TECHNICAL ASSISTANCE REPORT

MONTENEGRO

Climate Public Investment Management Assessment

March 2026

Prepared By
Tjeerd Tim, Jamie Carter, Graham Prentice, Stephanie Allan

Authoring Departments/Institutions:

Fiscal Affairs Department

©2026 International Monetary Fund

The contents of this document constitute technical advice provided by the staff of the International Monetary Fund to the authorities of the Ministry of Finance of Montenegro (the "CD recipient") in response to their request for technical assistance. Unless the CD recipient specifically objects to such disclosure, this document (in whole or in part) or summaries thereof may be disclosed by the IMF to the IMF Executive Director for Montenegro, to other IMF Executive Directors and members of their staff, as well as to other agencies or instrumentalities of the CD recipient, and upon their request, to World Bank staff, and other technical assistance providers and donors with legitimate interest (see Staff Operational Guidance on the Dissemination of Capacity Development Information). Publication or Disclosure of this report (in whole or in part) to parties outside the IMF other than agencies or instrumentalities of the CD recipient, World Bank staff, other technical assistance providers and donors with legitimate interest and shall require the explicit consent of the CD recipient and the IMF's Fiscal Affairs Department.

The analysis and policy considerations expressed in this publication are those of the IMF Fiscal Affairs Department.

This technical assistance (TA) was provided with financial support from the European Union and the Government of Switzerland.

International Monetary Fund, IMF Publications
P.O. Box 92780, Washington, DC 20090, U.S.A.
T. +(1) 202.623.7430 • F. +(1) 202.623.7201
publications@IMF.org
IMF.org/pubs

Contents

Acronyms and Abbreviations **4**

Preface **5**

Executive Summary **6**

Recommendations **7**

I. Climate Change and Montenegro **8**
A. Climate change and Public Infrastructure 8
B. Climate Change Objectives and Strategy 11

II. The Climate PIMA **13**
A. The Climate Public Investment Management Assessment Framework 13
B. Overall Assessment 14
C. Detailed Assessment 15
D. Cross-Cutting Issues 24

Annex 1. The Climate PIMA Action Plan **26**

Annex 2. C-PIMA Questionnaire **31**

Annex 3. Detailed C-PIMA Scores **35**

Annex 4. OECD Guidelines on Corporate Governance of SOEs and Sustainability **36**

Acronyms and Abbreviations

CD	Capacity Development
C-PIMA	Climate Public Investment Management Assessment
DRM	Disaster Risk Management
DRRS	Disaster Risk Reduction Strategy
EA	Environmental Assessment
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EU	European Union
GHG	Greenhouse Gas
IFI	International Financial Institution
IMF	International Monetary Fund
IPPU	Industrial Processes and Product Use
IT	Information Technology
LBFR	Law on Budget and Fiscal Responsibility
LULUCF	Land Use, Land-Use Change and Forestry
MERS	Ministry of Ecology, Sustainable Development and Northern Region Development
MoF	Ministry of Finance
MIRN	Ministry of Regional-Investment Development and Cooperation with Non-Governmental Organizations
MRV	Monitoring, Reporting and Verification
NAP	National Adaptation Plan
NCCS	National Climate Change Strategy
NDC	Nationally Determined Contribution
NECP	National Energy and Climate Plan
OECD	Organization for Economic Co-operation and Development
PEC	Project Evaluation Committee
PIM	Public Investment Management
PIC	Public Investment Council
PPP	Public-Private Partnership
Q-CRAFT	Quantitative Climate Risk Assessment Fiscal Tool
SAI	State Audit Institution
SEIA	Strategic Environmental Impact Assessment
SSP	Shared Socioeconomic Pathways
SNG	Subnational Government
SOE	State-Owned Enterprise

Preface

At the request of the Ministry of Finance (MoF) of Montenegro, a team from the IMF's Fiscal Affairs Department (FAD) undertook a Climate Public Investment Management Assessment (C-PIMA) during the period from May 12 to May 20, 2025. The team was led by Tjeerd Tim and comprised of Graham Prentice and Jamie Carter (all FAD) and Stephanie Allan (FAD expert).

Within the MoF, the team met with Ms. Jelena Jovetić, General Director, Mr. Branko Nilević, Head of the Division for Public Investments Management, and staff at the Directorate for Public Investments Management and Public Procurement Policy; Mr. Minas Trubljanin, Director General, and Mr. Miloš Baletić from the Directorate for Central Harmonisation and Development of Internal Controls; Ms. Gordana Stanišić and Ms. Anja Kadić at the Directorate for Macroeconomic and Fiscal Analyses and Projections; Ms. Dragana Nedić, Ms. Lidija Špadijer and Mr. Alen Markišić at the Directorate for State Budget; and Ms. Katarina Živković and Ms. Bojana Boljević from the Directorate for Public Debt.

The mission also conducted meetings with other ministries, agencies and state-owned enterprises (SOE) involved in climate change and public investment in Montenegro. These included: Mr. Rusmir Džudžević, State Secretary at the Ministry of Public Works; Mr. Šefko Kurpejović, General Director and Milena Strugar, Ministry of Regional and Investment Development and Cooperation with NGOs (MIRN); Mr. Božidar Pavlović, Director General and Mr. Zvjezdan Vujović, Director General, Ministry of Energy, Mining and Oil and Gas; Ms. Jelena Ban, Head of the Division for Climate Change, Ministry of Ecology, Sustainable Development and Northern Region Development (MERS); Ms. Mirjana Ivanov and Ms. Milica Mihaljević, Institute of Hydrometeorological and Seismological Survey; Mr. Dušan Mrdak and Ms. Milka Rajković-Mitrović from the Environmental Protection Agency; Mr. Aleksandar Dajković from the General Secretariat of the Government; Mr. Goran Gorašević from the Ministry of Spatial Planning, Urbanism and State Property; Ms. Aida Dizdarević-Džanković and Ms. Vera Baturan from the Ministry of Interior; Ms. Zorica Golubović from the Administration for State Property; Ms. Jadranka Delibašić from the State Audit Institution and Ms. Aida Čekić, Company Secretary and Mr. Dušan Čorlija, Technical Director and Deputy CEO, Monteput.

The FAD team also held discussions with representatives of development partners, including the Ms. Malgorzata Skocinska and Ms. Valentina Di-Sebastiano from the European Union (EU); Ms. Ana Pajkovic from the Embassy of Switzerland - Swiss Cooperation Office in Serbia (covering Montenegro) and Mr. Lakicevic Milan and colleagues from the World Bank.

The mission team would like to thank the Montenegro government for their cooperation and their participation in constructive discussions and especially Mr. Branko Nilević and Stefani Stefanović for their outstanding support during the mission and to Ms. Tamara Pavličić for her excellent translation services and support during the mission.

Executive Summary

Montenegro's geography, with steep mountains, coastal plains, and a hydropower-heavy energy mix, makes its infrastructure climate-sensitive. Hazards such as floods, droughts, heatwaves, and wildfires are expected to become more frequent and severe. Meanwhile, the government has committed to cutting net greenhouse gas (GHG) emissions by 55 percent by 2030 and 60 percent by 2035, aligning with EU accession goals. Delivering resilient, low-carbon infrastructure efficiently and effectively will therefore depend on robust public investment management (PIM) framework.

The C-PIMA highlights a PIM framework that is ambitious on paper but inconsistent in practice, including in integrating climate-related considerations across the PIM-cycle. A range of climate-related reforms across many PIM-institutions are underway, such as revisions to the legal framework, updating key strategies and improving project appraisal and selection processes. Completing and successfully implementing these reforms will be a significant task but would represent a meaningful step forward. Climate change mitigation and adaptation goals are embedded in legislation; the country has developed a National Adaptation Plan (NAP), Eurocode-based building standards, and nationwide disaster-risk maps. However, sector-specific investment strategies—particularly in energy and transport—remain incomplete or misaligned with climate goals. Costing methods are inadequate and do not systematically capture the costs and benefits of resilient and low-carbon infrastructure, and feasibility studies lack a consistent approach to assessing these dimensions. The scoring system for prioritizing investment project proposals does not apply a methodology for assessing the scale of climate impact, allowing domestically funded projects to proceed without clear evidence of climate resilience or alignment with GHG-reduction targets.

While ongoing reforms aim to strengthen the overall PIM framework, the integration of climate considerations remains at an early stage. There is no screening function to ensure that investment projects and the overall portfolio align with national climate objectives. Subnational governments and SOEs lack guidance to assess or limit GHG-emissions or manage exposure to climate risks. The Public-Private Partnership (PPP) framework does not integrate climate considerations. Capital budgets do not reflect climate contributions, and ex-post reviews are rare, leaving climate impacts unevaluated. The fiscal risk framework omits disaster-related risks to key infrastructure despite recent floods and wildfires.

Reforms indicate progress. The Capital Budget Circular requires submission of project level details which includes whether the project has a positive impact on the environment. The General Secretariat of the Government screens out strategies incompatible with the European Green Deal, and World Bank loans carry "pause clauses" for post-shock liquidity, allowing temporary suspension of debt-service payments after major natural disasters. Still, significant improvements require aligning strategy design, project appraisal, budgeting, and risk analysis within a consistent national climate-policy framework. Completing the sector strategies with credible, climate-aware costing methodologies would enhance resource allocation and infrastructure resilience. Ensuring sufficient staffing and technical capacity for climate-aware investment planning will be critical. By screening projects before budget approval—underpinned by standardized GHG accounting and climate risk assessments—the authorities can strengthen project selection and ensure consistency with climate objectives. A basic approach to tagging and reporting climate-budget related investments, drawing on the approach Montenegro is developing for gender-budget tagging, would raise awareness and allow progress to be tracked.

