency check before all the material was consolidated into the "Green Budget" document published as an annex to the 2021 budget.

Mission, based on [OECD 2021](#), [World Bank 2021](#), [UNDP 2021](#), and [Lelong and Wendling, 2021](#).

**37. Well-structured management of the asset portfolio is essential in addressing climate change risks, but this is not yet in place.** The National Asset and Government Property Commission has the mandate for the management and oversight of Sierra Leone's asset portfolio, yet they face several challenges. Despite the National Asset and Government Property Commission Act's (1990) provision for the control, identification, maintenance, and improvement of all national assets and government property, including their monitoring, use, or disposal, most of these functions are not undertaken and MDAs have not allocated specific budget lines for asset maintenance. The Ministry of Public Works and the Ministry of Transport are exceptions, having specific allocations for the



maintenance of government buildings and vehicles, respectively. While some ministries have established asset registers, there is no comprehensive, government-wide asset register. Sector-wide maintenance standards and funding are insufficient, compromising asset sustainability and increasing climate vulnerability.

**38. The development of a public asset policy and asset register by the National Asset and Government Property Commission is an important climate objective in Sierra Leone.** The 2020 PIMA recognizes the existence of sectoral asset registers and capital stock data within various government units, and efforts to develop a cohesive asset management policy are underway. The draft National Disaster Risk Financing Strategy highlights the development of the public asset policy and asset register as a key action to be achieved by 2027, with the support of the European Union.

**39. There are no ex-post reviews or audits conducted on the climate mitigation and adaptation outcomes of projects.** Ex-post reviews of projects are not conducted. The Auditor General, in compliance with the Constitution, the Audit Service Act (2014), and the Public Financial Management Act (2016), continues to carry out regular compliance and performance audits. However, the absence of identified climate-relevant projects in the budget limits the performance audit the Auditor General can do annually or periodically. These reports are submitted to the legislature upon their completion. However, reports are often not fully processed in parliament, undermining the opportunity for follow-up and lesson-learning from projects. This also weakens the incentive for MDAs to comply with the guidelines of various laws and regulations. There are also significant lags in the review of reports by the legislature, with reports submitted for 2015 and 2016 only being under review in 2024. The audit service is also understaffed and does not have sector specialists such as engineers and environmental specialists.

## **C5. Risk Management (Strength: **Partly Met**; Reform Priority: **Medium**)**

**40. Identifying and managing fiscal risks to public infrastructure arising from climate change should be an integral part of the government's risk management function.** As with other types of fiscal risks, governments need to be aware of climate-related risks and their potential impact on public investments and public finances. While the 2020 PIMA recommendations did not touch on fiscal risks specifically, Sierra Leone has made considerable progress in the analysis, management, and reporting of fiscal risks. The Fiscal Risks Management Division published the first SOE Financial Analysis report (2014-18), followed by the 2015-2020 Financial Performance of SOEs report, and is drafting the 2016-2021 report. The reports highlight the potential fiscal risks from the SOEs and propose remedial measures in each case. However, the analysis and management of other fiscal risks related to natural disasters and climate change is still at a nascent stage, and there is considerable scope to deepen this analysis and improve the management of these risks.

**41. Sierra Leone's disaster risk management framework is in a period of transition.** The National Disaster Management Agency was set up in 2020. The National Disaster Management Agency Act (2020) designates the Agency to coordinate and implement all aspects of disaster management, including governance, policy, planning, inter-agency collaboration, training, and response. Over the past four years, several analyses have been undertaken to assess disaster risks in Sierra Leone, including the Coastal Vulnerability Assessment. Sierra Leone has produced several documents that detail its approach to disaster risk management and identify key climate-related risks to infrastructure. The National Disaster Preparedness and Response Plan was produced by the National Disaster Management Agency in 2021,

with assistance from the World Bank. This plan includes coverage of climate-related risks and has individual preparedness plans for larger cities in Sierra Leone. However, it does not contain an analysis of the vulnerability of key infrastructure to climate change-related events or natural disasters.

**42. Nevertheless, Some analysis of the vulnerability of infrastructure to climate change-related risks has been conducted.** For instance, analysis by the World Bank estimates that damages to building and infrastructure assets from floods, landslides, windstorms, and fires are around USD 5.7 to 10 million per year. Assets at risk (including private buildings) from coastal erosion between now and 2050 were estimated in the World Bank's multicity hazard and risk assessment at around USD131 million, with an upper estimate of USD261 million.<sup>19</sup> The Coastal Vulnerability Assessment Report for Sierra Leone, focusing on the projected coastal erosion in Freetown by 2050, has also identified significant potential losses of infrastructure due to urban development, sand mining, and environmental degradation. It anticipates a loss of assets within areas of high coastal erosion hazard, using historical data to project future coastline recession and its impact on buildings and infrastructure.

**43. While there is a significant body of documents and analysis of climate risks in Sierra Leone, the coverage of infrastructure vulnerability is not uniform.** The Coastal Vulnerability Assessment Report and the Sierra Leone Disaster Risk Management Diagnostic Note provide valuable insights into the susceptibility of coastal areas, projecting some infrastructure losses by 2050 due to factors related to climate change. Still, these documents do not provide a comprehensive analysis of the vulnerability of infrastructure assets across the country. This suggests a need for a broader and more inclusive method of assessing infrastructure exposure to climate-related disaster risks, one that extends beyond coastal zones to include key infrastructure such as roads, and that guides both climate change-related disaster risk planning and the management of fiscal risks (see Box 9). The draft National Disaster Risk Financing Strategy includes actions to (a) undertake a multi-hazard disaster risk assessment across all critical public infrastructure (by 2025); (b) develop the public asset policy and asset register (by 2027); and (c) develop a Climate Resilient Road Strategy (by 2027). These activities should be supported. The National Monitoring and Evaluation Management Information System (NAMEMIS) database, which already contains Geographic Information System data on projects, could potentially be leveraged for a more comprehensive evaluation of disaster-related risks to infrastructure. Additionally, further assistance in developing the register of public assets at the Ministry of Works would supplement these efforts, enabling improved planning and risk mitigation.

