Under the National Adaptation Planning Process

ALBANIA'S NATIONAL ADAPTATION PLAN

FINANCING STRATEGY

2026-2036

GREEN CLIMATE FUND

REPUBLIKA E SHQIPËRISË
MINISTRIA E TURIZMIT DHE MJEDISIT

UNDP

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List of Acronyms and Abbreviations

AEZ	Agro-Ecological Zones
AFD	Agence Française de Développement
AFSA	Albanian Financial Supervisory Authority
ALPEX	Albanian Power Exchange
ATOA	Association of Tour Operators and Agencies
AEZ	Agro-Ecological Zone
AZHBR	Agricultural and Rural Development Agency
BoA	Bank of Albania
BTRs	Biennial transparency reports
CBA	Cost-Benefit Analysis
CBAM	Carbon Border Adjustment Mechanism
CCA	Climate Change Adaptation
CCDR	Country Climate and Development Report
CfD	Contracts for Difference
CIF	Climate Investment Funds
CPEIR	Climate Public Expenditure and Institutional Review
CSA	Climate-smart agriculture
CSOs	Civil Society Organizations
CSRD	Corporate Sustainability Reporting Directive
DAE	Direct Access Entity
DEG	Deutsche Investitions und Entwicklungsgesellschaft
DFIs	Development Finance Institutions
DRM	Disaster Risk Management
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
ERP	Economic Reform Programme
EU	European Union
EV	Electric Vehicle
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FiPs	Feed-in Premiums
FiTs	Feed-in Tariffs
FNA	Financing Needs Assesment
GCA	Global Center on Adaptation
GCC	Green Guarantee Company

GCF	Green Climate Fund
GEF	Global Environment Facility
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IPARD	Instrument for Pre-Accession Assistance in Rural Development
IPPs	Independent power producers
JBIC	Japan Bank for International Cooperation
JICA	Japan International Cooperation Agency
KPI	Key Performance Indicator
LAPs	Local Adaptation Plans
MDB	Multilateral Development Bank
MFZ	Mediterranean Field Zone
MHEWS	Multi-Hazard Early Warning System
MRV	Measurement, Reporting and Verification
MTBP	Medium-Term Budget Programme
NAP	National Adaptation Plan
NBFI	non-banking financial institutions
NbS	Nature-based Solutions
NDA	National Designated Authority
NDC	Nationally Determined Contribution
NECP	National Energy and Climate Plan
NEEAP	National Energy Efficiency Action Plan
NFCS	National Framework for Climate Services
NRRP	National Road Resilience Programme
NMHS	National Meteorological and Hydrological Service
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PES	Payments for ecosystem services
PPA	Power purchase agreement
PPP	Public-Private Partnerships
RED II	Renewable Energy Directive
SLR	Sea Level Rise
SDCC	Strategic Document on Climate Change
SDGs	Sustainable Development Goals
SMEs	Small & Medium Enterprises
SUDS	Sustainable urban drainage systems
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
VCIC	Vietnam Climate Innovation Center

Executive Summary

Climate change poses a significant threat to Albania's people, economy, and natural resources. Increasingly frequent extreme weather events – from destructive flooding after heavy rains to prolonged droughts – are already impacting key sectors like agriculture, tourism, energy, and urban infrastructure.

Projections indicate that these climate hazards will intensify, with wetter periods bringing more severe floods and drier periods exacerbating water scarcity. In response, Albania is developing the National Adaptation Plan (NAP) for the period 2026-2036, as a strategic framework to build climate resiliency in the country through a series of climate change adaptation measures. However, a plan is only as effective as its implementation. Mobilizing adequate financing is critical for translating Albania's adaptation plans into action on the ground, for which the present NAP Financing Strategy has been prepared.

This document outlines a comprehensive NAP Financing Strategy in Albania, aligned with UNDP guidelines and the NAP priorities. This strategy covers Albania's priority adaptation sectors – tourism, agriculture and forestry, urban development, transport, energy – which were identified in the NAP as highly vulnerable to climate change. The NAP also includes cross-sectoral measures that affect several sectors or support the reinforcement of capacities for adaptation.

The Financing Strategy offers and estimate of the financing needs in these sectors across short-, medium-, and long-term timeframes and proposes options to meet those needs sustainably. All major funding avenues are considered: domestic public finance (national and local budgets), international public finance (multilateral and bilateral climate funds, development partners), private sector investment, and innovative mechanisms (such as green bonds and debt-for-climate swaps). The strategy also addresses the institutional arrangements required to coordinate and monitor adaptation financing, ensuring alignment with Albania's development planning and budgeting frameworks. It follows conventional guiding principles of being country-driven and fit for purpose, whole-of-governance, and using an inclusive approach.

The objectives of this financing strategy are:

- Estimate the NAP's Financing Needs
- Identify and Diversify Funding Sources
- Align Financing with National Systems
- Enhance Coordination and Efficiency
- Address Financing Gaps and Ensure Sustainability

By providing a structured approach to fund adaptation, this document seeks to enable Albania to move from planning to action. It is intended for use by national policymakers (particularly the Ministry of Environment and Ministry of Finance), NDA, sectoral ministries, as well as international partners and private sector stakeholders. Ultimately, successful implementation of the NAP Financing Strategy will safeguard Albania's socio-economic development against climate risks and contribute to the global goals of climate resilience. The Financing Strategy provides options to fund the 66

Total financial gap

USD 9.1 billion

adaptation measures that are included in the NAP and its Implementation Plan, for which the total budget needed was estimated in USD9,8 billion. Such actions were prioritized from a long-list of measures through the application of a multicriteria (MCA) and a cost-benefit analysis (CBA) resulting in:

- 21 measures in total for agriculture and forestry sectors
- 11 measures for tourism sector
- 9 measures for urban development sector
- 8 measures for energy sector
- 7 measures for transport sector
- 10 cross-sectoral measures

The Implementation Plan includes soft measures (policy, capacity building, communication, etc.) and green and grey infrastructure measures. The two latter represent a larger share of the total estimated cost of the plan, with five of the measures in the Plan accounting for approximately 80% of the total budget, amounting to around USD7.95 billion.

This full inventory of adaptation measures (66 in total) and pipeline projects totals approximately USDUSD ~USD9.8 billion in investment needs through 2036 (2036 to the long term I plan period, and 2042 over the long-term II extra execution plan period). Each sectoral plan was costed and prioritized, ensuring the most urgent and high-impact interventions (e.g. flood defenses, climate-smart agriculture and forestry, ecosystem-based adaptation) are front-loaded in the implementation schedule.

The **financial gap** identified varies across sectors; by and large, urban development has the largest gap (USD2.7 billion), followed by transport (USD2.3 billion), forestry (USD1.93 billion), energy (USD1.66 billion), agriculture (USD0.52 billion) and cross-sectoral (USD0.25 billion). Tourism shows a positive gap with a slight financial surplus of (USD6 million). The total financial gap amounts to USD9.1 billion. Current committed financing includes approximately USD300 million in public funds from Medium-Term Budget Programme (MTBP) and adopted sectorial strategic documents, and around USD400 million from the private sector and international funds.

The strategy **identifies and prioritizes financing sources at international, domestic, and private levels**. In particular, the Green Climate Fund (GCF) is positioned as a central partner for Albania's adaptation finance – building on GCF's support for NAP formulation and recent project approvals. Other key sources include the Global Environment Facility (GEF), Adaptation Fund, World Bank and other multilateral development banks, European Union Instrument for Pre-Accession (IPA) funds, bilateral donors, as well as Albania's national budget and private sector investors. A mapping of these sources is provided, aligning each funding source to relevant sectoral needs and project types.

A robust **financing architecture** is proposed to mobilize and blend funds. Innovative instruments such as green bonds (sovereign or municipal bonds for resilience projects), results-based climate finance, blended finance facilities (combining grants, concessional loans, and private capital), and public-private partnerships (PPPs) for climate-resilient infrastructure are emphasized. These mechanisms will help leverage Albania's limited public funds by attracting private investment The strategy draws on international best practices yet context-appropriate for Albania. Albania's NAP Financing Strategy establishes a comprehensive and adaptive framework to align priority investments with suitable financial instruments from domestic, international, public, and private sources. The approach ensures efficient, high-impact resource allocation while addressing economic, institutional, and regulatory barriers that may impede implementation. It also incorporates a periodic review mechanism to adjust financing approaches as conditions evolve. The proposed instruments are proposed to be used jointly and strategically for example by blending grants, concessional loans and commercial capital with other innovative instruments, such as PPPs for solar irrigation and tourism hubs, supported by capacity-building and readiness work with line ministries and municipalities.

Albania's model foresees a modest but growing role for the private sector, projected to reach up to 3% of the total committed financing, coupled to innovative blending finance solutions, could potentially increase the role of the private sector, especially in energy and tourism. The bulk of financing will continue to rely on domestic budgets, multilateral development banks (MDBs) concessional loans, and grants from mechanisms such as the Green Climate Fund (GCF) and European Union's Instrument for Pre-accession Assistance (EU IPA). Municipalities are also expected to co-finance selected urban resilience measures through local levies or MTBP reallocations. The financing structure uses blended concessional loans, grant-loan mixes, and performance-based disbursements embedded in binding contractual frameworks. The strategy reflects a pragmatic, scalable model tailored to Albania's fiscal capacity and institutional readiness, while positioning the country to leverage growing international climate finance flows through 2036.

To **safeguard the NAP's implementation against climate and financial risks**, the strategy integrates instruments like climate risk insurance, contingency funds, and donor standby arrangements. These include expanding insurance coverage for agriculture and property (building on regional risk-pooling initiatives), maintaining fiscal buffers or emergency response funds for extreme events, and arranging contingent credit or grant support that can be triggered post-disaster. Such measures will provide financial resilience, ensuring that catastrophic events do not derail adaptation progress.

A clear **implementation roadmap of the priority adaptation measures across sectors** is outlined in the document Implementation Plan for Prioritized Adaptation Actions that includes a timeline with short-term (next 2–3 years), medium-term (to 2032), and long-term (to 2036 and continuing until 2050) phases, aligned with Albania's NAP timeline. In the short term, focus is on establishing enabling conditions – including operationalizing a national adaptation fund, securing initial GCF and donor funding for "ready" projects, building institutional capacities, and integrating adaptation into annual budgets. By the medium term, major sectoral projects (e.g. irrigation upgrades, forest protection, urban flood defenses) will be under full implementation with blended financing in place, and private-sector engagement (e.g. PPP projects, green bond issuance) will be scaling up. In the long term, the strategy envisions sustainable financing flows with greater domestic budget allocation and self-sustaining mechanisms (such as

revolving funds or market-based instruments) taking hold. The roadmap includes milestones and responsible agencies for each phase. Over the ten-year implementation horizon (2026–2036), the average annual investment would amount to USD 712 million, equivalent to roughly 2.5% of the 2025 GDP. This estimate is based on the annual disbursements from the Implementation Plan, which outlines the distribution of adaptation investment disbursements from 2025 to 2042, totaling approximately USD 9.8 billion. The amounts vary each year, reflecting the phased nature of the investment plan. While substantial, this level of investment remains within a fiscally manageable range, particularly if supported through concessional climate finance, well-sequenced budgeting, integration into Albania's public investment planning frameworks, and through private sector involvement.

A performance **MEL (Monitoring Evaluation and Learning) framework** is provided to track financing strategy implementation. Key indicators include the amount of adaptation finance mobilized (by source), number of projects funded and implemented, and progress toward closing the adaptation funding gap. A results matrix with targets, timelines, and responsible institutions (e.g. Ministry Environment, Ministry of Finance, line ministries for each sector) will enable regular monitoring. Feedback mechanisms – such as annual progress reviews and a mid-term evaluation in line with NAP progress reports – are built in to allow adaptive management of the financing strategy. This ensures accountability and a continuous learning process, with strategy adjustments made based on what is working or where new opportunities arise.

The strategy presented in this document is designed to be ambitious yet achievable with a strategic target of mobilizing 20% from domestic resources by 2036. It recognizes Albania's fiscal constraints and the competition for international climate funds, but also the significant cost of inaction (climate damages could reach 7% of GDP without adaptation). By institutionalizing climate budgeting, domestic resource mobilization, maximizing partnerships – especially with the GCF (Given GCF's adaptation focus, Albania should target its pipelines to those funds, emphasizing co-benefits, such as jobs, water security) and other donors – and catalyzing private sector participation, Albania can mobilize the estimated USD9.8 billion needed this decade for resilience investments. This financing strategy thus serves as a roadmap for securing and deploying those resources effectively, in full alignment with national priorities and UNDP's guidance on sustainable adaptation finance.

Total Investment (2025–2042)

$9.8 billion

By 2036, **20%** of financing is planned to come from Albania's public resources.

Annual Investment (2026–2036)

$712 million

3 % of total financing is expected from the private sector, with potential growth through blended finance and PPPs.

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Introduction
Context and Strategic Alignment

1.1 Background and Rationale

Albania is highly vulnerable to climate change, facing increased risks from floods, droughts, wildfires, and landslides. Without proactive measures for adaptation, climate change could reduce the country's GDP by around 7% by 2050[1]. These climate impacts directly threaten Albania's economy and development.

The impacts in the NAP priority sectors are varied. For instance, agriculture (which employs around 36% of the workforce and is vital for rural livelihoods) suffers from droughts and shifting growing seasons, potentially reducing crop yields by 20% by 2030 and food security. The tourism sector – which in pre-pandemic years grew to 6.4 million foreign visitors and 8.5% of GDP – is vulnerable to extreme heat, water shortages, and coastal degradation, which threatens 60% of Adriatic infrastructure. Urban areas like Tirana and other cities face flooding due to intense rainfall overwhelming outdated drainage systems (e.g. 40% of Tirana's drainage systems are climate vulnerable). The transport network (roads, bridges) can be damaged by floods or landslides, disrupting connectivity. The energy sector, which relies heavily on hydropower for electricity, is particularly climate-sensitive: reduced rainfall, higher evaporation, and siltation accrued as a result of heavy rainfalls are already decreasing hydropower production, making energy supply less reliable. Studies indicate that by 2030, annual electricity output from Albania's large hydropower plants could drop by 15–20% due to climate change[2]. At the same time, energy demand is projected to grow (up 77% by 2030), compounding the challenge. This highlights the urgent need for adaptation in the energy sector, through actions such as a diversification of generation sources and efficiency improvements.

Overall, without adaptation, climate change could impose severe economic costs on Albania. Beyond direct damage to assets, these impacts can slow GDP growth, strain public finances (through disaster relief costs), and undermine development gains. Indeed, it is estimated that the cost of inaction – the damages from climate events if no protective measures are taken – would far exceed the costs of proactive adaptation.

1.2 NAP context and key adaptation measures

Recognizing these risks, Albania has been actively developing its climate change adaptation policy framework over the past decade. A milestone in this process was the formulation of the National Adaptation Plan (NAP) for climate change. The NAP provides a strategic, long-term vision for adaptation, aiming to integrate climate resilience into all relevant sectors of development planning.

Albania launched its NAP process in 2015 with support from international partners. A stocktaking assessment identified gaps in data, institutional capacity, and policy integration, guiding the formulation of adaptation priorities. In 2019, the Government of Albania finalized the NAP document (titled "National Adaptation Planning to Climate Change in Albania – Framework for the Country Process"), which was subsequently submitted to the UNFCCC in September 2021. The NAP was developed under the leadership of the Ministry of Environment with input from an inter-ministerial working group and stakeholders across sectors. It aligns with national development goals and Albania's commitments under the Paris Agreement. The Climate Financing Strategy for Albania, developed as an integral component of the forthcom-

1. World Bank, *Investing in Albania's Resilience: A Path to Protect Lives and Secure Growth* (Washington, DC: World Bank, 2024), https://www.worldbank.org/en/news/press-release/2024/11/25/investing-in-albania-s-resilience-a-path-to-protect-lives-and-secure-growth
2. IFC, "IFC Providing Climate Adaptation Financing to Support Albania's First Large Scale Solar Photovoltaic Power Plant," press release, April 24, 2023, https://www.ifc.org/en/pressroom/2023/ifc-providing-climate-adaptation-financing-to-support-albanias-f

ing (2026-2036) NAP, is closely aligned with both national and international policy frameworks. It supports the implementation of Albania's updated Nationally Determined Contributions (NDCs) by identifying and mobilizing resources for priority adaptation measures that advance the country's climate targets. Simultaneously, the strategy contributes to the achievement of the Sustainable Development Goals (SDGs), particularly those related to climate action, sustainable infrastructure, food security, and resilient livelihoods, by promoting investments that generate socio-economic co-benefits. At the international level, the strategy is harmonized with the GCF Country Work Programme, enabling Albania to strengthen its pipeline of fundable projects and improve access to international climate finance. It also complements regional instruments such as the EU IPA, creating synergies between adaptation priorities and broader development cooperation objectives in the Western Balkans. Through this integrated approach, the strategy enhances coherence, effectiveness, and sustainability in financing climate resilience across sectors and scales.

The NAP 2026–2036 was developed through a new planning process that began in July 2021, integrating updated national, local and sectoral climate risk data and costings. As part of this process[3], Albania identified 66 Priority Adaptation Actions (PAs) to be implemented through 2036 across six key sectors. These actions were selected from a broader list of adaptation options using a rigorous prioritization methodology, which considered factors such as effectiveness, cost-benefit, and urgency.

The measures, which are included in Table 1, are also summarized below by sector, with examples of key actions in each:

Table 1. Implementation activities for the adaptation measures.

No.	Sector	Adaptation Measure	Budget (USD)	Execution period
1	Cross-sectoral	Strengthening Regional Resilience: Supporting the Western Balkans Adaptation Roadmap	315.000	2028-2031 (3 years)
2	Cross-sectoral	Optimizing Climate Coordination: Strengthening the IMWGCC Framework	420.000	2027-2029 (2 years)
3	Cross-sectoral	Enhancing Capacities for Adaptation: Support for the Climate Change Technical Group and create and capacitate a Steering Group	745.000	2027-2030 (3 years)
4	Cross-sectoral	Enhancing climate resilience through improved data systems	1.500.000	2028-2031 (3 years)
5	Cross-sectoral	Nature-based solutions and Biodiversity Net Gain Developer Schemes	242.793.396	2029-2025 (6 years)
6	Cross-sectoral	Fostering Climate Resilience Awareness Raising and Training for Adaptation and Mitigation	1.500.000	2027-2031 (4 years)

3. Implementation Plan for Prioritized Adaptation Actions (Ministry of Environment of the Republic of Albania, 2025).

No.	Sector	Adaptation Measure	Budget (USD)	Execution period
7	Cross-sectoral	Innovative Climate Finance Mechanisms: Piloting Sustainable Financing Strategies	6.080.000	2028-2032 (4 years)
8	Cross-sectoral	Piloting risk management Assessments for Climate-Resilient Businesses	200.000	2028-2031 (3 years)
9	Cross-sectoral	Promoting Gender-Sensitive Climate Adaptation: Training Stakeholders and Developing Inclusive Tools	143.000	2030-2032 (2 years)
10	Cross-sectoral	Educating Communities: Adaptation and disaster awareness-raising	3.025.000	2030-2034 (4 years)
11	Agriculture	Empowering farmers: financial support for climate-resilient infrastructure	29.600.000	2028-2038 (10 years)
12	Agriculture	Safeguarding farmers: Compensation and assistance programs for disaster recovery	102.250.000	2029-2039 (10 years)
13	Agriculture	Action Plan for Invasive Species Under Changing Climate Conditions	160.000	2030-2033 (3 years)
14	Agriculture	Strengthening Flood Protection: Riverbank Restoration and Floodplain Expansion Across Key Albanian Rivers	179.022.000	2026-2032 (6 years)
15	Agriculture	Implementing Habitat Creation and Nature-Based Solutions to Combat Soil Erosion	41.787.500	2028-2034 (6 years)
16	Agriculture	Enhancing IGEO's (Institute of Geosciences) Capacity for Coastal Monitoring and Data Provision on Environmental Changes and risks	322.200	2028-2030 (2 years)
17	Agriculture	Expanding and Modernizing Irrigation Systems for Enhanced Agricultural Resilience	249.123.998	2027-2033 (6 years)
18	Agriculture	Sustainable Water Security through Rainwater Harvesting Infrastructure	75.849.163	2027-2033 (6 years)
19	Forestry	Enhancing Forestry Efficiency through EU Regulatory Compliance	17.600.000	2026-2032 (6 years)
20	Forestry	Advancing Sustainable Forestry: Afforestation Fund and Green Procurement Initiatives	8.540.000	2028-2032 (4 years)
21	Forestry	Revitalizing Damaged Lands: Integrating NbS and EBA with Agroforestry Practices	1.494.738.115	2026-2032 (6 years)
22	Forestry	Strengthening Forest and Pasture Protection: Investments in Human Capacity and Firefighting Resources	475.000	2028-2032 (4 years)

No.	Sector	Adaptation Measure	Budget (USD)	Execution period
23	Forestry	Advancing Afforestation: Establishing Regional Nurseries for Drought-Resistant Species	2.249.360	2026-2036 (10 years)
24	Forestry	Supporting Migration of Rare and Endemic Forest Species to higher altitudes	894.780	2028-2034 (6 years)
25	Forestry	Restoring Vital Ecosystems: Protecting and Regenerating Coastal and Riverine Green Belts and Protective Ecosystems	145.561.688	2026-2032 (6 years)
26	Forestry	Sustainable Financing Through Payment for Ecosystem Services (PES)	16.000.000	2033-2039 (6 years)
27	Forestry	Integrated Ecosystem Restoration and Resilience: Addressing Soil Erosion in Key Albanian Regions	62.573.351	2033-2041 (8 years)
28	Forestry	Combating Erosion and Flooding: Strategic Habitat Restoration and Reforestation in Key Albanian Regions	124.943.176	2026-2034 (8 years)
29	Forestry	Sustainable Landscape Management: Enhancing Water Quality and Biodiversity at Viroi Lake in Gjirokastër	479.334	2033-2036 (3 years)
30	Forestry	Enhancing Climate Resilience in National Parks and Protected Areas	257.461.805	2032-2040 (8 years)
31	Forestry	Restoration of forest layers to protect crops in Vlora	3.282.947	2032-2039 (7 years)
32	Tourism	Strategic Spatial Planning for tourism: Redirecting Development from High-Risk Areas	600.000	2026-2028 (2 years)
33	Tourism	Climate-proofing tourism infrastructure: Incentive packages for climate-proofing the tourism sector infrastructure	800.000	2030-2033 (3 years)
34	Tourism	Strategic Planning for Coastal Resilience: Buffer Zones and Sea Gate Adaptations	504.000	2029-2032 (3 years)
35	Tourism	Protecting Vlora Bay: Preserving Posidonia Habitats and Underwater Cultural Heritage Against Climate Impacts	3.606.119	2034-2038 (4 years)
36	Tourism	Strengthening the policy and regulatory framework for Sustainable Tourism: Policy Review and Regulatory Enhancement	120.500	2028-2032 (4 years)
37	Tourism	Integrating Climate Data for Sustainable Tourism: Guidelines for resilient business management and National Reporting	290.000	2026-2029 (3 years)

No.	Sector	Adaptation Measure	Budget (USD)	Execution period
38	Tourism	Climate-proofing Tourism Infrastructure: Adaptive Designs for Climate Risk Mitigation	TBC	2027-2037 (10 years)
39	Tourism	Protecting Coastal Zones: Integrated Regulations, Planning and Management for Climate Resilience and Sustainable Development	657.000	2029-2034 (5 years)
40	Tourism	Building Climate Resilience Capacity: Training Tourism Operators in Sustainable Practices and Adaptation Strategies	430.000	2027-2029 (2 years)
41	Tourism	Digital Hubs for Climate-Resilient Tourism: Sharing Knowledge and Best Practices	34.000	2027-2029 (2 years)
42	Tourism	Protecting Tourism Assets: Enforcing Regulations and Restoring Ecosystems for Sustainable Development	1.450.000	2028-2032 (4 years)
43	Urban development	Maritime and Territorial Planning for Climate Resilience: Preparing for Rising Seas and Changing Environments	290.000	2031-2034 (3 years)
44	Urban development	Strategic Spatial Planning for Risk Reduction: Redirecting Developments and Managing Surface Water Flood Risks	3.027.000	2028-2034 (6 years)
45	Urban development	Incentive schemes to increase extreme temperature resilience of the building stock	2.715.000.000	2033-2043 (10 years)
46	Urban development	Integrating Green Spaces into Public Infrastructure Development through Green Public Procurement	380.000	2030-2033 (3 years)
47	Urban development	Restoring Green Corridors: Reforestation and Urban Greening Initiatives	568.544	2029-2035 (6 years)
48	Urban development	Climate Risk Assessment for Durrës, Elbasan, Fier, and Beyond: Developing a Comprehensive Vulnerability Map	196.000	2028-2032 (4 years)
49	Urban development	Flood event emergency plans	2.500.000	2027-2031 (4 years)
50	Urban development	Enhancing Urban Resilience: Assessing Greenspaces and Sustainable Drainage Solutions	TBC	2026-2034 (8 years)
51	Urban development	Sustainable Urban Design: Conservation and Restoration of Permeable and Infiltration Areas	1.200.000	2035-2040 (5 years)
52	Energy	Protecting Energy Infrastructure against strong winds: Rehabilitating Substations and Transmission Lines	986.298.000	2031-2037 (6 years)

No.	Sector	Adaptation Measure	Budget (USD)	Execution period
53	Energy	Enhancing Building Efficiency: Energy Performance Certificates and Resilient Standards	3.500.000	2031-2036 (5 years)
54	Energy	Exploring the Energy sector Potential: Demand-Side Management and Energy Storage Studies	2.900.000	2029-2032 (3 years)
55	Energy	Protecting the energy infrastructure: Monitoring Emergency and Risk Areas	875.000	2028-2032 (4 years)
56	Energy	Enhancing Heatwave resilience through Efficient Air Conditioning Technology Deployment and Climate Refuges	38.200.000	2036-2041 (5 years)
57	Energy	Optimizing Renewable Energy for Resilient Systems: Grid Innovation and Storage Investments	176.850.000	2033-2043 (10 years)
58	Energy	Advancing Gender Equity in Energy: Training and Support for Women in Renewable Energy Projects	4.900.000	2027-2032 (5 years)
59	Energy	Building Resilience in Hydropower: Optimized Operations and Strengthened Infrastructure	747.050.000	2028-2034 (6 years)
60	Transport	Regular Vulnerability and Risk Analysis and Definition of Resilience-Building Measures for Road Infrastructure	457.000	2028-2034 (6 years)
61	Transport	Geological Studies for Sustainable Roads: Bio-Engineering Solutions to reduce Erosion and Flood risks	2.900.000	2030-2036 (6 years)
62	Transport	Advancing Sustainable and Climate Resilient Urban Mobility: Developing and Reviewing Urban Mobility Plans	1.200.000	2034-2038 (4 years)
63	Transport	Adapting Critical Transport Infrastructure: Advanced Risk Assessment and Resilient Design Solutions	2.700.000	2028-2030 (2 years)
64	Transport	Integrating Nature-Based Solutions and environmental based adaptation for Transport sector resilience: Enhancing Infrastructure with Nature-Based and Ecosystem-Based Adaptation	2.029.460.000	2031-2036 (5 years)
65	Transport	Climate Resilience Transport Policies: Embedding Climate Adaptation in Regulatory Frameworks	218.000	2027-2030 (3 years)
66	Transport	Innovative Partnerships for Sustainable Transport: Funding Climate-Resilient Transport Infrastructure	1.900.000	2036-2041 (5 years)

Agriculture and Forestry Sector

Agriculture (including crops, livestock, and irrigation) is one of the most climate-sensitive sectors. Adaptation needs in agriculture total approximately USD678 million (through 2036), making agriculture one of the smaller sectors in terms of required investment (about 7% of the multi-sector total). This reflects the mix of measures in the sector: while there are a few large capital projects, many agricultural adaptation actions are "soft" measures or lower-cost interventions aimed at farmers' resilience. The agriculture adaptation measures (8 in total) include improving water management and infrastructure for climate resilience (e.g. rehabilitating irrigation and drainage systems and promoting rainwater harvesting in drought-prone areas), implementing nature-based solutions on farmlands (such as floodplain restoration and riverbank protection to reduce flood risk on agricultural land), providing financial protection for farmers (crop insurance or compensation funds for climate disaster losses), and enhancing agricultural services (developing an Action Plan for invasive species under changing climate conditions, and boosting climate monitoring capacity for coastal and agricultural zones). For example, one major initiative is Expanding and Modernizing Irrigation Systems to increase irrigated areas from 230,000 to 360,000 ha, prioritizing regions like Durrës, Elbasan, Fier, Gjirokastër, Kukës, etc. that are highly drought vulnerable.

Forestry and ecosystem adaptation needs, with 13 priority measures, are estimated at about USD2.13 billion, roughly 21% of Albania's total estimated adaptation costs – the second-largest sector after urban. This substantial need is driven by a few very large-scale initiatives to restore and protect Albania's forests and landscapes, which are seen as both vulnerable to climate change and crucial for providing ecosystem services (erosion control, flood regulation, etc.). The plan's single most expensive adaptation measure is a nationwide afforestation and agro-forestry program to restore degraded lands and improve watershed resilience. Supporting actions include establishing regional forest nurseries for drought-resistant species, and programmes to assist migration of rare/endemic species to suitable habitats as the climate shifts. Other measures aim to protect against floods and erosion by restoring coastal and riverine green belts, implementing integrated erosion control (like bio-engineering slopes and reforesting erosion hotspots), and enhancing the resilience of protected areas (climate adaptation plans for national parks). Capacity-building measures, like strengthening wildfire prevention and response and introducing Payment for Ecosystem Services (PES) schemes to fund forest conservation, are also prioritized. For instance, a measure on Restoring Vital Ecosystems focuses on regenerating coastal wetlands and riparian forests to act as natural buffers, while another addresses soil erosion in key regions via terracing, re-vegetation, and check dams.