Recommendations

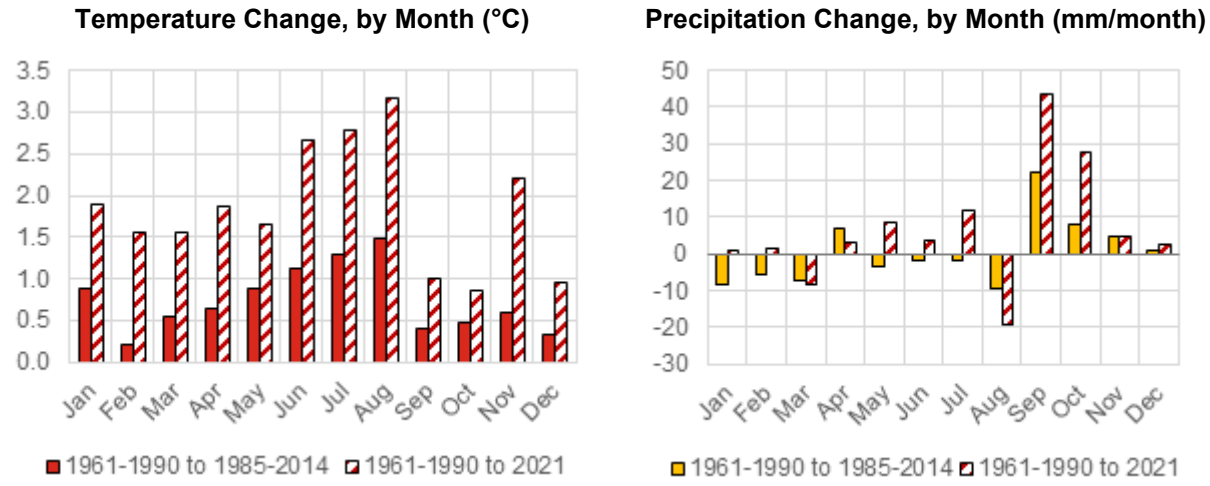
#	Recommendation	Who and when
1	Revise the Methodology for the Preparation of Strategic Documents to incorporate technical and costing guidance needed to align public investment strategies with Montenegro's climate objectives.	MoF, General Secretariat, and MERS, Q4 2026
2	Amend the mandate of the Project Evaluation Committee (PEC) to include climate considerations and require each PEC report to the Public Investment Council (PIC) to assess project and portfolio alignment with Montenegro's climate objectives.	MoF and MERS, Q1 2026.
3	Revise guidance on preparing local self-government development plans so that it requires climate change-informed investment planning aligned with Montenegro's climate objectives.	MIRN, Q4 2026
4	Ensure that the forthcoming SOE Law establishes a mandate for the government to define climate change-related expectations for SOE investments.	MoF, Q4 2025
5	Issue guidance on integrating climate change-considerations in feasibility studies and incorporate climate-adjusted results into the multi-criteria analysis with clear scoring components.	MoF, Q4 2025
6	Update the PPP law to include consideration of climate impacts in project appraisal criteria and risk management.	MoF, Q4 2026
7	Publish, in the FY 2027 budget rationale, a summary table of all major climate-related public investment—domestic and externally financed—supported by a brief narrative.	MoF, Q2 2026
8	Periodically estimate forward looking climate-disaster losses for major public-investment asset classes, compare these losses with current maintenance and contingency funds, and where gaps exist, propose budgetary, risk-financing, or mitigation measures.	MoF, Q4 2026

I. Climate Change and Montenegro

A. Climate change and Public Infrastructure

1. Montenegro's weather patterns are shifting, and climate change will intensify these trends. Montenegro—a geographically compact, mountainous country on the Adriatic—traditionally experiences dry summers and mild, wet winters. Average temperature in 2021 reached 10°C, about 1.8°C above the 1961–1990 average. Under a severe climate scenario[1], average temperature could rise between 2.3 and 4.4°C by 2050, and between 2.4 and 5.2°C by 2070. Hot days (above 35°C) will become far more common. Average annual rainfall also increased from 1,277 mm per year in 1990 (30-year running mean) to 1,404 mm in 2021. The increase in precipitation during the 21st century has largely been driven by extreme events, while total annual precipitation shows a slight decrease or increase within the range of normal variability. In some regions of Montenegro, a statistically significant increase in precipitation intensity has been recorded. Under a severe climate scenario, annual rainfall is projected to remain broadly stable, but rainfall distribution will likely become more uneven, with wetter autumns and drier late summers.

Figure 1: Trends and projections for temperature and precipitation by Month



Sources: FADCP Climate Dataset (Massetti and Tagklis, 2024), using CRU data (Harris et al., 2020)

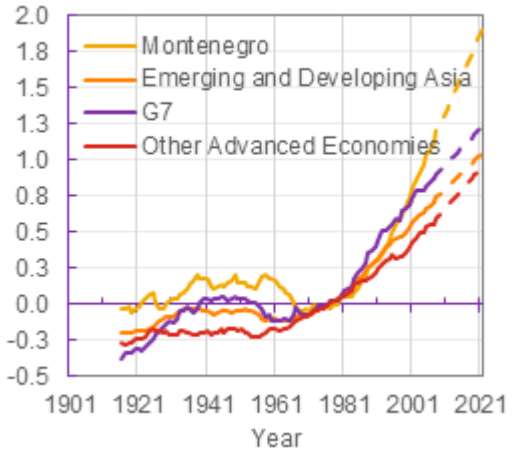
2. Climate change is amplifying Montenegro's exposure to floods, droughts, heat waves, landslides, and wildfires. Agriculture, forestry, and tourism are the primary sectors affected. Heavier rainfall in autumn and winter, combined with Montenegro's mountainous terrain, concentrates precipitation and raises flood and landslide risk. The 2010 floods damaged 30,000 hectares of agricultural land and cost, causing approximately EUR 44 million in damages. At the same time, reduced summer

[1] Throughout this report, "climate scenarios" refer to projections of GHG emissions under different standardized socioeconomic, technological, and policy pathways, known as Shared Socioeconomic Pathways (SSPs). The charts present a plausible range of future emissions—SSP1-2.6, SSP2-4.5, and SSP3-7.0—based on CMIP6 models used in the IPCC Sixth Assessment Report. SSP1-2.6 reflects a low-emissions pathway consistent with the Paris Agreement targets, while SSP3-7.0 represents a high-emissions, severe climate scenario.

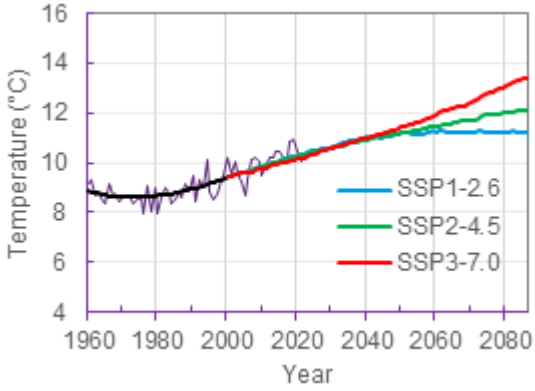
rainfall and higher temperatures increase Montenegro's susceptibility to drought. For example, the 2011 drought impacted key agricultural areas, including Zeta and Bjelopavlići. Forests cover 659.5 percent of Montenegro, and prolonged dry periods coupled with rising temperatures heighten wildfire risks, threatening infrastructure, agriculture, and tourism. Between 2005 and 2015, wildfire destroyed over 18,000 hectares of forests[2]. Additionally, more frequent heat waves can soften asphalt, buckle rail tracks, and increase electricity demand for cooling, placing extra stress on transportation and energy infrastructure. Temperatures in Montenegro are increasing faster than in peer economies and are projected to rise under all climate scenarios (Figure 2), further elevating the risk of, for example, wildfires.

Figure 2: Montenegro annual climate trends and projections

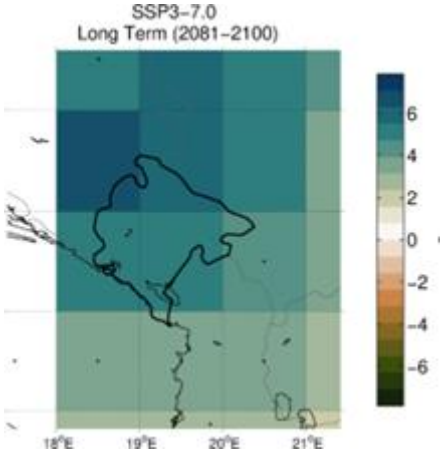
Temperature Change Relative to 1961-1990 (ºC)



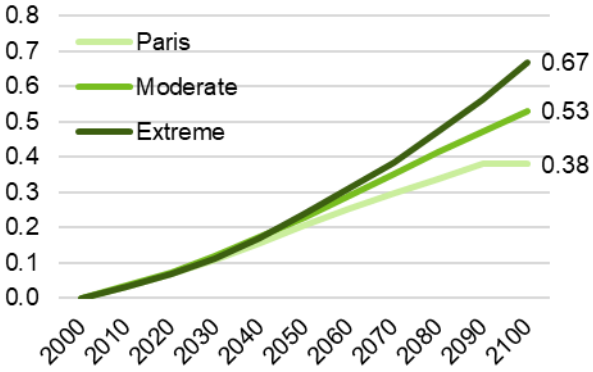
Historical and Simulated Annual Average Temperature (ºC)