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<sup>19</sup> World Bank (2020), Disaster Risk Management Diagnostic Note, Sierra Leone.

## Box 9. Importance of and Approach to Assessing Infrastructure Exposure to Climate-Related Disaster Risks

Understanding the exposure of infrastructure to climate-related disaster risks is crucial for effective planning and risk mitigation. It enables decision-makers to prioritize resources, develop effective adaptation strategies, and enhance the resilience of infrastructure. A leading example of such an assessment is the [Third UK Climate Change Risk Assessment](#), which provided a comprehensive approach to evaluating infrastructure exposure to climate-related risks.

The assessment categorizes infrastructure into two types: Category A, which includes assets linked to water and energy, and Category B, which includes infrastructure sites such as railway stations, hospitals, and schools. This categorization aids in identifying the types of infrastructure most at risk and tailoring appropriate mitigation strategies. This information is then used to identify the extent of significant risk exposure across the United Kingdom (Table 6).

**Table 6. Example of Infrastructure Risk Exposure: United Kingdom**

<b>Table 4.13</b> Number or length of infrastructure assets currently exposed to 'significant' risk of coastal flooding across the UK (Sayers <i>et al.</i> 2020)					
<b>Infrastructure Asset at 1:75 or greater risk of coastal flooding (present day)</b>	<b>England</b>	<b>Northern Ireland</b>	<b>Scotland</b>	<b>Wales</b>	<b>Total (UK wide)</b>
Water sites (no.)	3	11	0	8	22
Sewage treatment works (no.)	53	0	20	18	91
Power stations (no.)	34	0	1	0	35
Electricity substations (no)	23	0	4	7	34
Rail length (km)	114	20	65	312	511
Rail stations (no.)	5	3	5	12	25
Landfill sites	0	0	0	0	0

Source. United Kingdom CCRA3 Technical Report Chapter 4.

Similar analysis could be undertaken in Sierra Leone in the future. The NAMEMIS database already includes Geographic Information System data on projects, which could serve as the basis for an evaluation of disaster-related risks to existing and completed projects. This could be complemented by ongoing efforts to establish a database of assets at risk to climate-related phenomena, such as sea level rises.<sup>20</sup>

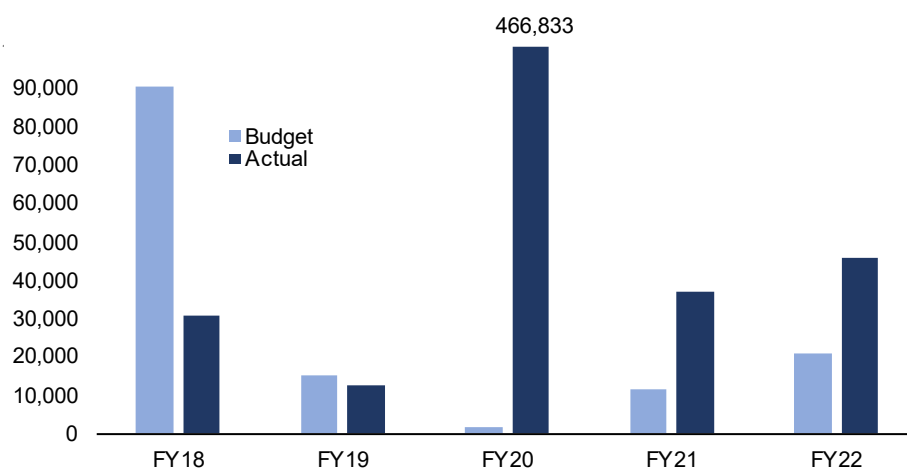
Source: Mission drawing on cited material.

**44. The current fiscal framework includes a Contingencies Fund, established under the Public Financial Management Act (2016).** The Act mandates that expenditures under this fund should be for urgent and unforeseen events and should not exceed two percent of non-extractive industries revenue. In recent years, the actual expenditures under this fund have varied considerably, though this largely reflects the unusually large expenditure related to COVID-19. The fund is typically used to cover high-frequency, low-intensity events, indicating its limited capacity to address more severe climate-related disasters. However, the intended appropriation for this fund is often insufficient to cover the costs of most

<sup>20</sup> See, for instance, the Coastal Vulnerability Assessment, which provides some initial analysis of the risk to coastal infrastructure from a rising sea level.

historical disasters, with an average cost of around USD20 million each year (or around Le40 billion) (Figure 14). Although the Road Maintenance Fund has been utilized for urgent road repairs following natural disasters such as landslides and floods, Section 17 of the Road Maintenance Fund Administration Act (2010) does not delineate a role for the Fund as an ex-ante facility for disaster contingencies. Instead, the Fund is legally constrained to road maintenance, insurance costs, and expenditures pursuant to the Administration's objectives, indicating an operational scope that does not inherently encompass disaster response.<sup>21</sup>

**Figure 14. Contingency Fund – Actual vs. Budget**  
(Le, millions)



Source: Sierra Leone Ministry of Finance.

Note: FY20 actuals reflect extraordinary spending related to COVID-19.

**45. Part VII of the National Disaster Management Agency Act (2020) of Sierra Leone establishes a framework for a National Disaster Management Fund, but this is yet to be operationalized.** The fund is designed to support the development and operation of disaster prevention, risk reduction, and other related programs. It is financed by allocations from the national budget, grants, donations, and other sources as approved by Parliament and is subject to investment regulations that emphasize security and financial benefit. The management of the Fund is the responsibility of the National Disaster Management Agency, which is accountable for its application in line with the approved budget and is mandated to ensure transparent management and utilization, including the provision of a disbursement formula. Also, the Agency must maintain accurate records and annual financial statements, audited by the Auditor-General. As of the current assessment, the fund has not been operationalized, indicating that the systems and processes for its deployment are still pending implementation.