Tourism Sector

Tourism is a significant and growing part of Albania's economy, particularly along the coast. While tourism-specific adaptation investments are relatively smaller compared to heavy infrastructure sectors, they are vital for local economies. The tourism sector's adaptation needs are estimated at under USD8.4 million in total – a relatively low figure (<<1% of total adaptation costs). In the plan, 11 measures, which are largely "soft" measures given the tourism sector's needs for planning and capacity. They include climate-informed spatial planning for tourism development (to avoid high-risk zones like floodplains or eroding coastlines), updating building standards and incentive programs for climate-proofing tourism facilities,

and policy and regulatory reforms to integrate climate risk management in tourism operations. An important ecosystem-based measure in tourism is the Protecting Vlora Bay's Underwater Heritage initiative, which involves preserving Posidonia seagrass habitats and underwater cultural heritage sites against climate impacts (through actions like seabed mapping, restoration of seagrass meadows, and establishing marine protected areas). An important note to be mentioned is the fact that maybe the costliest measure for tourism is not calculated. There was no sufficient information at this stage to estimate the total costs for the measure that include refurbishment of tourism infrastructure to make it climate resilient. Other measures focus on capacity building – e.g. training tourism operators in adaptive practices, creating digital knowledge hubs for climate-resilient tourism, and enforcing regulations to protect natural assets (like stricter enforcement against illegal coastal development and ecosystem degradation). While most tourism measures are low-cost enabling activities (policy, training), they are crucial for safeguarding the natural and cultural assets that the tourism industry depends on.

Urban Development Sector

Urban development (cities and towns) represents the largest share of adaptation costs – about USD2.7 billion, or ~28% of the total. Albania's cities are on the frontline of climate impacts like flash flooding, heatwaves, and coastal erosion, and adapting urban infrastructure is capital-intensive. The Implementation Plan prioritizes 9 measures for urban resilience, which cover both planning-level interventions and specific projects. Several measures involve integrating climate change into urban and territorial planning: e.g. updating city master plans to account for sea-level rise and flood risk, and redirecting new developments away from high-risk areas (using zoning and land-use regulations). Another key area of intervention is strengthening the resilience of buildings. A major measure focuses on incentive schemes to retrofit structures with features such as insulation and cool roofs, helping them withstand extreme temperatures and other hazards. This effectively serves as a climate resilience upgrade program for the building stock—an especially urgent priority given rising urban heat. Improving urban infrastructure is also prioritized in the Implementation Plan: e.g. conducting city-level climate risk assessments and vulnerability maps (starting with cities like Durrës, Elbasan, Fier) to guide investments, developing flood emergency response plans for municipalities, and assessing options for sustainable urban drainage and more green spaces to reduce flooding. Priority "Green" measures include urban greening and reforestation initiatives to create green corridors and mitigate heat island effects. Overall, the urban measures aim to build cities that can better handle heavy rainfall and heatwaves – through upgraded infrastructure, improved planning, and preparedness.

Energy Sector

Adaptation needs in the energy sector are estimated at about USD1.96 billion (≈20% of total adaptation costs), reflecting the heavy investments required to climate-proof Albania's power generation and distribution systems. Energy is a critical sector for climate change adaptation in Albania – with over 95% of electricity coming from hydropower, the country is highly vulnerable to droughts and shifting precipitation patterns. The sector's adaptation measures (8 in total) address both the supply side and demand side of energy. On the supply/infrastructure side, a major grey measure aims to protect energy infrastructure from extreme weather – for example, rehabilitating power substations and transmission lines to withstand strong winds and storms (especially in areas where aging infrastructure is prone to weather-related failures). Another

costly measure is building resilience in hydropower generation, which includes optimizing reservoir operations for new climate realities and reinforcing dams and related structures. On the demand and efficiency side, measures include promoting efficient cooling technologies and establishing "cool refuges" for heatwave events (to reduce stress on the electric grid and protect vulnerable populations during extreme heat), as well as enhancements in the regulatory framework like introducing energy performance standards for buildings factoring in future climate (ensuring buildings remain habitable in hotter climates).

There are also exploratory measures like demand-side management and energy storage studies to improve energy system flexibility under climate variability, and initiatives to involve women and vulnerable groups in renewable energy projects (building social resilience). Together, these actions aim to ensure Albania's energy system remains reliable in the face of hydrological changes and peak demand extremes.

Transport Sector

The transport sector's adaptation needs are approximately USD2.03 billion (about 21% of the 66 measures' total estimated budget). Albania's transport infrastructure – roads, railways, ports, and airports – must be strengthened to endure extreme weather (floods, landslides, extreme heat) to ensure connectivity and safety. Seven priority measures have been identified, many of these are strategic or planning-focused, reflecting the need to systematically climate-proof the transport network. For example, conducting regular climate vulnerability and risk assessments for road infrastructure is identified as a measure – this means periodically analyzing which road segments or bridges are at highest risk from floods, landslides, or extreme heat, and proposing remedies. Based on such assessments, the plan prioritizes bio-engineering solutions for road stabilization (e.g. slope reinforcement with vegetation, improved road drainage) and geological studies to guide road design in erosion-prone areas. A very significant measure (green measure) in this sector (also budget wise) is the integration of nature-based solutions (NbS) into transport infrastructure – for instance, restoring wetlands near roads to buffer floodwaters or planting trees along highways to prevent landslides and provide shade. On the policy side, the selected measures include interventions such as updating transport design standards and maintenance regimes to account for climate risks (climate-resilient road design guidelines) and developing innovative financing partnerships to fund resilient transport projects (e.g. engaging private investors via public-private partnerships for upgrading infrastructure with resilience components). The transport measures thus combine immediate risk reduction efforts with longer-term shifts in how transport systems are planned and financed under a changing climate.

Cross sector

In addition to the sector-specific measures, the plan includes also USD256.7 million cross-sectoral adaptation measures (10 in total) that benefit multiple sectors and represent 2.6% of the total adaptation costs. These are often enabling actions such as strengthening regional climate resilience coordination (e.g. a Western Balkans Adaptation Roadmap for transboundary risks), improving climate data systems (upgrading the hydro-meteorological network and data sharing), and piloting innovative finance mechanisms (like climate funds or incentives that cut across sectors).

While these cross-cutting actions are not broken down by sector here, they play an important role in the overall adaptation effort, ensuring coherence and leveraging synergies among sectoral actions.

1.4 NAP Financing Strategy

The NAP serves as the guiding framework for adaptation, but it does not come with pre-allocated funding. It is essentially a list of what needs to be done. Hence, alongside the updated NAP, a financing strategy for climate adaptation is drafted to guide future adaptation financing. This Financing Strategy is the companion piece that addresses how those actions can be paid for. By estimating the costs of adaptation measures and exploring funding sources, the strategy aims to operationalize the NAP. It takes forward the NAP's recommendation that Albania needs an "innovative financing approach" tapping all relevant sources – international, domestic, private, and public The NAP Financing Strategy will ensure that sufficient and sustainable financial resources are mobilized and effectively allocated to implement Albania's adaptation priorities. This overarching goal can be broken down into several specific objectives:

1 OBJECTIVE

Estimate Adaptation Financing Needs and Gaps

Quantify the funding required to implement prioritized adaptation measures in the short, medium, and long term, based on cost–benefit analysis (CBA). This includes detailed cost estimates by sector (tourism, agriculture, urban development, transport, energy) and by time frame, aligned the NAP's targets. The analysis also identifies financing gaps by comparing total estimated needs with currently committed funding. These commitments include allocations under the Medium-Term Budget Program (MTBP) 2025–2027, secured and pipeline international funding, and financing commitments outlined in national sectoral strategies adopted by the government, as detailed in the supplementary *Financial Needs and Gap Assessment for adaptation in Albania*.

2 OBJECTIVE

Identify and Diversify Funding Sources

Map out all potential sources of adaptation finance – domestic and international, public and private. The strategy aims to clarify how much can realistically be expected from each source and how to access these funds. A key objective is to diversify the funding base so that Albania is not overly reliant on any single source. This includes exploring innovative financing mechanisms beyond traditional grants.

3 OBJECTIVE

Align Financing with National Processes

Integrate adaptation financing into Albania's national budgeting and planning frameworks. A major aim is to embed climate adaptation into the MTBP and annual budget cycles, thereby institutionalizing funding for adaptation. Similarly, the strategy seeks to align with Albania's public finance management reforms and the emerging Integrated National Financing Framework (INFF) for the SDG, to ensure coherence.

By achieving these objectives, Albania will be better positioned to implement its NAP effectively and meet its adaptation targets. Progress toward these objectives will also demonstrate to international partners that Albania is taking a systematic, results-oriented approach to adaptation finance, which can improve the country's access to climate funds. This strategy is also embedded in its broader policy and institutional context. Financing these priorities supports Albania's NAP, EU integration goals and priorities contributes to fulfilling the adaptation components of the NDC. Though the challenge that remains is closing the gap between identified needs and on-the-ground action – a gap largely attributable to financing constraints. Adaptation is underfunded, and capacity to access global climate funds is still developing. The following sections delve into the specifics of those financing needs and the strategies to meet them.

4 OBJECTIVE

Enhance Coordination and Effectiveness

Define institutional roles and coordination mechanisms for managing adaptation finance. The strategy will outline how different actors – government ministries, donors, private sector, civil society – can collaborate in mobilizing and deploying funds. It also seeks to improve the efficiency of finance use by avoiding overlaps, ensuring funds target priority needs, and strengthening the capacity to absorb and manage resources.

5 OBJECTIVE

Address Financing Gaps and Sustainability

Identify where projected financing falls short of needs (the financing gap) and propose solutions to bridge that gap. The strategy places emphasis on sustainability, aiming for long-term financing solutions rather than one-off projects. This includes exploring how to maintain funding flows beyond the life of individual donor projects, through domestic resource generation or revolving mechanisms.

6 OBJECTIVE

Recommend Actions and Reforms

Provide actionable recommendations for policymakers. This ranges from policy measures (e.g. instituting climate budget tagging, establishing a national climate fund) to project development (e.g. preparing a pipeline of bankable adaptation projects for international funding) and capacity building (e.g. training sectoral ministries in accessing climate finance). The strategy sets out a financing action plan for the next 5–10 years.

02

NAP Implementation Framework

This chapter presents the best available estimates of adaptation financing needs, disaggregated by sector and time horizon, drawing on the Financial Needs Assessment and related analyses. It also compares these needs with existing funding commitments, including national budget allocations, international support, and sectoral strategy commitments, to identify financing gaps.

To develop a robust financing strategy, it is essential to have a clear understanding of the scale of resources required to implement Albania's adaptation priorities outlined in the NAP 2026–2036. Beyond quantifying needs, the chapter explores key barriers to mobilizing adaptation finance, such as economic constraints, fragmented donor engagement, limited private sector participation, and institutional and regulatory challenges. It concludes by outlining potential enabling mechanisms, including blended finance structures and the integration of adaptation into broader development finance systems. Together, these elements provide the foundation for prioritizing which NAP actions can realistically be implemented and when, helping to inform a feasible and strategic approach to adaptation financing.

2.1 Methodological Approach for the Identification and Prioritization of Adaptation Measures

The process for identifying and prioritizing 66 climate adaptation measures in Albania followed a rigorous multi-step methodology, combining Multi-Criteria Analysis (MCA) and Cost-Benefit Analysis (CBA) to ensure technical, economic, and social robustness. This methodology, the full content of the analyses and the related results are available in the report *"Implementation Plan for Prioritized Adaptation Actions"*[4] .A **Multi-Criteria Analysis (MCA) evaluated an initial refined list of 114 potential measures** against three groups of criteria: feasibility (financial, technical, institutional), social co-benefits (including gender equity and vulnerable groups), and strategic alignment with national priorities. Each criterion was weighted and scored, leading to the prioritization of measures scoring above 70%. The prioritized measures span sectors such as agriculture, forestry, energy, tourism, urban development, and transport

After this, a **Cost-Benefit Analysis (CBA)** was applied to the 21 infrastructure-related priority measures to assess economic efficiency through cost-benefit ratios and Net Present Value (NPV). This included stakeholder consultations, GIS analysis, data extrapolation, and sensitivity analyses to confirm high-impact and cost-effective interventions.

2.2 Implementation Plan (2026-2036)

Once the measures were selected, an **Implementation Plan** was developed to operationalize the 66 prioritized measures. It defines institutional responsibilities, timelines, financing strategies, and monitoring indicators, while promoting alignment with the NAP's Monitoring, Evaluation & Learning (MEL) framework.

4. Implementation Plan for Prioritized Adaptation Actions (Ministry of Environment of the Republic of Albania, 2025).

Objectives

The *general objective* of this Implementation Plan is to establish a coherent and actionable framework to guide the delivery of priority climate change adaptation measures in Albania across key sectors: Agriculture, Forestry, Energy, Tourism, Urban Development, Transport, and Cross-sectoral domains. The Plan is designed to transform sectoral adaptation priorities into concrete interventions that are technically feasible, financially viable, and socially inclusive. To achieve its purpose, the Plan is structured around the following *specific objectives*:

1. Establish the institutional and operational conditions for effective implementation, by defining roles and responsibilities, coordination mechanisms, and resource mobilization strategies at national and local levels.
2. Strengthen multi-level and cross-sectoral collaboration among ministries, public agencies, municipalities, and other key stakeholders to ensure alignment, coherence, and ownership in the implementation of adaptation measures.

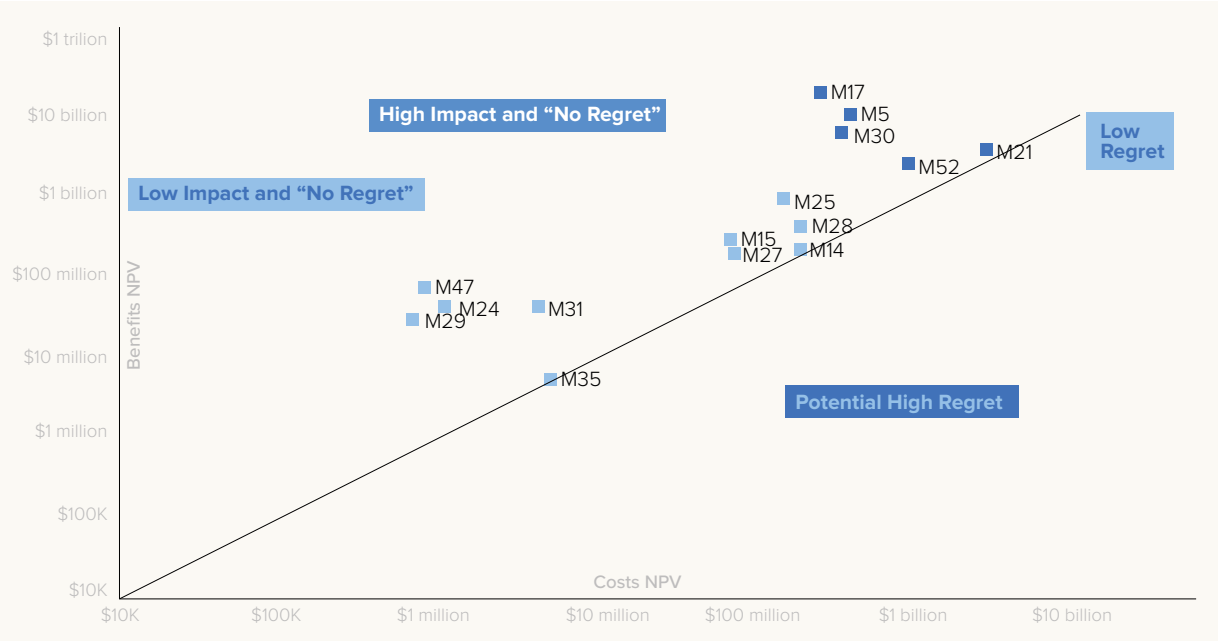
These objectives lay the foundation for a comprehensive implementation framework that defines institutional roles, establishes implementation timelines, assesses financial needs and opportunities, and sets the basis for monitoring and evaluation. Together, these elements aim to ensure that adaptation measures are delivered effectively, coherently, and sustainably across all sectors and levels of governance. Albania's 2026–2036 Implementation Plan (see Annex I: Implementation Plan 2026-2036) for climate adaptation transforms strategic priorities from its NAP into a detailed, actionable roadmap. The Implementation Plan is scheduled to span the period from 2026 to 2036, in alignment with Albania's national approval cycles that will follow the design phase. This timeframe was selected to enable a structured and strategic rollout of the adaptation actions outlined in the NAP, facilitating the execution of long-term policies, programmes, and initiatives aimed at building resilience across all five priority sectors. The extended horizon allows for sufficient time to develop institutional capacities, implement infrastructure projects, integrate policies, and establish ongoing monitoring and evaluation processes to track progress and make necessary adjustments. Toward the end of the period, the plan will undergo a review to inform the development of a new Implementation Plan, which may include continued or additional adaptation measures.

Each measure was further reviewed for technical readiness, institutional capacity, alignment with national climate goals, and socio-economic impact to ensure prioritization of "no-regret" and high-impact interventions. This evidence-based process allowed for ranking and sequencing measures in a coherent timeline based on urgency, cost-efficien-

Priority interventions per sector:

21	measures in total for agriculture and forestry sectors	**8**	measures for energy sector
11	measures for tourism sector	**7**	measures for transport sector
9	measures for urban development sector	**10**	cross-sectoral measures

Figure 1. Prioritization of Adaptation Measures by Impact and Regret Potential.



cy, and implementation readiness. The Implementation plan identifies 66 priority interventions from a Multicriteria Analysis. The prioritization of measures aimed to select the "no-regret" options that provide both immediate and long-term benefits. Among the prioritized actions, five measures are considered high-impact in terms of value for money, while ten are categorized as lower-impact but still worthy of the investment. The most impactful measures which NPV's fall in the "High Impact and No regret" zone total USD3.2 billion (33%) as follows:

- **M5:** Cross sectoral: Nature-based solutions and Biodiversity Net Gain Developer Schemes (USD243 million)
- **M17**: Agriculture and forestry sector: Expanding and Modernizing Irrigation Systems for Enhanced Agricultural Resilience (USD249 million)
- **M21**: Agriculture and forestry sector: Revitalizing Damaged Lands: Integrating NbS and EBA with Agroforestry Practices (USD1.5 billion)
- **M30:** Agriculture and forestry sector: Enhancing Climate Resilience in National Parks and Protected Areas (USD257 million)
- **M52:** Energy sector: Protecting Energy Infrastructure against strong winds: Rehabilitating Substations and Transmission Lines (USD986 million)

Notably, five high-impact measures account for approximately 80% of the total budget, around USD7.95 billion:

- **M21:** Revitalizing Damaged Lands: Integrating Nature-based Solutions (NbS) and Ecosystem-based Adaptation (EbA) with Agroforestry Practices
- **M45:** Incentive Schemes to Enhance the Resilience of the Building Stock to Extreme Temperatures
- **M52:** Protecting Energy Infrastructure from Strong Winds: Rehabilitating Substations and Transmission Lines
- **M59:** Enhancing Hydropower Resilience: Optimized Operations and Strengthened Infrastructure
- **M64:** Integrating NbS and EbA into the Transport Sector: Enhancing Infrastructure Resilience through Nature-based Solutions

The prioritization process also ensured a balanced portfolio that addresses urgent vulnerabilities while investing in foundational capacities such as institutional development and knowledge systems. As a result, Albania's adaptation portfolio spans from large-scale infrastructure projects, costing hundreds of millions of dollars, to low-cost policy interventions, reflecting both the complexity of climate challenges and the diverse range of solutions required.

2.3 Phased Implementation Roadmap

The implementation starting year for each measure was determined based on expert judgment, taking into account national priorities, institutional readiness, and operational capacity. This was complemented by results from the MCA, including each measure's total MCA score, assigned priority level, and sector-specific sequencing. This combined approach enabled a staggered timeline that promotes both feasibility and effective coordination. Accordingly, the start periods are distributed as follows:

- **Short-term measures** are expected to launch between 2026 and 2028, given their urgency or relative ease of execution. 58% of measures are supposed to start in the short term.
- **Medium-term measures** are scheduled to begin between 2029 and 2032. 27% of measures are supposed to start in the medium-term.
- **Long-term measures,** 15% of measures, which are more complex, capital-intensive, or dependent on prior assessments, are set to start between 2033 and 2036. Most measures are supposed to start on the long-term period, including disbursement.

The period from 2037 to 2042 is designated for continued implementation of ongoing measures but will not see the initiation of any new actions, as it lies outside the 2026–2036 planning cycle.

Each adaptation measure has been assigned an expected implementation duration, reflecting the number of years needed to achieve its objectives. These durations vary between 1 and 10 years, depending on the specific activities involved. To support planning, tentative start years for each measure were proposed, and a Gantt chart has been developed (*Annex III*) to visualize both the initiation year and expected duration of implementation.

2.4 Mid-Term Budget Implementation Plan (2026-2028)

Developing the **short-term plan** (see Annex II: MTBP Plan 2026-2028) was requested from the Ministry of Finance, framed within the Medium – Term Budgetary Planning (MTBP) process. The objective is to ensure that measures, responsibilities, costs, and financing needs are clearly defined for the period 2026-2028 period, supporting alignment with national fiscal planning. The template provided by the Ministry also includes monitoring and evaluation indicators, which are essential to track implementation progress and assess performance against the defined objectives.

2.5 Roles and Responsibilities

Lead Coordination

The Ministry of Environment (MoTE) holds the central coordinating role for Albania's climate change policy, including adaptation, and serves as the technical lead for the NAP. As chair of the Inter-Ministerial Working Group on Climate Change (IMWGCC) and host of the Climate Change Unit, which oversaw the NAP's development, MoTE ensures coherence across national adaptation planning. In the area of adaptation finance, MoTE is responsible for leading the planning and prioriti-

zation of adaptation measures, identifying needs in collaboration with sector ministries. It develops national climate policy and integrates adaptation priorities into broader development strategies, ensuring alignment with this financing strategy. MoTE also serves as the National Designated Authority (NDA) for the Green Climate Fund and other climate finance mechanisms, which entails endorsing funding proposals and engaging with international funds on behalf of the government. Additionally, the ministry monitors and reports on adaptation progress to both national authorities and international bodies such as the UNFCCC, including tracking the mobilization and use of adaptation finance. MoTE is also tasked with implementing select adaptation projects, particularly those with cross-sectoral dimensions or falling within the environment portfolio, such as ecosystem-based adaptation initiatives.

The Ministry of Finance (MoF) plays a vital role in integrating adaptation priorities into the national budget and mobilizing domestic and international resources. It leads efforts to incorporate climate adaptation into the MTBP and annual budget cycles. This includes facilitating climate budget tagging and supporting line ministries in allocating funds to adaptation-relevant actions. MoFE also explores fiscal measures that incentivize resilience, such as tax benefits or earmarking specific fees for a national climate fund. Through its aid coordination function, the ministry manages external financing agreements and donor engagement, aligning development assistance with national adaptation priorities. It ensures financial oversight and transparency in the use of adaptation resources, potentially overseeing fiduciary operations if a national climate fund is established. MoFE contributes to the economic rationale for adaptation by supporting cost-benefit analyses that underpin budgetary decisions. Given the interdependence of climate policy and public finance, close collaboration between MoTE and MoFE is essential. A dedicated joint task force on climate finance could enhance coordination, ensuring that policy priorities are adequately funded.

Sectoral Responsibilities

Sectoral line ministries are responsible for the design and implementation of adaptation measures within their respective domains. These include, among others, the Ministry of Agriculture and Rural Development; the Ministry of Infrastructure and Energy; the Ministry of Health and Social Protection; the Ministry of Defense (which houses the Civil Protection and Disaster Risk Management functions); and the Ministry of Education. Each ministry integrates climate adaptation into its strategic and operational planning. For instance, the Ministry of Agriculture would incorporate resilience into agricultural development strategies, while the Ministry of Infrastructure would oversee the climate-proofing of transport networks and public utilities. These ministries are expected to develop and implement adaptation projects, advocate for budgetary allocations, and manage project execution within their sectors. With the introduction of climate budget tagging, they will be responsible for reporting their climate-related expenditures, contributing to national monitoring and transparency efforts. Their technical expertise is crucial for the accurate costing and design of adaptation measures. Furthermore, sector ministries play an active role in national coordination mechanisms such as the IMWGCC and NCCC, ensuring cross-sectoral coherence. They also work in tandem with MoTE to develop project proposals for international climate finance, such as submissions to the Green Climate Fund.

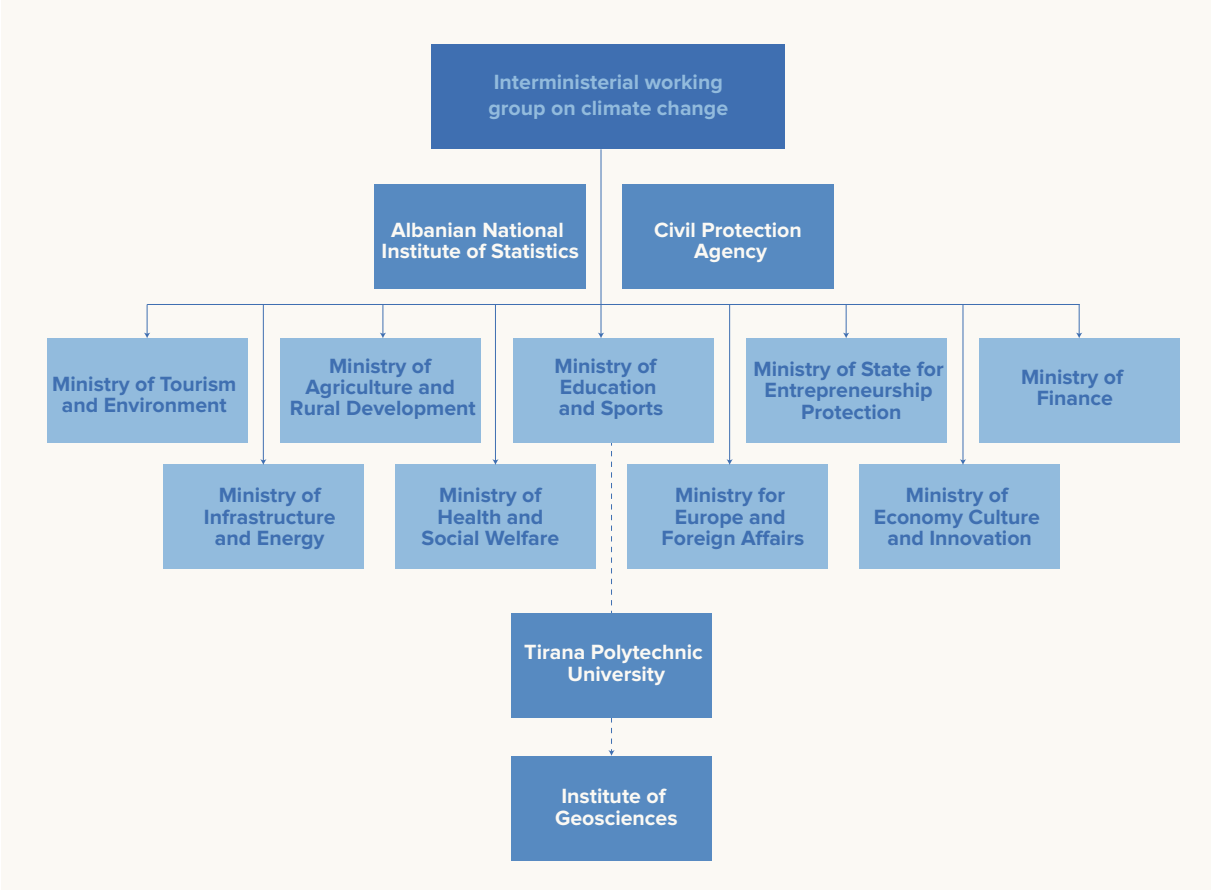
Municipal and local governments, while more limited in fiscal capacity, are key actors in the localized delivery of adaptation measures. They are often the first responders to climate impacts and thus play a critical role in resilience building at the community level. Municipalities are increasingly developing Local Adaptation or Resilience Plans, often with support from international development partners. These plans articulate specific local vulnerabilities and priorities, guiding the implementation of targeted adaptation interventions such as

urban greening, flood defense systems, and water infrastructure improvements. Local authorities are also responsible for maintaining public infrastructure essential to climate resilience, such as drainage systems and reservoirs. Although their financial contributions may be modest, local governments often provide in-kind support or co-financing, which enhances project credibility and ownership. They participate in capacity-building activities and engage with local populations to raise awareness and foster behavioral change. In some cases, municipalities also serve as administrators for small grants or community-based financing schemes, acting as intermediaries between national programs and local beneficiaries.

2.6 Governance and Coordination Mechanisms

Albania's climate adaptation governance structure is anchored in a multi-level coordination framework that brings together political, technical, and operational actors to ensure the effective implementation of the NAP and its financing strategy. At the political level, the IMWGCCC provides high-level oversight and strategic guidance, ensuring coherence of adaptation policies across sectors. The IMWGCCC plays a critical role in embedding financing strategies into national development plans and sectoral investment frameworks, aligning climate finance objectives with Albania's broader development trajectory.