Maximum 5-day Precipitations Relative to 1985-2014 (mm)



Sea-Level Rise in Montenegro (relative to 2000 level, m)



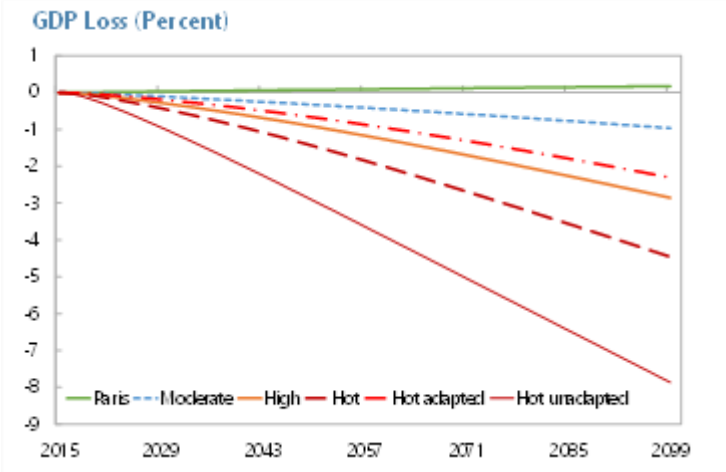
Sources: FADCP Climate Dataset (Massetti and Tagklis, 2024), using CRU data (Harris et al., 2020). Sea-level rise projections from the CIAM model database (Diaz, 2016) based on data from Kopp et al. (2014).

[2] Montenegro, Second National Communication on Climate Change to the UNFCCC (Podgorica: Ministry of Sustainable Development and Tourism, 2015).

3. **Montenegro's infrastructure already faces significant challenges due to climate change, especially in the water and transportation sectors.** Heavy rains and flooding cause annual damages of approximately EUR 90 million to roads and water infrastructure. Rainfall-triggered landslides further increase repair costs and can disrupt road connectivity entirely. The European Bank for Reconstruction and Development (EBRD) estimated that climate-related infrastructure damage could raise annual maintenance costs by 124 percent (an additional EUR 10.2 million). Rising sea levels threaten coastal infrastructure through erosion and localized flooding, particularly impacting tourist areas. Shifting rainfall patterns pose risks to hydropower—currently providing 50 percent of Montenegro's electricity. In the longer term, greater rainfall variability may affect generation volumes and investment needs in the energy system. Additionally, accompanied by high temperatures, more frequent heatwaves delay outdoor construction projects and elevate peak cooling demand, placing further strain on the power grid.

4. **Climate change poses serious macro-fiscal risks for Montenegro.** IMFs Quantitative Climate Risk Assessment Fiscal Tool (Q-CRAFT) model quantifies them: in a moderate scenario, GDP losses stay near the historic 1 percent of GDP, but in the most severe case output could drop 8 percent by 2100 relative to the baseline (Figure 3)[3]. Timely mitigation and adaptation can curb these losses and ease future fiscal pressures. Policymakers therefore face a trilemma: the government must invest to meet climate targets, keep debt sustainable, and maintain political support for reform.

Figure 3. Macroeconomic Impact of Climate Change in Montenegro[17]



Sources: IMF (2025) Montenegro: Managing Fiscal Risks TA report, and IMF Q-CRAFT Tool and Manual (2025)

5. **Integrating Montenegro's climate policy objectives for both adaptation and mitigation across Montenegro's public PIM cycle is essential.** Extreme weather already affects energy, transport, water, and urban infrastructure. Addressing infrastructure gaps while adapting to climate hazards requires a comprehensive shift: scaling up renewable energy, promoting low-emission transport, and improving energy efficiency in buildings and industry, all underpinned by stronger infrastructure planning. Climate

[3] The moderate climate change scenario corresponds to SSP2-4.5, while the severe scenario reflects SSP3-7.0 without adaptation. For more information, see: International Monetary Fund (2023), Q-CRAFT User Guide: Quantitative Climate Risk Assessment Fiscal Tool, Washington, DC.

objectives should inform every PIM phase—embedding targets in sector strategies, applying standardized climate-screening tools during project appraisal and capital-budget preparation, and maintaining active portfolio management through procurement, implementation, audits, and ex-post evaluation. Achieving this will require institutional reforms, enhanced capacity and incentives, and clear financing mechanisms that mobilize private capital and development-partner support.

B. Climate Change Objectives and Strategy

6. Despite its negligible share of global emissions of 0.002 percent, Montenegro has committed to climate mitigation goals supported by policy and investment plans. Decarbonizing the economy will cut Montenegro's emissions and maintain its competitiveness amid the global shift to low-carbon technologies. Montenegro's total GHG-emissions have decreased and by 2022, net emissions were approximately 30 percentage points below 1990 levels. Absolute emissions totaled around 3.8 megatons of carbon dioxide equivalent ($MtCO_2eq$) in 2019, declining to about 2.2 $MtCO_2eq$ once removals for Land Use and Land Use Change and Forestry (LULUCF) are taken into account.[4] Net per capita GHG emissions in Montenegro amounted in 2022 to 1.63 tCO_2eq, far below the EU-27 average (7.84 tCO_2eq). The energy sector generates the largest share of emissions (approximately 75.8 percent), followed by waste (10 percent), industrial processes and product use (IPPU, 7.8 percent), and agriculture (6.5 percent). Montenegro's 2025 update of the NDC[5] sets more ambitious GHG reduction targets. Completing the NDS, the National Climate Change Strategy (NCCS, 2013) includes sector-level goals such as lower energy consumption, rail electrification and wider public transport use.

7. Montenegro's EU accession ambitions strongly influence its climate mitigation and adaptation frameworks, strategies, policies and regulations. As part EU accession, Montenegro must align the EU's European Green Deal of achieving climate neutrality by 2050. Under the Energy Community Treaty, Montenegro must harmonize its energy and climate laws with EU legislation, adopt a National Energy and Climate Plan (NECP), and support the 2050 climate-neutral target. While essential mitigation legislation is in place —notably the 2019 Law on Protection from Negative Impacts of Climate Change, which defines key aspects of Montenegro's climate policy and institutional framework—important implementation tools remain pending. The NECP is still in a draft form. However, in July 2025 the government adopted the NAP for 2025–2035, together with its Action Plan for 2025–2027. Additionally, the 2019 law requires establishing a Monitoring, Reporting and Verification system (MRV) for GHG emissions, which the Environmental Protection Agency (EPA) aims to complete end-2025. Table 1 summarizes key strategies on climate change mitigation and adaptation, and Table 2 lists key institutions responsible for implementing climate policy objectives.

Table 1: Strategies to support climate change objectives in Montenegro

Key Strategies and Plans	Coverage	Status
(Voluntary) Updated NDC	Sets out economy-wide net domestic GHG emission reduction targets: at least 55% by 2030 and 60% by 2035 compared to 1990). Covers sectors energy, IPPU, Agriculture, Waste, and LULUCF.	Submitted in 2025.

[4] World Bank (2024) Montenegro Country Climate and Development Report
[5] Government of Montenegro (2025). Updated Nationally Determined Contributions

NCCS	Aligns national policy with EU climate legislation. Sets targets for reducing energy consumption, landfill waste, increasing biofuel use, renewable heating, rail electrification, and public transport.	Adopted in 2015.
NECP	Roadmap to achieve NDC and EU 2030 targets, detailing specific measures for energy efficiency, renewables, and a just transition.	Drafted in 2024; not yet adopted.
NAP	Identifies climate vulnerabilities and sets medium- to long-term adaptation measures.	Adopted in 2025
Disaster Risk Reduction Strategy (DRRS), 2025-2030	Identifies areas vulnerable to natural disasters; outlines preventive measures, crisis response coordination, and resilience-strengthening actions. Includes 2025–2026 Action Plan.	Adopted in 2024.
Low-Carbon Development Strategy to 2050	Long-term pathway for decarbonization (energy, buildings, transport, industry), aligning with EU climate-neutrality goal.	Under preparation.
Law on Protection from the Negative Impacts of Climate Change (2019)	Establishes legal basis for mitigation policies, MRV system for GHG emissions, NDC implementation, and institutional responsibilities.	Enacted in 2019.
Long-Term Strategy for Climate Neutrality	Required under EU Governance Regulation; complements NECP with a vision for achieving climate neutrality by 2050.	To be drafted after NECP adoption.

Source: IMF Mission Team, Montenegro NDC, World Bank (2024) Montenegro Country Climate and Development Report

Table 2: Institutions to Support Climate Change Objectives in Montenegro

Institutions	Climate-related Responsibilities
EPA	Maintains the national GHG inventory; participates in developing the MRV system; oversees Environmental Impact Assessments (EIAs).
Institute for Hydrometeorology and Seismology	Collects and analyzes climate data; develops climate scenarios; manages early-warning systems for weather-related events, monitors extreme weather and climate events, and conducts climate assessments. Serves as a contact for the Intergovernmental Panel on Climate Change and World Meteorological Organization, contributes to the adaptation chapters of Montenegro's National Communication to the UNFCCC, and provides data relevant for the assessment of climate resilience of public investments.
Ministry of Agriculture, Forestry and Water Management	Implements climate-resilient agriculture, forestry management, sustainable water resources, and drought mitigation.
MERS	Leads national climate policy; serves as focal point for UNFCCC; responsible for drafting the NAP.
Ministry of Economic Development	Oversees industrial policy, economic recovery, and green economy initiatives.
Ministry of Energy and Mining	Develops the NECP, guiding the transition to a low-carbon economy.
MoF	Coordinates climate-related public investment, budgeting, and disaster risk financing; provides guidance to sector ministries.
Ministry of the Interior	Oversees disaster risk management; developed the DRRS and national hazard maps (2021).