**46. Given Sierra Leone's vulnerability to climate change and the potential for high-impact natural disasters, there is a growing recognition of the need to enhance the ex-ante financing framework.** The government has begun exploring ex-ante financing mechanisms, and a draft of the

<sup>21</sup> A Contingent Emergency Response Component is also included in the [Resilient Urban Sierra Leone World Bank project](#), which enables the rapid redeployment of resources from other expenditure categories in the project at the time of its disaster-related activation, but this is limited to disaster response within the scope of the project.

National Disaster Risk Financing Strategy has been presented to the Cabinet, which builds on assistance provided by the World Bank in 2022<sup>22</sup>. This strategy would seek to operationalize the Disaster Management Fund and assess contingent credit lines and sovereign risk transfer instruments to bolster the country's financial resilience against such risks.

**47. Sierra Leone's Fiscal Risk Statement provides only passing qualitative analysis of climate-related fiscal risks.** The statement acknowledges the existence of climate-related fiscal risks in a short subsection (6.3.4) and, more broadly, notes the risk of climate-related natural disasters on SOEs. However, the statement lacks explicit incorporation of climate-related risks to public infrastructure assets. The statement notes that Sierra Leone has made strides in establishing the National Disaster Management Agency and developing a Disaster Risk Financing Strategy, which indirectly contributes to the management of climate-related fiscal risks. However, these efforts do not directly address the incorporation of climate-related risks into fiscal risk analysis, nor do they involve a published analysis specific to public infrastructure assets. The statement's section on mitigating measures (including strategies for macroeconomic risks, SOE fiscal risks, and policy implementation) presents a framework for addressing potential risks but does not extend specifically to climate-related risks.

**48. Sierra Leone's Fiscal Risk Statement could be expanded to include a quantitative analysis of climate-related fiscal risks.** Box 10 demonstrates the increasing recognition of climate-related risks in long-term fiscal sustainability analysis. Building on the approach outlined in Box 10, a comprehensive analysis could build on the qualitative discussion to ultimately include the quantification of long-term fiscal pathways under different climate change scenarios. This analysis could also extend to discrete risks related to SOEs and PPPs, which are often vulnerable to climate-induced operational and financial disruptions. This could build on the existing analysis of discrete risks in the Fiscal Risk Statement and include risk valuations of SOEs that are critical to the economy, such as energy and water utilities, which may face increased costs or revenue volatility due to climate variability.

**49. Similarly, PPPs might be exposed to climate-related performance risks, where climate events could compromise the private sector's ability to deliver services or complete infrastructure projects.** Ultimately, as asset management registries improve and vulnerability analysis is undertaken (Box 9), a broader infrastructure assessment could project the costs associated with the increased frequency and intensity of extreme weather events, considering the impact on maintenance, repair, and replacement cycles. This type of comprehensive approach to climate-related fiscal sustainability analysis would allow for informed decision-making and the development of robust fiscal buffers to safeguard against future climate-related fiscal risks.

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<sup>22</sup> World Bank, 2022, [Sierra Leone: Crisis and Disaster Risk Finance Diagnostic](#).

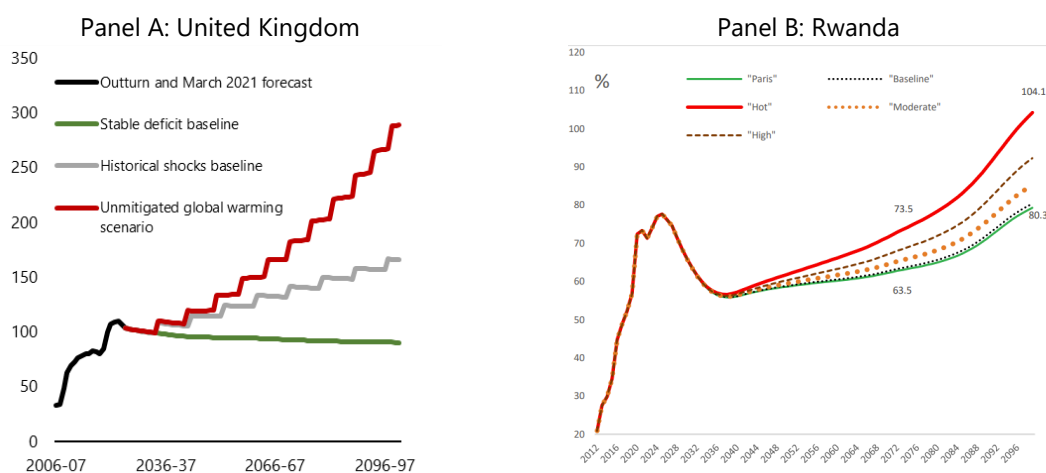
### Box 10. Country Examples of Long-Term Fiscal Sustainability Analysis

The number of countries publishing Fiscal Risk Statements that cover climate-related risks has grown rapidly in the last 10-15 years. The starting point for discussing climate-related risks is typically a qualitative discussion of the possible fiscal costs of natural disasters, including climate-related disasters, with progressive quantification of the costs of past disasters. These costs typically include expenditure from budget contingency funds to repair damages from disasters, including damage to public infrastructure. The Philippines provides a good example of the progressive deepening of the annual Fiscal Risk Statement’s coverage of the fiscal impacts of disasters since the first Fiscal Risk Statement in 2012.

In its 2021 Fiscal Risk Report, the *United Kingdom’s* Office of Budget Responsibility (OBR) outlines the fiscal implications and fiscal risks related to climate change. The OBR began by creating a simple long-term fiscal baseline for the budget deficit called the ‘stable deficit baseline.’ Based on historical experiences in the United Kingdom and worldwide, the additional impact of periodic fiscal risks was layered on top of that baseline, creating the “historical shocks baseline.” The OBR then added an “unmitigated global warming scenario,” which builds on the unlikely but hottest scenario and assumes the cost of adaptation to be 0.3 percent of GDP a year. It also assumes the cost of natural disasters is twice as high, and natural disasters occur twice as frequently (Figure 15). This simple framework provides illustrative scenarios that demonstrate the potential fiscal scale of climate change risks in the United Kingdom.