Figure 2. Inter-ministerial Working Group on Climate Change[5]



5. Implementation Plan for Prioritized Adaptation Actions (Ministry of Environment of the Republic of Albania, 2025).

At the technical level, the **Inter-Ministerial Working Group on Climate Change** acts as the engine for coordination and execution. Composed of representatives from key ministries and agencies, the IMWGCC has been central to the development of the NAP and will remain the core body for tracking implementation progress. It will oversee the operationalization of the financing strategy by facilitating information exchange on donor calls, identifying co-financing and partnership opportunities, and ensuring consistency across project proposals submitted to international funds. To enhance technical capacity and enable targeted action, a climate finance sub-group can be established within the IMWGCC to focus on the development of budget tagging methodologies, adaptation investment pipelines, and the mobilization of blended finance mechanisms.

Complementing these bodies is the **Adaptation Technical Working Group** (ATWG), which plays a crucial role in coordinating the technical planning of adaptation measures. The ATWG ensures that adaptation interventions are technically sound and aligned with both NAP priorities and the NDC. It bridges the gap between planning and implementation, helping line ministries and local governments translate strategic guidance into actionable plans. Together, these governance mechanisms form a coherent institutional ecosystem capable of driving Albania's adaptation agenda through clear mandates, inter-institutional collaboration, and continuous technical support.

In addition to core governmental bodies, a range of national agencies, research institutions, and civil society actors play crucial roles in supporting the implementation and financing of Albania's NAP. Technical agencies provide the scientific foundation and operational capacities required for effective climate adaptation. The Institute of Geosciences (IGEO), for example, supplies vital meteorological and hydrological data that underpin climate risk assessments and early warning systems. Strengthening IGEO's institutional capacity and explicitly integrating climate adaptation into its mandate is essential for providing sustained technical support.

The **Water Resources Management Agency** is a key actor in planning for floods and water security, while the National Agency for Civil Protection is responsible for disaster preparedness and emergency response. The latter requires dedicated funding for early warning systems, resilient emergency infrastructure, and coordination mechanisms to align disaster risk reduction with adaptation efforts. Similarly, the Environmental Protection Agency, or an equivalent institution, has an important role in environmental monitoring and could be empowered to manage resources for ecosystem-based adaptation, including enforcing environmental standards that contribute to long-term climate resilience.

Research institutions and universities, though not directly involved in financing, provide indispensable contributions through scientific analysis and innovation. They support evidence-based decision-making by conducting cost-benefit assessments of adaptation options, for example, evaluating the most cost-effective methods for coastal protection or forest resilience. These institutions are also well-positioned to implement pilot projects funded through international grants, enhancing the knowledge base for adaptive planning. Finally, civil society organizations and academia serve as essential partners in awareness-raising, local capacity building, and ensuring accountability in the allocation and use of adaptation finance. Their involvement reinforces the transparency and effectiveness of the national adaptation system.

Albania's climate adaptation governance structure is anchored in a multi-level coordination framework that brings together political, technical, and operational actors to **ensure the effective implementation of the NAP and its financing strategy**.

2.7 Budgeting and Cash Flow Management

The effective implementation of Albania's NAP relies on robust budgeting and cash flow management systems that are anchored in the MTBP cycle. Budget disbursement mechanisms for adaptation measures must align with the annual and mid-term budgeting process, enabling line ministries to secure financing based on prioritized, costed interventions. The introduction of climate budget tagging (CBT) represents a key innovation, helping track adaptation expenditures across ministries and programs. This system will allow Albania to monitor climate-relevant spending systematically and to distinguish between adaptation, mitigation, and dual-benefit interventions, thus improving transparency and reporting toward national and international commitments.

Cash flow forecasting tools are also proposed to strengthen implementation at the project level, ensuring timely disbursement of funds to executing agencies and avoiding bottlenecks. These tools support liquidity planning and enhance the financial efficiency of adaptation investments. In parallel, the deployment of the budget screening tool allows line ministries to assess the climate relevance of public investments, enhancing coherence with the NAP's strategic objectives. These instruments are further supported by capacity-building activities aimed at public finance officials, ensuring that adaptation finance is mainstreamed into Albania's public financial management system. Through this integrated approach, the NAP financing strategy not only ensures sound budget execution but also enables adaptive learning and iterative investment adjustments based on implementation feedback.

03

Financing Needs Assessment and Financing Gaps

3.1 Total Cost of Implementing the NAP

This section presents a costed implementation plan[6] for Albania's priority climate change adaptation measures. The aim is to clearly articulate what needs to be financed in each sector to achieve Albania's adaptation goals. The plan is organized by sector (agriculture, forestry, urban development, energy, transport, tourism) and cross-cutting measures, with cost breakdowns and timelines for implementation. These cost estimates provide the basis for targeting financing efforts in later sections of this strategy.

Overall, Albania's adaptation needs are substantial, with an estimated USD9.8 billion required to finance 66 priority adaptation measures under the NAP 2026–2036, with implementation of the measures extending through 2042. The largest adaptation finance needs are for the urban development and infrastructure sector (~27.8% of total costs, ~USD2.7 billion), followed by forestry (~21.3%, ~USD2.1 billion), transport (~20.7%, ~USD2.03 billion), and energy (~20%, ~USD1.96 billion). The agriculture sector's adaptation needs are more moderate (~7%, ~USD0.6–0.7 billion), while tourism's measures account only for a very small share (well under 1% of total costs). Cross-sectoral transversal measures' budget mounts up to USD257 million or about 2% of total adaptation financing needs.

When these allocations are annualized and compared to Albania's current GDP (estimated at USD 28.37 billion in 2025), the short-term expenditure (2026–2028) would correspond to an average of approximately USD 180.6 million per year, representing about 0.6% of GDP. For the medium term (2029–2032), the average annual investment of USD 652.4 million corresponds to roughly 2.3% of GDP. Over the long-term period (2033–2042), the average annual investment would reach approximately USD 664.9 million, equating to around 2.3% of 2025 GDP. However, if Albania's economy grows at a steady rate of 3.5% annually, GDP would increase to approximately USD 39.5 billion by 2036 and reach nearly USD 48.9 billion by 2042. In this scenario, the annualized adaptation disbursement of USD 576.5 million per year over 17 years (2026–2042) would represent around 1.18% of projected 2042 GDP, demonstrating that GDP growth is likely to help easing the relative annual fiscal burden. A summary is provided in Table 2 below.

Between 2026 and 2036, the average annual investment needed for implementing Albania's adaptation measures is estimated at approximately USD 528.3 million, equivalent to 1.9% of the country's 2025 GDP as estimated by the IMF.

While substantial, this investment level is considered fiscally feasible, particularly if supported by

Table 2. Projected investment for the period 2026-2042.

Period	Annual Projected Disbursement (mln USD)	Total (mln USD)	% of GDP (in 2025)
2026–2028	180.6	542	0.6
2029–2032	652.4	2610	2.3
2033–2042	664.9	6649	2.3
Total	**576.5**	**9800**	

6. The costed implementation plan is developed by GFI contracted company.

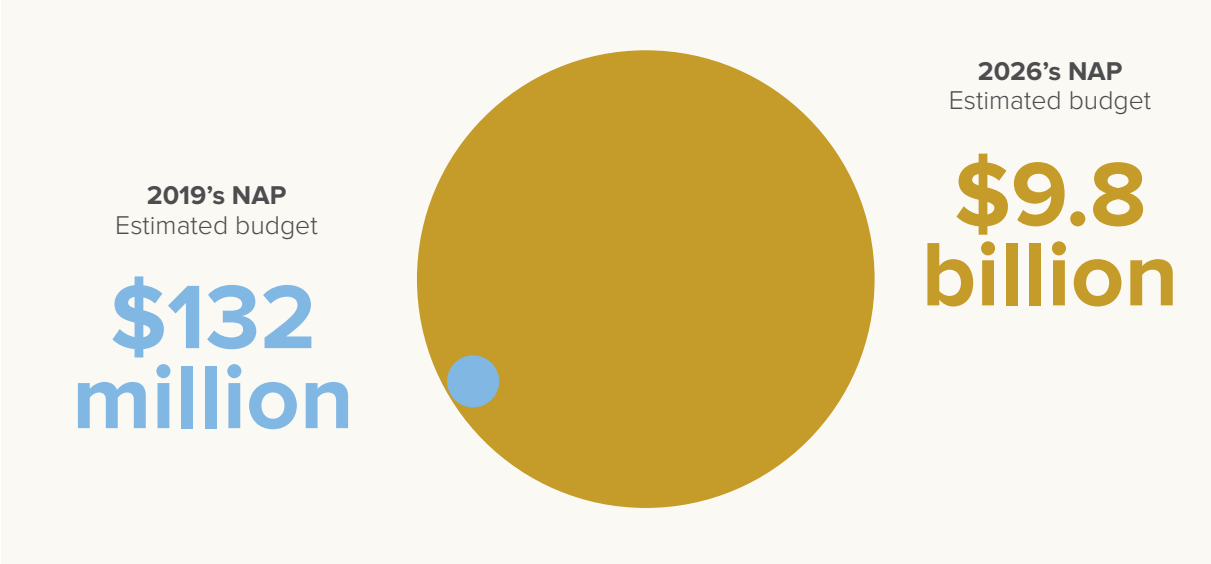
Table 3. Annual distribution of adaptation investment disbursements (2025–2042) and percentage of total budget.

Year	Disbursements	%
2026	4.659.800 USD	0,05%
2027	7.529.882 USD	0,1%
2028	529.596.820 USD	5,4%
2029	662.060.265 USD	6,8%
2030	802.079.015 USD	8,2%
2031	804.689.152 USD	8,2%
2032	340.902.076 USD	3,5%
2033	1.471.731.191 USD	15,0%
2034	1.314.666.566 USD	13,4%
2035	1.284.405.814 USD	13,1%
2036	614.986.908 USD	6,3%
2037	365.760.242 USD	3,7%
2038	360.947.182 USD	3,7%
2039	350.722.182 USD	3,6%
2040	307.589.881 USD	3,1%
2041	289.185.000 USD	3,0%
2042	289.185.000 USD	3,0%
Total	**9.800.696.977 USD**	**100%**

concessional finance, phased budget allocation, and full integration into national public investment frameworks. The highest disbursements are expected between 2033 and 2035. In contrast, spending in the early implementation years (2026–2027) remains modest, below USD 10 million annually, before scaling up significantly from 2028 onwards to allow time for preparation of budget resources.

As major infrastructure components reach completion, investment levels taper off between 2037 and 2042, stabilizing between USD 365-289 million annually.

According to macroeconomic projections by the International Monetary Fund (International Monetary Fund (IMF), 2025), the World Bank (World Bank Group (WBG), 2025c), and the European Commission, Albania's economy is expected to grow at an average annual rate of 3.2% to 3.5%. If this trajectory is sustained, the country's GDP could reach approximately USD 59.6 billion by 2050. In this context, the total adaptation investment—currently equivalent to 37% of Albania's 2025 GDP—would represent around 16.4% of projected mid-century GDP, and would average less than 2% of GDP per year if evenly distributed over the long term.



It is important to note that the estimated annual investment—equivalent to 2.69% of 2025 GDP—is based on a front-loaded financing profile concentrated in the years where implementation activity is most intense. In contrast, indicative estimates from the World Bank suggest that Albania's additional national adaptation needs may reach 0.8% to 1% of GDP annually over the 2025–2050 period, assuming steady economic growth and a phased investment strategy. Although the methodologies differ, the comparison supports the conclusion that the current investment envelope falls within a plausible and responsible range for countries engaging in a structured and ambitious climate transition.

By comparison, the initial NAP document (prepared in 2019) estimated more modest costs for a first tranche of priority actions. **The NAP's 15 Priority Actions for 2017–2020 were estimated to require about 11 billion ALL (approximately EUR 80 million or USD91 million) in total**[7].

This initial costing, however, covered mainly policy, capacity building, and pilot measures in the early years. It did not include the full scale of implementation needed up to 2035, especially for large infrastructure investments. As Albania moves from planning and pilots to full implementation, financing requirements escalate significantly.

The main factors driving up the cost of the updated NAP include:

- the need for infrastructure investments (e.g., reservoirs, flood defenses, irrigation canals, resilient roads) which are capital-intensive but crucial for long-term resilience;
- the expansive scope of adaptation covering many sectors and communities nationwide
- the inclusion of contingency and maintenance costs to ensure measures remain effective over time, not just initial capital costs,
- the adjustment for inflation and economic growth since earlier estimates – costs of materials and labor for projects have risen.

While such sums are daunting, they should be viewed in context: the cost of inaction would likely be higher, as severe climate damages could erase years of development progress. **Investing in resilience is fundamentally an investment in safeguarding economic stability and growth.**

7. Republic of Albania, *National Adaptation Plan: Albania* (Tirana: Ministry of Environment, 2021), https://unfccc.int/sites/default/files/resource/National_Adaptation_Plan_Albania.pdf

Table 4. Estimated Adaptation Financing Needs, Current Funding and Gap by Sector.

Sector	Estimated Cost (USD)	Current committed Funding)	Gap over total period	% Gap over total period
Agriculture	678.114.861	148.777.832	529.337.029	78
Forestry	2.134.799.557	200.836.646	1.933.962.911	91
Urban development	2.723.161.544	27.551.451	2.695.610.092	99
Tourism	8.491.619	14.632.720	0	0
Energy	1.960.573.000	296.960.378	1.663.612.622	85
Transport	2.038.835.000	3.684.480	2.035.150.520	100
Cross Sectoral	256.721.396	6.740.576	249.980.820	97
TOTAL	**9.800.696.977**	**699.184.083**	**9.101.512.894**	**93**

3.2 Existing commitments and funding gaps

Despite recent efforts, existing funding falls far short of requirements. The Government of Albania has earmarked roughly USD310 million for adaptation actions across sectors including its 2025–2027 MTBP and national sectorial strategies, with the largest shares going to forest (USD194 million), and agriculture (USD80 million) projects. International partners – including the EU, World Bank, GCF, and others – are supporting adaptation through grants and loans, but mostly at a scale of tens of millions annually rather than the hundreds of millions required. For example, a new World Bank USD50 million urban resilience project and an EU–EBRD–EIB (European Investment Bank) investment of over USD375 million in climate-proofed rail infrastructure are significant commitments, yet still only begin to address the ~USD180–200 million per year needed in the urban sector. Private sector contributions remain modest, generally limited to co-financing in agriculture and isolated investments (e.g. a toll road concessionaire funding slope stabilization).

Table 4 summarizes the adaptation investment needs by sector, the total financing already committed or allocated within the medium-term budget (2025–2027), funding identified through other public sectorial strategies, as well as financing from private and international sources. It also highlights the remaining funding gaps that need to be addressed.

As **Table 4** illustrates, Albania faces substantial financing gaps in most sectors, with a critical 93% overall gap. Only 7% of the required funding has been committed through the MTBP 2025–2027. Except for tourism which shows no gap, the financing gaps are high across all other sectors above 78% (agriculture), with forestry, urban development, cross sectoral, and transport showing gap levels above 90% and near 100%. These shortfalls show that significant funding will have to be mobilized to support the financing needs of the NAP.

Agriculture has secured notable external support (e.g. EU and World Bank funds) covering roughly one-third of its needs yet still confronts a gap of around USD530 million.

Table 5. Estimated financing gap based in the committed funding till 2042, including MTBP (2025-2027) in USD.

Sector	Total Adaptation Need (through ~2036)	Committed National Public Funding[8]	International Funding (Secured & Pipeline)	Private Sector Contributions	Estimated Financing Gap
Agriculture	680 million	~80 million	~ 68 million (EU IPARD III, World Bank loan, etc.)	Low (farmer co-financing, ~5–10 million)	High (~0.5 billion)
Forestry & Ecosystems	2.13 billion	~193 million	~ 7 million (EU IPA, GEF projects; GCF pipeline)	Minimal (pilot PES, CSR tree-planting)	Extreme (~1.9 billion)
Urban Development	2.73 billion	~4 million	~23.5 million (WB urban project; ALBAdapt; EU grants; EIB pipeline)	Very low (sporadic ~1 million/yr)	Extreme (~2,7 billion)
Tourism	~8–10 million	~1 million	~13 million (WB "Blue Sea"; GEF coastal)	Minimal (hotel retrofits negligible)	None
Energy	1.96 billion	~22 million	~275 million EBRD grid €70 M; WB policy loan USD120 M4; KfW/WB dam USD20 M pipeline)	Moderate (renewables, IPPs)	Very High (~1.7 billion)
Transport	2.03 billion	~1 million	~2,5 million but strong potential to increase (EU-EIB-EBRD rail; EU roads)	Low (PPP concessions)	Extreme High (~2 billion)
Cross Sectoral	256,7 million	2,7 million	4 million		High (~250 million)
TOTAL	**9,8 billion**	**306 million**	**393 million**		**Extreme high ~9,1 billion**

While Table 4 presents the financing situation through 2042, showing the longer-term funding requirements and gaps across all adaptation sectors and the complete scope of Albania's adaptation needs over the extended planning horizon, **Table 5** provides detailed information on total "committed funding", which encompasses allocations from the **MTBP 2025–2027**, **international funding (both secured and, in the pipeline,)**, and **commitments embedded in national sectoral strategies adopted by the government** and, in the pipeline, expected but limited **private sector contributions**.[8] The analysis reveals significant disparities across sectors:

Overall, Albania faces an adaptation financing gap of roughly USD9.1 billion through 2036. The largest unfunded needs are in Forestry & Ecosystems (~USD1.9 billion), Urban Development (~USD2.7 billion), Transport (~USD2 billion) and Energy (USD1.7 billion). Agriculture's gap is about USD0.5 billion, Cross-sectoral priorities roughly USD0.25 billion, while Tourism is effectively fully funded.

8. Including the budget of MTBP 2025–2027.

Agriculture: The gap foreseen over the total budgeting period is around USD500 million, with substantial support from national strategies and international programs such as EU Pre-accession Assistance (IPARD) III and World Bank (WB) loans. The needs are concentrated in certain measures: large flood protection and irrigation projects are only partially funded (e.g. EU IPARD III and WB funds cover some irrigation, but the USD179 M flood control measure has minimal funding). Also, the scale-up of insurance schemes (>USD100 M need) lacks identified funding aside from a few million from the budget. If the government and donors can sustain ~USD15–20 M/year in agriculture adaptation spending, measures could slowly be implemented, but it would take perhaps 20+ years, extending well beyond 2035. To close the gap sooner, additional grants (e.g. a dedicated GCF project for agricultural water management) and more national budget allocation (maybe via an Adaptation Fund) would be needed.

Forestry: Gap is nearly USD1,933 billion, essentially ~91% unfunded. The current finance is marginal relative to the colossal afforestation program. This is the most acute gap in percentage terms – Albania simply cannot fund a nationwide reforestation on its own or with current donor flows. The implication is that without a quantum leap in financing, the forestry measures will not materialize as planned. The consequences are significant: continued land degradation, soil loss, and increased flood/landslide hazards. One might consider phasing the plan (e.g. reforest 20% of target area by 2035 with available funds and seek funding for the rest later). Innovative solutions like engaging the global carbon market or EU restoration funds might be necessary. The forestry gap is also a major opportunity – large-scale nature-based solutions could attract international climate finance if Albania positions projects correctly (e.g. a high-quality GCF proposal could chip away at this). However, every year of delay means that forests planted later (less mature by 2050) will postpone or nullify the disaster risk reduction impact.

Urban Development: The long-term budgeting period falls short by ~USD2.7 billion. This is critical because urban adaptation comprises a substantial number of high-priority protective measures (i.e. USD2.5B of unbuilt flood defenses and un-retrofitted buildings). The funding shortfall here implies that, as things stand, cities will remain extremely vulnerable. Tirana, Durrës, and others would still have undersized drainage, large inventories of buildings unprepared for heat or earthquakes (with climate overlap), and limited capacity to respond to disasters. The gap also suggests that without bridging it, Albania might witness more frequent urban flooding events and associated economic losses, which could erode public support for adaptation if not addressed. The substantial gap requires a multi-pronged approach: increasing municipal investments (perhaps via municipal bonds or climate funds), leveraging development bank loans (with careful debt management), and attracting private co-finance in things like green buildings. The government might consider dedicating a portion of any future sovereign green bonds or climate credit lines to urban resilience to chip at this gap.

Tourism: This sector shows no financing gap for the overall budgeting period, as total estimated financing needs for the sector are lower than in the other sectors. However, the low volume belies that tourism's main adaptation challenges (coastal erosion, infrastructure resilience) are actually handled in other sectors. So while the tourism sector gap as defined by the plan is small, it is a sector that still faces substantial climate threats and funding needs since as long as coastal urban adaptation is underfunded, tourism is indirectly at risk. The direct tourism measures (policy and planning) are relatively inexpensive and could feasibly be funded with domestic resources or a small donor grant – so that gap might be closed in the next budget cycle if prioritized. The remaining issue is implementation and enforcement of those plans, which requires strong political commitment.

Energy: There are major uncertainties for securing energy adaptation funding coupled to a financing gap of USD1.7 billion for the sector. Energy projects can sometimes be financed commercially if they generate revenue (e.g. transmission upgrades can be loan-financed with tariff adjustments). However, purely climate-driven parts of the selected measures (like hardening lines or adding redundancy that does not increase revenue) are hard to finance without external support or higher tariffs. The gap implies that crucial upgrades – such as widespread grid modernization, adding energy storage facilities for resilience, diversifying generation mix to reduce hydro dependency – may not happen in time to avoid sectoral climate impacts. This leaves Albania exposed to energy crises in drought years and grid failures in extreme weather. The government will likely need to prioritize climate resilience in its energy investment plan and seek blended financing: through options such as combining IFI loans, climate fund grants, and private investment (IPPs building solar/wind with storage). Given energy's centrality to all sectors, closing this gap has multiplier benefits (keeping lights on in hospitals during heatwaves, etc.). Therefore, one strategic recommendation is to integrate adaptation into the national energy investment pipeline (NECP) and aggressively pursue EU/IFI funds earmarked for grid resilience under regional initiatives.

Transport: The sectoral gap is ~USD2 billion, leaving the sector's adaptation needs currently almost entirely unfunded. While international donors are active in transport, the sheer scale of infrastructure means many secondary roads, bridges, and critical structures remain vulnerable. If the gap persists, Albania will continue to suffer costly damage such as roads being washed out or bridges collapsing from floods which would isolate and impact greatly the affected communities. Climate-related road damages impose already millions in annual repairs – effectively, the gap manifests as a drain on resources and connectivity. Closing the transport gap requires mainstreaming adaptation into all transport funding (which is a process currently being initiated in the country) and possibly creating a dedicated fund or a similar mechanism such as a "Resilient Infrastructure Fund" to systematically retrofit infrastructure. Given the scope and cost of such infrastructure, Albania might triage investment to implement them steadely: focus available funds on the highest traffic/highest risk routes first (e.g. protect main highways and rail lines), while seeking further funding for rural and secondary networks subsequently. The transport gap also underscores a need for nature-based solutions (cheaper alternatives like slope bioengineering instead of massive concrete walls, where feasible) to make the most out of the limited funds.

Cross-sectoral priorities (such as governance, institutions, and information systems) face a **very high gap** of around **USD225 million**, with limited domestic allocation.

In total, Albania still faces an extreme adaptation financing gap, estimated at approximately **USD9.1 billion**, or about **90%** of the total required funding, to fully implement the priorities outlined in the NAP 2026–2036 (see Table 2).

3.3 Short-, Medium-, and Long-Term Needs

As outlined, Albania's priority adaptation measures are estimated to cost on the order of USD9.8 billion **with commitments through 2036 and actual disbursement continuing until 2042, averaging roughly USD 890 million per year.**. By contrast, the current level of adaptation-related spending is only a fraction of that. While it is difficult to pin down an exact annual figure for current adaptation finance (due to scattered sources and definitional issues), a reasonable estimate – adding up

the major secured contributions (national budgets ~USD300 million + privately sector ~USD226 million + international secured ~USD166 M across all sectors) suggests that roughly USD700 million or less is currently available/committed for adaptation in Albania. This implies an unfunded gap on the order of USD9.1 billion (over 90% of total needs). Even if optimistic pipeline scenarios are considered (another ~USD500 M that might materialize from GCF, new EU funds, etc.), the gap remains above 75%. In annual terms, Albania should be investing ~USD890 million per year in adaptation; while presently, actual spending is perhaps USD50–75 million per year (including both, public funding and donors' contributions), i.e. barely 10% of the ideal level.

Short-term (2026–2028): In the immediate future, Albania does have some resources in hand. The MTBP and the national strategies allocations provide a baseline of domestic spending (~USD160 million over 2026–28 across sectors), and many donor projects such as World Bank (WB) agriculture, EU IPARD, European Bank for Reconstruction and Development's (EBRD) loans, the GCF-funded ALBAdapt-Climate Services for a Resilient Albania, among others will be disbursing during this period, potentially totaling another ~USD37 million in that three-year window. However, the short-term financing need (2026–28) – while not explicitly broken out in the NAP's Implementation Plan – could be approximated by looking at which measures are slated to start or finish by 2028. A rough estimate is around USD219 million of adaptation measures should be underway or completed by 2028 to keep on track (for example, initial phases of reforestation, priority urban drainage works, irrigation projects, etc.). The gap in the short-term, therefore, is far less than that of the medium and long-term, which becomes increasingly critical with time, reaching ~USD5.3 billion in the long-term representing more than half the total adaptation disbursement, while the medium term still bears ~USD1.8 billion. Implementation timelines are designed to prioritize immediate actions while allowing flexibility for the initiation of more resource-intensive measures in later phases. This phased approach supports effective resource mobilization and ensures the sustained delivery of adaptation priorities over the plan period.

On the positive side, some quick-win measures are covered already in this initial period of the NAP Implementation Plan: e.g. development of plans and regulations for example for tourism integrated coastal zone management (ICZM), and urban plans which will be funded through government or small grants, and should be already executed by 2028. On the other hand, capital-intensive projects in forestry, urban, transport are largely unfunded in the short-term, meaning little physical progress on those fronts by 2028 beyond studies and pilots. This poses a risk of falling behind schedule in reducing vulnerability, making it imperative to accelerate resource mobilization urgently.

Medium-term (2029–2032): This period is critical –as according to the NAP's implementation plan it is when many adaptation investments should peak (as per plan goals) and also aligns with Albania's likely EU pre-accession timeline where substantial IPA funds might flow to the country. If all pipeline projects come through, the financing landscape in 2029–32 for adaptation could be reinforced: there could be for instance, a GCF project injecting USD20 M, an EU post-2027 financial framework giving larger climate-related grants, or also a second World Bank adaptation project, among other new funding sources. An additional USD500–600 M might be raised for this period (this is speculative but assumes a scaling up as Albania approaches the 2030 horizon of both its NDC and the end of the current adaptation strategy). Even with that, funding available for adaptation for the period would mount up to between USD0.5 and 1 billion in total over 2029–2032, while the needs in

that period would likely be of around USD2.2 billion. So by 2032, the gap could still be on the order of USD2 billion unaddressed measures.

Sectors like agriculture might close much of their gap by 2030 if planned projects succeed (it's conceivable to fund irrigation and farm programs via a combination of IPARD, WB, GCF, etc., narrowing agriculture's gap to maybe USD100 M by 2030). Tourism's needs could also be largely met through integration into other projects (so its gap stays small, maybe even fully closed if coastal management is enforced by then). The largest challenges remain for urban, forestry, energy, and transport, which will likely carry massive residual gaps into 2032, further extended by 2036. These sectors adaptation financing needs might only be20–30% funded by that point. The implication is that Albania would either need a second wave of adaptation initiatives post-2030 or risk leaving many climate risks unaddressed, potentially causing economic and human losses that far exceed the investment costs.

Long-term (2033–2050): If by 2032 Albania manages to mobilize ~25% of needed funds (optimistic scenario), the remaining ~60% (roughly USD5.3 billion) becomes the long-term gap. Some of this is simply delayed implementation – e.g. the big forestry program might stretch beyond 2036 due to funding constraints, or urban retrofits might cover only a small fraction of buildings by 2030 and continue afterwards. In addition, by 2050 new needs will emerge: infrastructure built in 2030 may need further upgrades by 2045 as climate extremes intensify, and some "unquantified" needs (like adapting to very high-end sea-level rise scenarios or second-generation technologies) could add to costs. So the 2033–2050 period must not only tackle the remainder of today's plan but also adapt to evolving conditions.

The long-term adaptation gap may be regarded as effectively open-ended. Insufficient investment within this decade will significantly increase the future costs of closing the gap. By contrast, proactive investment today can substantially mitigate future expenditures; for instance, the establishment and maintenance of new forests will likely prove less costly than recurrent emergency flood recovery efforts. Should current trajectories persist, the financing gap by 2050 could materialize in the form of substantial economic damages and foregone opportunities. A failure to climate-proof transport infrastructure, for example, may reduce gross domestic product by several percentage points through repeated disruptions—far outweighing the short-term savings from delayed resilience measures. In monetary terms, Albania could face annual climate-related damages amounting to hundreds of millions of dollars by 2050 if the adaptation gap remains unaddressed, reflecting a "gap cost" that would impose a significant burden on the national economy.

3.4 Key Barriers

Economic Barriers and fragmented donor engagement

Albania's adaptation financing landscape faces a range of economic and structural challenges that limit the scale and effectiveness of climate-resilient investment. A primary constraint is the **high upfront cost of adaptation measures**, such as modernizing irrigation infrastructure, which requires an estimated roughly USD250 million, or implementing coastal flood protection systems, which could cost approximately USD180 million. Despite the urgency of these investments, Albania's capital markets remain underdeveloped. The country has yet to issue any green or climate bonds, and both municipalities and small and medium-sized enterprises (SMEs) have limited access to affordable credit or concessional finance.