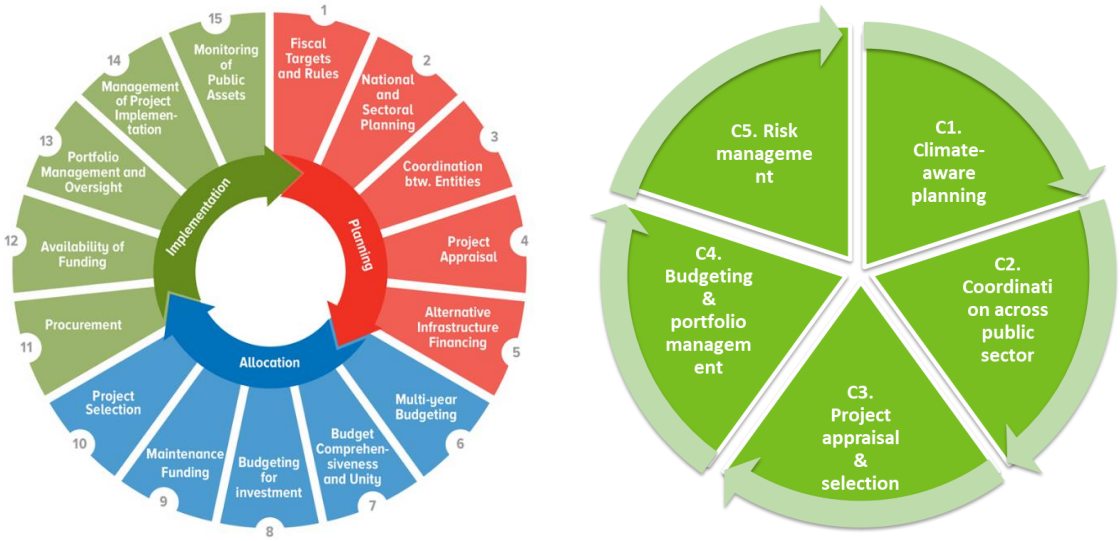
Source: IMF Mission Team

II. The Climate PIMA

A. The Climate Public Investment Management Assessment Framework

8. **The C-PIMA assesses five key PIM-institutions from the climate change perspective and is an extension of the existing PIMA framework.** Figure 4 describes the main elements.

Figure 41. Climate Public Investment Management Assessment Framework



9. **C-PIMA covers the following specific issues (see Annex 3 for the C-PIMA Questionnaire):**

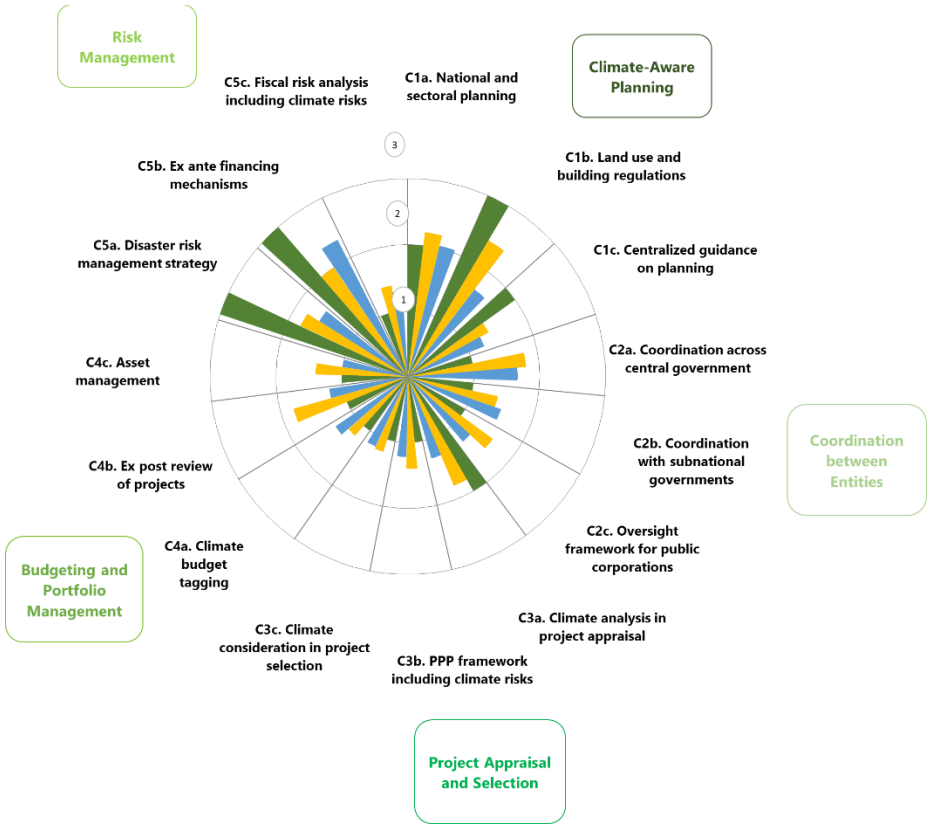
- *C1. Climate-aware planning:* Is public investment planned from a climate change perspective? This is necessary to ensure that long- and medium-term plans contribute to meeting climate objectives and facilitate effective prioritization and decision-making.
- *C2. Coordination across public sector:* Is there effective coordination of decision making on climate change-related public investment across the public sector? In addition to the central government, local governments, public corporations, and private sector entities play key roles in realizing climate-related public investment. Climate adaptation investments will often take place at the local government level, and both PCs and private sector entities may play key roles for instance in energy production.
- *C3. Project appraisal and selection:* Do project appraisal and selection include climate-related analysis and criteria? This is necessary to ensure that the most effective and efficient investments are prioritized. This serves to maximize the climate impacts of public investments 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.

B. Overall Assessment

10. Montenegro is making solid strides in strengthening its climate-PIM framework, with clear emerging strengths and remaining gaps. The radar chart (Figure 5) highlights robust performance in strategic planning, where Montenegro (yellow bars) surpasses Emerging Market Economies (EMEs, blue bars) and approaches EU (green bars) averages, and in disaster risk management and financing. By contrast, coordination among central and local governments, as well as oversight of SOEs, budgeting, reporting, and asset-management practices, trails regional and EME benchmarks. The appraisal and selection function falls short of EU practices and slightly exceeds EME averages. While climate analysis increasingly informs project preparation, there is still no formal climate-screening function within the PIM process to verify that proposed projects and the overall investment portfolio align with national climate objectives. This constrains decision-makers from fully aligning public investments with climate objectives. Strengthening intergovernmental coordination, embedding climate criteria in project appraisal and selection, and establishing a formal climate-screening role with a MERS representative sits on PEC and requiring each PEC report to the PIC to include an assessment of investment projects alignment with Montenegro's climate mitigation and adaptation objectives would address these remaining gaps.

Figure 5: Design of Climate Public Investment Management Institutions



C. Detailed Assessment

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

11. Public investment planning at the national and sectoral level should address both the need to mitigate climate change and to adapt to its consequences. Public investment should be planned in a manner that is consistent with the government's climate change objectives and international commitments. In addition, planning should ensure that the investment projects are resilient not only against physical climate risks, but also reflect the uncertainty associated with a transition to a low carbon society. Government land regulations and building codes can mitigate the exposure to climate-related risks and disasters. At the same time, ministries, departments, agencies and municipalities should be provided with guidance and support to incorporate climate change considerations into investment plans.

12. Montenegro's climate commitments are clearly articulated in law and climate policy. Montenegro's emerging climate policy architecture, which is anchored in its Law on Protection from the Negative Impacts of Climate Change, includes the commitment to a reduction of net domestic GHG emissions of at least 55% by 2030 and 60% by 2035 (including LULUCF), as articulated in the updated NDC. Meanwhile, the NAP which is in draft and expected to be adopted this year, sets out priority adaptation measures in a range of sectors.

13. The planning architecture displays alignment between sector investment plans and climate commitments, in some but not all sectors. The PIM framework is not driving alignment of sector investment plans with these documents; for instance, the Long Term Investment Plan (or Public Investment Master Plan, under development) identifies multisector investment priorities, but its guidance to sectors do not refer to the NDC or NAP.[6] Rather, under the government's hierarchical government planning structure, ministries should embed climate policy priorities into sector plans, including for investment. Some sector plans are clearly aligned with climate commitments (for example, the Agriculture and Rural Development Strategy 2023-2028[7] prioritizes use of renewable energy sources, improved water management practices, and emission reductions in line with NDC and NAP priorities). Other sectors are less aligned because their strategies remain out-of- date or in draft form (such as the Transport Strategy and the NECP), and there are no plans to review existing sector strategies to align with the NDC and NAP. The draft NECP is also noteworthy because it has drawn some queries and criticism whether its plan to keep the Pljevlja coal power plant running until 2040 is consistent with Montenegro's NDC targets[8]. The Ministry of Energy and Mining's internal modelling indicates that it remains feasible, contingent on ambitious renewable energy production growth.