In *Rwanda*, the Ministry of Finance, with the support of IMF technical assistance, assessed the fiscal impact of climate change under several climate scenarios in their most recent Fiscal Risk Statement. This approach examined the growing impact of higher temperatures on the macroeconomy through lower productivity and its consequences for public finances. The primary deficit is projected to widen under all climate scenarios except a scenario where the Paris Agreement is adhered to, resulting in increased borrowing needs and a higher debt-to-GDP ratio. Under the worst scenario, the primary deficit is expected to reach 3.9 percent of GDP by 2073, compared to 3.1 percent under the baseline. Consequently, the debt-to-GDP ratio is projected to surpass the current threshold of 65 percent by 2039 and exceeds 100 percent by the end of the century, or around 25 percentage points above the Paris scenario. The Fiscal Risk Statement also highlights mitigation and adaptation measures that could be adopted to address these risks today.

**Figure 15. Long-Run Fiscal Sustainability Analysis with Climate Change**  
(percent of GDP)



Source: UK OBR [Fiscal Risk Report 2021](#), 2021, and Government of Rwanda, [Fiscal Risk Statement FY23/24](#).

## III. Cross-Cutting Issues

### A. Legal and Regulatory Framework

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**50. The Public Financial Management Act (2016) and the attendant regulations of 2018 provide the legal framework to guide the allocation and management of public funds, including the capital budget.** The Act provides for prudent, efficient, effective, and transparent management and use of public financial resources and other related matters. The minister is required by the Public Financial Management Act (2016) section (35) to annually prepare and submit a Public Investment Program document as part of the budget estimates. However, the Public Financial Management Act (2016) and 2018 regulations do not expressly provide guidance on climate-related expenditure.

**51. Several Acts to regulate environmental management and protection, including disaster management, are in place.** These acts provide for the establishment of various authorities, giving them mandates that are all geared towards effective and efficient protection and management of the environment. The National Disaster Management Agency Act (2020), in addition to creating disaster management committees, provides guidelines on how to manage disasters and similar emergencies. Table 7 provides the main key climate-related laws that should guide public investments.

**52. The legal framework for climate-related public investment is disbursed across instruments and actors, necessitating collaboration and coordination.** Through the various Acts, several institutions are stakeholders in the climate change agenda. Collaboration between the Ministry of Environment and climate and organizations like the National Protected Areas Agency, the National Disaster Management Agency, and the Environment Protection Agency is necessary. Mainstreaming climate across the government, including in the public investment program, requires a central role from the MoF and the MoPED. For efficient execution and accountability of climate-related projects, the government will need to ensure rules and regulations are clarified to identify the institutional roles and that those roles are adhered to. Some countries have adopted a Climate Change Act, which provides greater clarity on the roles of MDAs in the climate change agenda and creates a coordination framework for achieving climate change goals (see, for instance, [Kenya](#) and [Uganda](#)).

**Table 7. Main Laws and Regulations for Climate-Related Public Investment Management**

Law	Coverage
Public Investment Management	
Public Financial Management Act (2016)	Provides for the prudent, efficient, effective, and transparent management and use of public financial resources.
Public Private Partnership Act (2014)	The purpose of the Act is to (i) promote, facilitate, and streamline the conclusion and implementation of PPP agreements by contracting authority; (ii) establish a PPP Unit; and (iii) establish private partner selection procedures in PPP agreements.
Public Procurement Act (2016)	Allows for the National Public Procurement Authority to regulate and harmonize public procurement processes in public service, decentralize public procurement to procuring entities, and promote economic development by ensuring value for money in public expenditures and participation in public procurement.
National Asset and Government Property Commission Act (1990)	Provides the statutory framework and mandate for the national asset register and Government Property Commission.
Local Government Act (2022)	Provides for the continuation of local councils, the decentralization and devolution of functions, powers, and services to local councils. The Act repealed and replaced the Local Government Act of 2004 for the development of Sierra Leone.
Climate Change	
Environment Protection Agency Act (2022)	Provides for the continuation of the Sierra Leone Environment Protection Agency, more effective and efficient protection and management of the environment, and other related matters, including climate change.
The National Disaster Management Agency Act (2020)	Establishes the National Disaster Management Agency, the Disaster Management Fund, and related offices and committees for disaster management. In addition, it provides guidelines on how to manage disasters and similar emergencies.
The Sierra Leone Meteorological Agency (2017)	Establishes the Sierra Leone Meteorological Agency as the sole authority for the provision of meteorological and climatological services
The National Protected Area Authority Act (2022)	Establishes the National Protected Area Authority and Conservation Trust Fund. The objective was to promote biodiversity conservation, wildlife management, research, and ecosystem services in Sierra Leone's protected areas. The Authority oversees national parks, protects natural ecosystems, and manages nature reserves and sanctuaries in line with national conservation policies and laws.

Source: Mission



## B. Information Technology

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**53. Reporting of financial information on public investments is done through the Integrated Financial Management Information System (IFMIS).** IFMIS was developed to support the management of budgetary, financial, and accounting operations of the government and promote better public financial management. It has been rolled out to 78 MDAs and is currently being upgraded to a new web-based system with an updated chart of accounts.<sup>23</sup> An existing limitation of IFMIS is that not all expenditure is processed through the system. For example, while donor-funded project loans and grants are part of the approved budget, spending for these projects is processed outside IFMIS. This implies that the IFMIS currently does not include information on donor-funded projects, which causes inconsistencies between budget execution reports and the approved budget.

**54. IFMIS could support the tagging of climate-related expenditure.** Plans are underway for the government to roll out climate budget tagging from FY2025, and the IFMIS could support the identification and tracking of climate-sensitive expenditure, including investment. More specifically, budget output codes or binary flags could be created on IFMIS to facilitate tagging recurrent and investment expenditure for both climate change adaptation and mitigation.