Another critical barrier is the **lack of risk mitigation instruments**. Albania does not have an operational climate insurance market, and as highlighted in a study prepared around the NAP process on options to further involve the private and public sector in national adaptation funding[9], agricultural insurance schemes have yet to be mainstreamed. This leaves farmers and rural communities vulnerable to repeated climate-related losses without compensation mechanisms or risk-sharing frameworks.

The **donor landscape remains fragmented**, with adaptation financing frequently shaped by the specific priorities of individual development partners. This has led to duplication in some areas and significant gaps in others. While sectors such as agriculture and disaster risk management have received considerable support from the EU and UNDP, tourism-related adaptation has received relatively little attention, despite its economic relevance and climate vulnerability.

Finally, the economic case for adaptation investment is often weak or difficult to substantiate. **Many proposed measures struggle to demonstrate clear, quantifiable returns**. For example, the Implementation Plan's cost-benefit analysis revealed that several tourism-focused adaptation actions yielded Benefit-Cost Ratios (BCRs) below 1 under conservative assumptions. In the absence of robust feasibility data and demonstrated economic viability, such projects face significant challenges in securing multilateral development bank financing or concessional lending.

Sector-Specific Challenges

Each sector in Albania encounters distinct challenges in accessing climate adaptation finance, necessitating sector-tailored solutions:

Energy: Albania's dependence on hydropower exposes its energy sector to climate variability, especially droughts. Transitioning to a diversified energy mix, including renewables and modernized grids, demands large investments. However, regulatory barriers and high initial costs discourage private sector participation. The sector's vulnerability is further increased by the absence of energy storage infrastructure. A proposed battery storage initiative has stalled due to regulatory uncertainty and lack of investor guarantees.

Transport: The sector is both, a major source of greenhouse gas emissions, but also particularly susceptible to extreme weather events like flooding and heatwaves. Recurrent flood damage (e.g., Vlora bypass, 2023) underlines the sector's exposure. However, the Implementation Plan notes a lack of climate-resilient design standards in national tenders and insufficient coordination between MoIE and local governments to mainstream resilience.

Agriculture: Agriculture is highly sensitive to climate risks such as drought, soil erosion, and unpredictable rainfall. Upgrading irrigation systems and promoting climate-smart farming practices necessitate considerable investment, but small-scale farmers often struggle to obtain affordable credit. Moreover, the lack of a nationwide agricultural insurance system leaves them unprotected against climate shocks. Small-scale farms (avg. 1.2 ha) dominate and lack access to credit. Despite EU's IPARD support, uptake of climate-smart agriculture (CSA) practices remains limited. For example, less than 5% of vineyards in Berat use drip irrigation, despite projected water stress increases.

Tourism: Climate threats like coastal erosion, extreme weather, and changing seasonal patterns make the tourism sector particularly vulnerable to climate change impacts. Sustaining the sector over the long term will require investment in resilient infrastructure and eco-tourism initiatives.

9. UNDP (2025). *A Market Study and Strategic Roadmap for Public and Private Sector Engagement in Albania's Adaptation Financing*, NAP Project.

However, the scarcity of financial instruments and incentives tailored to sustainable tourism limits private investment in this regard. Measures such as eco-path restoration and coastal buffer zones remain unfunded. The high climate vulnerability of cultural heritage zones in Vlorë and Saranda, identified in LAPs, remains unaddressed due to weak fiscal incentives and absence of PPP models.

Urban Development: Fast-paced urbanization, coupled with climate hazards such as floods and heatwaves, is placing increasing stress on urban areas. While green infrastructure, energy-efficient construction, and climate-resilient planning are urgently needed, the absence of coordinated urban planning and weak enforcement of building codes slow implementation. Informal settlements in flood-prone zones like Shkoza (Tirana) or Lezha remain unregulated. A lack of enforcement of urban climate resilience standards and building codes despite the growing risk profile was detected as a barrier limiting adaptation action in the sector.

Project Preparation and Coordination Gaps

Albania's adaptation finance efforts are further constrained by critical gaps in project preparation and coordination. One of the most pressing issues is the limited number of "bankable" adaptation projects. According to consultations summarized in the Implementation Plan, only four to five projects currently have full feasibility studies and meet the readiness criteria required to access funding from sources such as the GCF or the Western Balkans Investment Framework (WBIF). This narrow pipeline of investment-ready projects significantly hinders Albania's capacity to mobilize international climate finance at scale.

Coordination across institutions also presents a major bottleneck. The IMWGCC, which is mandated to oversee national climate policy implementation, does not have a dedicated secretariat or mechanism to coordinate climate finance planning. In the absence of such a body, donor interventions have occasionally overlapped or operated in silos.

Moreover, the absence of a climate finance tracking system poses an additional challenge. Currently, there is no centralized platform or methodology to systematically monitor and report climate-related expenditures across line ministries or development partners. This lack of visibility undermines effective budgeting and long-term strategic planning. It also contributes to gaps in the identification and reporting of adaptation investments, for instance, the Local Adaptation Plans (LAPs) tend to underestimate cross-sectoral spending due to fragmented data and reporting practices.

Low private sector participation in adaptation financing

Private sector participation in climate adaptation remains minimal in Albania, constrained by structural, financial, and regulatory barriers. However, **several enabling actions are currently being designed or piloted to address these gaps**. The Ministry of Finance is considering fiscal incentives to stimulate investment, including VAT exemptions for climate-smart agriculture equipment, such as drip irrigation systems, and accelerated depreciation for green building retrofits. These measures are still pending finalization and legislative approval.

In the insurance sector, Albania currently lacks a formal climate or catastrophe insurance market. However, a feasibility study launched by UNDP in 2024 is exploring parametric insurance for drought risks, with a focus on olive and grape producers in the Berat and Fier regions. If successful, this initiative could serve as a scalable model for national implementation with donor support.

Despite these efforts, **the country's green finance ecosystem is still in its early stages**. No climate bonds or sustainability-linked loans have been issued domestically, and commercial banks have shown limited appetite for adaptation finance. This reluctance is largely due to the absence of regulatory clarity and de-risking instruments. Only a few institutions, such as ProCredit and Raiffeisen Bank, have started experimenting with environmental, social, and governance (ESG) screening tools in their lending practices. Both banks are piloting ESG scoring systems for their SME portfolios and plan to incorporate climate adaptation criteria into loan products by 2026.

A major obstacle remains the lack of insurance and guarantee mechanisms. The absence of agricultural and catastrophe insurance, coupled with limited access to financial products offering first-loss protection or credit guarantees, continues to deter private investment. This gap has already undermined projects, such as attempts to scale sustainable forestry initiatives near Kukës, which failed to attract private capital despite donor interest, primarily due to unmitigated investment risks.

The broader policy environment also does little to incentivize adaptation-related investment. There are currently no fiscal benefits for adopting CSA technologies or climate-resilient construction practices, and the absence of a carbon pricing mechanism further weakens the economic case for private sector engagement in climate resilience.

Nonetheless, progress is being made in exploring blended finance and PPP models. Under the National Road Resilience Program (NRRP), infrastructure projects, such as road rehabilitation, are beginning to incorporate climate-proofing measures like improved culverts and slope stabilization. These components are partially financed through concessional donor resources, illustrating a potential pathway for embedding resilience into capital projects through PPPs.

Institutional, regulatory, market and capacity constraints

Policy and institutional barriers continue to hinder effective adaptation finance deployment in Albania. Although the 2020 Climate Law marked a milestone in mainstreaming climate action, secondary legislation necessary for implementation remains delayed. As a result, key regulatory instruments, such as water tariffs, are misaligned with financial sustainability objectives. Tariffs remain too low to attract PPPs in water infrastructure. Similarly, building permit processes often fail to account for floodplain risk, despite zoning reforms introduced in 2021 aimed at addressing such vulnerabilities.Institutional fragmentation further complicates coordination and financing. Albania lacks a dedicated National Climate Fund, and budget tagging for adaptation is still in the exploratory phase. The absence of a central mechanism to manage and channel adaptation finance limits the country's ability to leverage external resources.
Equity considerations are also insufficiently integrated into existing financing frameworks. Vulnerable populations, particularly those in remote mountainous regions such as Kukës and Dibër, remain underserved. Despite being identified as high-risk zones in LAPs, these communities received less than 3% of adaptation grants under recent EU-funded programs. This underinvestment exacerbates existing social and spatial inequalities and limits the resilience of communities most exposed to climate risks.

Policy and Regulatory Reforms

Scaling Up Domestic Resource Allocation: While international support is vital, Albania will likely need to increase its own budget contribution to adaptation, especially in sectors where public goods are involved (forestry, urban drainage, etc.). Integrating adaptation into the Medium-Term Budget Program (2028–2031) at a higher level is recommended. For example, dedicating a fixed percentage of GDP or of public investment to climate adaptation each year could systematically raise funding. The establishment of a National Climate

Adaptation Fund (as planned) could be accelerated and capitalized with both state budget funds and donor contributions to provide a coordinated funding stream. This fund could then program resources to priority gaps (e.g. matching grants for municipalities' resilience projects, or seed money for nature-based solutions that can attract co-financing). Essentially, Albania should treat adaptation as a core development priority – akin to education or defense – and reflect that in budget planning.

Regional and EU Support: As an EU candidate, Albania can tap into regional climate funds and technical support. The EU Green Deal and upcoming EU Budget (2027–2034) likely will have increased climate adaptation funding for accession countries. Albania should proactively identify projects to propose for EU funding (the EU has substantial funds for environment, transport, and agriculture under its External Investment Plan and Green Agenda). Continued engagement with the WBIF is key – packaging adaptation needs into large projects that WBIF can grant-fund partially (as seen with rail and water projects). Additionally, collaborating regionally (e.g. a Balkans regional GCF proposal on forests or coastal adaptation) could attract bigger pools of money.

Monitoring and Leveraging Successes: Finally, demonstrating effective use of funds can help mobilize more. For instance, if an initial donor-funded project (say the WB urban project) shows strong results in reducing flood losses, it strengthens the case for additional investments (maybe a follow-up project or scale-up by government). Albania should set up a robust monitoring, evaluation, and learning system for adaptation finance – tracking not just expenditures but outcomes (e.g. hectares reforested, people protected from floods, etc.). This will be important for convincing international funds (like GCF or Adaptation Fund) that Albania can deliver impactful adaptation, thereby attracting more resources to close gaps. Additionally, successful pilots can often be expanded with cheaper domestic finance after proof of concept.

Other Challenges

Uncertainty related to climate change projections and weaknesses in monitoring systems pose additional challenges to adaptation finance in Albania. Adaptation costs may be significantly underestimated due to the unpredictable nature of climate impacts. For instance, while current estimates project USD 31.5 million in investment needs for sea level protection in Durrës, this figure could double if worst-case climate scenarios such as SSP5-8.5 materialize by 2100, as outlined in the Implementation Plan. At the same time, Albania's Monitoring, Reporting, and Verification (MRV) system for adaptation remains underdeveloped. There is a lack of standardized indicators to measure adaptation effectiveness, such as resilience gains per euro invested, which impedes the ability to evaluate outcomes and justify further investments. This limitation has been flagged by both the EBRD and the GCF during recent consultations.

3.5 Enabling Mechanisms

Blended Finance Structures

Albania's adaptation financing strategy hinges on scaling up blended finance, combining concessional and commercial capital to de-risk private investment. A recent study elaborated within the NAP development process highlights several actionable instruments and pilots[10]:

- **Guarantees and Risk-Sharing Facilities:** The EBRD is piloting guarantee schemes for energy efficiency retrofits in the Western Balkans, which could be extended to adaptation sectors such as climate-resilient housing or small-scale irrigation.

10. UNDP (2025). *A Market Study and Strategic Roadmap for Public and Private Sector Engagement in Albania's Adaptation Financing*, NAP Project.

- **Green for Growth Fund (GGF):** Although currently focused on energy, this EU-backed vehicle could be expanded to fund adaptation-related infrastructure such as flood protection or climate-smart urban upgrades.
- **Use Case – Tourism Adaptation Bonds:** A concept under discussion involves using concessional anchor investment (e.g., from GCF) to back tourism resilience bonds targeting private resorts in coastal erosion zones like Saranda and Vlorë.

Integration of Adaptation into Development Finance

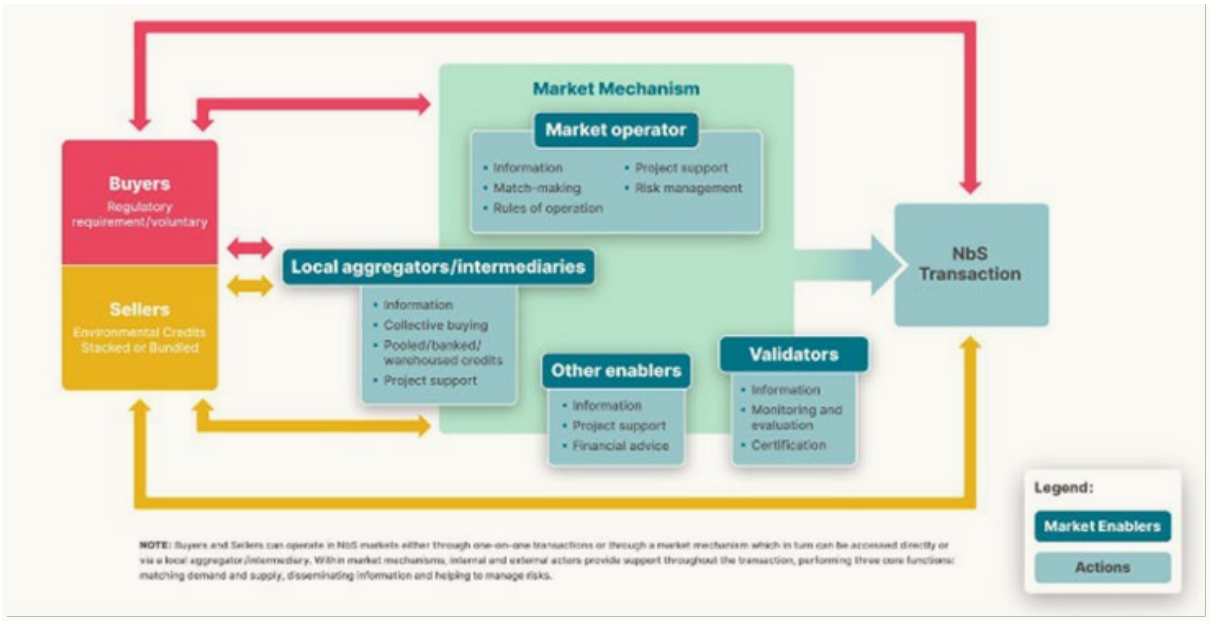
A central pillar of Albania's adaptation strategy is the integration of climate resilience into the broader framework of development finance. This approach seeks to ensure that all new infrastructure investments, whether publicly or privately financed, are robust to climate risks. Progress has already been made in embedding such considerations into investment planning. IFIs like the EIB and the WBIF now systematically require climate risk screening for major infrastructure projects. Albania has piloted this approach in urban drainage systems in Shkodër and Tirana, setting a precedent for mainstreaming climate risk assessments across all future investments. The Implementation Plan builds on this momentum by identifying concrete co-financing opportunities to embed resilience features within EU-supported projects. For example, a USD 41 million water network upgrade in Elbasan, funded by the EU, could be enhanced by integrating NbS, with an additional USD2–3 million sourced from the GCF. Such leveraging of blended finance mechanisms is key to scaling adaptation in a fiscally constrained environment. In total, the Implementation Plan prioritizes 66 adaptation measures, for which green and grey infrastructure measures' were analyzed under a CBA that proves them beneficial. Several of these are particularly attractive to donors and financiers due to their strong financial returns. Projects like the Tirana flood control system and afforestation in Kukës demonstrate net present values exceeding USD 5.8 million and benefit-cost ratios above 2.5, positioning them as shovel-ready interventions for donor alignment and private sector engagement.

However, unlocking large-scale adaptation finance requires a set of enabling reforms to strengthen institutional readiness, fiscal transparency, and regulatory alignment. One such reform is the finalization and operationalization of climate budget tagging, which is currently under development within the Ministry of Finance. Once fully implemented, this system will allow the government to systematically track climate-related expenditures across sectors. It will also provide evidence of alignment with Albania's NDC and NAP, improving eligibility for international climate finance.

Complementary reforms include the introduction of carbon pricing mechanisms and environmental tariff adjustments. Recent analytical work, recommends the phased adoption of a shadow carbon price within public investment appraisal frameworks. Concurrently, correcting utility tariffs, especially in the water sector, is necessary to reflect environmental externalities and create a more attractive environment for private investment in adaptation-related infrastructure through PPPs.Land use planning and enforcement also require significant strengthening. Although Albania's legal framework, including Law No. 107/2014 on spatial planning, mandates climate risk assessments for new infrastructure, enforcement remains weak. Without adequate regulatory oversight, there is a risk of maladaptive development in flood-prone or hazard-exposed areas. Ensuring that zoning and permitting processes systematically account for long-term climate risks is therefore critical to safeguarding future investments.

In parallel to these policy and financial reforms, Albania must address a range of market and institutional capacity constraints that hinder the mobilization of adaptation finance. Technical expertise in climate risk assessment remains limited across ministries and municipalities. Existing methodologies for assessing risks and designing resilience interventions are often weak or inconsistently

Figure 3. Enabling Actors in a stylized NbS Market.



Source: Fankhauser, S., Britz, K., Dickie, I., England, K., Howarth, C., & Ranger, N. (2023, January 13). Case studies in adaptation finance (Advisory Group paper). Oxford Smith School of Enterprise and the Environment, for the UK Climate Change Committee. Figure 2, p. 24.

applied. Moreover, awareness of ESG standards among project developers and financiers is still nascent, limiting the quality and bankability of proposed investments. Data fragmentation further complicates adaptation planning, as integrated information systems across sectors are lacking.

Coordination challenges compound these constraints. Inter-sectoral collaboration on adaptation is often ad hoc, while many key stakeholders, including SMEs and local communities, are excluded from decision-making processes. This weakens both the design and social ownership of adaptation initiatives. Reports by UNDP and the World Bank highlight the need for more inclusive engagement processes and targeted capacity-building programs to empower local governments, civil society, and financial institutions to assess, manage, and invest in climate resilience. As Albania seeks to develop a market for nature-based solutions, the interplay between public institutions, private sector actors, financial institutions, and communities will be essential. An effective NbS ecosystem depends on regulatory clarity, access to finance, local capacity, and the alignment of public and private incentives. Institutional collaboration and mutual reinforcement of roles across these actors can help overcome barriers and foster a vibrant NbS market that supports long-term climate resilience and sustainable development.

This figure presents the key actors involved in developing a NbS market in Albania and outlines their respective roles in advancing climate adaptation efforts. It illustrates the dynamic relationships among public institutions, private sector stakeholders, financial entities, and local communities, emphasizing the need for coordinated action to address persistent barriers, such as limited financing, regulatory gaps, and capacity constraints. By fostering cross-sectoral collaboration and drawing on the comparative strengths of each actor, Albania can lay the foundation for a functional and resilient NbS market that contributes meaningfully to both climate resilience and sustainable development. Implementation Plan and Institutional Arrangements.

04

Strategic approach to mobilizing finance

This strategy emphasizes a proactive approach to identifying and structuring financing opportunities, rooted in a thorough understanding of the financial ecosystem and Albania's strategic entry points into that system. The approach aims to strengthen ownership while maximizing the efficiency and predictability of adaptation finance flows.

Implementing Albania's climate adaptation investment plan will require strong coordination between government institutions, development partners, and the private sector.

Building such partnerships entails early engagement with financiers (public, multilateral, and private), aligning adaptation investment priorities with available funding instruments, and designing financing structures that are both attractive to investors and responsive to national needs.

Effectively financing Albania's adaptation priorities will require a multi-pronged strategy, combining domestic resource mobilization, enhanced access to international climate finance, greater engagement with the private sector, and the development of innovative financial instruments. This section sets out the key pillars of the strategic financing approach, each of which is grounded in the broader climate finance architecture.

4.1 Domestic Resource Mobilization

A cornerstone of sustainable adaptation financing is **the mobilization of national resources**. Albania has already initiated climate budget tagging across line ministries, supported by guidance documents and the Ministry of Finance's budget circulars. Building on this, adaptation-specific tagging categories will be further refined to allow more granular tracking of adaptation-related expenditures. Integration of NAP priorities into MTBP cycles will be systematized, ensuring that sectoral adaptation measures are embedded in planning and supported by dedicated budget lines.

Green fiscal reforms will also be pursued to enhance domestic revenue streams. These include the introduction or reconfiguration of green taxes and environmental levies, as proposed in the Climate Change Adaptation Financing Guidelines. Such fiscal tools serve the dual purpose of internalizing environmental costs and generating earmarked revenue that can be reinvested in resilience-building measures. At the subnational level, municipalities will be encouraged to incorporate adaptation objectives into their investment planning, supported by fiscal transfers and performance-based grants.

In parallel, the **use of PPPs will be expanded**, particularly in areas such as water infrastructure, flood protection, and tourism-resilient transport networks. A dedicated PPP advisory facility may be considered, with technical support from development partners, to ensure climate risk screening is mainstreamed in PPP project structuring. Strengthening domestic contributions is essential for leveraging international funds and ensuring sustainability:

- **State Budget Allocations:** Integration of adaptation priorities into MTBP, using tools like CBT and the *Budget Screening Tool* developed under the NAP Readiness project, will improve transparency and allocation efficiency. To do so, the process or necessary steps would be as follows:

- Key ministries (Infrastructure, Agriculture, etc.) identify adaptation-related programs in their budget submissions. For example, the Ministry of Energy and Infrastructure could include a program "Road Infrastructure Climate Resilience Upgrades" with a specified allocation.

- Over the next few budget cycles, gradually increase allocations for these programs. The Ministry of Finance can set guidance or targets (e.g., each relevant ministry to allocate at least X% of its investment budget to climate-proofing projects).

- The introduction of climate budget tagging (or use of Rio Markers) will help track spending. Pilot tagging in one or two ministries could start as early as next fiscal year, expanding to all ministries by 2–3 years. Tagged data can then be reported, illustrating how much domestic funding goes to adaptation – an important signal to international partners and a baseline to improve upon annually.

- National Climate Fund or Financing Vehicle: Establishing a dedicated fund can help pool and direct resources. This could be a National Adaptation Fund under government oversight (possibly evolving from the existing Environmental Fund). Sources for capitalization could include:
  - Budget transfers (e.g., an initial endowment and then annual contributions).
  - Earmarked revenues, such as a small levy on tourism (tourism tax) or certain natural resource fees, justified by the fact that these sectors need adaptation.
  - International grants (donors might prefer contributing to a national fund that co-finances many projects rather than funding each separately).
  - The fund would then issue grants or co-finance projects, focusing on priorities that might be less attractive to large donors (like community projects or maintenance funding). It should have strong governance to ensure transparent use.
  - Contingency and Emergency Funds: Strengthening Albania's disaster contingency fund and allowing it to finance preventive measures could be beneficial. Currently, the contingency fund is mostly for post-disaster response. By expanding its scope (with increased allocation), some of it could be used in years without disasters to invest in risk reduction (adaptation) measures. This is a way to use domestic "self-insurance" funds proactively.

- **Municipal Budgets:** Subnational governments can finance small-scale local adaptation interventions, especially in water supply, infrastructure maintenance, and DRR, contingent on capacity development.
  - Conditional grants for climate adaptation projects. For example, a competitive program where municipalities propose small adaptation investments (like storm drains, reforestation of slopes, etc.) and receive co-funding from the national budget.

  - Incorporating climate criteria in the formula for capital investment transfers to municipalities – e.g., higher allocation if a municipality has a climate adaptation plan or commits its own funds to a resilience project.

  - Encouraging public participation at local level in budgeting for adaptation (which can also stimulate community contributions in kind or cash for local projects).

  - Increasing domestic public finance for adaptation demonstrates Albania's commitment and improves ownership of adaptation efforts.

Even if domestic funds never cover the entire need, every lek allocated can leverage multiple leks from external sources (as counterpart funding). For example, committing to finance maintenance costs or some percentage of project costs can make proposals to donors more attractive.

- **National Climate Fund (to be established):** The strategy proposes exploring a dedicated national financing mechanism (e.g., a Climate Adaptation Fund) to pool public resources and match donor contributions.
  - Explore and utilize existing financing options and platforms such as national budgets, MDBs and DFIs, bilateral investments, private-sector initiatives, blended financing models, and other innovative market mechanisms. Conduct a comprehensive analysis to align these mechanisms with investment goals and optimize financial support: assess the national budget scope, MDBs and DFIs eligibility, bilateral agreements, and the private sector. The aim is to combine various funding sources for a more impactful and sustainable approach, tapping into a wider range of resources and expertise to enhance the efficiency and effectiveness of initiatives and maximize their impact.

- **Green fiscal reform** (e.g., green taxes, environmental levies)
  - A carbon pricing mechanism (carbon tax or emissions trading) – while primarily for mitigation, some proceeds can be allocated to adaptation (as is done in some countries where a share of carbon tax revenue funds a climate change trust).

  - Removing or redirecting fossil fuel subsidies (if any significant ones exist) and channeling savings to adaptation. Though Albania's direct subsidies are limited, energy price support or similar measures could be rationalized in favor of funding climate actions.

  - Incorporate climate risk in public investment appraisals (this does not directly create funding, but ensures that all publicly funded projects are designed with resilience in mind, safeguarding the effectiveness of public expenditures).

  - Local Government Funding: The central government can incentivize municipalities through:
    - Assess and leverage the investment appetite of finance partners (preferences, objectives, and willingness to invest) by reviewing and interlinking their multi-year financing and investment strategies with the country's investment priorities and finance mobilization strategies.
    - Explore the requirements and constraints of potential financing instruments and the investment sizes they are comfortable with (i.e., ticket size).
    - Examine their investment criteria and strategies to understand the factors and considerations that drive their investment decisions.
    - Finally, investigate the approaches and funding cycles of these investors and finance partners, identifying the timing and frequency with which they allocate capital to align the initiatives effectively.

4.2 International Climate Finance

Accessing **international climate finance** remains critical to closing Albania's adaptation funding gap. The country will prioritize engagement with key global funds, notably the GCF, the Global

Environment Facility (GEF), the Adaptation Fund (AF), and the EU's Instrument for Pre-Accession Assistance (IPA III). Albania is currently preparing a multi-sector adaptation proposal for submission to the GCF in 2025. This flagship proposal builds on the national GCF Country Programme and aligns with the sectoral priorities and costed interventions set out in the Implementation Plan. Co-financing from domestic and bilateral sources will be mobilized to enhance its scope and impact. To maximize efficiency and coordination, Albania will operationalize a pipeline coordination mechanism under the Climate Finance Coordination Unit (CFCU) within the Ministry of Environment. This mechanism will streamline project preparation across line ministries and development partners. Additional GCF Readiness proposals will be fast-tracked to support institutional capacity, project design, and financial instrument development.
Albania will also strengthen its participation in regional climate finance initiatives, including the Western Balkans Green Agenda, and pursue cross-border financing through mechanisms such as the WBIF and the EIB's Adaptation Window.
Key sources of international finance include:

- **GCF:** Albania's core adaptation partner, with active support through readiness grants and NAP financing. GCF provides large-scale, flexible financing (grants, concessional loans, guarantees) for cross-sectoral adaptation priorities such as water management, climate-resilient agriculture, and early warning systems.

- **GEF:** Supports enabling activities, institutional capacity building, and smaller-scale adaptation projects. GEF's LDCF/SCCF windows are particularly suited for ecosystem-based and community-level interventions.

- **AF:** Offers direct access to finance for medium-scale adaptation projects. It can support innovative pilots in water infrastructure, rural resilience, and nature-based solutions.

- **EU's IPA III (Green Agenda):** Provides funding for climate-proof infrastructure, policy reforms, and regional cooperation. Albania will prioritize climate adaptation integration into IPA planning and implementation.

- **World Bank, EIB, and MDBs:** Offer concessional loans, blended finance, and technical assistance for resilient infrastructure, flood protection, and agriculture through investment lending and program-for-results modalities.

- **UN Agencies (UNDP, UNEP, FAO):** Provide technical cooperation and catalytic grant financing for policy integration, MRV systems, and demonstration projects.

- **Debt-for-Nature Swaps:** Debt-for-nature swaps offer dual benefits by simultaneously reducing public debt and channeling funds toward environmental conservation. While Albania has not yet implemented such a mechanism, successful cases in other countries demonstrate their effectiveness in supporting biodiversity while improving fiscal sustainability. Given Albania's rich natural capital, such as the Vjosa River, one of Europe's last wild rivers, this instrument holds significant potential for financing nature-based solutions and enhancing climate resilience (Banque de France, 2024).

- **Bilateral Donors:** Albania will continue engagement with key bilateral partners, including:
  - KfW/BMZ (Germany)
  - SECO (Switzerland)
  - USAID/MCC (USA)
  - Japan, Nordic Development Fund, and others

To enhance effectiveness, Albania's climate finance engagement will be aligned with the GCF's Country Programme and the country's overarch-

ing climate priorities. Readiness grants and proposals for medium-sized projects will be strategically sequenced to ensure coherence and build institutional momentum. Coordination among donors will be facilitated through the Climate Finance Coordination Unit, which will play a central role in aligning diverse funding sources with national adaptation priorities and investment plans.