14. Montenegro's construction regulations address energy efficiency and climate-related risks. Two recent laws on construction standards[9] and spatial planning[10] emphasize climate

[6] MoF (2025). Outline Content and Methodology for Preparing a Long-Term Investment Plan. (Unpublished)
[7] Government of Montenegro (2023). Agriculture and Rural Development Strategy 2023-2028.
[8] See for example, European Commission (2024). Commission staff working document: Montenegro 2024 Report and Energy Community Secretariat (2025) Recommendations on the draft integrated National Energy and Climate Plan of Montenegro covering the period 2025-2030.
[9] Law on Construction of Structures, Official Gazette of Montenegro, No. 019/25.
[10] Law on Spatial Planning, Official Gazette of Montenegro, No. 019/25.

considerations. Montenegro adopted detailed building guidance in the Eurocodes[11] in 2023, addressing climate-related risks (for example by incorporating design actions that make construction more resilient to flooding risks and promoting efficient use of construction materials). The Spatial Masterplan for Montenegro steers the implementation of the new Spatial Planning law and reflects climate change-related considerations. This includes measures to increase infrastructure resilience to increasingly severe disasters, requirements for green spaces and watercourse management, provisions to construct new renewable energy sources, and reduce energy consumption in urban zones.[12]

15. The government provides uniform instructions for drafting strategies, but these focus on screening rather than costing or technical quality. In 2023, the General Secretariat of the Government's 2023 Guidelines for the Preparation of Strategic Documents[13] requires all new government strategies to undergo a Strategic Environmental Impact Assessment (SEIA), which is the strategic-level equivalent of an environment assessment for a single investment project, mandated under law[14]. The SEIA covers GHG emissions and adaptation impacts (see institution 3 for further discussion). Compliance is ensured through a number of ways: all SEIAs must be cleared by the EPA, and all new strategic documents are submitted to the General Secretariat, who prior to submitting the document to Cabinet, completes a review that checks alignment with the European Green Deal and probes on its discussion of issues including renewable energy use and pollution.[15] However, the centralized guidance on plan development does not include guidance on costing of investment projects in general terms or in relation to climate-sensitive investments, although the General Secretariat in conjunction with the MoF plans to develop costing guidance which could provide an opportunity to consider this.

16. Montenegro's climate policy commitments are clearly defined, so the remaining task is to complete the translation of these into lower-level planning instruments and guidance that direct public investment. In some instances, this is a case of finalizing documents which are already drafted or under development, such as the NECP, or implementing those that have been adopted, such as the Spatial Plan. Going forward, ensuring new strategies are aligned with climate commitments requires strengthened technical and costing guidance, which is a medium priority.

Recommendations

Issue: Current instructions for drafting government strategies lack the technical and costing guidance needed to reflect Montenegro's climate commitments.

Recommendation 1: Revise the Methodology for the Preparation of Strategic Documents to incorporate technical and costing guidance needed to align public investment strategies with Montenegro's climate objectives (*MoF, General Secretariat of Government, and MERS, Q4 2026).*

[11] Eurocodes are 10 European standards for designing buildings and infrastructure. They help improve resilience to extreme weather by allowing countries to adjust load values based on local climate. A new version in 2026 will add more adaptation requirements.
[12] Ministry of Spatial Planning, Urbanism and State Property (2025). Report on the Strategic Environmental Impact Assessment of the Proposed Spatial Plan of Montenegro.
[13] General Secretariat, 2023. Guidelines for the preparation of strategic documents.
[14] Law on the strategic environmental impact assessment. Official Gazette of the Republic of Montenegro No. 80/ 2005, 59/11, 52/16
[15] General Secretariat, 2023. Methodology for developing policies, drafting and monitoring the implementation of strategic documents

C2. Coordination Between Entities (Strength—Low; Reform Priority: High)

17. A whole-of-government approach facilitates coordination of climate action across all public sector levels. Effective coordination must occur within central government, between central government and subnational governments, and across the broader public sector, to align ensuring decision-making on climate-related investments. The regulatory and oversight framework for public corporations should ensure that infrastructure investments align with national climate objectives and strategies.

18. Montenegro currently lacks a designated body to coordinate public investment from a climate perspective. This gap leads to a disconnect between strategic climate-aware planning and its implementation through the annual budget. The MERS coordinates the development of climate strategies but has neither the mandate nor capacity to integrate these strategies into the annual budget. The Directorate General of Public Investment Management in the MoF sets guidelines on project preparation and issues the capital budget circular[16] but does not have an explicit climate change mandate. The PEC, which includes the MoF amongst others,[17] coordinates the selection of capital projects for budget inclusion and advises the Public Investment Council, chaired by the Prime Minister. However, the PEC lacks a member with a primary climate-focused mandate, and the budget circular does not assign climate-related responsibilities to this committee. One way to address this gap would be to assign a mandate to PEC to consider climate impact and in practice deliver that by appointing a MERS representative with a mandate to assess project and portfolio alignment with the government's climate change strategies. Including a brief overview of this alignment in the advice to the PIC would further strengthen the process.

19. There is no legal requirement for coordinating capital spending, including climate-related investments, between SNGs and the central government. Sub-national government's budgets are approved by the MoF but this review focusses on financial stability rather than reviewing policy alignment with government strategies. Despite the lack of formal mechanism, the IMFs 2022 Public Investment Management Assessment found that there are a number of other mechanisms by which co-ordination between central government and SNGs can occur[18]. Some further formal mechanisms could be helpful, as a first step, revising guidance on preparing local self-government development plans so that it requires climate-informed investment planning aligned with Montenegro's climate mitigation and adaptation objectives would clarify the requirements on SNGs. In time, having an implementation method, such as asking MIRN to require that SNGs Strategic Development Plan plans are consistent with NDC and NAP, in addition to their existing checks against the Spatial Plan, could further address this weakness.

20. SOE's in Montenegro are not legally required to ensure that their climate-related investments align with national climate policies and guidelines. However, a new SOE law and SOE ownership policy is planned which will, amongst other things, provide Ministries with better oversight of SOE investment plans. This law could also be used to include a requirement to align with national climate objectives, policies and guidelines. SOEs play an important role in Montenegro's climate

[16] https://www.gov.me/clanak/budzetski-cirkular-za-pripremu-kapitalnog-budzeta-za-2026-godinu
[17] The budget circular stipulates that it should consist of two representatives of the Ministry of Finance, one representative of the Prime Minister's Office, the administrative body responsible for capital projects, the administrative body responsible for transport, the state administration body responsible for spatial planning and the state administration body responsible for education.
[18] See box 3.2, Republic of Montenegro: Public Investment Management Assessment, 2022

challenges, given their scale – operating revenues of SOEs equaled 17% of GDP in 2023[19] – and their concentration in key sectors like energy and transport. In practice, despite the lack of an overarching regulation, SOEs contribute to climate change mitigation and adaptation. For instance, Elektroprivreda Crne Gore, the state electricity provider, invests in renewable energy and promoting energy efficiency, however these efforts are not formalized. MoF is leading a reform of the SOE governance framework in Montenegro, including a new SOE law planned for 2025 and the establishment of an ownership unit in MoF.

Box 1: OECD Guidelines on Corporate Governance of SOEs and Sustainability

Chapter VII of the OECD Guidelines outlines principles for integrating sustainability, including climate change considerations, into the governance frameworks of SOEs. The guidelines recommend clearly defining ambitious sustainability and climate expectations within state ownership policies. SOE boards are expected to incorporate sustainability and climate objectives into their corporate strategies, risk management, and internal control systems. Furthermore, consistent and transparent reporting aligned with international sustainability standards, including climate disclosures, with independent assurance, are key components. Countries worldwide increasingly adopt these guidelines to ensure effective sustainability and climate governance within SOEs. Annex IV provides more detailed information.

Source: OECD (2024), OECD Guidelines on Corporate Governance of State-Owned Enterprises 2024, OECD Publishing, Paris, https://doi.org/10.1787/18a24f43-en.

21. Cross government co-ordination of public investment from a climate perspective remains a systematic weakness. The absence of a central coordinating body results in a disconnect between strategic planning and the annual budgeting process. Updating the mandate of PEC and appointing a designated member of the PEC could bridge this gap. Beyond central government, the legal framework to ensure alignment of SNG's and SOE's with national climate change policies and guidelines is lacking. Although practical application may exceed legal requirements here, they occur on an ad hoc basis. The proposed SOE law provides the opportunity to address the gap. The government could leverage existing informal mechanisms with SNGs to promote alignment between SNG investment and national strategies. For instance, MIRN currently assesses the alignment of SNG strategic development plans with Spatial Plans and could extend this responsibility to include alignment with the government's environmental strategy.

Recommendations

Issue: There is no entity tasked with coordinating between climate strategies and annual budgets.

Recommendation 2: Amend the mandate of the PEC to include climate considerations and require each PEC report to the PIC to assess project and portfolio alignment with Montenegro's climate objectives. (*MoF, General Secretariat, and MERS, Q4 2025*)

[19] Ministry of Finance, Aggregate Analysis of the Financial Operations of SOEs for 2023 with the Statement of Fiscal Risks

Issue: There is no mechanism to align climate-related investments of local governments with national climate priorities.

Recommendation 3: Revise guidance on preparing local self-government development plans so that it requires climate-informed investment planning aligned with Montenegro's climate objectives. (*MIRN, Q4 2026*)

Issue: SOEs are not obliged to align their investments with national climate goals.

Recommendation 4: Ensure that the forthcoming SOE Law establishes a mandate for the government to define climate change-related expectations for SOE investments. (*MoF, Q4 2025*)

C3. Project Appraisal and Selection (Strength—Low; Reform Priority: High)

22. Climate considerations must be systematically integrated into project appraisal and selection to ensure that climate-resilient and low-carbon investments are developed and prioritized. Conducting climate-related analysis during project appraisal ensures that climate risks are consistently identified and addressed, including for public private partnerships (PPP). Utilizing climate analysis to guide project selection ensures funding is allocated to sustainable, resilient infrastructure aligned with climate objectives. This integrated approach helps identify and manage climate-related risks, enhances infrastructure resilience, ensures cost-effectiveness, and aligns public investments with Montenegro's climate strategies.