**55. Sierra Leone has no centralized IT system to manage public investments.** Capital projects are mostly managed through Excel spreadsheets compiled by different central government MDAs in line with their mandates. For example, MoPED maintains an Excel spreadsheet that includes information on the duration and status of projects, while MoF maintains a database for contract management. These are not automated. More recently, the National Monitoring and Evaluation Agency launched NAMEMIS, which is an integrated online monitoring and evaluation system for government and donor-funded projects, programs, and policies. The system was designed to support project cycle management with features for planning, monitoring, and reporting of all capital projects related to the National Development Plan. Effective from FY2024, MDAs and local councils are required to upload all ongoing and new projects and work plans on the system to enable tracking during implementation. The template for this system includes questions on the alignment of projects with Sustainable Development Goals and MTNDP goals, including climate change-related objectives.

**56. The management, monitoring, and reporting of public investments could be strengthened by creating a Public Investment Management Information System (PIMIS).** A PIMIS is a software-based solution designed to support the management of public investments throughout the project life cycle. It enables instant access to key information on projects, such as the status, duration, total costs, and allocated budget to support decision-making. Integration of a PIMIS (information on capital projects) with an IFMIS (capital budget and expenditure information) and NAMEMIS (information on the status of project execution and outputs) would improve institutional coordination, management, monitoring, and reporting in public investment management. It would also help to address current weaknesses, such as cost overruns, incomplete information on multiyear commitments, and authorization of spending above the allocated budget. Box 11 provides an example of the Integrated Bank of Projects in Uganda.

**57. The government is currently working with development partners to establish the scope for a PIMIS.** The database should include information on all pipeline projects, i.e., all appraised projects

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<sup>23</sup> [2022 Public Expenditure and Financial Accountability \(PEFA\) assessment report.](#)

ready for implementation but still awaiting funding and those included in the budget. This will ensure consistency of information across entities for monitoring and reporting purposes and facilitate decision-making on public investments. A PIMIS could ultimately gradually be established as an online system and integrated with other existing systems such as IFMIS and NAMEMIS. The database would also be useful in identifying and tracking climate-related projects, thereby enabling their tagging in IFMIS and monitoring in NAMEMIS.

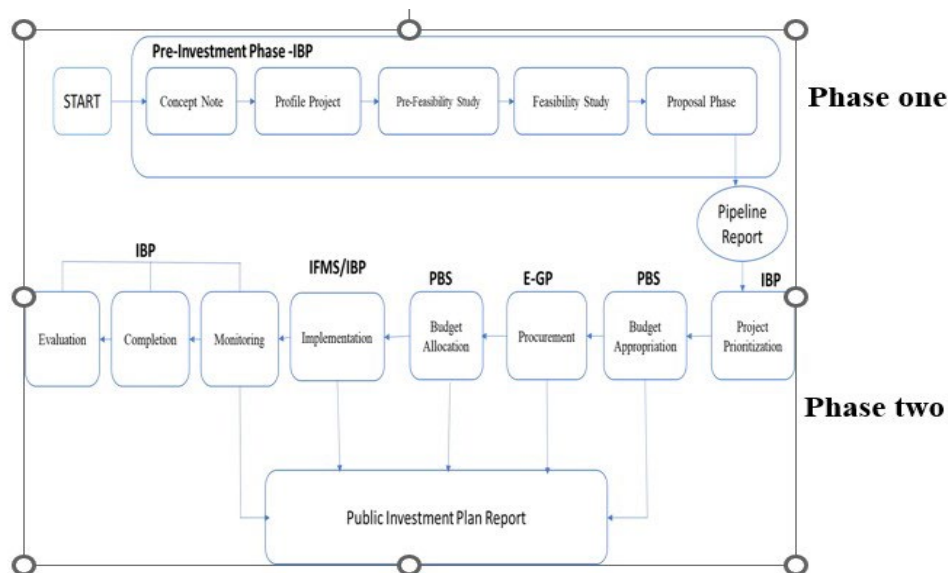
### Box 11. Integrated Bank of Projects System, Uganda

The Government of Uganda developed the Integrated Bank of Projects, a web-based software that acts as a central repository for all information and documents on public investment projects over their life cycle. The software allows integration with existing government systems such as the Program Budgeting System and IFMIS.

Benefits of the Integrated Bank of Projects include improved institutional coordination, transparency, and accountability by ensuring process flow at all stages of the project, including an audit trail; efficiency during project preparation and submission since the system automatically generates Gantt charts, results matrix, statistical reports, and editable documents once the information is entered. Some of the system-generated reports include: the project pipeline sorted by vote and sector, commitments by sectors over five years, and cost evaluation reports, among others.

The system has a user guide to help various stakeholders involved in project development to populate projects in the system in the four stages of the Project Cycle. The first phase covers the pre-investment phase, which includes concept, profile, pre-feasibility, and feasibility stages. A new module on project monitoring and evaluation is being developed to strengthen forward-looking project monitoring.

Figure 16. Structure of the Ugandan Integrated Bank of Projects



Source: Ministry of Finance, Planning and Economic Development, Uganda.

Note: In this figure, IBP is the Integrated Bank of Projects, PBS is the Program Budgeting System, and E-GP is the e-procurement system.

## C. Capacity

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**58. The integration of climate change considerations into fiscal planning and budgetary processes in Sierra Leone will require a substantial supporting capacity-building initiative.** This initiative should enhance existing public financial management and environmental reform efforts, drawing from the work of the Environmental Protection Agency, and integrate with the new Public Financial Management Reform Strategy, as well as other institutional and capacity-building programs at the national and county levels. It should also work hand-in-hand with efforts to clarify responsibilities and streamline coordination for climate change-related public investment management.

**59. Limited capacity within MoPED and MoF undermines the integration of climate sensitivity in public investment management.** Public investment management capacity development has not kept pace with the development of regulations and guidelines. There has been a lack of targeted training for staff in MDAs and state corporations on the use of new appraisal tools, affecting the quality of and compliance with these tools. The Public Investment Management Unit, critical for project appraisal, comprises only 11 staff, of which three are currently on study leave, including the director. This shortfall in trained personnel undermines the effectiveness of the public investment management system overall and the integration of climate change into the public investment processes. Staffing and capacity-building efforts should be scaled up to meet the demands of climate change mainstreaming in public investment and budgetary decision-making.