4.3 Private Sector Engagement

In Albania, enterprises primarily utilize debt financing through micro-financing institutions, commercial banks, and financial intermediaries. Albania's bank-centric financial sector exacerbates these constraints. The country has underdeveloped capital markets, limited availability of green bonds, and insufficient non-bank financial institutions to provide alternative financing. Additionally, corporate financial disclosure on climate-related risks is weak, making it difficult for investors to assess opportunities in sustainable finance[11]. The lack of a unified database on climate risks, emissions levels, and investment performance further impairs financial institutions' ability to allocate capital efficiently.

Many renewable energy projects, climate-smart infrastructure, and low-carbon technologies require high upfront capital investments, which deter private investors. Inadequate risk-sharing mechanisms and guarantees heighten perceived risks, limiting private sector engagement. PPPs, which could mitigate investment risks, remain underutilized in Albania[12]. Without improved risk mitigation instruments, such as partial credit guarantees or concessional finance, investors remain hesitant to allocate funds toward climate-related projects.

The adoption of ESG principles remains in its infancy in Albania. Many businesses are unaware of the EU's Sustainable Finance Taxonomy, Corporate Sustainability Reporting Directive (CSRD), and the European Green Deal[13]. Without aligning national financial regulations with EU sustainability frameworks, businesses risk losing access to European markets. Additionally, many enterprises lack the technical expertise to integrate sustainability into their business models, making them less attractive to green investors.

Despite Albania's growing financial sector, access to green finance remains limited. Traditional banks have been slow to develop financial products tailored to climate-related investments due to perceived risks, lack of expertise, and underdeveloped climate risk assessment methodologies. Furthermore, local financial institutions often have limited knowledge of ESG criteria, which restricts their ability to assess the creditworthiness of green projects.

Albania's private sector is predominantly composed of SMEs, which represent approximately 99.8% of all businesses in the country. SMEs contribution to growth and competitiveness, despite their overall importance to economic development, is limited by their constrained access to sources of external finance[14].Despite their critical role in economic development, many of these SME's struggle to grow beyond their initial size due to limited access to external financing[15].

Despite increasing awareness of climate risks, Albania's green finance landscape remains nascent. The country's financial system is bank-dominated, with underdeveloped capital markets and limited availability of green financial instruments.

11. World Bank, *Sustainability and Resilience in the Western Balkans: Economic and Environmental Perspectives* (Washington, DC: World Bank, 2022).
12. World Bank, *Country Climate and Development Report (CCDR) for Albania: Climate Resilience and Sustainable Growth* (Washington, DC: World Bank, 2024).
13. Regional Cooperation Council (RCC), *Western Balkans Green Agenda and Climate Adaptation Strategies* (Sarajevo: RCC, 2024).
14. Thorsten Beck and Asli Demirgüç-Kunt, "Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint," *Journal of Banking & Finance* 30, no. 11 (2006): 2931–2943
15. Institute of Statistics of Albania (INSTAT), *Statistical Yearbook of Albania: Socioeconomic and Environmental Indicators* (Tirana: INSTAT, 2024).

Blended Finance Innovations: Albania is piloting blended finance models to de-risk investments in climate adaptation. For example, the Adriatic Resilience Fund combines GCF grants (30%), EIB loans (50%), and private equity (20%) to finance eco-tourism and agroforestry projects. Early results show a 1:3 public-to-private leverage ratio, consistent with global trends[16].

Private investments account for less than 5% of adaptation finance in Albania, compared to the global average of 14%. High perceived risks, such as regulatory uncertainty and lack of standardized climate risk assessments, deter private sector participation[17].

The strategy for private sector mobilization focuses on enabling conditions, risk-reduction instruments, and business models that align with adaptation outcomes. A central component will be the expansion of blended finance mechanisms, using concessional funds to mobilize commercial capital, particularly through guarantees and climate-aligned credit lines in partnership with national and regional banks. The GCF Private Sector Facility and other multilateral financial windows will be actively explored to catalyze private investment.

Public-Private Partnerships in climate-relevant sectors such as resilient road infrastructure, flood protection, and water systems will be promoted through risk-sharing instruments and the development of regulatory frameworks that account for long-term climate risk. ESCO models will also be introduced, particularly to support retrofitting of public buildings and tourism infrastructure, critical areas given Albania's economic reliance on climate-sensitive sectors.

In parallel, the strategy encourages the private sector to integrate climate risk into core business models. This will be supported by exploring incentives such as tax rebates, concessional financing, and participation in voluntary carbon markets to stimulate investments in ecosystem-based adaptation and green infrastructure.

Mobilizing private capital is essential to scaling up adaptation investment. Key areas of focus include:

- **PPPs:** Opportunities exist in water infrastructure, renewable energy projects that yield resilience co-benefits, and climate-smart agriculture value chains.
- **Green and Climate Bonds:** Although still nascent in Albania, the issuance of sovereign or municipal green bonds could be piloted to finance resilient urban and infrastructure projects.
- **Insurance Instruments:** Risk transfer mechanisms, such as agricultural or weather-index insurance, can strengthen climate risk management for farmers and SMEs.
- **Commercial Banks and Microfinance Institutions:** With appropriate regulatory support and technical capacity, domestic banks could offer dedicated credit lines aligned with adaptation goals, especially for SMEs in the agriculture and tourism sectors.
- **Corporate Social Responsibility (CSR):** Large firms may be engaged to invest in ecosystem restoration or urban greening under CSR initiatives.

Other blended finance innovations under consideration include the use of green and resilience bonds backed by partial guarantees (such as under the AEF), ESCO service agreements, and dedicated credit lines to encourage private sector uptake.

16. Climate Policy Initiative (CPI), *Tracking and Mobilizing Private Sector Climate Adaptation Finance* (2024).
17. Climate Policy Initiative (CPI), *Tracking and Mobilizing Private Sector Climate Adaptation Finance* (2024).

Currently, Albania's financial sector is predominantly bank-centric, with enterprises primarily relying on debt financing through commercial banks, microfinance institutions, and intermediaries. This structure creates constraints on access to finance for climate-related investments.

The underdevelopment of capital markets, limited issuance of green bonds, and the scarcity of alternative non-bank financial institutions further limit access to diverse financing instruments. Moreover, corporate climate-related financial disclosures remain weak, hampering investor capacity to assess sustainable investment opportunities. The absence of a unified database on climate risks, emissions, and investment performance impedes effective capital allocation by financial institutions.

Many climate-smart infrastructure, renewable energy, and low-carbon projects require significant upfront capital, which discourages private investment in the absence of adequate risk mitigation. The limited use of PPPs and lack of partial credit guarantees, or concessional instruments further increase perceived risks and deter engagement.
The adoption of ESG principles is still in its early stages in Albania. Awareness of EU-aligned frameworks, such as the Sustainable Finance Taxonomy, the CSRD, and the European Green Deal, is low. Without alignment to these frameworks, Albanian enterprises risk exclusion from European markets. Compounding this challenge is the lack of technical expertise among firms to integrate sustainability into their operations, limiting their attractiveness to green investors.

Despite the financial sector's gradual expansion, traditional banks have shown limited initiative in designing financial products tailored to adaptation needs, largely due to perceived risks, a lack of ESG understanding, and underdeveloped climate risk assessment methodologies. Financial institutions often lack the capacity to evaluate the creditworthiness of green projects. Albania's private sector is composed overwhelmingly of SMEs, which represent nearly 99.8% of all businesses. Although vital to economic development, these SMEs struggle with constrained access to external finance, which inhibits growth and limits their capacity to invest in climate resilience.

Private investment currently accounts for less than 5% of adaptation finance in Albania, well below the global average of 14%. High perceived risks, regulatory uncertainty, and the absence of standardized tools for assessing climate risks continue to restrict private participation.

Nonetheless, Albania is piloting innovative blended finance approaches to address these gaps. For example, the Adriatic Resilience Fund combines GCF grants (30%), EIB loans (50%), and private equity (20%) to support eco-tourism and agroforestry ventures, achieving a public-to-private leverage ratio of 1:3. This model reflects global best practice and demonstrates the potential of coordinated financing to catalyze private capital for adaptation.

In cases in which the private sector is expected to lead in addressing investment needs, decision-makers should prepare and publish Requests for Proposal (RFP) for the relevant pipeline of projects. RFPs will describe the investment needs, define the climate and development goals being pursued, and transparently lay out the process for evaluating the proposals.

Mobilizing private finance for adaptation is challenging but essential. The private sector can contribute through direct investments in their own adaptation and via capital market instruments. Some strategies to unlock private finance include:

- **Green and Resilience Bonds:** The government (or possibly a large municipality like Tirana) could issue green bonds where proceeds

are earmarked for climate-related projects, including adaptation. For example, a sovereign green bond of USD100 million could be issued, with a portion allocated to specific adaptation projects (flood protection, reforestation, etc.). Investors are increasingly interested in green bonds globally. Albania would need to develop a green bond framework (with clear criteria and reporting) to ensure credibility. The World Bank or EBRD can provide support in structuring such bonds. If Albania's credit rating and market conditions allow, this could be a way to raise significant upfront capital dedicated to climate projects.

- **PPPs:** Identify adaptation projects suitable for PPP structures. For instance:
  - A desalination plant for providing water in coastal tourist areas (private operator builds/operates, recoups costs via water tariffs with government support).
  - Flood defense infrastructure in a city, where perhaps the private party also develops adjacent land (as seen in some Dutch projects) to make a return.
  - City infrastructure like stormwater systems could be bundled with other urban services that generate revenue (e.g., waste management) to attract private operations.
  - Viability Gap Funding (VGF): The government may offer VGF or guarantees to make PPPs viable for adaptation projects that aren't naturally profitable. Donor grants could also be used to sweeten PPP deals for resilience.
- **Insurance and Risk Transfer:** Develop insurance markets that encourage risk reduction:
  - Work with insurance companies to design affordable products for farmers (crop insurance against drought/flood). Government can subsidize premiums initially to encourage uptake. With insurance in place, banks are more likely to lend to agriculture (knowing shocks are covered), indirectly financing adaptation (farmers can invest in better practices).
  - Explore catastrophe bonds or insurance pools for disasters, possibly regionally. For example, a Balkan Catastrophe Insurance Pool could provide quick payouts after events, which while not prevention, improves financial resilience and could reduce the fiscal burden on government (freeing budget to invest in preventive adaptation).

4.4 Innovative Instruments

As part of its forward-looking approach, Albania will explore and pilot innovative financing instruments that can expand its adaptation finance envelope. A feasibility study for Albania's first green bond is planned for 2026, with technical assistance to assess market readiness, legal frameworks, and potential pipelines. Lessons will be drawn from peer countries in the region (e.g., Serbia and North Macedonia) that have issued sustainability-linked bonds.

In agriculture and nature-based solutions, results-based climate finance (RBCF) mechanisms will be piloted in selected basins, where disbursement is contingent on verified ecosystem restoration or yield improvements under climate stress.

These pilots could be supported through bilateral climate funds or through instruments like the World Bank's BioCarbon Fund.

Albania is also actively participating in the development of a regional climate risk insurance facility, under the umbrella of the Southeastern Europe Catastrophe Risk Insurance Facility (SECRIF). This instrument would provide sovereign and municipal insurance against extreme weather events, with the potential for local uptake by farmers and SMEs. Feasibility assessments and actuarial studies are ongoing and will inform Albania's potential contribution and benefit design.

Overall, this integrated approach reflects a pragmatic yet ambitious effort to diversify finance sources, enhance fiscal resilience, and ensure that the implementation of Albania's adaptation agenda is not constrained by financing shortfalls. The success of this strategy will depend on sustained political commitment, institutional coordination, and the continued engagement of development partners and financial institutions.

When large amounts of capital are required to address systemic investment needs, countries may consider implementing policy and regulatory reforms, strengthening national institutions, and setting up or tapping into existing vehicles or instruments, such as co-investment platforms, to de-risk investments and attract financing at the needed volumes. These approaches may specifically target private-sector capital but usually also play a catalytic role in financing from various finance partners (please see Stage 4, Component 2, Step 2).

Example of application of innovative instruments: Chile.

Chile has developed an innovative de-risking strategy to attract private investment in renewable energy and green hydrogen through a combination of public guarantees, blended finance, and risk-mitigation instruments. The government, in partnership with CORFO (Chile's Economic Development Agency), the Inter-American Development Bank (IDB), and private investors, has launched financing mechanisms such as credit guarantees, concessional loans, and PPPs to reduce investor risk. One key initiative is the Green Hydrogen Fund, which provides first-loss capital and loan guarantees to incentivize private sector participation in this emerging industry. Additionally, the government has introduced contract-for-difference (CfD) schemes to stabilize energy prices and reduce revenue volatility for investors. These instruments have successfully mobilized billions in private capital for renewable energy, making Chile a regional leader in climate investment de-risking.

05

Strategic prioritization

Figure 4. Innovative Financial Instruments for Climate Change Adaptation by sector,

Category / Instrument	Crop and food production	Ecological services/nature-based infrastructure	Water supply (infrastructure)	Coastal and riverine protection and management	Disaster risk reduction	Energy infrastructure	Transport infrastructure	Other built environment and infrastructure	Social infrastructure	Industry and manufacturing
Debt instruments										
● Green bonds	■	■	■	■	■	■	■	■	■	■
◐ Climate (resilience) bonds	■	■	■		■	■	■	■	■	■
◐ Blue bonds	■	■	■	■						
◐ Social bonds	■		■		■			■	■	
◐ Sustainability bonds	■	■	■	■	■	■	■	■	■	■
◐ Sustainability-linked bonds		■	■			■	■	■		■
◐ Green loans	■	■	■	■	■	■	■	■	■	■
◐ Sustainability-linked loans	■	■	■	■	■	■	■	■	■	■
Results-based financing instruments										
◐ Biodiversity credits				■						
○ Conservation impact bonds				■						
◐ Environmental impact bonds		■	■	■				■		
○ Restoration insurance service companies				■	■					
● Stormwater credit trading programs				■				■		
● Payments for ecosystem services	■	■	■							
○ Adaptation Benefits Mechanism	■	■	■		■	■				
Financial risk management instruments										
● Pooled investment funds	■	■	■	■	■	■	■	■	■	■
◐ Crowdfunding and investment platforms	■		■	■				■	■	
● Public–private partnerships	■	■	■			■	■	■	■	
● Credit guarantees	■	■	■	■	■	■	■	■	■	■
◐ Contingent line of credit – Liquidity facility					■				■	
● Green revolving funds		■	■	■	■					
● (Parametric) catastrophe bonds					■					
● Debt-for-nature swaps		■	■	■	■					
● Tax increment financing			■	■			■	■	■	
◐ Green securitization			■			■	■	■		
◐ Work for taxes schemes	■	■	■		■	■	■	■	■	

Source: NAP Global Network. (2024). Innovative financial instruments for climate change adaptation: Instruments by sector and case study location.

5.1 Impact of the Climate Financing Strategy by 2030

By modernizing irrigation systems across Albania's key agroecological zones, the Strategy will secure reliable water supply for approximately 180,000 farmers and their households[1]. At the same time, diversifying the energy mix with 150 MW of solar and wind capacity will enhance grid stability for roughly 900,000 electricity consumers in droughtprone regions[2]. Upgrading and climateproofing 500 km of primary roads and rail corridors will markedly reduce weatherrelated disruptions for an estimated 1.2 million daily commuters and freight users[3]. In urban areas, the installation of green drainage and flood management measures in five secondary cities will protect around 120,000 residents from extreme rainfall and inundation[4]. Finally, by strengthening resilience of tourism assets, coastal infrastructure, heritage sites, and naturebased attractions, the Strategy will safeguard jobs and incomes for some 150,000 workers and service providers in the sector[5]. Altogether, these interventions are projected to benefit over 2.5 million people, nearly 90 percent of Albania's population, through enhanced water and energy security, uninterrupted mobility, urban flood resilience, and stabilized livelihoods.
Beyond the 30,000 net new green jobs directly created by adaptation investments, the Climate Financing Strategy will protect and sustain employment across Albania's key sectors well into the future. Tourism employment is projected to grow from 269,000 jobs in 2023 to over 300,000 by 2030 and to 314,000 by 2034 as resilient infrastructure and ecotourism measures unlock new market potential[18]. Agricultural livelihoods, which today comprise 36 percent of the employed labor force (around 660,000 workers), will be safeguarded through modernized irrigation, climatesmart crop support and targeted credit lines, ensuring income stability for more than half a million smallholder farmers nationwide. With SMEs accounting for over 80 percent of total employment (roughly 1.5 million jobs), the Strategy's blendedfinance facilities and guarantee schemes will prevent climatedriven business closures and preserve these livelihoods. Finally, diversification into 150 MW of renewable energy capacity will avert supply disruptions that otherwise risk layoffs among 900,000 electricity consumers and their service networks, indirectly securing thousands of jobs in utilities and related industries. In combination, while 30,000 represents the net new positions catalyzed by adaptation projects, the Strategy's broader measures will safeguard and enhance livelihoods for over 2 million workers by 2030, spanning tourism, agriculture, SMEs and energy.

Investing the estimated USD9.8 billion in Albania's NAP will yield a substantial return across the four priority sectors, agriculture, energy, transport and urban development, **through the "TripleDividend" of adaptation: avoided losses, accelerated economic potential and amplified social and environmental cobenefits.**

In agriculture, modernized irrigation and soilmanagement practices will avert up to USD4 billion of crop losses by 2030, while boosting productivity to generate an additional USD1.5 billion in farm income and reducing rural poverty. In the energy sector, diversifying 150 MW of renewables will prevent nearly USD2 billion in droughtrelated power shortages and imports, unlock USD1 billion in new economic activity through distributed generation, and cut greenhousegas emissions by 1.2 million tCO_2e annually. Upgrading 500 km of roads and rail will avoid USD3 billion in transport disruptions, enable USD2 billion of incremental trade and tourism revenue, and reduce roadfatality risks, saving an estimated 250 lives per year[4]. In urban development, green infrastructure in secondary cities will forestall USD1.2 billion in flood

18. UNDP, *Unlocking Climate Resilience: A Market Study and Strategic Roadmap (Cibola Market Study)*, Table 4 (May 2025).

damages, spur USD800 million of property value gains through enhanced livability, and improve public health outcomes by reducing heatrelated hospitalizations by 15 percent.

Aggregating these streams, the Strategy is projected to deliver over USD17 billion in avoided losses, USD5.3 billion of accelerated economic gains, and USD2.5 billion of cobenefits by 2030, a total impact of nearly USD24.8 billion[19] on a USD9.8 billion outlay. This equates to a benefit–cost ratio of approximately 2.5 to 1, consistent with global adaptation benchmarks, and underpins resilient, inclusive growth across Albania's most climatevulnerable sectors.

Albania's Governance Framework will be strengthened by institutionalizing climate budget tagging within the MediumTerm Budget Programme, mirroring the Philippines' Climate Change Expenditure Tagging (CCET) system introduced in 2013, which enabled annual publication of tagged climate allocations in the national Budget of Expenditures and Sources of Financing. A publicly accessible MRV dashboard, updated biannually, will track disbursements against the 66 prioritized adaptation measures and display progress on key indicators, such as percentage of funding mobilized and number of fully funded projects, directly on the Ministry of Finance portal. Regular oversight will be provided through quarterly reviews by the InterMinisterial Working Group on Climate Change and an annual Climate Public Expenditure and Institutional Review (CPEIR), following the Nepal model initiated in 2011. Together, these reforms will raise Albania's climateexpenditure transparency score from 40 percent today to over 85 percent by 2030, aligning public finance management with leading international practices and reinforcing accountability to parliament, donors, and citizens.

5.2 Indicators

Percentage of Total Funding Mobilized

The Financing Strategy estimates an USD 936 million adaptation financing need over 2026–2036. As of mid2025, only about USD211 million (22 percent) of that total has been formally committed, primarily through GCF readiness grants, EU IPA al-

19. *Triple dividend impact calculation from a USD9.8 billion outlay. UNDP, Unlocking Climate Resilience: A Market Study and Strategic Roadmap (Cibola Market Study), Table 4 (May 2025).*

- *Avoided losses (~ USD10.2 billion)*

USD4 billion in crop-losses averted (FAO; Implementation Plan D3, Annex II)
USD2 billion in avoided powershortage costs (Cibola Study, Sect. 3.1)
USD3 billion in avoided transport disruptions (Implementation Plan D3, Table 7)
USD1.2 billion in avoided urban flood damages (Financing Strategy Outline, Sect. 4.2)
Total ≈ USD10.2 billion

- *Accelerated economic potential (~ USD5.3 billion)*

USD1.5 billion additional farm income (FAO; Implementation Plan D3)
USD1 billion of new distributedgeneration activity (IEA; Cibola Study)
USD2 billion of incremental trade and tourism revenue (World Bank; Implementation Plan D3)
USD0.8 billion of propertyvalue gains (WHO; Financing Strategy Outline)
Total ≈ USD5.3 billion

- *Amplified cobenefits (~ USD2.5 billion)*

Climaterisk health savings (15 % fewer heatrelated hospitalizations)
Emissions- abatement social value (1.2 Mt CO_2e × social cost of carbon)
Lives saved (250 lives/year × VSL)
Total ≈ USD2.5 billion (aggregate social & environmental valuation)

Adding these three streams yields a combined impact of - USD18 billion on a USD9.8 billion investment, consistent with the methodology laid out by the Global Commission on Adaptation (benefit–cost ratios of 2–4) and grounded in the sectoral data we've cited.

locations, and early domestic budget tagging. The Strategy therefore targets mobilizing 75 percent of the total need (approximately USD 702 million) by 2030. Progress will be tracked via the annual disbursement estimation in the Implementation Plan for Prioritized Adaptation Actions (D3 Annex XI), which projects cumulative commitments of USD679 million by end2030.

Number of Fully Funded Priority Projects

Sixtysix adaptation measures were prioritized through a multicriteria analysis (Implementation Plan D3 Table 5). Of these, 12 have secured full financing and initiated implementation as of June 2025 (D3 Table 11). The Strategy sets a target of 50 fully funded and operationalized measures by 2030, reflecting both the need for accelerated proposal development and the capacity of the National Designated Authority to fasttrack at least five GCF or MDB proposals per year.

Share of Domestic vs. International Financing

Today's financing mix remains skewed, an estimated 15 percent domestic (national budget, local levies) versus 85 percent international (multilateral, bilateral, private). Building on MTBP climate tagging and planned greenbond issuance, the Strategy targets raising the domestic share to 30 percent (USD280 million) by 2030, with the remaining 70 percent (USD655 million) sourced externally through GCF, EU IPA, MDB concessional loans, and blendedfinance instruments.

5.3 Alignment with Ministry of Finance Budget Terms

Albania's Climate Change Adaptation Finance Strategy must be fully embedded within the Ministry of Finance and Economy's existing budget framework to ensure both sustainability and impact. Since 2024, the MoFE has required each ministry to demonstrate how its threeyear MediumTerm Budget Programme allocations support the NAP and the adaptation components of its NDC. Building on Instruction No. 5 of February 2023, which introduced climate indicators and outputs into MTBP guidelines, adaptation priorities are now a standing element of the macrofiscal framework. Ministries must allocate a minimum share of their sectoral ceilings to resilience measures, such as floodproofing transport networks, and include an "Adaptation Impact Statement" in every MTBP submission that quantifies expected resilience benefits alongside traditional economic indicators. These adaptation allocations are reviewed in dedicated MTBP hearings, cochaired by the MoFE and the Ministry of Tourism and Environment, ensuring that adaptation spending is defended on equal footing with other strategic fiscal priorities.

Transparent tracking of adaptation expenditures hinges on a robust climate budget tagging system. Under Albania's green budgeting screening tool, every line item in the national budget is classified according to its relevance to climate adaptation, using a typology that distinguishes high from mediumrelevance expenditures. Where budget lines serve multiple objectives, relevance weights are applied to quantify their adaptation contribution. The MoFE has piloted this tagging in the agriculture, energy, and infrastructure sectors. Integration with the Financial Management Information System will automatically flag tagged lines during execution, while an annual Climate Budget Report, drawn directly from tagged data, will accompany the Budget Law to Parliament, enabling legislators to monitor adaptation spending trends. A dedicated MoFE unit will conduct qualityassurance reviews using a standard "Tagging Review Form," verifying that each programme's assigned weight reflects its true contribution to resilience.

Aligning fiscal instruments with climate objectives is equally essential. Secondary regulations under Law 155/2020 will be finalized to adjust utility tariffs, particularly in the water sector, and to

introduce a shadow carbon price into public investment appraisals. This ensures that projectlevel financial analyses reflect the full cost of climate risks and discourages maladaptive investments. Public Investment Management guidelines will be amended to require climaterisk screening at the concept stage for all capital projects exceeding ALL 1.5 billion (USD 18.44 million) for most sectors, ALL 2.5 billion (USD 30.56 million) in the transport secto[20] Adaptation measures must be costed and budgeted upfront, mirroring best practices among EU candidate countries. In parallel, the MoFE's Debt Management Office is developing green bond frameworks and publicprivate partnership clauses for the 2025–2027 MediumTerm Fiscal Strategy, with support from development partners to structure blendedfinance guarantees.

Finally, a suite of transparency and accountability mechanisms will cement these reforms in practice. Beginning in 2025, the Parliamentary Finance Committee will hold an annual "Climate Finance" session to review the Climate Budget Report and question ministry officials on adaptation spending performance. The Supreme State Audit will incorporate adaptationtagged expenditures into its annual audit cycle, verifying that funds marked for resilience have been disbursed and used effectively. To engage civil society and private investors, the MoFE will publish an online dashboard of adaptation spending, leveraging the structured classification developed in the Budget Screening Tool, providing realtime visibility into how public resources contribute to climate resilience.

By integrating adaptation into the MTBP, operationalizing climate budget tagging, aligning fiscal instruments with climate risk, and strengthening transparency and accountability, Albania will not only meet its NAP and NDC commitments but also build a resilient public finance system capable of sustaining longterm climate action.

5.4 Prioritization of Actions and Domestic Resource Mobilization

Implementing Albania's climate adaptation priorities over the 2026–2036 period requires substantial and sustained investment. The total financing requirement for the 66 prioritized adaptation measures is estimated at approximately USD 9.8 billion, equivalent to 2.7% of Albania's 2025 GDP per year. While this scale of investment presents a challenge, it is deemed fiscally feasible through a diversified financing approach leveraging both public and private sources, further improved by an expected GDP growth.

To enhance financial sustainability and ownership, Albania may commit to mobilizing at least 20% of the total financing needs from domestic resources by 2030. This includes the establishment of a dedicated government climate budget envelope, integrated within the Medium-Term Budgeting Program, and supported by climate budget tagging mechanisms. In the short term, a reallocation of underutilized MTBP funds during the 2025 budget cycle offers an immediate opportunity to finance select priority measures, particularly those that are institutionally ready and require limited investment, referred to as "low-hanging fruits".

PPPs will play a key role in financing infrastructure-heavy measures, especially in sectors such as tourism, energy, and resilient urban development. The strategy further proposes piloting a national green bond issuance, in collaboration with the Ministry of Finance and international development partners, to tap into sustainable finance markets and attract institutional investors. Parallel efforts will focus on municipality-level contributions and local levies, particularly for community-based adaptation and decentralized services, ensuring that local governments contribute effectively to adaptation financing.

20. Albania, Udhëzimi Nr. 11 "Për përcaktimin e kufirit financiar të vlerës së plotë të projektit" (28 Maj 2025) https://financa.gov.al/wp-content/uploads/2025/06/Udhezimi-nr.11-date-28.05.2025-Per-percaktimin-e-kufirit-financiar-te-vleres-se-plote-te-projektit.pdf

Table 6. Illustrative Financing Actions and Implementation Timeline.

Action	Timeline	Lead	Source
Readiness proposals	2026	MoTE/NDA	GCF
Green bond feasibility & issuance	2027–2028	MoF	Domestic market
PPP development for priority sector	2026–2029	MoI	Blended finance
Local budget co-financing	2026–2030	Municipalities	Local levies

Target: **Mobilize 20% of adaptation costs** from domestic resources by 2030

To accelerate implementation, Albania will submit fast-track GCF Readiness and Preparatory Support Programme proposals, focusing on institutional strengthening, pipeline development, and innovative financing instruments. These grants are expected to enhance access to larger-scale concessional financing windows and provide essential support to operationalize the climate finance architecture. Together, these measures constitute a robust and realistic roadmap to mobilize the financial resources necessary for effective and inclusive climate adaptation, while reinforcing Albania's long-term fiscal resilience and climate governance.

5.5 Prioritization sequence

The proposed sequencing for mobilizing the roughly USD 9.8 billion investment in Albania's National Adaptation Plan is drawn directly from the detailed Implementation Plan for Prioritized Adaptation Actions and the NAP Monitoring, Evaluation and Learning (MEL) Framework documents which provides a set of indicators, and stretches through 2035 to align with the mediumterm budget cycle (see Figure 5).