23. The government undertakes climate-related analysis primarily through Environmental Impact Assessments (EIAs) for major capital projects; comprehensive feasibility studies remain optional and lack standard guidance. The EIA Law requires climate discussions, including for GHG-emissions and adaptation impacts, for projects significantly affecting the environment or human health. Projects over EUR 5 million require a basic feasibility study, yet no standardized methodology exists, leading to inconsistent climate considerations. The 2026 Capital Budget Circular includes high level guidance on producing higher quality feasibility studies, however following this is currently optional pending a planned update to the Law on Budget and Fiscal Responsibility (LBFR) in 2025. Authorities have shared a draft detailed project appraisal methodology which includes climate risk in cost-benefit analyses and climate and disaster risk assessments, which they plan to publish. In practice, large projects with external financing, like the Bar-Bolijare Highway funded by EBRD, typically meet climate standards of the financers.

24. Climate change is not applied consistently during project selection. The Budget Circular's multi-criteria scoring[20] awards 10 points (out of a total of 135) for a "positive impact on the environment" and 5 points for "contributing to energy efficiency". These criteria capture a project's environmental impact but not how climate may affect the project. There is no standard published methodology for assessing whether a project meets these criteria. In practice, the MoF did consider climate impacts, but not in a formalized and consistent manner. Once the LBFR is updated and feasibility studies follow a uniform methodology, some climate impacts, for instance GHG emissions and exposure to climate-related risks,

[20] Projects are assessed against 10 main and 6 supplementary criteria with a set number of points awarded for meeting each criteria.

will be included in the CBA. MoF should then update the scoring methodology for awarding additional climate points, based on projects being either net-carbon positive or clearly justified as climate adaptation.

25. The 2019 Law on Public Private Partnerships and subsequent guidance does not include specific consideration of climate change for risk allocation and contract management. The law refers to considerations relating to the environment, yet neither document clarifies the definition of environment to include climate change risks. In practice Montenegro has rarely used PPP's, with just one active at the current time, however, authorities indicated that more are planned in the near future. As a first step, the MoF should use the same detailed appraisal guidance as regular PIM projects, once that is developed, to include within the cost benefit assessment. In addition, bespoke guidance will be required on risk allocation of climate risks and contract management given the unique contractual features of PPPs compared to traditional infrastructure procurement.

26. The reform priority for the government is to complete, and implement, the ongoing reforms that strengthens feasibility studies for major projects, in time for inclusion in the Budget Circular for 2027. This should be backed up with training for line ministries such that they are able to commission, undertake and utilize these reviews productively. Completing that reform will mean that all major projects must undertake a robust project appraisal which considers climate change in the cost benefit analysis as well as in the risk mitigation section, which would be a significant step forward. Major projects are currently defined as EUR 5 million, which is a relatively low level and authorities may want to consider raising this to reduce administrative burden. This would provide consistent information that can be used in project selection. Improvements to the PPP framework are needed although they should only be prioritized if further PPPs are likely to be actively pursued.

Recommendations

Issue: Feasibility studies do not consistently assess climate change effects and climate-informed project selection criteria are not applied in a consistent manner across projects.

Recommendation 5: Issue guidance on integrating climate change-considerations in feasibility studies and incorporate climate-adjusted results into the multi-criteria analysis with clear scoring components. (*MoF, Q4 2025*)

Issue: The PPP law does not require projects to adequately consider the implications of climate change

Recommendation 6: Update the PPP law to include consideration of climate impacts in project appraisal criteria and risk management

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

27. 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 the public asset base. 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. Good practices include identifying climate related

projects in budget documents; conducting ex-post reviews of the impacts of investment projects on climate adaptation and mitigation; and addressing climate-related risks in asset management policies and practices.

28. Currently, planned climate-related public investment expenditures are not identified in Montenegro's budget and related documents. The LBFR does not require the identification of climate related public investment. The authorities have partially implemented gender tagging on a manual basis and intend to replicate this methodology for climate tagging of public investments. The IT system does not currently allow tagging of public investment expenditure which limits full implementation. Budget documents include programs and project names which can be used to identify climate related public investment including "Water Management", "Energy efficiency" and "Environmental conservation projects" programs with budgets specified for each individual project. Budget documents include performance indicators, but these are not consistently specified.

29. No ex-post reviews or audits have been conducted of the climate change mitigation and adaptation outcomes of public investments, but the Montenegro State Audit Institution (SAI) is conducting relevant performance audits. There is no formal requirement in methodology to review the actual climate-related impacts of public investments or projects. However, performance audit methodology require audits to consider key performance indicators set by government, which will reflect climate aspects where these are specified.[21] The SAI has undertaken a number of performance audits on climate relevant public investments and assets.[22] While there are examples where climate change considerations have been taken into account (for wastewater), audits of projects to construct education and health facilities and assess road maintenance did not take into account climate change considerations although this may only be applicable for some, not all projects. International Financial Institutions are providing significant financing for climate related investment projects,[23] and these projects are subject to ex-post reviews as part of IFI investment practices.

30. There are no formalized government asset management policies, nor methodologies for estimating maintenance needs, but some SOEs track the climate risk of their assets. The Law on State property (2009) requires an asset register for immovable assets, maintained by MSPUSP[24]. Asset management and maintenance remain the responsibility of the competent authority, no central maintenance norms or methodologies for estimating maintenance needs exist. SOEs own many climate vulnerable assets (including state highways, electricity and waterways). Monteput, the SOE that manages state highways, applies its own maintenance methodology and presently sees no need to adjust it for expected climate change. The company updates its asset register every six months and forwards the

[21] Montenegro Supreme Audit Institution: Instruction on Methodology for Performance Audit (2019)
[22] Examples include: Efficiency of Wastewater System Management (2022); Efficiency of Regular and Investment Maintenance of State Roads (2021); Efficiency of Construction Project Management Reconstructions of Health Facilities (2020);Project Management of Construction and Reconstruction of Educational and Scientific Facilities (2018)
[23] Listed in Article 10 of the 2025 Budget Law. Examples include: EIB and EBRD "Project for the modernization of the electrified single-track line on the Bar-Golubovci section, including the Ratac landslide and the Sozina tunnel"; EBRD "Project for the improvement of energy efficiency in educational facilities in Montenegro" and World Bank "Energy Efficiency in Montenegro"
[24] Previously managed by the State Property Administration

data to the central register; although that register omits climate-risk exposure, Monteput maintains a separate risk log that tracks current and some future risks for high-risk assets.

31. The reform priority is to include information in the budget on climate-related public investment. Although all investments appear in the budget, it is impossible to tell which projects support the Government's climate-change strategies. Introducing a climate tag would raise awareness and transparency, making this upgrade a priority. An approach to tagging and reporting climate-budget related investments, drawing on the approach Montenegro is developing for gender-budget tagging, would raise awareness. Using similar tagging approaches for gender and climate should facilitate integration into existing IT systems. Clearly flagging climate investment in the budget would elevate its profile during preparation and allow progress to be tracked through in-year and annual execution reports. The OECD will be supporting Montenegro on a methodology for marking based on SDG indicators but that is more advanced.

Issue: Budget documents does not tag climate-related investments, limiting prioritization, oversight, and public awareness.

Recommendation 7: Publish, in the FY 2027 Budget Rationale, a summary table of all major climate-related public investment—domestic and externally financed—supported by a brief narrative. (*MoF, Q2 2026*).

C5. Risk Management (Strength—Medium; Reform Priority: Low)

32. 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 of public investments and their potential impact on the public finances. These risks are increasing in significance, are expected to be chronic sources of fiscal risk in most countries, and therefore warrant explicit attention. To better manage these fiscal risks it is important for governments to (i) develop and publish a disaster risk management strategy that identifies the exposure of public infrastructure to climate related disasters; (ii) develop mechanisms to absorb the cost of climate-related damages to infrastructure; and (iii) analyze climate-related risks to public infrastructure assets.

33. The government has a disaster risk management (DRM) policy framework which incorporates climate impacts on public infrastructure, and proposes some preparedness and risk reduction measures. The 2025-2030 Disaster Risk Reduction Strategy (DRRS) includes an analysis of a wide range of risks (climate-related and otherwise), drawing on the extensive risk mapping efforts which constituted the 2021 Disaster Risk Assessment[25], case studies from historical disaster events, and a 2023 assessment of the country's DRM capacity. The DRRS also provides an elaborate discussion of the risk to public infrastructure, including railways, roads, airports, schools, energy infrastructure and telecommunications, although this remains primarily qualitative, and geocoded risk maps have not been overlain with information about the location of public investments. The strategic priorities set forth in the DRRS cover strengthening the understanding of disaster risk, improving disaster response capacities,

[25] https://documents1.worldbank.org/curated/en/727791621920082705/pdf/Montenegro-Ready-2-Respond-Emergency-Preparedness-and-Response-Assessment-Diagnostic-Report.pdf

disaster risk reduction, and resilient reconstruction post-disaster. However, a review of the detailed activities listed in strategy identified few interventions in the areas of resilient reconstruction.