**60. Staffing issues also affect other key MDAs, including those focused on climate issues.** The Climate Financing Unit in MoF, NAMEA, the Environmental Protection Agency's Climate Change Division, and the Presidential Initiative on Climate Change, Renewable Energy, and Food Security are all understaffed. While the Ministry of Environment has requested additional staff for its expanded mandate since its establishment in 2019, capacity exists in areas like the Fiscal Risk Department within the MoF, which could start assessing climate-related fiscal risks with its current staff. Utilizing tools such as the IMF's Quantitative Climate Change Risk Assessment Fiscal Tool (Q-CRAFT) could facilitate long-term fiscal sustainability analysis under different climate scenarios. However, the department requires staff and climate expertise to support this work.

**61. The capacity challenge is intricately linked to the challenge of effective coordination across Sierra Leone's public sector, particularly in climate-sensitive public investment management.** The capacity constraints within pivotal agencies such as the MoPED and the MoF hinder the integration of climate considerations into public investment planning and budgetary processes. The shortfall in trained personnel and technical expertise in climate-related analysis exacerbates the coordination challenge, entrenching a piecemeal approach to climate-sensitive public investment. To address these interlinked issues, a capacity-building strategy is needed that not only enhances the technical capabilities of key agencies but also clarifies and strengthens institutional roles for a more cohesive and effective governance framework. Such a strategy should aim to foster a collaborative environment that facilitates the sharing of knowledge, resources, and best practices among all stakeholders involved in climate-related public investments, ensuring that Sierra Leone's approach to climate change is both coordinated and robust.

## IV. Recommendations

**Issue:** There continue to be significant cost overruns in the capital budget, undermining the credibility of the overall budget and creating substantial fiscal risks for the government.

**Recommendation 1:** MoPED to create a centralized database for all public investments including PPPs and SOE projects that are both state and donor-funded and incorporate multi-year contracts and commitments. This information should be accessible to the MoF and NAMEA and be utilized to inform budget decision-making. (By December 2024, **High priority**).

**Recommendation 2:** The Public Investment Committees with MoPED and MoF to undertake a comprehensive review of all ongoing and planned projects and ensure that only appraised projects are included in the PIP and selected for funding. (By December 2024, **High priority**).

**Recommendation 3:** MoPED to overhaul the annex of PIP that is included in the budget documents so that it is comprehensive and include information on total costs, multiyear commitments, project duration, and total variations. (By December 2025).

**Recommendation 4:** MoF to ensure commitment and payment controls are applied by enforcing the provisions of the Public Financial Management Act on excess spending as per section 56 (5) and enforcement of liabilities and penalties section 120 (1 c). (Immediately, **High priority**).

**Issue:** Climate change analysis is not required or included in the government's project appraisal and selection processes. This delinks the design and selection of projects from Sierra Leone's climate objectives.

**Recommendation 5:** In conjunction with Recommendation 2, MoPED to develop and implement multicriteria analysis which incorporates climate change to guide prioritization and selection of projects in the PIP. (By December 2025).

**Recommendation 6:** MoPED to expand the sustainability analysis required in the Project Appraisal Report and Review Template to cover climate-related analysis of project proposals in line with a standard methodology. (By June 2025).

**Issue:** Climate-related public investments (and climate-related expenditure more generally) are not identifiable in budget documents, making it difficult to assess whether resourcing is sufficient to meet climate objectives.

**Recommendation 7:** MoF to identify and highlight climate-related projects in budget documents. This should build on current plans to implement a climate-sensitive tagging framework and be summarized in a short budget chapter. (By December 2027).

**Recommendation 8:** The National Asset and Government Property Commission to develop the planned asset register and update maintenance manuals to ensure critical infrastructure (energy, transport, communications, health, and education) is resilient to climate change. (By December 2027).

**Issue:** While some analysis of the fiscal risks from climate-related effects on infrastructure exists, there is no comprehensive quantitative assessment of fiscal risks related to climate change.

**Recommendation 9:** The MoF, along with the Ministry of Environment and the National Asset and Government Property Commission to gradually incorporate climate vulnerability analysis into asset registries that are being developed and include quantitative analysis of both long-term and discrete fiscal risks (such as risks to specific infrastructure-providing SOEs and PPPs) of climate change in the Fiscal Risk Statement. (By December 2028).

**Issue:** The development of Sierra Leone's climate-sensitive public investment management framework faces challenges due to a dispersed legal framework, unclear coordination responsibilities among key institutions, and limited capacity.

**Recommendation 10:** MoPED, MoF, the Environmental Protection Agency, and the Ministry of Environment to clarify and strengthen the climate-relevant roles, responsibilities, and capabilities within the public investment management process, particularly for MoPED and MoF, through targeted training and a review of legal mandates. (By December 2024, **High priority**).

# Annex 1. Action Plan

Issue	Recommendations	Action	Priority	Responsibility	Timing
There are significant cost overruns in the capital budget, undermining the credibility of the overall budget, and creating substantial fiscal risks for the government.	Create a centralized database for all public investments including PPPs and SOEs that are both state and donor-funded and incorporate multi-year contracts and commitments. This information should be accessible to the MoF and NAMEA and be utilized to inform budget decision making.	Consolidate existing data on projects from different central government ministries and create a single database containing all information on public investments.	High	MoPED	Dec 2024
	Undertake a comprehensive review of all projects and ensure that only appraised projects are included in the PIP and selected for funding.	Identify and remove all projects in the PIP not appraised, including projects significantly delayed and stalled.	High	MoPED	Dec 2024
		Demand an appraisal certificate before selection of a project for inclusion in the budget.	High	MoF	Dec 2024
	Overhaul the annex of PIP that is included in the budget documents so that it is comprehensive and include information on total costs, multiyear commitments, project duration, and total variations.	Update PIP annexes in the budget to also include information on total costs, multiyear commitments, project duration, and total variations.	High	MoF/MoPED	Dec 2025
	Enforce the provisions of the PFM Act on excess spending as per section 56 (5) and enforcement of liabilities and penalties section 120 (1 c).	No approvals for spending to be granted to MDAs before approval of the excess spending by parliament. Monitor commitments by ministries and publish a report on a quarterly basis.	Medium	MoF	Immediately
		NAMEA must be strengthened to produce a quarterly report on the status of implementation of capital projects.	Medium	NAMEA	Immediately
Climate change analysis is not required or included in the government's project appraisal and selection processes.	In conjunction with Recommendation 2 (pipeline), develop and implement MCA which incorporates climate change to guide prioritization and selection of projects in the PIP.	Design MCA that includes climate change using the criteria for prioritization stipulated in the PIGM as the basis.	Medium	MoPED	Dec 2025
		Publish the MCA.	Medium	MoPED	Dec 2025
	Expand the sustainability analysis required in the PARRT to cover climate-related analysis of project proposals in line with a standard methodology.	Develop standard methodology to guide climate-related analysis of major infrastructure projects during the appraisal process.	Medium	MoPED	Jun 2025
		Include a dedicated section on climate change related analysis in the PARRT.	Medium	MoPED	Jun 2025