2025 – Preparation and Early Pilots

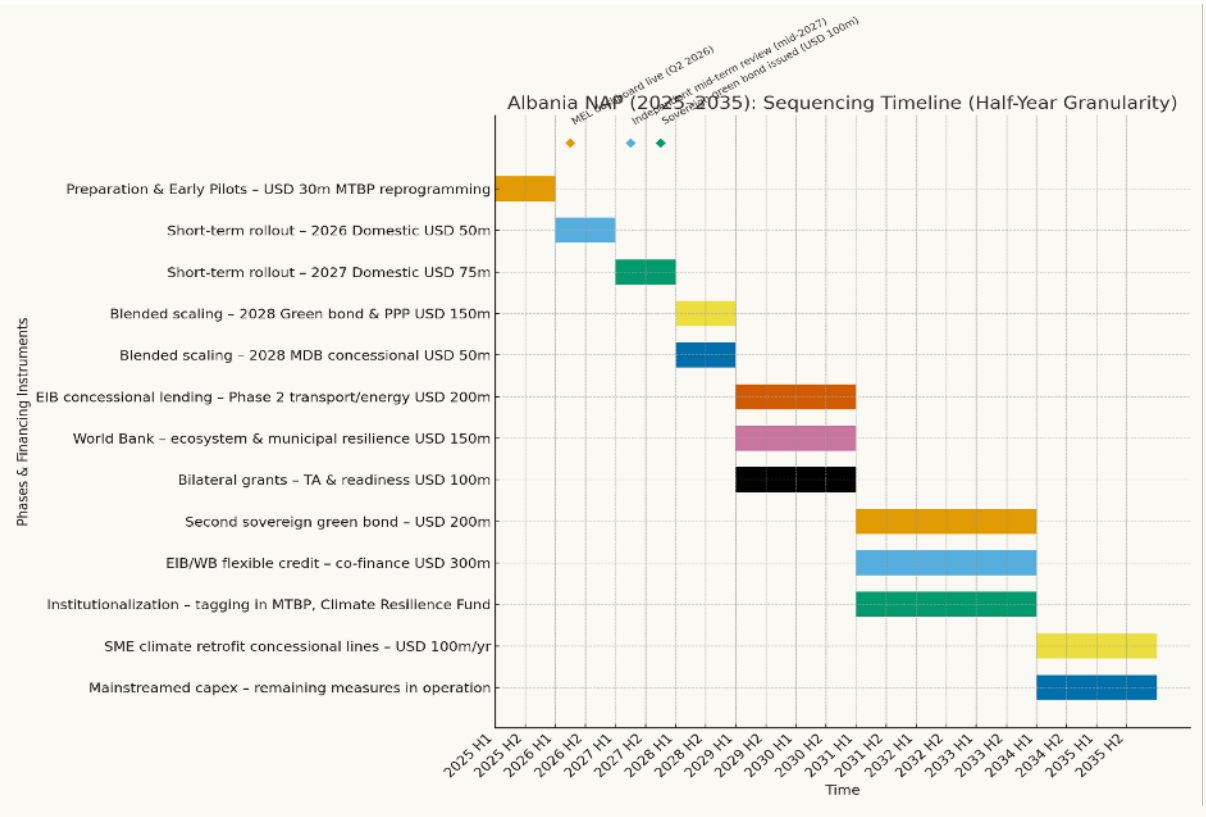
Before full-scale financing begins, a oneoff reprogramming of USD 30 million from underutilized MTBP lines is allocated to ten "lowcost, highimpact" pilots, riverbank reforestation, village drainage upgrades, smallscale irrigation kiosks, and the drafting of complete GCF/EU IPA proposals. These pilots both validate procurement channels and build execution capacity ahead of larger disbursements.

2026–2028 – Short Term RollOut (USD218.6 million total)

The first tranche of 24 priority measures (agriculture, forestry, tourism, urban development and transport) requires USD 218.6 million overall. Disbursement is phased as follows:

- **2026 (USD 50 million)**: Ten measures, four irrigationmodernization projects, three urban greendrainage schemes, two forestrestoration pilots, one climateproof road upgrade, are cofinanced through climatetagged MTBP lines and initial domestic budget allocations.
- **2027 (USD 75 million)**: A further seven measures roll out, including secondarycity flood defenses, agroforestry enhancements and tourismresilience pilots, as domestic adaptation allocations grow to USD 75 million.

Figure 5. NAP Implementation Timeline: Key Phases and Funding Modalities (2025–2035).



- **Late 2027 (USD 100 million green bond)**: Albania issues its first sovereign green bond, backed by a bilateral guarantee, embedding private cofinance into wetlands restoration and solarpowered irrigation PPPs.

2028 – Blended Finance Scaling (USD200 million total)

With readiness and early implementation complete, USD 150 million of green bond proceeds and PPP funds are deployed to the remaining seven measures in this tranche, utilityscale solar minigrids, expanded irrigation networks, urban park green corridors, leveraging an additional USD 50 million of concessional MDB loans from the EIB and World Bank.

2029–2030 – MDB Loans and Bilateral Grants (USD450 million total)

The next wave of scaling is financed through:

- **USD 200 million** in EIB concessional lending for Phase 2 transport and energy resilience (climateproof road corridors, gridstabilizing solar farms),
- **USD 150 million** in World Bank financing for ecosystembased agriculture and municipal resilience investments, and
- **USD 100 million** in bilateral grants (KfW, JICA, Nordic donors) to support technical assistance and crosssector readiness.

By the close of 2030, fifty of the sixtysix measures will be fully financed and in execution, with

cumulative disbursements reaching approximately USD 600 million, about 75 percent of the USD 800 million shortterm envelope.

2031–2033 – Institutionalization and Major Capital Works

This phase embeds adaptation finance within national systems and delivers largescale infrastructure:

- **USD 200 million** second greenbond issuance strengthens domestic capital markets and underwrites regional waterstorage and floodcontrol dams.
- **USD 300 million** of EIB/World Bank flexiblecredit cofinance funds major urban green corridors and dam construction.
- Routine climatebudget tagging is fully integrated into multiyear budget cycles and a dedicated Climate Resilience Fund is established in MoF to channel carbonpricing revenues and environmental levies.

2034–2035 – Mainstreaming and Sustainability

In the last two years of the mediumterm cycle, adaptation is fully mainstreamed across all sectoral capital programmes:

- The balance of the sixtysix measures, coastal defenses, transport upgrades, energy retrofits, are under implementation or operation.
- SME climateretrofit concessional lines scale to USD 100 million annually.
- MoF transitions to a permanent Climate Adaptation Facility model, managing maintenance funds, ongoing monitoring and privatesector engagement to sustain outcomes beyond 2035.

Monitoring & MidCourse Correction

Although the biannual public "finance dashboard" is still to be developed, the MEL Roadmap mandates its launch by Q2 2026, drawing on the CPEIR and climate budgettagging systems to track disbursements by source, sector and measure. An independent midterm review in mid2027 will benchmark actual disbursements and procurement performance against the 2026–27 plan, verify fiduciary controls and recommend any resequencing or reallocation needed to keep the 2025–2035 objectives on course.

06

Detailed Funding Plan (2026 – 2028)

This section presents a comprehensive funding plan to mobilize and manage the financial resources required to implement Albania's priority climate adaptation measures.

The plan seeks to align identified investment needs with the most appropriate sources of finance, domestic, international, public, and private, while addressing key barriers and institutional capacity gaps that may hinder effective delivery.

The strategy prioritizes investments and matches them with suitable financing instruments to ensure resources are allocated strategically, efficiently, and with maximum impact. It includes a periodic review mechanism to adapt the financing approach as conditions and opportunities evolve. A central element of this plan is the systematic identification and analysis of financing barriers, economic, technological, socio-cultural, institutional, and regulatory, that affect the feasibility of each adaptation intervention. This analysis, informed by both desk-based research and stakeholder consultations, will guide actions to strengthen the enabling environment for climate finance. Recognizing that barriers may vary by type of financing sought, the plan involves relevant ministries and sectors in addressing these constraints in a prioritized and coordinated manner.

In parallel, the plan emphasizes the need to secure and strengthen implementation capacities across the full project lifecycle. This includes assessing institutional capabilities, identifying skill and resource gaps, and facilitating partnerships with development agencies, NGOs, and international organizations. Such collaboration helps ensure that project teams are well-equipped to manage implementation, monitoring, and reporting tasks effectively.

This integrated approach not only supports the successful delivery of adaptation investments but also promotes a culture of continuous improvement, institutional learning, and adaptive management, key for navigating the evolving landscape of climate risks and finance.

6.1 Funding matrix: project clusters vs. sources, volumes, timing

The funding matrix provides an overview of the proposed financing framework for NAP implementation, organized by sectors. It outlines the estimated financing volumes (in USD millions) alongside national and international commitments, highlighting the remaining funding gaps. The table also captures the expected timeline for mobilizing resources, the level of proposal readiness, and the lead institutions responsible for advancing each initiative. Importantly, it indicates the co-financing modalities and alignment with donor priorities, showing how different sources—national budgets, international climate funds, bilateral donors, and private sector partners—can be strategically combined to meet adaptation financing needs.

The Table 7 below shows the financial gaps per sector being the difference between the estimated volume of measures needed and the amounts committed.

Table 7. Sectoral Overview of Estimated Financing, Funding Sources, Gaps, and Proposal Timeline for Adaptation Actions (2025–2035).

Sectors	Main Funding Sources	Est. Volume (USD)	National committed	International committed	Gap	Timeline	Proposal Readiness	Lead Institutions	CoFinancing Modality / Donor Alignment
Cross-sectoral	GCF; MoF budget; bilateral technical grants	256.721.396	6.705.576	35.000	249980.820	2025–2035	Q2 2025 (GCF concept note)	Ministry of Finance; MoTE; NDA	30% domestic tagging; GCF grants; UNDP technical support
Agriculture	GCF; MoF budget; IFAD; EU IPARD	678.114.861	97.740.426	51.037.406	529.337.029	2025–2029	Q3 2025 (GCF full proposal)	Ministry of Agriculture; MoE; NDA	30% national budget; aligned with EU IPARD and IFAD lines
Forestry	World Bank (IBRD); GCF; bilateral grants	2.134.799.557	193.912.596	6.924.050	1.933.962.911	2026–2028	Q4 2025 (IBRD concept note)	Ministry of Environment; MoF	Blended IBRD loan + 25% municipal cofinance
Tourism	EU IPA III; EBRD; privatesector PPPs	8.491.619	4.346.901	10.285.819	0	2026–2029	Q4 2025 (EU IPA pipeline)	Ministry of Tourism; NDA; Local authorities	PPPs with tour operators; cofinance via EU Tourism Facility
Urban Development	World Bank (IDA); GCF; municipal budgets	2.723.161.544	4.060.192	23.491.259	2.695.610.093	2026–2030	Q1 2026 (IDA concept note)	Ministry of Infrastructure; MoE; Municipalities	25% municipal budget; MDB concessional loans; GCF grants
Energy	EIB; World Bank (IBRD); IFC	1.960.573.000	224.477.993	72.482.385	1.663.612.622	2027–2031	Q2 2026 (EIB expression of interest)	Ministry of Infrastructure & Energy; NDA	PPP frameworks; EC guarantees; 20% private equity
Transport	EIB; EBRD; national budget	2.038.835.000	1.228.960	2.455.520	2.035.150.520	2027–2032	Q3 2026 (EBRD scoping mission)	Ministry of Infrastructure; MoF; Municipalities	MDB concessional loans; national matching funds

Table 8. Timeline of Key Climate Adaptation Funding Proposals and Responsible Institutions (2025–2027).

Quarter	Key Proposals Targeted	Responsible Lead
H2 2025	Cross-sectoral GCF concept note (initial USD 30M readiness tranche)	Ministry of Finance; MoE; NDA
H2 2025	GCF full proposals for Climate-Resilient Agriculture (4 irrigation schemes); EU IPA concept for Municipal SAPs pilot	Ministry of Agriculture; MoE; NDA
H2 2025	IBRD concept note for Forestry & Ecosystem Restoration (Annex II measures); EU IPA pipeline submission for Tourism Resilience Infrastructure	Ministry of Tourism & MoEnvironment; NDA; Local Authorities
Q1 2026	IDA project concept for Urban Flood Management & Green Drains (5 city schemes); GCF readiness request for Habitat Restoration pilots	Ministry of Infrastructure; MoE; Municipalities
Q2 2026	EIB Expression of Interest for Renewable Energy Diversification (150 MW solar/wind); IFC advisory proposal for Energy ESCOs	Ministry of Infrastructure & Energy; NDA
Q3 2026	GCF full proposal for Agriculture Phase 2 (value-chain and agro-forestry); EU IPA III submission for Municipal SAPs expansion; EBRD scoping note for Tourism Eco-hubs	MoE; NDA; Ministries of Agriculture, Tourism; Municipalities
Q4 2026	GCF funding application for Nature-Based Solutions & Ecosystem Restoration (wetlands, NbS corridors); Finalization of EU IPA tourism resilience grant	MoTE; Ministry of Environment; NDA
Q1 2027	First PPP concession tender documents for Solar-Powered Irrigation; Green Bond framework approval by MoF	Ministry of Finance; MoI; Private Sector Partners
Q2 2027	PPP RFP for Wetlands Restoration (performance-based contracts); MDB loan applications to EIB/World Bank for Phase 1 transport corridors	Ministry of Infrastructure; MoF; Municipalities
Q3 2027	GCF conformity check and resubmission for any under-funded agriculture/forestry proposals; EBRD full loan application for Transport resilience	Ministries of Agriculture & Infrastructure; NDA; MoF
Q4 2027	Issue inaugural USD 100M Sovereign Green Bond (back-stopping PPPs); Submit joint MDB/bilateral grant package for regional water-storage dams	Ministry of Finance; MoF; EBRD; World Bank; Bilateral Partners

6.2 Proposal readiness schedule and responsible agencies

Table 8 outlines the 2025–2027 schedule of key adaptation finance proposals, identifying target funds and the lead agencies responsible. It highlights a sequenced pipeline across agriculture, energy, ecosystems, infrastructure, tourism, and urban resilience—targeted at major funding sources such as the GCF, EU IPA, World Bank, EBRD, IFC, and EIB, with active involvement of national ministries, municipalities, and private sector partners.

6.3 Cofinancing modalities and contractual frameworks

To leverage public funds and maximize private and multilateral participation, the Strategy employs a range of cofinancing modalities and contractual vehicles:

1. Blended Concessional Loans

- **Structure:** Senior loans from MDBs (EIB, World Bank) blended with subordinated equity or guarantees provided by bilateral partners (e.g. KfW, JICA).

- **Application:** Used for large infrastructure (dams, solar parks, road corridors) where concessional tranche covers up to 60 percent of capital costs, reducing commercial financing rates for implementing agencies.

- **Green Bonds**

- **Structure:** Sovereignbacked, 10year tenure bonds issued by MoF, with coupon rates partially guaranteed by a bilateral donor facility.

- **Application:** Funds crosssectoral readiness and capital works; privatesector investors purchase alongside institutional greeninvestors, creating a predictable yield on climatetagged assets.

2. PublicPrivate Partnerships

- **Structure:** Availabilitypayment or concession models, depending on revenuegenerating potential (e.g. tariffbased irrigation systems vs. ecosystemservice payments).

- **Application:** Employed for wetlands restoration, solardriven irrigation, and ecotourism hubs, 15 to 20 year contracts with performancebased payments tied to resilience and servicedelivery metrics.

3. Grant + Loan Mixing

- **Structure:** Initial grant funding (GCF, EU IPA) to underwrite frontend design and feasibility, followed by concessional loans for construction and early operations.

- **Application:** Forestry and ecosystem restoration measures use GCF readiness grants to develop IBRD loan applications, ensuring designs meet both environmental and financial duediligence.

4. Municipal CoFinancing and Local Levies

- **Structure:** Municipalities contribute 20–30 percent of project cost via dedicated resilience levies or reallocated MTBP sublines.

- **Application:** Urban flood management and greendrainage works are cofinanced by city budgets (up to 25 percent) with the remainder sourced from MDB concessional financing and GCF grants.

5. PerformanceBased Grants

- **Structure:** Disbursements tied to achievement of preagreed resilience milestones (e.g. hectares reforested, serviceuptake rates).

- **Application:** Applied in smallscale pilots and tourism resilience measures, where tranche release follows independent verification of ecosystem health or visitorsatisfaction improvements.

Each modality must be embedded in legally binding contracts, loan agreements, bond covenants, PPP concession deeds, and grant memoranda of understanding, drafted in compliance with Albania's PublicPrivate Partnership Law and MDB procurement guidelines. This layered approach ensures financing is structured to share risk, incentivize performance, and mobilize the full suite of domestic, multilateral and private capital needed to meet adaptation objectives through 2035.

07

Monitoring, evaluation, and learning

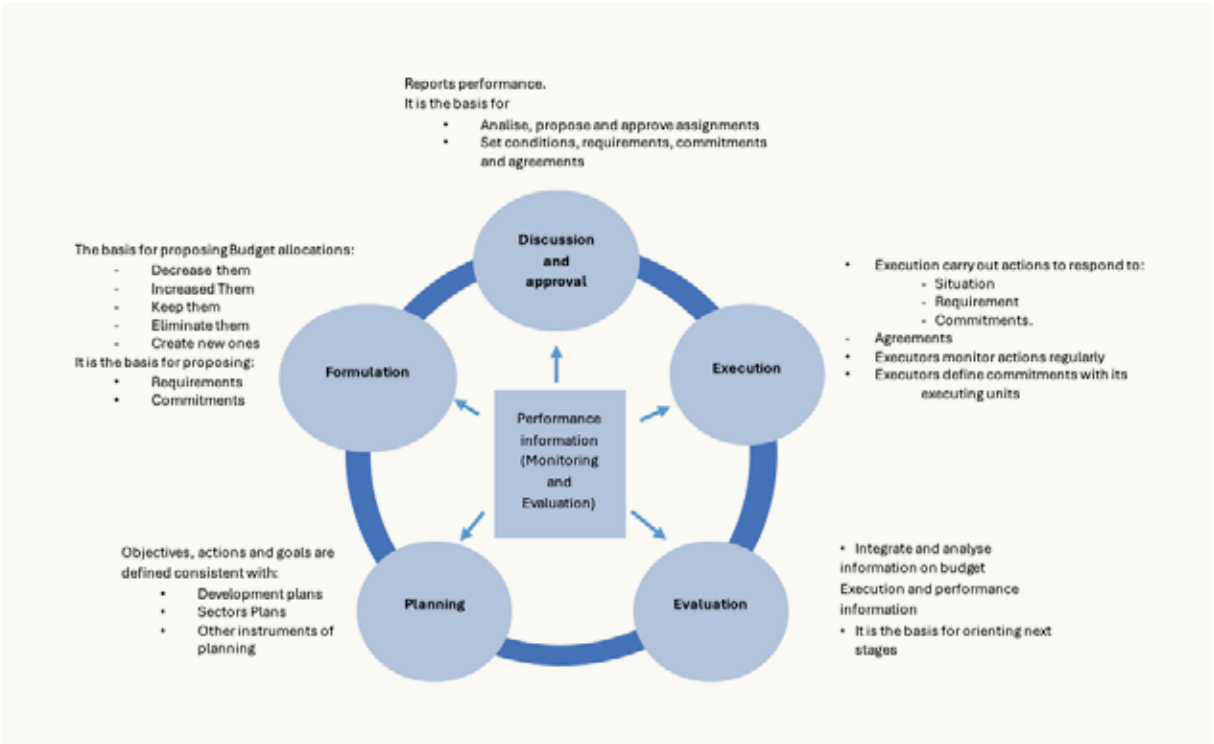
7.1 MEL Framework

To guarantee that this financing strategy is effective and on track, a robust Monitoring, Evaluation & Learning (MEL) framework is essential. This section outlines how progress will be measured, reported, and used for adaptive management. The MEL framework for the financing strategy aligns with and complements the overall NAP MEL system (since financing is one aspect of NAP implementation). It defines clear indicators, baselines, and targets related to finance mobilization and utilization, assigns institutional responsibilities for data collection and reporting, and establishes feedback mechanisms to incorporate lessons learned into ongoing policy. It also tracks disbursements via Albania's Integrated Financial Management System (IFMS), with annual audits.

7.2 Finance tracking system integrated with budget processes

Climate finance partners generally use a results-based management approach to continuously monitor and evaluate the performance of their projects, programs, and portfolios. This approach supports their need to assess whether their projects and programs are on or off track to deliver expected results based on data generated from monitoring and evaluation reports. Furthermore, it is always useful to report successful and unsuccessful activities during implementation as part of knowledge management and to inform feedback loops for other countries and entities to benefit from. The country or project proponents should seek capacity support to fulfill these functions as needed.

Figure 6. The integration of the MEL system with the budget cycle and the use of performance information.



Source: Reinhard Engl.

The insights derived from monitoring and reporting activities contribute significantly to investment and implementation planning. They inform decisions on strategic resource allocation for capacity gaps, highlight areas that require additional attention, and provide evidence for refining the project's progress. Ultimately, adherence to monitoring and reporting guidelines ensures that monitoring and reporting processes become valuable tools not only for assessing the current project but also for steering it toward greater success and alignment with long-term climate and sustainability goals.

7.3 Key Performance Indicators and Targets

To oversee the implementation of the Financing Strategy of the NAP, three Key Performance Indicators (KPIs) that capture both the inputs (finance mobilized) and outputs/outcomes (projects implemented, risk reduced) of the financing strategy, and actual disbursement vs. plan will be tracked. Some proposed KPIs include:

- **Total Adaptation Finance Mobilized (annual, by source):** This is a headline indicator – the sum of funds directed to adaptation actions each year, broken down by international grants, international loans, domestic budget, and private sector. Baseline (2023) might be for example ALL X million (mostly domestic small allocations and one-off donor projects). Targets can be set to increase this by certain percentages or absolute amounts. For instance, target by 2027: mobilize cumulative ALL 5 billion; by 2030: ALL 11 billion (matching need). We will also measure the share from private sources (with a target to grow it, reflecting success in private engagement).

- **Number of Adaptation Projects Financed and Under Implementation:** Tracks how many of the identified priority projects (or what percentage of the 66 NAP measures) have secured finance and started. Baseline 2026: perhaps only a handful were financed. Target 2030: 80% financed; 2035: 100%. This indicates coverage of the financing strategy.

- **Disbursement Ratio:** The percentage of funds committed that are disbursed on schedule. This highlights efficiency – e.g., if GCF granted USD20m, is it being spent or stuck? A high disbursement ratio means implementation is on track. We aim for >85% of funds disbursed by project end dates (accounting for normal lags).

Other optional KPI:

- **Adaptation Finance as % of GDP or % of Public Expenditure:** This contextual indicator shows how significant adaptation spending is in the economy. It helps gauge government effort. It might be very low now (<<1% GDP). We could target doubling it by 2030 (still modest but an improvement).

- **Private Sector Investment in Adaptation** (cumulative): Harder to measure but can use proxies like volume of loans for adaptation-friendly activities, or investments made by companies in resilient infrastructure. Perhaps collected via surveys or specific tracking of projects like PPPs. A target could be set (e.g. attract at least ALL 1 billion of private investment into adaptation by 2030, which might include PPP capital and such).

- **Outcome Indicators** (Resilience Metrics): While financing is input, we want to link it to resilience outcomes. Some outcome indicators could be reduction in economic losses from climate disasters (5-year average losses as % of GDP, hoping to see a downward trend by 2035 due to adaptation measures in

place), or number of beneficiaries covered by adaptation interventions (like number of people benefiting from improved flood protection, etc.). These are shared with the NAP MEL but important to ultimately justify the finance.

- **Institutional Capacity Indicators:** e.g., number of staff trained on climate finance, or NDA effectiveness metrics (like time taken to endorse proposals, etc.), to measure improved capacity which is an intangible but critical part of success.

7.4 Reporting Cadence and Feedback Mechanisms: Annual and mid-term review (2027)

Reporting will occur on multiple levels and frequencies:

- **Annual Performance Assessment:** Each year, MoTE will compile an Adaptation Finance Progress Report. This will summarize funds mobilized that year, projects started/completed, and any issues faced. It will include the updated values of KPIs for that year, with brief analysis. This annual report can be appended to wider climate change reports or stand-alone but should be presented to the IMWGCC and the National Climate Change Committee (which includes high-level government and can escalate issues to the Prime Minister if needed).

- **NAP Progress Report:** The financing strategy results will feed into the NAP progress reports. The Mid-Term Review in 2030 (as planned) should have a chapter on financing, essentially drawn from our MEL info. This ensures synergy – no separate parallel processes, one integrated story of adaptation progress.

- **Donor Reporting:** For accountability to external supporters, we may craft a consolidated report for donors (some donors require separate reports, but we try to unify). For instance, GCF readiness or NAP support expects an annual report – we align that content with our own.

- **Public Transparency:** Key information will be made public (suitable for citizen understanding) to ensure transparency. Possibly a public dashboard on a government website that tracks adaptation finance flows (similar to how some countries have climate finance portals). Civil society and media can then play a role in accountability, asking questions if progress slips.

- **Feedback and learning mechanisms:** Quarterly/biannual review meetings at technical level (with focal points of ministries) to discuss progress, troubleshoot bottlenecks (e.g., if a planned funding source fell through, how to adjust).

- **After-action reviews** for major funding processes – e.g., if a GCF proposal gets rejected or faces hurdles, do a quick lessons-learned session to improve future attempts.

- **IMWGCC meetings** (maybe semi-annual) include an agenda item on finance progress. They can make recommendations like re-prioritizing certain projects, or asking a ministry to speed up spending etc., which then get communicated back to those responsible.

- **Adaptation Fund/National Fund oversight:** The Board of the fund will likely meet quarterly to approve projects and check on performance. That also serves as a feedback loop if, say, disbursement is slow, they can inquire reasons and help resolve (like instructing removal of bureaucratic hurdles).

- **Mid-term Evaluation (2028):** Formal evaluation will provide bigger-picture feedback. The strategy explicitly states that the financing approach will be adjusted in 2028 based on evaluation findings (e.g., if some funding instruments under-performed or new opportunities emerged, we shift focus accordingly).

- **Peer Learning:** Using platforms like NAP Global Network, Albania can also get feedback externally – sharing our progress and getting input or comparisons with other countries like Saint Lucia or Cambodia to continuously improve. Already, lessons from others have shaped our plan; similarly, our experiences will circle back to refine the approach.

Importantly, the MEL will not just be bean-counting; it's about ensuring the effectiveness of finance. If it its observed that money is flowing but not reaching the most vulnerable communities, that is an issue that must be addressed in time. Thus, some qualitative evaluation will also be integrated, possibly via stakeholder surveys or third-party assessments, to ensure equity and effectiveness of spending.

All these MEL efforts ultimately aim at one thing: keeping the financing strategy on track to deliver a climate-resilient Albania. They allow to demonstrate accountability to both domestic stakeholders (government, taxpayers, communities) and international partners (donors, etc.), which is crucial for maintaining trust and support, both essential to secure funding.

Finally, effective monitoring and feedback ensure that the financing strategy remains a living document – adjusting as needed to new climate realities or financial conditions over the implementation period. This adaptability is key given the inherent uncertainties in climate projections and global finance trends.

7.5 Stakeholder Roles and Accountability Mechanisms

The effective implementation of projects and programs requires the achievement of climate, development, and financial objectives. The MEL of the financing strategy will be embedded in existing institutional arrangements for climate change:

- **The Ministry of Environment,** as NAP lead and NDA, will coordinate MEL overall. Within MoTE, the Climate Finance Unit (or similar) will gather data on finance flows and project status. They effectively act as the MEL secretariat for this strategy.

- **The IMWGCC will receive periodic progress reports and provide strategic oversight.** The IMWGCC can integrate financing strategy MEL in its mandate to monitor NAP progress. It includes representatives from key ministries, so they can ensure their sectors are reporting properly.

- **Line Ministries and Project Implementers:** Each ministry (Agriculture, Infrastructure, etc.) is responsible for monitoring implementation of adaptation projects in its purview and reporting financial and physical progress to MoTE quarterly or semi-annually. For example, the Ministry of Agriculture will report how much was spent on irrigation projects and how they progress, including any co-finance from their budget.

- **The Ministry of Finance** will provide data on budget allocations and expenditures tagged as climate adaptation, and help in tracking indicators like adaptation spending % of budget. They also co-lead on monitoring things like the performance of the National Adaptation Fund (e.g., how quickly funds are approved/disbursed).

- **National Adaptation Fund Board/Secretariat:** Once established, the Fund will have its own monitoring of projects it finances. It should produce annual reports that feed into the overall MEL. The fund's secretariat ensures that recipients of fund grants report on use of funds and outcomes.

- **Development Partners:** Donors and international agencies involved will also monitor their projects (GCF, UNDP, etc.). The strategy encourages aligning these efforts with national MEL. Donors could be asked to report contributions in a standard format (some adaptation finance tracking might already exist via OECD markers, etc. – those can be used by MoTE to cross-check).

- **Independent Evaluators:** At mid-term (around 2028) and final (2035), independent evaluations should be conducted. These could be done by external experts or through NAP Global Network etc., to assess effectiveness, efficiency, and impact of the financing strategy. This independent view ensures objectivity and can provide recommendations for course correction.

08

Risk management and contingencies

Financing climate adaptation is not only about raising and spending money, but also about managing the risks associated with climate impacts and financial flows. This section addresses strategies to mitigate risks that could undermine the financing strategy or the resilience of investments.

There are two broad categories of risk to consider: *(1)* Climate-related physical risks (extreme events, disasters) that can cause economic shocks and potentially divert resources away from planned adaptation investments; and *(2)* Financial and institutional risks in implementing the financing strategy (such as funding volatility, debt risks, or project performance issues). By incorporating risk mitigation measures – including insurance mechanisms, contingency funds (fiscal buffers), and standby agreements with donors – Albania can ensure that its adaptation efforts are financially sustainable and resilient to shocks.