34. The government primarily meets the financial cost of disaster-related risks to infrastructure through the state budget, including from the contingency reserve, and a climate-resilient debt clause on World Bank lending provides an extra layer of post-disaster liquidity. Criteria on the use of the use on the reserve fund specifies that they can be made available for the repair of damage from natural disasters, including damage to public (or private) assets, but only up to 10% of the estimated value of the damage. At the same time, the Law on Local Self Government Financing requires that municipalities set aside 2% of total receipts for a permanent budget reserve, to be used for expenditures related to disasters. Additionally, since 2024 all World Bank loan agreements have included a Climate Resilient Debt Clause intended to increase liquidity after a disaster by enabling the Government to defer payments for up to 2 years. There are no risk transfer instruments in place, such as asset insurance against disasters, but the government reported that existing provisions were sufficient to meet disaster-related investment spending needs at the present time.

35. MoF's analysis of fiscal risks does not incorporate climate-related risks to public infrastructure assets. The fiscal risk report was published for the first time in December 2024, and only covers fiscal risks from SOEs. MoF's Directorate for Macroeconomic and Fiscal Analyses and Projections have medium-term plans to add climate change to their fiscal risk analysis, but this will likely be looking at aggregate climate change impacts on the macro-fiscal outlook rather than focused specifically on public infrastructure. Relevant analysis can be found in some of the SOEs who implement large capital projects, for example Monteput, which is responsible for repairing Montenegro's road and tunnel network, maintains an internal risk register which includes an analysis of climate disaster risk.

36. Current plans and financial provisions for managing disaster related impacts on public infrastructure meet today's needs but may not be sufficient in the future. In light of climate risk projections, it would be prudent to periodically review the adequacy of ex-ante financing arrangements, which relies on MoF having a clearer picture of potential contingent liabilities arising from disaster impacts on public assets than it currently has. This could begin with drawing on existing data collected by other parts of Government, including risk registers compiled by SOEs. Given the present adequacy of reserves, this is a low priority to implement.

Recommendations

Issue: The government does not have a clear view of potential fiscal costs related to climate change-related disaster risks to public assets, hampering fiscal preparedness.

Recommendation 8: Periodically estimate forward looking climate-disaster losses for major public-investment asset classes, compare these losses with existing contingency funds, and where gaps exist, propose budgetary, risk-financing, or mitigation measures. (*MoF, Q4 2026*)

D. Cross-Cutting Issues

Legal Framework

37. The pace of reform in Montenegro means that there are a number of substantial planned changes to the legal framework impacting PIM delivery. The 2022 PIMA found that the legal framework for wider PIM management was comprehensive and recent. However, there are some gaps in relation to climate change, in particular around SOEs and SNG, and some areas where the government is looking to revise existing laws in part to better integrate climate change. If adopted, and well implemented, these changes would result in a broadly comprehensive legal framework.

- **A revision to the organic budget law is planned for 2025.** In addition, the Decision on the preparation of the capital budget requires that feasibility studies be submitted for projects greater than 5 million. This provides a clear basis for integrating climate change considerations into project appraisal.
- **A new SOE law is planned for 2025.** This will provide the government with the power to instruct SOEs to comply with national climate targets. It will also establish an ownership unit in the MoF.
- **A revision of the climate law is underway,** with changes relating to the next phase of Montenegro's Emissions Trading System, alignment with EU standards, and some shift in the responsibility of emissions forecasting to EPA.
- **The law on regional development is in final drafting stages.** This law can provide the powers to ensure the subsequent revisions of the regional development Strategy and SNG development strategies consider how climate change will affect and be affected by regional development.
- **The law on Corporate Sustainability Reporting is being revised** to include a requirement for SOEs to prepare, and have verified through an audit, sustainability reports**,** reflecting EU corporate sustainability reporting directive standards. However, this is currently delayed awaiting an update to the relevant EU directive.

Information Systems and Technology

38. Following the 2022 PIMA, significant progress has been made on developing and implementing a project monitoring system at the MoF. The 2022 PIMA found that 'existing IT systems are fragmented and do not provide good integral support to the Government in performing key PIM functions'. Since then, the MoF has established a dedicated capital projects module of the Budget Management Information system which allows MoF to track and report on the capital budget as a whole and produce a quarterly execution report. However, the current system does not allow MoF to tag and track climate change expenditure, other than by (sub) program name or activity name within the program classification. The system could be adjusted to allow budget users to manually flag expenditure where there is a positive climate impact similar to the method already being used to report on gender related expenditure.

Capacity

39. Capacity limitations is one of the major risks to the successful implementation of Montenegro's ambitious reform plans in this area. Across central government the teams leading on PIM and climate change are small and often stretched with limited absorbative capacity. A widely held concern was the ability of central government to recruit and retain key, particularly those with important specialist skills, such as meteorologists, whose expertise is particularly relevant for climate change analysis.

40. The 2022 PIMA highlighted 'a significant capacity weakness is related to project preparation, appraisal, and selection' and that there is no institutional capacity for preparing feasibility studies. Because the production of high-quality feasibility studies is essential for incorporating climate change into project selection, this remains a key risk to improving climate PIM processes. Since 2022 a small, four-person, Directorate General of Public Investment Management has been established in MoF and processes around project selection have been improved. Whilst the production of draft feasibility study guidance is being done by external consultants and therefore the expertise is not sitting within government. Four of the steps highlighted in the PIMA, and not yet implemented, are of particular relevance to the C-PIMA:

- **Better technical skills:** Implement a regular and wide-ranging training program and to create well-staffed units in charge of different aspects of PIM.
- **Centralized support:** Creating specialized units with highly skilled staff to support line ministries with project preparation or discard projects early on.
- **Private sector support:** Specialized consulting services, either local or international can support preparation of feasibility studies for large infrastructure projects; staff could focus on preparing good terms of reference for studies, develop an effective selection process, and be a demanding counterpart during the study.
- **MoF project preparation and appraisal team:** the MoF PIM unit undertakes some of the functions proposed in the PIMA but does not have the mandate or capacity to undertake all of them, such as training line ministries and challenging producers of feasibility studies.

Annex 1. The Climate PIMA Action Plan

Issue	Recommendation	Action	Responsibility	Timing
Climate-aware planning				
Current instructions for drafting government strategies lack the technical and costing guidance needed to reflect Montenegro's climate commitments.	1. Revise the Methodology for the Preparation of Strategic Documents to incorporate technical and costing guidance needed to align public investment strategies with Montenegro's climate mitigation and adaptation objectives.	▪ When next reviewing the guidelines, include: i) a summary of the climate commitments in the NDC and NAP pertaining to different sectors; ii) guidance on climate-sensitive planning principles (potentially linking to existing guidance prepared by UN agencies and others, as needed); iii) complementary guidance on costing strategies that reflects climate change considerations (for example in relation to climate sensitive investment design and construction materials); iv) advice on relevant data sets and information sources available with government; and v) contacts for officials within MERS who can offer further support if required. ▪ Publish and disseminate amongst government agencies.	MoF, General Secretariat, and MERS	Q4 2026
Coordination across public sector				
There is no entity tasked with coordinating between climate strategies and annual budgets.	2. Amend the mandate of the PEC to include climate considerations and add require each PEC report to the PIC to assess project and project portfolio alignment with Montenegro's climate objectives.	▪ Update the budget circular to require the MoF to ensure that climate change expertise is included in the project evaluation process, including, where appropriate, the appointment of a relevant expert to the PEC.	MoF and MERS	Q4 2025

		▪ A climate change expert should review whether the self-reporting of alignment with governments climate change strategies and targets is accurate or not. ▪ Expert to be tasked to assess alignment of proposed specific projects, and the entire portfolio, with government strategies, to be included in the PEC advice to the PIC.		Q1 2026
There is no mechanism to align climate-related investments of local governments with national climate priorities.	3. Revise guidance on preparing local self-government development plans so that it requires climate change-informed investment planning aligned with Montenegro's climate objectives.	▪ Complete the planned update of the law on regional development to require Local Government Development plans to align with the national climate change strategy. ▪ Issue detailed guidance on preparing a climate-smart Local Government Development Plan. ▪ Engage with the Union of Municipalities to share best practice and offer support. ▪ MIRN to assess compliance of Local Government Development plans and the NDC and NAP when issuing their no-objection decision.	MIRN	Q4 2026 Q1 2027
SOEs are not obliged to align their investments with national climate goals.	4. Ensure that the forthcoming SOE Law establishes a clear mandate for the government to define climate change-related expectations for SOEs.	▪ SOE Law to include explicit reference that SOEs need to align their corporate strategies and capital spending plans with national climate change objectives. ▪ SOE ownership framework to provide guidance to government shareholder on setting clear climate change expectations for relevant SOEs either through KPIs or annual formal letters.	MoF	Q4 2025

		▪ SOEs report to the ownership entity on how they perform against these targets, at least annually.		
Project appraisal and selection				
Feasibility studies do not consistently assess climate change effects and project selection criteria are not applied in a consistent way across projects	5. Issue guidance on integrating climate change-considerations in feasibility studies and incorporate climate-adjusted results into the multi-criteria analysis with clear scoring components.	▪ Adopt updated LBFR to require all major projects to produce feasibility studies in a consistent way. ▪ Apply the updated feasibility study guidance. ▪ Guidance defines how to incorporate climate change into cost-benefit analysis ▪ Guidance defines how to undertake climate risk analysis. ▪ Include a specific criterion in the multi-criteria analysis relating to climate adjusted cost-benefit analysis. Include criteria assessing climate change mitigation and adaptation against specific scoring guidance. ▪ Train line-ministry staff in the new methodology and guidance for conducting feasibility studies, including on climate change aspects, consider: ➢ Create expert working group, with representatives from MoF and MERS to create a training course. ➢ Organize workshops and trainings for line ministries to educate them on (i) the purpose of feasibility studies, including the climate aspect, (ii) how to complete a feasibility study, and (iii) how to assess and challenge a feasibility study undertaken by a third party.	MoF	Q4 2025 2026 and ongoing