Issue	Recommendations	Action	Priority	Responsibility	Timing
Climate related public investments (and climate-related expenditure more generally) is not identifiable in budget documents.	Identify and highlight climate-related projects in budget documents. This should build on current plans to implement a climate-sensitive tagging framework and be summarized in a short budget chapter.	Develop criteria for identification of climate-related projects and provide guidelines to MDAs	Low	MoF	Dec 2027
		Train pilot MDAs and roll out tagging process in phases	Low	MoF	Dec 2027
		Draft chapter of the budget summarizing climate spending plans and achievements.	Low	MoF	Dec 2027
Maintenance policies do not factor climate change risks, and there is no comprehensive registry of assets which could be assessed for climate vulnerability.	Develop the planned asset register and update maintenance manuals to ensure critical infrastructure (energy, transport, communications, health, and education) is resilient to climate change.	Maintain and update the asset register on an annual basis.	Medium	National Asset and Government Property Commission	Dec 2027
		Make an assessment of climate risks to individual assets and include the costs in the budget line item for maintenance.	Medium	National Asset and Government Property Commission	Dec 2027
While some analysis of the fiscal risks from climate-related effects on infrastructure exist, there is no comprehensive quantitative assessment of fiscal risks related to climate change.	Gradually incorporate climate vulnerability analysis into asset registries that are being developed and include quantitative analysis of both long-term and discrete fiscal risks (such as risks to specific infrastructure-providing SOEs and PPPs) of climate change in the Fiscal Risk Statement.	Develop a centralized and comprehensive database of critical public infrastructure (such as infrastructure in the transport, energy, health, and communications sectors) and assess the vulnerability of these assets to climate change and climate related natural disasters.	Low	MoF, Ministry of Environment and National Asset and Government Property Commission	Dec 2028
		Analyze fiscal sustainability under varying climate change scenarios and publish this analysis in the Fiscal Risk Statement. This analysis could draw on existing analysis of climate-related disaster risks in the Crisis and Disaster Risk Financing Diagnostic (World Bank, 2022).	Low	MoF, Ministry of Environment and National Asset and Government Property Commission	Dec 2028
		Enhance the existing analysis of SOE and PPP risks in the fiscal risk framework with occasional evaluations of the risks to climate sensitive SOEs and PPPs of climate change (for instance, risks to energy IPPs from changing rainfall patterns, or fossil fuel based generators from changing greenhouse gas commitments).	Low	MoF, Ministry of Environment and National Asset and Government	Dec 2028
The development of Sierra Leone's climate-sensitive PIM framework faces challenges due to a dispersed legal framework, unclear coordination responsibilities among key institutions, and limited capacity.	Clarify and strengthen the climate-relevant roles, responsibilities, and capabilities within the PIM process, particularly for MoPED and MoF, through targeted training and a review of legal mandates.	Provide training in MoPED and MoF on climate sensitive public investment, and the NDC and iNAP commitments	High	MoPED, MoF, EPA, and Ministry of Environment	Dec 2024
		Review and consolidate information on committees and mandates for overseeing climate change public investments and refine structure as necessary to ensure public investments are evaluated from a climate change perspective	High	MoPED, MoF, EPA, and Ministry of Environment	Dec 2024

## Annex 2. C-PIMA Questionnaire

Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
<b>C1. Climate-aware planning: Is public investment planned from a climate change perspective?</b>				
C.1.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 <b>some</b> sectors.	National and sectoral public investment strategies and plans are consistent with NDC or other overarching climate change strategy for <b>most</b> sectors.
C.1.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, <b>or</b> 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, <b>and</b> construction (through building codes) address climate-related risks and impacts on public investment.
C.1.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 <b>preparation</b> of climate-aware public investment strategies.	There is centralized guidance/support for government agencies on the <b>preparation and costing</b> of climate-aware public investment strategies.
<b>C2. Coordination between entities: Is there effective coordination of decision making on climate change-related public investment across the public sector?</b>				
C.2.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.



Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
C.2.b	Is the planning and implementation of capital spending of Sub National Governments (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 and is published alongside data on central government projects.	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 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.
C.2.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.
<b>C3. Do project appraisal and selection include climate-related analysis and criteria?</b>				
C.3.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.
C.3.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

Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
				are mandated to address climate-related challenges.
C.3.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.
<b>C.4 Budgeting and portfolio management: Is climate-related investment spending subject to active management and oversight?</b>				
C.4.a.	Are planned climate-related public investment expenditure, sources of financing, outputs and outcomes identified in the budget and related documents, monitored, and reported?	Planned climate-related public investment expenditure are not identified in the budget and related documents.	Some planned climate-related public investment expenditure are identified in the budget and related documents, including investment expenditure funded externally, by extra-budgetary entities, and PPPs.	Most planned climate-related public investment expenditure, sources of financing, and outputs and outcomes are identified in the budget and related documents, including investment expenditure funded externally, by extra-budgetary entities, and PPPs, and expenditure on these projects is monitored and reported.
C.4.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.
C.4.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-	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

Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
		exposed infrastructure assets address climate-related risks.		registers include climate-related information of these assets.
<b>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?</b>				
C.5.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.
C.5.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.
C.5.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.
<b>Cross-cutting issues</b>				
<b>A</b>	<b>IT support.</b> Is there a comprehensive computerized information system for public investment projects to support decision making and monitoring?			
<b>B</b>	<b>Legal Framework.</b> Is there a legal and regulatory framework that supports institutional arrangements, mandates, coverage, standards and accountability for effective			
<b>C</b>	<b>Staff capacity.</b> Does staff capacity (number of staff and/or their knowledge, skills, and experience) and clarity of roles and responsibilities support effective			

## Annex 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 with subnational 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

Not met	Partially met	Met
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## Annex 4. Rwanda: Project Selection Criteria

### Scoring instructions for the prioritization and selection template

The proposed scoring criteria are subject to weightings which reflect the preferences of the Rwandan government. The percentage values show the relative importance of the nine chosen criteria. These percentage weightings are then simply converted to a multiplier to be used in calculating the scores of each of the criteria, for each project that is assessed. Green-shaded elements reflect the climate-related selection criteria.

#### Weights for the prioritization and selection criteria

#	Criteria	Percentage of the Total Score	Weighting Multiplier
1.	National Sector Priority	20	0.2
2.	Sector Ministry's own Priority	10	0.1
3.	Project Efficiency	20	0.2
4.	Effects on the Climate	15	0.15
5.	Resilience to the effects of CC	15	0.15
6.	The Degree of Gender Balance	5	0.05
7.	Compliance with other ESG requirements	5	0.05
8.	Number and Type of Jobs Created	5	0.05
9.	Distribution of Benefits	5	0.05
	<b>Total</b>	<b>100</b>	<b>1</b>

All criteria can score a maximum of 3 points each meaning that the total maximum score for any project is 27. The relative importance between the different criteria is accounted for through the weighting system which is shown after the scoring tables. Criteria 1 and 2 are completely objective and scores should be the same across all scorers; criteria 3 - 9 require some judgment and for this reason the individual scores can be expected to vary. Individual scores are averaged, and the weighting applied to this average score. Scores are entered via an Excel spreadsheet where the average and weighted scores are calculated values. Information on how to score the nine criteria are illustrated below.

**Criterion 1/9: 'Government Sector (or sub-sector) Priority' is scored as follows:**

National Sector (or sub-sector) Priority	Number of Points Awarded
National Top Priority Sector or Sub-Sector	3
National Second Sector Priority	2
All Other Sectors	1

**Criterion 2/9: 'Sector Ministry's own Project Priority' is scored as follows:**

Sector Ministry's own Priority	Number of Points Awarded
Sector Ministry Top Priority Project	3
Sector Ministry 2nd Priority Project	2
Other Projects submitted by the Sector Ministry	1

**Criterion 3/9: 'Project Efficiency' is scored as follows:**

Project Efficiency	Number of Points Awarded
50 or more beneficiaries per RWF1m	3
20-50 beneficiaries per RWF1m	2
Less than 20 beneficiaries per RWF1m	1

**Criterion 4/9: 'Effects on the Climate' is scored as follows:**

Effects on the Climate	Number of Points Awarded
Carbon Positive	3
Carbon Neutral	2
Carbon Negative but with maximum mitigation	1

**Criterion 5/9: 'Resilience to the Effects of CC' is scored as follows:**

Resilience to the Effects of CC	Number of Points Awarded
No risk (or minor theoretical risk) from CC	3
Small Risk / low impact from CC but acceptable mitigations in place	2
Significant risk / low to medium impact from CC but acceptable mitigations in place	1

**Criterion 6/9: 'Degree of Gender Balance' is scored as follows:**

Compliance with other ESG Requirements	Number of Points Awarded
No concerns about gender issues	3
Minor gender issues identified but acceptable mitigations are in place	2
Significant gender issues identified but acceptable mitigations now in place	1

**Criterion 7/9: 'Compliance with other ESG requirements' is scored as follows:**

Compliance with other ESG Requirements	Number of Points Awarded
No concerns about ESG compliance	3
Minor ESG issues identified but acceptable mitigations in place	2
Significant ESG issues identified but acceptable mitigations in place	1

**Criterion 8/9: 'Number and Type of Jobs Created' is scored as follows:**

Number and Type of Jobs Created	Number of Points Awarded
More than 500 <b>or</b> more than 50 green jobs	3
100-500 <b>or</b> 10-50 green jobs	2
Less than 100 <b>or</b> 1-10 green jobs	1

**Criterion 9/9: 'Distribution of Benefits' is scored as follows:**

Distribution of Benefits	Number of Points Awarded
National Project benefiting all citizens	3
Benefits more than 1 region outside Kigali	2
Benefits only 1 region or just Kigali	1

**Interpreting results and selecting projects based on available fiscal space**

**Once the scoring is completed at the project level, these will be ranked based on the weighted score.** The project with the highest weighted score will be first on the list; the project with the lowest weighted score will be last.

**The aggregation will produce a list that also creates a cumulative capital value in the right-hand column.** This will allow the easy identification of a 'cut-off point', depending on the available fiscal space, at which all projects above the line can be accommodated and those below it cannot.

Rank	Project	Total Average score	Total Weighted Score	Capital Value (RWF)	Cumulative Capital Value
1	2	12.5	2.6	10,000,000	10,000,000
2	10	12.5	2.5	4,000,000	14,000,000
3	9	11.8	2.3	12,000,000	26,000,000
4	8	11.4	2.2	7,000,000	33,000,000
5	7	10.4	2.1	10,000,000	43,000,000
6	5	9.9	2.0	8,000,000	51,000,000
7	3	9.5	1.9	10,000,000	61,000,000
8	4	9.0	1.8	7,000,000	68,000,000
9	6	9.0	1.7	12,000,000	80,000,000
10	1	8.3	1.6	5,000,000	85,000,000

Note: In the illustration above, if fiscal space available for the budget agency in the MTEF was RWF 45m, the first five ranked projects could be selected