8.1 Climate Risk Insurance Mechanisms

Climate risk insurance provides a financial safety net when disasters strike. While adaptation aims to reduce the damage from climate events, it cannot fully prevent losses. Insurance can transfer some of the remaining risk to insurers or capital markets, thus protecting public finances and communities. Albania is considering insurance at multiple levels:

- **Sovereign Risk Insurance/Pools:** The government can participate in regional risk transfer pools. For example, Albania was involved in the Southeast Europe Catastrophe Risk Insurance Facility (Europa Re), which offers catastrophe insurance products. By paying an annual premium, Albania could receive a payout if a major disaster (flood, earthquake) occurs, providing immediate liquidity for relief and reconstruction. The Adaptation Fund proposal notes leveraging Europa Re's catastrophe models – indicating alignment with such approaches. The strategy encourages the Ministry of Finance to maintain or upscale involvement in these facilities. If not already done, exploring membership in global initiatives like the InsuResilience Climate Risk Finance program can bring technical support and possibly premium subsidies.

- **Agricultural Insurance:** Farmers are among the most vulnerable to droughts, hail, and other climate hazards. A crop insurance scheme (perhaps index-based to keep it simple, where payouts are triggered by weather index thresholds) can stabilize farm incomes after climate shocks. Currently, agricultural insurance penetration in Albania is very low. The strategy proposes to pilot index insurance for specific crops in drought-prone regions. Donors and the government might subsidize initial premiums to encourage uptake (e.g. pay 50% of premium for the first 3 years). As farmers see the benefit, demand could grow. This mechanism will complement adaptation measures like introducing resilient crops – insurance covers residual risk beyond what improved practices can handle. Over time, if scaled, agricultural insurance could significantly reduce the need for ad-hoc disaster assistance to farmers.

- **Property and Business Insurance for Climate Risks:** Encourage uptake of flood insurance for properties and business interruption insurance

for enterprises. Insurance companies in Albania may be cautious offering flood coverage widely. The government can assist by investing in better flood risk maps and data (insurers need this to price risk). Also, public policy can promote insurance – for instance, require new mortgages in flood zones to have flood insurance, or work with banks to bundle insurance with loans for climate adaptation improvements (e.g. a business getting a loan for resilience also gets an insurance policy). Additionally, the concept of "insurance-premium credit for adaptation" can be explored: if a property owner has undertaken certified risk reduction (like elevating the building or building a rainwater retention basin), insurers could lower premiums, effectively turning adaptation investment into immediate financial savings. The government can facilitate such programs by defining standards for risk reduction measures.

- **Microinsurance for Vulnerable Groups:** At the community level, microinsurance schemes (small coverage for low-income households, possibly via NGOs or microfinance institutions) can be introduced for things like livestock or homes against climate perils. These can be bundled with micro-loans for adaptation (e.g. a micro-loan to a household to climate-proof their home, with an attached microinsurance). International charities or social enterprises might partner to design these, and the adaptation strategy supports such innovative pilots, especially in poorer rural areas.

Implementing insurance solutions will require collaboration with the insurance industry (local and international). The government may need to adjust regulatory frameworks – for example, allowing index insurance products, or providing reinsurance support for local insurers if needed. Capacity building for insurance regulators and companies on climate risk (through workshops, likely with InsuResilience or UNEP FI support) is part of the plan.

Expected Outcomes

With greater insurance penetration, when a disaster like a major flood hits, a significant portion of the financial losses will be covered by insurance payouts instead of falling entirely on individuals or government. This means households recover faster, businesses reopen sooner (maintaining livelihoods), and the government does not have to divert as much from development funds for emergency relief. Ultimately, insurance fosters a culture of risk awareness – premiums send signals about risk levels, which can also incentivize prevention.

Insurance is not a silver bullet (and very high-risk or slow-onset changes like gradual sea-level rise are hard to insure), but it's a critical component of a comprehensive resilience strategy, providing financial resilience to complement physical resilience efforts.

8.2 Exchange rate and Fiscal Buffers and Contingency Funds

Climate change increases the likelihood of unexpected shocks to public finances – for instance, a severe flood might necessitate emergency spending on relief and repairs, straining the budget. If no reserves or buffers are in place, such shocks can force governments to reallocate funds from planned projects (including adaptation projects), thus derailing long-term plans. To avoid this, Albania will strengthen its fiscal buffers and contingency arrangements specifically for climate and disaster risks:

- **Contingency Budgetary Provisions:** Each annual state budget can include a contingency line item for disaster response (some countries allocate ~2-3% of budget expenditures for contingencies). Albania will review its current practice and aim to formalize a rule for a climate emergency reserve. Funds in this reserve, if unspent in a given year (no big disaster), could roll over or be contributed to the adaptation fund for proactive use – ensuring they remain in the climate domain. This provides immediate readily available cash for events, so that rehabilitation does not entirely depend on donor aid or budget reallocation.

- **Sovereign Wealth Fund or Rainy-Day Fund:** If Albania receives windfalls (e.g. privatization revenues or higher-than-expected tax revenues), a portion could be saved in a sovereign fund earmarked for emergency use. Some countries set up stabilization funds; while Albania's fiscal capacity is limited, even a modest fund that accumulates over years can become significant. This is a longer-term measure – realistically, a resilience reserve fund might be built gradually post-2025 as economy grows. The governance would ensure it is only tapped under defined disaster conditions.

The combination of buffers and standby arrangements ensures that short-term shocks do not derail long-term strategy. Essentially, Albania's financing strategy is armored with a financial shock absorber.

From a policy perspective, the Ministry of Finance will lead on this front, integrating climate risk into fiscal risk analysis. Already, climate-related fiscal risk is noted by institutions like the IMF. The strategy's measures will likely be recognized as prudent fiscal management (could even help Albania's credit rating in future by demonstrating ability to manage disaster risks).

Monitoring metric for this could be maintaining a target level of contingency funding (e.g. at least 0.5% of GDP available for disaster response at any time through combination of reserves, contingent credit, or insurance).

8.3 Donor and Partner Standby Agreements

Building on the above, it's worth detailing the role of donor standby agreements beyond immediate disaster response. This term is used to also encompass broader assurances from development partners for adaptation financing continuity:

- UNDP and other UN agencies could agree in principle to reallocate or provide surge support to adaptation coordination if needed (for example, if a project funding gap appears due to some issue, UNDP might temporarily fund coordination staff).
- GCF readiness or other technical assistance that can be mobilized quickly if new needs or opportunities arise (like if a new international funding window opens suddenly, having readiness support to quickly prepare proposals).
- Partnerships with NGOs and civil society so

that in case public systems are overwhelmed, NGOs can step in to maintain certain services (like community trainings or local infrastructure maintenance), supported by fast-tracked grants from donors.

While these are more on the programmatic side, formalizing them (via MoUs or inclusion in country program documents) ensures the adaptation process has a safety net of support.

In effect, donor standby arrangements serve as a "Plan B" or surge capacity for the financing strategy. They are a recognition that even with the best plans, things change – a donor might face its own budget cuts or a project might underperform. By having an understanding that, for instance, if GCF funding is delayed, another donor (maybe an EU fund or bilateral) could fill the gap temporarily, Albania can keep momentum.

- International Climate Finance Landscape Risk: There is also a risk that international climate finance volumes or priorities could shift (for example, if global funds pivot more to mitigation or certain regions). Albania could mitigate this by diversifying its partners and by staying actively engaged in climate diplomacy to advocate for continued adaptation support to countries like itself. If one source wanes, having multiple relationships helps buffer.

Finally, risk mitigation also entails ensuring the funded projects themselves are resilient – e.g. any infrastructure built should incorporate future climate scenarios so that it does not become a maladaptation or suffer premature failure. That is more of a technical design issue but is part of our quality control.

In closing this section, by deploying insurance, buffers, and standby support, Albania's adaptation financing strategy is guarded against the twin dangers of climate shocks and financial shortfalls. This layered approach – sometimes called a risk-layering strategy – uses different instruments for different frequencies and severities of risk (insurance for high-severity rare events, reserves for medium, budget adjustments for low). It will enhance investor and donor confidence as well, knowing that Albania is proactively managing risks and thus any funds invested are less likely to go to waste.

With a solid risk mitigation framework in place, the strategy can be executed with greater certainty of success. Next, we will outline how the strategy will be put into practice over time (the Implementation Roadmap) and how progress will be monitored (MEL Framework).

09

Conclusion and next steps

Albania stands at a pivotal moment in its journey towards a climate-resilient future. Albania's National Adaptation Plan Financing Strategy lays out a clear, actionable pathway to mobilize and deploy resources needed to safeguard the country's future in the face of climate change and that ambition on paper translates into action on the ground.

By identifying the significant financing needs – on the order of billions of dollars – and matching them with a diverse array of funding sources and mechanisms– from the Green Climate Fund and development banks to domestic budgets and private investors – the strategy provides the financial blueprint to implement Albania's NAP. It proposes innovative yet practical solutions to ensure funds flow efficiently to priority projects, while also embedding risk management through insurance and fiscal buffers to protect these investments.

This strategy is aligned with international best practices and tailored to Albania's context, taking into account the nation's EU integration aspirations, economic capacities, and institutional set-up. Importantly, it emphasizes partnership: the success of this strategy hinges on continued close collaboration between Albanian authorities (national and local), international partners (UNDP, GCF, EU, etc.), the private sector, and civil society. All stakeholders have roles to play in financing and implementing adaptation – and the strategy provides the coordination framework to harness their contributions effectively.

Implementing this strategy will require strong political will, coordinated governance, and persistent effort. It is not a simple task to mobilize resources at the scale required, but it is unequivocally an investment worth making. The costs of inaction, in terms of economic losses, social upheaval, and lost development opportunities, far outweigh the costs of proactive adaptation. Every lek or dollar spent on resilient infrastructure, climate-smart agriculture, early warning systems, or ecosystem protection today will save many more in future damages and relief efforts. This strategy positions Albania to secure sustainable financing for climate resilience, reducing vulnerability in priority sectors.

This NAP Financing Strategy for Albania is a call to action and a blueprint for resilience. It aligns financial realities with climate realities, offering solutions to bridge the two. The Government of Albania, together with its communities, private sector, and international friends, now has a clear path to follow. By turning this strategy into tangible investments and projects, Albania will move towards a future where its towns and villages, its farms and industries, and its beautiful coasts and mountains can thrive despite the climate challenges ahead.
The journey will not be without challenges. Securing the large sums required, improving absorption capacity for funds, and incentivizing private sector involvement are significant tasks. The task is immense but achievable – and the time to act is now. With commitment, creativity, and collaboration, Albania can secure the financing needed to adapt and prosper in the face of climate change, ensuring safety and prosperity for current and future generations. Early successes will build confidence and momentum.

The road ahead will have challenges. There will be competition for limited public funds, stringent criteria to meet for international grants, and the need to convince some private sector actors of the value in investing now for benefits that accrue

later. However, Albania is not starting from zero – it has a NAP in place, successful pilot projects to build on, a cadre of experts and officials gaining experience, and international partners ready to assist.

In the long term, this financing strategy will help Albania achieve a state of climate resilience that also supports sustainable development goals. Better protected agriculture and infrastructure will secure livelihoods and economic growth; well-adapted water and energy systems will ensure national stability; and preserved ecosystems will continue to provide services and natural beauty for future generations, including a robust tourism industry. Moreover, by proactively investing in adaptation now, Albania will avoid much larger costs down the line, as studies have shown that each euro invested in resilience can yield a tenfold return in avoided damages and new opportunities.

In conclusion, Albania's commitment – as demonstrated by this strategy – sends a strong signal: the country is ready to act on climate adaptation with seriousness and creativity. The strategy is a call to action for all partners to support and participate in Albania's adaptation financing efforts. With continued political will and the support of the international community, Albania can turn this strategy into on-the-ground reality, ensuring that by 2036 the nation stands as a model in the Balkans for how to smartly finance and achieve climate resilience. The next steps will involve refining and operationalizing this strategy through the implementation roadmap, and integrating it firmly into the National Adaptation Plan process as a living component, finalizing the GCF proposal and adopting climate budget tagging by 2025. Albania's path to a climate-resilient future is charted – now it is time to navigate it together, turning plans and budgets into tangible resilience for the people and ecosystems of Albania.

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Annexes

ANNEX I: IMPLEMENTATION PLAN 2026-2036

No.	Sector	Adaptation measure	Type	Starting period	Years	Budget	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
1	Cross-sectoral	Strengthening Regional Resilience: Supporting the Western Balkans Adaptation Roadmap	Soft	ST (2028)	3	315.000			105.000	105.000	105.000												
2	Cross-sectoral	Optimizing Climate Coordination: Strengthening the IMWGCC Framework	Soft	ST (2027)	2	420.000		210.000	210.000														
3	Cross-sectoral	Enhancing Capacities for Adaptation: Support for the Climate Change Technical Group and create and capacitate a Steering Group	Soft	ST (2027)	3	745.000		248.333	248.333	248.333													
4	Cross-sectoral	Enhancing climate resilience through improved data systems	Soft	ST (2028)	3	1.500.000			500.000	500.000	500.000												
5	Cross-sectoral	Nature-based solutions and Biodiversity Net Gain Developer Schemes	Green	MT (2029)	6																		
		Establish and restoring green corridors for biodiversity connectivity by identifying priority areas and restoring native vegetation through plantation and wildlife-friendly infrastructure (eco-bridges, underpasses, etc).			6	24.891.143				4.148.524	4.148.524	4.148.524	4.148.524	4.148.524	4.148.524								
		Enhancing cultural and recreational ecosystem services through conservation by restoring protected areas to improve public access, develop infrastructure for sustainable recreation (trails, wildlife observation areas, angling, eco-tourism zones, etc.), and ensuring conservation of landscapes while promoting public engagement.			6	215.014.955				35.835.826	35.835.826	35.835.826	35.835.826	35.835.826	35.835.826								
		Implement biodiversity net gain as a regulatory standard in planning by introducing a net gain policy for new development projects and establishing an offset program requiring developers to restore or compensate for habitat loss. Pilots in the target municipalities may be considered.			6	2.887.299				481.216	481.216	481.216	481.216	481.216	481.216								
6	Cross-sectoral	Fostering Climate Resilience Awareness Raising and Training for Adaptation and Mitigation	Soft	ST (2027)	4	1.500.000		375.000	375.000	375.000	375.000												
7	Cross-sectoral	Innovative Climate Finance Mechanisms: Piloting Sustainable Financing Strategies	Soft	ST (2028)	4	6.080.000			1.520.000	1.520.000	1.520.000	1.520.000											
8	Cross-sectoral	Piloting risk management Assessments for Climate-Resilient Businesses	Soft	ST (2028)	3	200.000			66.667	66.667	66.667												
9	Cross-sectoral	Promoting Gender-Sensitive Climate Adaptation: Training Stakeholders and Developing Inclusive Tools	Soft	MT (2030)	2	143.000					71.500	71.500											
10	Cross-sectoral	Educating Communities: Adaptation and disaster awareness-raising	Soft	MT (2030)	4	3.025.000					756.250	756.250	756.250	756.250									
11	Agriculture	Empowering farmers: financial support for climate-resilient infrastructure	Soft	ST (2028)	10	29.600.000			2.960.000	2.960.000	2.960.000	2.960.000	2.960.000	2.960.000	2.960.000	2.960.000	2.960.000	2.960.000					
12	Agriculture	Safeguarding farmers: Compensation and assistance programs for disaster recovery	Soft	MT (2029)	10	102.250.000				10.225.000	10.225.000	10.225.000	10.225.000	10.225.000	10.225.000	10.225.000	10.225.000	10.225.000	10.225.000				
13	Agriculture	Action Plan for Invasive Species Under Changing Climate Conditions	Soft	MT (2030)	3	160.000					53.333	53.333	53.333										
14	Agriculture	Strengthening Flood Protection: Riverbank Restoration and Floodplain Expansion Across Key Albanian Rivers	Grey	ST (2026)	6																		
		Hydrological modelling and flood risk mapping in the priority rivers to identify vulnerable areas where riverbanks and floodplains require restoration.			2	354.000	177.000	177.000															
		Engineering design for the restoration works of vulnerable riverbanks and dams based on the vulnerabilities detected.			2	400.000	200.000	200.000															
		Riverbank Restoration and Dam Repairs: Focus on the restoration and repair of riverbanks embankments and dams along key river streams such as Drini, Buna, Mati, Ishmi, and Vjosa to restore the 300km of flood protection embankments identified in the National Strategy for Irrigation, Drainage and Flood Protections. Efforts will aim to strengthen existing and new flood protection infrastructure, improve erosion control, and prevent damage caused by heavy rainfall or rising sea levels. Emphasize sustainable practices that incorporate natural vegetation to reinforce riverbanks and promote ecosystem resilience.			4	176.000.000			44.000.000	44.000.000	44.000.000	44.000.000											
		Monitoring and Maintenance of River Protection Systems: Set up a monitoring system to track the effectiveness of riverbank restoration, floodplain expansion, and flood barrier construction. As well as early warning systems to be prepared against possible affections. Regular inspections will ensure that the infrastructure remains intact and continues to provide protection.			4	1.296.000			324.000	324.000	324.000	324.000											
		Community Engagement and Flood Risk Awareness: Engage local communities in flood risk management by raising awareness about flood protection measures, the importance of riverbank restoration, and the role of wetlands in flood mitigation. Encourage local participation in maintenance and restoration activities, empowering residents to take an active role in the protection of their environments. And stablish specific population evacuation plans in case of extreme climate hazards.			6	972.000	162.000	162.000	162.000	162.000	162.000	162.000											
15	Agriculture	Implementing Habitat Creation and Nature-Based Solutions to Combat Soil Erosion	Green	ST (2028)	6																		
		Identify and map erosion-prone areas for targeted areas. Conduct geospatial analysis and field surveys to map erosion-prone areas, compared with climate risk assessment to identify high-risk zones and define interventions aligned with local adaptation strategies.			2	340.000			170.000	170.000													
		Based on the needs identified, establish Vegetative Buffers and Restoring Natural Barriers by planting native grasses, shrubs, and trees along riverbanks, hillsides, and agricultural lands to stabilize soil and reduce sediment loss.			4	12.000.000					3.000.000	3.000.000	3.000.000	3.000.000									
		Implementating agroforestry and sustainable land management for soil stability by introducing agroforestry systems, using native perennial crops and intercropping methods to prevent soild depletion, and promoting regenerative farming techniques.			4	16.200.000					4.050.000	4.050.000	4.050.000	4.050.000									
		Soil bioengineering and green infrastructure for slope stabilization including: reinforcement of steep slopes through bioengineering solutions, applying geotextiles and biodegrdable erosion control blankets and utilizing deep-rooted native species to provide natural anchoring.			4	12.960.000					3.240.000	3.240.000	3.240.000	3.240.000									

No.	Sector	Adaptation measure	Type	Starting period	Years	Budget	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		Foster community-led reforestation and soil conservation programms to actively engage farmers, indigenous groups nad local organizations in land restoration efforts, including capacity buildings.			6	287.500			47.917	47.917	47.917	47.917	47.917	47.917									
16	Agriculture	Enhancing IGEO's (Institute of Geosciences) Capacity for Coastal Monitoring and Data Provision on Environmental Changes and risks	Soft	ST (2028)	2	322.200			161.100	161.100													
17	Agriculture	Expanding and Modernizing Irrigation Systems for Enhanced Agricultural Resilience	Grey	ST (2027)	6																		
		Mapping and identifying existing irrigation systems and its status: Develop a specific map and/or clear list of each existing irrigation system and its status, followed by areas requiring new systems and feasiblity studies.			2	24.000		12.000	12.000														
		Construction of New Irrigation Systems: Develop and construct new irrigation systems across key agricultural regions, focusing on expanding irrigation coverage to 360,000 hectares. Prioritize the installation of modern irrigation technologies, such as drip and sprinkler systems, to improve water efficiency and ensure year-round crop production. Key areas of focus include Durres, Elbasan, Gjirokastër, Kukës, and Vlora.			4	60.000.000				15.000.000	15.000.000	15.000.000	15.000.000										
		Rehabilitation of Existing Irrigation Infrastructure up to 240,000 hectares: Undertake the rehabilitation and upgrade of existing irrigation systems, including the repair of aging infrastructure such as canals, pipes, and pumping stations. Special focus will be placed on rehabilitating water reservoirs and damaged dams in areas such as Përmet, ensuring a reliable and sustainable water supply for agriculture.			4	188.000.000				47.000.000	47.000.000	47.000.000	47.000.000										
		Development of Sustainable Water Management Practices: Promote the adoption of sustainable water management practices in agricultural regions, including the use of smart irrigation technologies and the efficient management of water resources. Train farmers in water conservation techniques and the efficient use of irrigation systems to maximize productivity while minimizing water waste.			4	600.000				150.000	150.000	150.000	150.000										
		Monitoring and Maintenance of Irrigation Systems: Implement a regular monitoring and maintenance program to ensure the continuous operation of irrigation systems. This will include scheduled inspections of all infrastructure, repairing any damages, and ensuring that water distribution is efficient. The program will also track the performance of the irrigation systems in enhancing agricultural productivity.			4	499.998				125.000	125.000	125.000	125.000										
18	Agriculture	Sustainable Water Security through Rainwater Harvesting Infrastructure	Grey	ST (2027)	6																		
		Site assessment, prioritization of interventions and feasibility analysis in close cooperation with farmers and local communities. Based on existing and complementary vulnerability and water infrastructure assessments, design suitable interventions for rainwater infrastructure, water reserves and dams reparation.			2	230.163		115.082	115.082														
		Construction of Rainwater Harvesting Infrastructure: Build or maintain rainwater harvesting systems in strategic locations identified in the previous activity to improve water availability, particularly in areas vulnerable to drought and water scarcity. These systems will collect and store rainwater for agricultural, domestic, and industrial use, increasing resilience to climate change impacts.			4	279.000				69.750	69.750	69.750	69.750										
		Restoration of Water Reserves and repair of damaged dams to achieve the National targets : Focus on the restoration of existing water reserves to enhance their capacity to store water including the cleaning, reinforcement, and expansion of existing reservoirs and cisterns to improve water storage for use during dry periods, and of reparation of approximately 230 critical damaged dams (highlighted in blue points in the map) ensuring that the functionality of these dams will safeguard water supply for communities and ecosystems, especially during periods of irregular rainfall.			4	73.030.000				18.257.500	18.257.500	18.257.500	18.257.500										
		Regular Maintenance of Rainwater Harvesting Infrastructure Systems: Implement a comprehensive maintenance program for rainwater harvesting systems and restored water reserves. This will involve periodic inspections, cleaning, and repairs to ensure the continued functionality and longevity of the infrastructure.			4	1.320.000				330.000	330.000	330.000	330.000										
		Capacity building and awareness-raising for Water Conservation Practices: Promote water conservation practices in regions equipped with rainwater harvesting infrastructure, ensuring that municipalities, communities, farmers, and industries use the collected water efficiently.			6	990.000				165.000	165.000	165.000	165.000	165.000	165.000								
19	Forestry	Enhancing Forestry Efficiency through EU Regulatory Compliance	Soft	ST (2026)	6	17.600.000	2.933.333	2.933.333	2.933.333	2.933.333	2.933.333	2.933.333											
20	Forestry	Advancing Sustainable Forestry: Afforestation Fund and Green Procurement Initiatives	Soft	ST (2028)	4	8.540.000			2.135.000	2.135.000	2.135.000	2.135.000											
21	Forestry	Revitalizing Damaged Lands: Integrating NbS and EBA with Agroforestry Practices	Green	ST (2026)	6																		
		Site identification, assessment and strategic planning. Through a mapping exercise of degraded areas in the regions identified, the affected regions will be classified by level of degradation, to develop a priority restoration plan.			2	340.000	170.000	170.000															
		Forest regeneration and reforestation in target areas: Has, Kukës, Pukë, Fushë-Arrëz, Mirditë, Mat, Klos, Dibër, Bulqizë, Shkodër, Krujë, Korçë, Kolonjë, Vlorë. The activity will restore native tree species through planting of local and fire-resistant species and through the introduction of fire prevention and resilience techniques such as buffer zones and firebreaks, mixed-species reforestations and fire-resistant tree belts to minimize the spread of future wildfires.			4	196.205.672			49.051.418	49.051.418	49.051.418	49.051.418											
		Implementing NBS and bioengineering for soil and infrastructure protection in forest areas in the target areas of Tropojë, Has, Kukës, Mirditë, Dibër, Mat, Bulqizë, Klos, Bovillë (Tiranë), Krujë, Gramsh, Skrapar, Tepelenë. Interventions may include techniques such as firewalls, vegetated retaining wall, and soil-stabilizing plant species to prevent erosion.			4	1.292.765.443			323.191.361	323.191.361	323.191.361	323.191.361											
		Fire prevention, monitoring and risk mitigation measures by enhancing wildfire risk monitoring and early warning systems and training local			4	4.185.000			1.046.250	1.046.250	1.046.250	1.046.250											

No.	Sector	Adaptation measure	Type	Starting period	Years	Budget	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		communities and forestry teams in fire prevention and rapid response strategies.																					
		Promoting Community-Based Sustainable Forest Management: Engage local communities in forest restoration through capacity-building programs, sustainable harvesting, and fire prevention training.			6	1.242.000	207.000	207.000	207.000	207.000	207.000	207.000											
22	Forestry	Strengthening Forest and Pasture Protection: Investments in Human Capacity and Firefighting Resources	Soft	ST (2028)	4	475.000			118.750	118.750	118.750	118.750											
23	Forestry	Advancing Afforestation: Establishing Regional Nurseries for Drought-Resistant Species	Green	ST (2026)	10																		
		Site selection, land acquisiton and infrastructure development for the four nurseries. Site suitability and availability assessments will be performed to identify the four suitable locations. After this, an implementation plan for the nurseries will be drafted with the definiton of infrastructure needed (soil preparation, shadow/greenhouse areas, drip irrigation, water tanks, storage facilities etc.)			2	10.000	5.000	5.000															
		Constructing and Equipping Regional Nurseries: Develop four strategically located nurseries with irrigation systems, seed storage, and controlled environments to optimize seedling growth.			8	1.135.600			141.950	141.950	141.950	141.950	141.950	141.950	141.950	141.950							
		Cultivating Native and Drought-Resistant Tree Species: Propagate and maintain a diverse selection of native tree species adapted to local climate conditions for LT afforestation success.			8	410.400			51.300	51.300	51.300	51.300	51.300	51.300	51.300	51.300							
		Establishing a Seed Collection and Storage Program: Develop a seed bank to collect and store genetically diverse, locally adapted seeds for continuous nursery operations and climate resilience.			8	380.160			47.520	47.520	47.520	47.520	47.520	47.520	47.520	47.520							
		Training and Capacity Building for Local Communities: Provide technical training for local communities and forestry professionals on nursery management, seed collection, and sustainable planting techniques.			10	108.000	10.800	10.800	10.800	10.800	10.800	10.800	10.800	10.800	10.800	10.800							
		Developing a Monitoring System for Seedling Growth and Survival: Implement a monitoring framework to track seedling health, growth rates, and post-planting survival in afforestation sites.			8	205.200			25.650	25.650	25.650	25.650	25.650	25.650	25.650	25.650							
24	Forestry	Supporting Migration of Rare and Endemic Forest Species	Green	ST (2028)	6																		
		Identifying Suitable High-Altitude Habitats: Conduct ecological assessments to identify optimal high-altitude areas with the necessary climatic and soil conditions for species relocation.			2	108.000			54.000	54.000													
		Developing Assisted Migration Protocols: Establish guidelines for transplanting rare and endemic species, ensuring minimal ecological disruption and maximizing adaptation success.			4	108.000					27.000	27.000	27.000	27.000									
		Establishing Experimental Relocation Plots: Set up pilot plots to monitor species adaptation and refine best practices for future large-scale migrations.			4	205.200					51.300	51.300	51.300	51.300									
		Providing Financial and Technical Support for Habitat Management: Offer incentives and training for local stakeholders to manage new high-altitude habitats, ensuring LT conservation.			6	268.380			44.730	44.730	44.730	44.730	44.730	44.730									
		Monitoring and LT Adaptation Strategy Development: Implement a continuous monitoring program to track species health, ecosystem interactions, and necessary adaptations over time.			4	205.200					51.300	51.300	51.300	51.300									
25	Forestry	Restoring Vital Ecosystems: Protecting and Regenerating Coastal and Riverine Green Belts and Protective Ecosystems	Green	ST (2026)	6																		
		Site selection, risk assessment and strategic planning. Hydrological, geomorphological, risk assessment and remote sensins studies to identify intervention areas and to define a plan for intervention.			2	340.000	170.000	170.000															
		Implementing bio-engineering measures for coastal erosion management in Velipoje, Kepi Rodonit, Bishti I Palles, Kurbin (Patok), Fier (Darzeze), Durres (Rushkull) and Vlore (Pylli Sodes). Use vegetated embankments, dune stabilization, and wetland restoration in sensitive coastal areas to mitigate erosion and enhance flood defenses			4	22.000.000			5.500.000	5.500.000	5.500.000	5.500.000											
		Protecting and regenerating coastal green belts in the areas of Velipoje, Patok Lagoon, Rrushkull, Karpen, Spille, Karavasta, Vjosa discharge, Dukat, Karaburun, Pishë-Poro, Lukova, and Saranda. Protect, expand, and improve existing coastal green belts by planting native vegetation, improving connectivity between coastal ecosystems and implementing coastal buffer zones to filter pollutants.			4	66.370.000			16.592.500	16.592.500	16.592.500	16.592.500											
		Engineering coastal protection works (grey infrastructure) in the areas of Velipoje, Kune-Vain, Patok-Fushë Kuqe, Rrushkull, Divjake-Karavasta, Narta, and Butrint. Interventions may include the construction of coastal embankments, breakwaters to reduce wave action, and sea walls to protect against high tides and storm surges, limiting coastal retreat. Susstainability of structures will be promoted by integrating eco-friendly materials where possible.			4	43.670.000			10.917.500	10.917.500	10.917.500	10.917.500											
		Strengthening Riverine Ecosystem Resilience: Implement soil stabilization with native plants and vegetal erosion control measures in riverine zones, particularly in Bovilla and watersheds in Drini, Mati, Erzeni, Shkumbini, Vjosa, and Semani, to reduce sedimentation and enhance flood management.			4	11.520.000			2.880.000	2.880.000	2.880.000	2.880.000											
		Enhancing Monitoring and Adaptive Management Strategies: Establish long-term monitoring programs for coastal and riverine ecosystems, integrating satellite imagery and on-site biodiversity assessments to measure the effectiveness of restoration efforts.			4	1.661.688			415.422	415.422	415.422	415.422											
26	Forestry	Sustainable Financing Through Payment for Ecosystem Services (PES)	Soft	Long - term (2033)	6	16.000.000						2.666.667	2.666.667	2.666.667	2.666.667	2.666.667	2.666.667						
27	Forestry	Integrated Ecosystem Restoration and Resilience: Addressing Soil Erosion in Key Albanian Regions	Green	Long - term (2033)	8																		
		Site selection, risk assessment and strategic planning. Hydrological, geomorphological, risk assessment and remote sensins studies to identify intervention areas and to define a plan for intervention.			2	86.510								43.255	43.255								
		Implementing Bio-Engineering and Riparian Buffers to Combat Soil Erosion: Utilize bio-engineering solutions such as vegetative buffers, terracing, and erosion-resistant native plant species for slope stabilization. Protect and restore riparian and wetland vegetation in			6	61.821.939										10.303.656	10.303.656	10.303.656	10.303.656	10.303.656	10.303.656		