		➢ Offer shorter training to potential private sector providers introducing the guidance.		
The PPP law does not require projects to adequately consider the implications of climate change	6. Update the PPP Law to include considerations of climate impacts in project appraisal criteria and risk management.	▪ Align the PPP cost-benefit analysis with the new budget-project methodology, monetizing GHG externalities. ▪ Make a climate-risk and resilience assessment—covering physical and transition risks—mandatory in every feasibility study. ▪ Require PPP contracts to spell out how major climate risks are allocated and mitigated. ▪ Embed EU climate-proofing guidance and the Sustainable-Finance Taxonomy in appraisal templates and evaluation criteria.	MoF	Q4 2026
Budgeting and portfolio management				
The budget documents do not tag climate-related investments, limiting prioritization, oversight, and public awareness.	7. Publish, in the FY 2027 budget rationale, a summary table of all major climate-related public investment projects—domestic and externally financed—supported by a brief narrative.	▪ Define climate related investment. ▪ Replicate gender tagging arrangements to enable the manual tagging of climate projects in the IT system. ▪ Review domestic and externally financed climate-related public investment and initially tag projects clearly aimed at achieving climate related objectives. Confirm this by checking against objectives in project appraisal documents. ▪ Update the Budget Rationale document to include a short strategic narrative drawing on objectives of key projects specified in project appraisal documents, and a list of climate-tagged public investments. ▪ Incorporate climate tagging in budget execution reports.	MoF	Q2 2026

		▪ Longer term, refine ability to identify a wider range of climate-related public investment.		
Risk management				
The government does not have a clear view of potential fiscal costs related to climate change-related disaster risks to public assets, hampering fiscal preparedness.	8. Periodically estimate forward-looking climate-disaster losses for major public-investment asset classes, compare these losses with current maintenance and contingency funds, and where gaps exist, propose budgetary, risk-financing, or mitigation measures.	▪ For major classes of public investment, compile existing climate-related disaster damage estimates and projections (as may be found in asset registries of entities managing them, for example). ▪ Compare this information against capital maintenance funding in contingency reserves at the central and agency level, to take a view on whether subsequent budgetary, risk financing or risk mitigation measures are necessary. ▪ Update the exercise every 5 years, or following updates to the national risk map and climate change commitments/targets..	MoF	Q4 2026

Annex 2. C-PIMA Questionnaire

Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
C1. Climate-aware planning: Is public investment planned from a climate change perspective?				
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 ***some*** sectors.	National and sectoral public investment strategies and plans are consistent with NDC or other overarching climate change strategy for ***most*** 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, ***or*** construction (through building codes) addresses climate-related risks and impacts on public investment.	Central government and/or sub-national government regulations on spatial and urban planning, ***and*** construction (through building codes) address climate-related risks and impacts on public investment.
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 ***preparation*** of climate-aware public investment strategies.	There is centralized guidance/support for government agencies on the ***preparation and costing*** of climate-aware public investment strategies.
C2. Coordination between entities: Is there effective coordination of decision making on climate change-related public investment across the public sector?				
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 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.
C3. Do project appraisal and selection include climate-related analysis and criteria?				
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.
C3b	Does the framework for managing longer-term public investment contracts, such as PPPs, explicitly address climate-related challenges?	The referred framework does not include explicit consideration of climate change for risk allocation or contract management.	The referred framework includes explicit consideration of climate change with respect to how risks are allocated between the parties in infrastructure contracts.	The referred framework includes explicit consideration of climate change with respect to how risks are allocated between the parties in infrastructure contracts, and contract managers in government departments and agencies are mandated to address climate-related challenges.
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-

Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
				budgetary entities, and PPPs, and the criteria are published.
C.4 Budgeting and portfolio management: Is climate-related investment spending subject to active management and oversight?				
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.
C4.b.	Are ex-post reviews or audits conducted of the climate change mitigation and adaptation outcomes of public investments?	No ex-post reviews or audits are conducted of the climate change mitigation and adaptation outcomes of public investments.	Ex-post reviews or audits are conducted for selected major public investments of either the climate change mitigation or adaptation outcomes.	Ex-post reviews or audits are conducted and published for selected major public investments of both the climate change mitigation and adaptation outcomes.
C4.c.	Do the government's asset management policies and practices, including the maintenance of assets, address climate-related risks?	Neither the government's asset management policies and practices nor methodologies for estimating the maintenance needs of climate change-exposed infrastructure assets address climate-related risks.	Methodologies prepared by the government for estimating the maintenance needs of some climate change-exposed infrastructure assets address climate-related risks.	Methodologies prepared by the government for estimating the maintenance needs and associated costs of most climate change-exposed infrastructure assets address climate-related risks, and government asset registers include climate-related information of these assets.

Indicator		Scoring		
		1 = To no or a lesser extent	2 = To some extent	3 = To a greater extent
C5. Risk management: Are fiscal risks relating to climate change and infrastructure incorporated in budgets and fiscal risk analysis and managed according to a plan?				
C5.a.	Does the government publish a national disaster risk management strategy that incorporates the potential impact of climate change on public infrastructure assets and networks?	Either there is no published national disaster risk management strategy, or the strategy does not identify the key climate-related risks to public infrastructure assets and networks.	The government publishes a national disaster risk management strategy that identifies the key climate-related risks to public infrastructure assets and networks in terms of hazards, exposure, and vulnerability.	The government publishes a national disaster risk management strategy that identifies and analyses the key climate-related risks to public infrastructure assets and networks in terms of hazards, exposure and vulnerability, and includes the government's plans to mitigate and respond to these risks.
C5.b.	Has the government put in place ex ante financing mechanisms to manage the exposure of the stock of public infrastructure to climate-related risks?	The government has not put in place any ex-ante financing mechanisms to manage the exposure of the stock of public infrastructure to climate-related risks.	There is an annual contingency appropriation in the budget or other financing mechanisms that is available to meet the costs of climate-related damages to public infrastructure.	There is an annual contingency appropriation in the budget and other financing mechanisms that are available to meet the costs of climate-related damages to public infrastructure.
C5.c.	Does the government conduct and publish a fiscal risk analysis that incorporates climate-related risks to public infrastructure assets?	The government does not conduct a fiscal risk analysis that incorporates climate-related risks to public infrastructure assets.	The government conducts and publishes a fiscal risk analysis that incorporates a qualitative assessment of climate-related risks to public infrastructure assets over the medium term.	The government conducts and publishes a fiscal risk analysis that incorporates a quantitative assessment of climate-related risks to public infrastructure assets over the medium term and policies to mitigate these risks, and a qualitative assessment of the risks that may arise over the long-term.
Cross-cutting issues				
A	**IT support**. Is there a comprehensive computerized information system for public investment projects to support decision making and monitoring?			
B	**Legal Framework**. Is there a legal and regulatory framework that supports institutional arrangements, mandates, coverage, standards and accountability for effective PIM?			
C	**Staff capacity.** Does staff capacity (number of staff and/or their knowledge, skills, and experience) and clarity of roles and responsibilities support effective institutions?			

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

Annex 4. OECD Guidelines on Corporate Governance of SOEs and Sustainability

Chapter VII of the OECD Guidelines on Corporate Governance of SOEs sets out the principles by for best practice management of SOEs and sustainability. The relevant section is:

The corporate governance framework should provide incentives for state ownership entities and SOEs to make decisions and manage their risks in a way that contributes to SOEs' sustainability and resilience and ensures long-term value creation. Where the state has sustainability goals, the state as owner should set concrete and ambitious, sustainability-related expectations for SOEs, including on the role of the board, disclosure and transparency and responsible business conduct. The ownership policy should fully recognize SOEs' responsibilities towards stakeholders.

VII.A. Where the state has set sustainability goals, they should be integral to the state's ownership policy and practices. This includes:

VII.A.1. Setting concrete and ambitious sustainability-related expectations for SOEs that are consistent with the ownership policy and practices. In doing so, the state should respect the rights and fair treatment of all shareholders.
VII.A.2. Communicating and clarifying the state's expectations on sustainability through regular dialogue with the boards.
VII.A.3. Assessing, monitoring and reporting on SOEs' alignment with sustainability-related expectations and performance on a regular basis.

VII.B. The state should expect SOE boards to adequately consider sustainability risks and opportunities when fulfilling their key functions. The following prerequisites are essential for ensuring effective sustainability management at the enterprise level:

VII.B.1. SOE boards should review and guide the development, implementation and disclosure of material sustainability-related objectives and targets as part of the corporate strategy.
VII.B.2. SOEs should integrate sustainability considerations into their risk management and internal control systems, including by conducting risk-based due diligence.
VII.B.3. SOE boards should consider sustainability matters when assessing and monitoring management performance.

VII.C. The state should expect SOEs to be subject to appropriate sustainability reporting and disclosure requirements, based on consistent, comparable and reliable information:
VII.C.1. Sustainability reporting and disclosure should be aligned with high-quality internationally recognized standards that facilitate the consistency and comparability of sustainability-related disclosure across markets, jurisdictions and companies.
VII.C.2. Phasing in of requirements for annual assurance attestations by an independent, competent and qualified attestation service provider, in accordance with high-quality internationally recognized assurance standards should be considered.