No.	Sector	Adaptation measure	Type	Starting period	Years	Budget	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		erosion-prone areas to enhance water retention, filter pollutants, and support biodiversity																					
		Enhancing Community Engagement and Sustainable Land Management: Develop local training programs to promote sustainable agricultural and forestry practices that reduce soil erosion and enhance ecosystem resilience.			2	177.552								88.776	88.776								
		Strengthening Monitoring and Adaptive Management Strategies: Establish long-term ecosystem monitoring to be prepared in case of climate hazards, track the effectiveness of restoration efforts, and refine adaptive management approaches.			6	487.350										81.225	81.225	81.225	81.225	81.225	81.225		
28	Forestry	Combating Erosion and Flooding: Strategic Habitat Restoration and Reforestation in Key Albanian Regions	Green	ST (2026)	8																		
		Site selection to identify specific areas and interventions for implementing habitat creation and restoration to reduce soil erosion, prevent flooding, and enhance ecosystem resilience in the strategic locations identified.			2	456.000	228.000	228.000															
		Restoring Degraded Forests and Pasturelands in Key Regions: Implement reforestation in Durrës (194,84 ha.) and Fier (931,96 ha.) targeting areas degraded by wildfires, overgrazing, and deforestation.			6	5.172.012			862.002	862.002	862.002	862.002	862.002	862.002									
		Establishing Green Belts Along the Vjosa and Seman Rivers: Plant native tree species along the Vjosa (137,8 ha) and Seman rivers (Fier) (55,63 ha.) to stabilize riverbanks, reduce sedimentation, and mitigate flood risks.			6	1.427.894			237.982	237.982	237.982	237.982	237.982	237.982									
		Nature-Based Solutions (NbS) for Erosion and Flood Control: Implement NbS, such as bio-engineering solutions, terracing, and vegetation barriers, to restore degraded areas and control soil erosion in forested and pastureland regions.			6	39.735.360			6.622.560	6.622.560	6.622.560	6.622.560	6.622.560	6.622.560									
		Focused Restoration in Vlora Coastal and Mountain Ecosystems: Restore key ecosystems in Dukat, Llogora, Karaburun to protect against soil erosion, and Pishë-Poro Forest (6740ha) to protect against coastal erosion and biodiversity loss.			6	74.247.840			12.374.640	12.374.640	12.374.640	12.374.640	12.374.640	12.374.640									
		Targeted Reforestation in Dukat i Vjetër: Restore 354,4 hectares of degraded forest in Dukat i Vjetër (Vlora), where soil erosion and deforestation have led to land degradation and loss of productive land.			6	3.904.070			650.678	650.678	650.678	650.678	650.678	650.678									
29	Forestry	Sustainable Landscape Management: Enhancing Water Quality and Biodiversity at Viroi Lake in Gjirokastër	Green	Long - term (2033)	3																		
		Site assessment, planing and stakeholder engagement by conducting ecological and hydrological assessment, GIS mapping and remote sensing to identify areas for intervention and to define a plan for restoration interventions involving relevant stakeholders and communities			1	40.000								40.000									
		Reforestation with Native Species: Implement reforestation initiatives around Viroi Lake using native tree and shrub species to restore degraded areas, stabilize the soil, and enhance biodiversity. Strengthening riparian buffer zones will help reduce sediment inflow into the lake, improving water quality and ecosystem resilience. Drought-resistant vegetation will be prioritized to adapt to changing climatic conditions.			2	55.000									27.500	27.500							
		Erosion Control Measures: Establish erosion control measures such as vegetative buffers, terracing, and bioengineering techniques to reduce soil erosion and prevent sedimentation in the lake. These actions will protect water quality and enhance the resilience of surrounding landscapes.			2	151.109									75.555	75.555							
		Water Quality Improvement Initiatives: Implement measures to enhance water quality in Viroi Lake by reducing pollution sources, improving wastewater management, and promoting sustainable agricultural practices in the surrounding areas. This includes establishing buffer zones, controlling nutrient runoff, and monitoring water quality parameters.			2	157.670									78.835	78.835							
		Biodiversity Conservation and Habitat Enhancement: Strengthen biodiversity conservation by restoring natural habitats, reintroducing native species, and creating ecological corridors around the lake. This includes protecting wetland areas, improving fish habitats, and enhancing conditions for bird and aquatic species.			2	75.555									37.777	37.777							
30	Forestry	Enhancing Climate Resilience in National Parks and Protected Areas	Green	MT (2032)	8																		
		Climate Change Impact Assessments and Specific CC Adaptation Plans in Protected Areas: Conduct thorough climate change impact assessments for national parks and protected areas, with a particular focus on the "Bredhi i Hotovës-Dangëlli" National Park in Përmet. This will involve studying the effects of climate change on rare and endemic species, evaluating shifts in habitat distribution, identifying vulnerable areas, and identifying adaptive measures.			2	108.000							54.000	54.000									
		Establishment of Buffer Zones around Protected Areas: Promote the creation and enforcement of buffer zones around Bredhi i Hotovës-Dangëlli, the Vjosa River National Park and other protected areas in Vlora to reduce external pressures such as urban development, agriculture, and tourism. These zones will act as natural buffers to safeguard biodiversity and maintain ecosystem functions.			6	257.062.205									42.843.701	42.843.701	42.843.701	42.843.701	42.843.701	42.843.701			
		Monitoring of Endemic and Rare Species: Implement a comprehensive monitoring system for endemic and rare species within the Vjosa River and "Bredhi i Hotovës-Dangëlli" National Park. Regular surveys will track population dynamics and health of these species, ensuring timely interventions if necessary.			6	183.600									30.600	30.600	30.600	30.600	30.600	30.600			
		Capacity Building for Local Communities and Stakeholders: Strengthen the capacity of local communities, conservationists, and government agencies to manage protected areas and buffer zones. This will include training on climate change adaptation strategies, biodiversity conservation, and sustainable land management practices.			6	108.000									18.000	18.000	18.000	18.000	18.000	18.000			
31	Forestry	Restoration of forest layers to protect crops in Vlora	Green		7																		

No.	Sector	Adaptation measure	Type	Starting period	Years	Budget	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		Studies to to determine optimal locations for forest layer integration and engagement with farmes and local communities to define the areas and necessary interventions to identify the best options and species to provide wind protection for agricultural crops.			2	74.222				37.111	37.111												
		Restoration of Forest Layers Between Agricultural Areas in Vlora to cover 345,47 ha: Promote the restoration of forest layers between agricultural surfaces in Vlora, specifically in areas such as Dukat i Ri, Tragjas, and Radhimë. These forest layers will help create microhabitats that enhance biodiversity, improve soil fertility, and provide natural windbreaks for crops, reducing the negative impact of strong winds and improving overall crop resilience, promoting the planteation of native tree species that can support biodiversity.		MT (2029)	5	2.089.403						417.881	417.881	417.881	417.881	417.881							
		Community Involvement and Sustainable Practices: Involve local farmers and communities in the restoration process, ensuring that forest layers are maintained sustainably over time. Provide training and resources on agroforestry practices and the long-term benefits of integrating trees with crops.			5	1.119.323						223.865	223.865	223.865	223.865	223.865							
32	Tourism	Strategic Spatial Planning for tourism: Redirecting Development from High-Risk Areas	Soft	ST (2026)	2	600.000	300.000	300.000															
33	Tourism	Climate-proofing tourism infrastructure: Incentive packages for climate-proofing the tourism sector infrastructure	Soft	MT (2030)	3	800.000					266.667	266.667	266.667										
34	Tourism	Strategic Planning for Coastal Resilience: Buffer Zones and Sea Gate Adaptations	Soft	MT (2029)	3	504.000				168.000	168.000	168.000											
35	Tourism	Protecting Vlora Bay: Preserving Posidonia Habitats and Underwater Cultural Heritage Against Climate Impacts	Green	LT (2034)	4																		
		Conduct seabed mapping and assessment of Posidonia meadows to define the scope and options for the restoration efforts			2	500.000									250.000	250.000							
		Restoring and Expanding Posidonia Seagrass Meadows: Actively restore degraded Posidonia meadows through transplanting and conservation efforts to enhance coastal resilience.			2	633.784											316.892	316.892					
		Promoting Natural Beach Areas and Protecting Posidonia Banquettes: Encourage the use of natural beach areas while preserving Posidonia beach casts and banquettes to maintain ecosystem balance including the development of sustainable tourism activities			2	50.000											25.000	25.000					
		Monitoring Climate Impacts on Underwater Cultural Heritage: Develop monitoring programs to assess the effects of rising sea temperatures and erosion on submerged archaeological sites.			2	60.000											30.000	30.000					
		Implementing Marine Protected Areas (MPAs) for Conservation: Designate and enforce marine protected zones in Vlora Bay to safeguard Posidonia habitats and underwater heritage from human and climate-induced threats.			2	24.835											12.418	12.418					
		Engaging Local Communities in Conservation Efforts: Promote capacity building around conservation and community-led initiatives and sustainable tourism practices to support conservation while ensuring economic benefits for the region.			2	50.000											25.000	25.000					
		Sustainable monitoring systems to protect seagrass meadows: Install eco-friendly mooring buoys to prevent anchor damage to Posidonia meadows and other sensitive marine ecosystems.			2	2.210.000											1.105.000	1.105.000					
		Marine debris removal and plastic waste reduction programs: Establish local initiatives for beach and seabed cleanup to reduce pollution impacting marine biodiversity and tourism appeal.			2	77.500											38.750	38.750					
36	Tourism	Strengthening the policy and regulatory framework for Sustainable Tourism: Policy Review and Regulatory Enhancement	Soft	ST (2028)	4	120.500			30.125	30.125	30.125	30.125											
37	Tourism	Integrating Climate Data for Sustainable Tourism: Guidelines for resilient business management and National Reporting	Soft	ST (2026)	3	290.000	96.667	96.667	96.667														
38	Tourism	Climate-proofing Tourism Infrastructure: Adaptive Designs for Climate Risk Mitigation	Grey	ST (2027)	10	TBC																	
		Climate risk assessment for existing and planned tourism infrastructure and site selection for areas that are particularly vulnerable to define direct interventions by the public sector and study potential for private sector involvement.																					
		Review the building codes and analyse whether the inclusion of additional climate-resilient design principles to construct or refurbish climate-resilient tourism infrastructure is necessary, emphasizing also enforcement : Defining and incorporating resilience criteria in the design and building of hotels, lodges and recreational spaces with elevated foundations, flood-proof materails and reinforced structures, and drainage systems to withstand extreme weather events through the building codes. Moreover, enforcement shall be reinforced through auditing and inspection mechanisms.																					
		Provide capacity building to key tourism operators and constructors into the new climate-resilient principles and good practices in the sector, covering the inclusion of nature-based solutions to protect coastal resorts and recreational areas while promoting biodiversity.																					
		Implementing climate-resilient measures in specific public touristic areas detected in the study of risks to ensure the infrastructure is climate-proofed against the different climate threats and expected impacts.																					
39	Tourism	Protecting Coastal Zones: Integrated Regulations, Planning and Management for Climate Resilience and Sustainable Development	Soft	MT (2029)	5	657.000				131.400	131.400	131.400	131.400	131.400									
40	Tourism	Building Climate Resilience Capacity: Training Tourism Operators in Sustainable Practices and Adaptation Strategies	Soft	ST (2027)	2	430.000		215.000	215.000														
41	Tourism	Digital Hubs for Climate-Resilient Tourism: Sharing Knowledge and Best Practices	Soft	ST (2027)	2	34.000		17.000	17.000														
42	Tourism	Protecting Tourism Assets: Enforcing Regulations and Restoring Ecosystems for Sustainable Development	Soft	ST (2028)	4	1.450.000			362.500	362.500	362.500	362.500											
43	Urban	Territorial Planning for Climate Resilience: Preparing for Rising Seas and Changing Environments	Soft	MT (2031)	3	290.000						96.667	96.667	96.667									
44	Urban	Strategic Spatial Planning for Risk Reduction: Redirecting Developments and Managing Surface Water Flood Risks	Soft	ST (2028)	6	3.027.000			504.500	504.500	504.500	504.500	504.500	504.500									

No.	Sector	Adaptation measure	Type	Starting period	Years	Budget	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
45	Urban	Incentive schemes to increase extreme temperature resilience of the building stock	Soft	LT (2033)	10	2.715.000.000								271.500.000	271.500.000	271.500.000	271.500.000	271.500.000	271.500.000	271.500.000	271.500.000	271.500.000	271.500.000
46	Urban	Integrating Green Spaces into Public Infrastructure Development through Green Public Procurement	Soft	MT (2030)	3	380.000					126.667	126.667	126.667										
47	Urban	Restoring Green Corridors: Reforestation and Urban Greening Initiatives	Green	MT (2029)	6																		
		Conduct ecological and environmental assessments and map and prioritize areas for restoration and planting of green corridors in alignment with Local Adaptation Plans in Gjirokastër and Përmet.			2	76.400				38.200	38.200												
		Prepare land and conduct planting activities to restore and develop new green corridors promoting connectivity of green spaces and fostering urban green spaces to mitigate heat island effects. The restoration and planting exercise aims at improving soil quality, reducing erosion, protecting and restoring ecosystems and reducing extreme weather impacts.			4	492.144						123.036	123.036	123.036	123.036								
48	Urban	Climate Risk Assessment for Durrës, Elbasan, Fier, and Beyond: Developing a Comprehensive Vulnerability Map	Soft	ST (2028)	4	196.000			49.000	49.000	49.000	49.000											
49	Urban	Flood event emergency plans	Soft	ST (2027)	4	2.500.000		625.000	625.000	625.000	625.000												
50	Urban	Enhancing Urban Resilience: Assessing Greenspaces and Sustainable Drainage Solutions	Green	ST (2026)	8	TBC																	
		Assessment and planning to analyse feasibility and priority spots for increasing the volume of greenspaces and sustainable urban drainage systems in municipalities, considering land use with a focus in Vlora, Elbasan and Durrës municipalities, defining a plan for implementation of the interventions.																					
		Implement tree-planting initiatives in key urban zones to increase water retention and mitigate flood risks in the priority municipalities.																					
		Implementing Permeable Pavements and sustainable urban drainage systems in High-Risk Areas: Replace impermeable surfaces with permeable pavements in key urban locations to improve groundwater recharge and reduce flash flooding.																					
51	Urban	Sustainable Urban Design: Conservation and Restoration of Permeable and Infiltration Areas	Soft	LT (2035)	5	1.200.000										240.000	240.000	240.000	240.000	240.000			
52	Energy	Protecting Energy Infrastructure against strong winds: Rehabilitating Substations and Transmission Lines	Grey	MT (2031)	6																		
		Study on vulnerable and affected electrical substantions and power transmissions lines and design of interventions to address the vulnerabilities detected.			2	58.000						29.000	29.000										
		Upgrading Transmission Towers with Wind-Resistant Designs: Reinforce or replace transmission towers with wind-resistant structures, using materials and designs that withstand high wind loads.			4	488.090.000								122.022.500	122.022.500	122.022.500	122.022.500						
		Installing Aerodynamic Insulators and Cables: Use aerodynamic conductors and dampers to reduce wind-induced vibrations and minimize the risk of cable galloping or breakage.			4	194.960.000								48.740.000	48.740.000	48.740.000	48.740.000						
		Strengthening Substation Structures Against Wind Loads: Retrofit substations with reinforced roofing, wind barriers, and secure equipment anchoring to prevent damage from high winds.			4	238.200.000								59.550.000	59.550.000	59.550.000	59.550.000						
		Implementing Vegetative Windbreaks Around Energy Infrastructure: Plant rows of resilient trees and shrubs to act as natural wind barriers, reducing wind speed and protecting transmission lines and substations.			4	64.990.000								16.247.500	16.247.500	16.247.500	16.247.500						
53	Energy	Enhancing Building Efficiency: Energy Performance Certificates and Resilient Standards	Soft	MT (2031)	5	3.500.000						700.000	700.000	700.000	700.000	700.000							
54	Energy	Exploring the Energy sector Potential: Demand-Side Management and Energy Storage Studies	Soft	MT (2029)	3	2.900.000				966.667	966.667	966.667											
55	Energy	Protecting the energy infrastructure: Monitoring Emergency and Risk Areas	Soft	ST (2028)	4	875.000			218.750	218.750	218.750	218.750											
56	Energy	Enhancing Heatwave resilience through Efficient Air Conditioning Technology Deployment and Climate Refuges	Soft	LT (2036)	5	38.200.000											7.640.000	7.640.000	7.640.000	7.640.000	7.640.000		
57	Energy	Optimizing Renewable Energy for Resilient Systems: Grid Innovation and Storage Investments	Soft	LT (2033)	10	176.850.000								17.685.000	17.685.000	17.685.000	17.685.000	17.685.000	17.685.000	17.685.000	17.685.000	17.685.000	17.685.000
58	Energy	Advancing Gender Equity in Energy: Training and Support for Women in Renewable Energy Projects	Soft	ST (2027)	5	4.900.000		980.000	980.000	980.000	980.000	980.000											
59	Energy	Building Resilience in Hydropower: Optimized Operations and Strengthened Infrastructure	Grey	ST (2028)	6																		
		Updating Dam and Reservoir Operation Protocols: Revise reservoir management protocols and define optimize water storage and release based on climate projections and changing seasonal patterns.			2	75.820.000			37.910.000	37.910.000													
		Retrofitting Hydropower Facilities for Climate Resilience: Implement structural upgrades to dams and turbines to withstand prolonged droughts and extreme weather events, such as heavy rainfall.			4	346.500.000					86.625.000	86.625.000	86.625.000	86.625.000									
		Enhancing Sediment Management in Reservoirs: Apply sustainable dredging and controlled diversions, to maintain storage capacity and operational efficiency.			4	238.200.000					59.550.000	59.550.000	59.550.000	59.550.000									
		Implementing Advanced Climate and Hydrological Monitoring Systems: Deploy sensors and forecasting models to monitor real-time variations in precipitation and water inflows.			4	86.530.000					21.632.500	21.632.500	21.632.500	21.632.500									
60	Transport	Regular Vulnerability and Risk Analysis and Definition of Resilience-Building Measures for Road Infrastructure	Soft	ST (2028)	6	457.000			76.167	76.167	76.167	76.167	76.167	76.167									
61	Transport	Geological Studies for Sustainable Roads: Bio-Engineering Solutions to reduce Erosion and Flood risks	Soft	MT (2030)	6	2.900.000					483.333	483.333	483.333	483.333	483.333	483.333							
62	Transport	Advancing Sustainable and Climate Resilient Urban Mobility: Developing and Reviewing Urban Mobility Plans	Soft	LT (2034)	4	1.200.000									300.000	300.000	300.000	300.000					
63	Transport	Adapting Critical Transport Infrastructure: Advanced Risk Assessment and Resilient Design Solutions	Soft	ST (2028)	2	2.700.000			1.350.000	1.350.000													
64	Transport	Integrating nature-basesolutions and environmental based adaptation for Transport sector resilience: Enhancing Infrastructure with Nature-Based and Ecosystem-Based Adaptation	Green	MT (2031)	5																		
		Carry out an assessment of options to implement green corridors alongside road infrastructure to mitigate climate change impacts			2	200.000						100.000	100.000										

No.	Sector	Adaptation measure	Type	Starting period	Years	Budget	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
		preventing the heat island effect, mitigating flood risks and erosion. The analysis shall identify the kms and surrounding surfaces of specific roads in which interventions are to be conducted, together with the implementation plan and feasibilty analysis.																					
		Riparian Buffer Strips Along River-Adjacent Roads: Establishing vegetative buffer zones along roads near rivers to reduce erosion, stabilize banks, and minimize flood damage.			3	378.920.000								126.306.667	126.306.667	126.306.667							
		Permeable Pavements and Green Drainage in Urban Transport: Replacing conventional pavements with permeable alternatives.			3	270.630.000								90.210.000	90.210.000	90.210.000							
		Afforestation and terracing for Landslide Prevention on Mountain Roads: Planting native trees and vegetation on slopes along key transport routes, and implement terrace systems to reduce soil erosion and landslide risks.			3	184.020.000								61.340.000	61.340.000	61.340.000							
		Coastal Wetland Protection for Transport Resilience: Restore and conserve coastal wetlands to act as natural barriers against storm surges and coastal erosion affecting transport infrastructure.			3	270.630.000								90.210.000	90.210.000	90.210.000							
		Sustainable Dredging Practices for Navigable Waterways: Implement environmentally responsible dredging techniques to maintain transport waterways while preserving marine biodiversity.			3	151.810.000								50.603.333	50.603.333	50.603.333							
		Green Corridors Along highways and Railways: Restoration and instauration of tree lined corridors and green belts along major roads and railway lines to reduce heat stress, provide shade, absorb pollutants, work as noise barriers, and improve biodiversity connectivity.			3	156.140.000								52.046.667	52.046.667	52.046.667							
		Bioengineering for road and railway stabilization: Use bio techniques for slope stabilization like vegetative covers and planted tterraces alongvulnerable transport routes prone to landslides or erosion in non-mountainous areas.			3	173.230.000								57.743.333	57.743.333	57.743.333							
		Living shorelines for coastal transport resilience: use oyster reefs, vegetative buffers to stabilize shorelines and protect transport infrastructure from wave action and sea-level rise.			3	248.940.000								82.980.000	82.980.000	82.980.000							
		Integration of green bridges for wildlife crossings: develop eco-friendly overpasses and underpasses for wildlife to prevent roadkill and esnsure safe species migration across transport networks			3	194.940.000								64.980.000	64.980.000	64.980.000							
65	Transport	Climate Resilience Transport Policies: Embedding Climate Adaptation in Regulatory Frameworks	Soft	ST (2027)	3	218.000		72.667	72.667	72.667													
66	Transport	Innovative Partnerships for Sustainable Transport: Funding Climate-Resilient Transport Infrastructure	Soft	LT (2036)	5	1.900.000											380.000	380.000	380.000	380.000	380.000		
						9.800.696.977	4.659.800	7.529.882	529.596.820	662.060.265	802.079.015	804.689.152	340.902.076	1.471.731.191	1.314.666.566	1.284.405.814	614.986.908	365.760.242	360.947.182	350.722.182	307.589.881	289.185.000	289.185.000
							0,05%	0,1%	5,4%	6,8%	8,2%	8,2%	3,5%	15,0%	13,4%	13,1%	6,3%	3,7%	3,7%	3,6%	3,1%	3,0%	3,0%

ANNEX II: MTBP PLAN 2026-2028

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
I. Cross-sectorial measures					3.858.333	2.705.576	0	17.500	-1.135.257
Measure 1	Strengthening Regional Resilience: Supporting the Western Balkans Adaptation Roadmap	1.Completion and official adoption of the Western Balkans Climate Adaptation Innovative Roadmap.			105.000	37.333	0	12.500	-227.667
Activity 1.1	1.1 Provide technical expertise and advisory support to the Regional Cooperation Council in the design, structure, and methodology of the Climate Adaptation Innovative Roadmap, ensuring it reflects regional vulnerabilities, sectoral needs, and climate projections up to 2050.		Q1 2028	Q4 2028	105.000	37333		12.500	0
Activity 1.2	1.2 Contribute to the development of the Roadmap by reviewing and validating drafts, supporting stakeholder engagement processes, and ensuring regional coherence.	1.3 .Number of regional consultations, workshops, or meetings held to develop and refine the Roadmap.	Q1 2029	Q4 2030				0	
Activity 1.3	1.3 Facilitate dialogue and coordination with key stakeholders across the Western Balkans to ensure the Roadmap reflects national adaptation priorities and supports regional cooperation.	1.3 .Number of regional consultations, workshops, or meetings held to develop and refine the Roadmap.	Q1 2029	Q4 2030					
Measure 2	Optimizing Climate Coordination: Strengthening the IMWGCC Framework	1. Number of municipalities with operational Steering Groups that meet regularly and report on NAP and Local Action Plan progress. 2. Percentage of Climate Change Adaptation Technical Working Group (TWG) and Municipal Steering Group members trained in climate adaptation planning and implementation. 3. Number of climate adaptation policies or actions recommended by the TWG and adopted at the municipal level.			420.000	0	0	0	-420.000
Activity 2.1	2.1 Conduct an institutional review of the IMWGCC's current structure, mandate, decision-making processes, and coordination mechanisms related to climate adaptation.		Q1 2027	Q4 2028	210.000				
Activity 2.2	2.2 Identify key barriers and gaps hindering inter-sectoral collaboration and effective implementation of adaptation measures within the IMWGCC.		Q1 2027	Q4 2028	210.000				
Activity 2.3	2.3 Provide targeted recommendations to improve the functionality, coordination capacity, and strategic alignment of the IMWGCC with national climate adaptation frameworks.		Q1 2027	Q4 2028					
Activity 2.4	2.4 Propose improvements to decision-making protocols within the IMWGCC to enhance transparency, efficiency, and accountability in adaptation planning and implementation.		Q1 2027	Q4 2028					
Measure 3	Enhancing Capacities for Adaptation: Support for the Climate Change Technical Group and create and capacitate a Steering Group				496.666	0	0	5.000	-491.666
Activity 3.1	3.1 Provide targeted capacity-building support (e.g. technical training, guidance materials) to the Climate Change Adaptation Technical Working Group.	3.1 Number of training sessions conducted for the Climate Change Adaptation Technical Working Group.	Q1 2027	Q4 2029	248.333			5000,0	
Activity 3.2	3.2 Establish a Steering Group at municipal level with clearly defined roles and responsibilities to coordinate and monitor local adaptation actions.	3.2 Percentage of municipalities with operational Steering Groups in place.	Q1 2027	Q4 2029	248.333				
Activity 3.3	3.3 Deliver training sessions for municipal Steering Group members on adaptation planning and reporting mechanisms linked to the NAP and Local Action Plan.	3.3 Number of Steering Group members trained in adaptation planning and reporting.	Q1 2027	Q4 2029					
Measure 4	Enhancing climate resilience through improved data systems				500.000	1.476.151	0	0	976.151
Activity 4.1	4.1 Develop or upgrade centralized climate information platforms to enable data integration, sharing, and access across sectors and governance levels.	4.1. Existence of an operational climate information platform (new or upgraded) providing accessible data and services. 4.2. Number of technical staff trained in climate data collection, processing, and analysis. 4.3. Percentage of vulnerable areas covered by real-time monitoring and early warning systems. 4.4 Strengthen climate resilient health system through enhanced climate-health data and early warning system, integrated evidence-based policies and institutions and upgraded health infrastructure and response capacities	Q1 2028	Q4 2028	200.000	1.376.151			
Activity 4.2	4.2 Strengthen institutional capacities for climate data collection, processing, and analysis through training, provision of tools, and development of standard protocols.		Q1 2028	Q4 2030	200.000	100.000			
Activity 4.3	4.3 Establish or enhance real-time monitoring systems and early warning systems for climate-related hazards.		Q1 2028	Q4 2030	100.000	0			
Measure 5	Nature-based solutions and Biodiversity Net Gain Developer Schemes	1. Existence of an operational climate information platform (new or upgraded) providing accessible data and services 2. Number of jobs created through the implementation of nature-based solutions and habitat restoration initiatives.							
Activity 5.1	Establish and restoring green corridors for biodiversity connectivity by identifying priority areas, and restoring native vegatation thorugh plantation and wildlife-friendly infrastructure (eco-bridges, underpasses, etc).	5.1. Number of kilometers of green corridors established or restored with native vegetation and wildlife-friendly infrastructure.	Q1 2029	Q4 2034					
Activity 5.2	Enhancing cultural and recreational ecosystem services through conservation by restoring protected areas to improve public access, develop infrastructure for sustainable recreation (trails, wildlife observation areas, angling, eco-tourism zones, etc.), and ensuring conservation of landscapes while promoting public engagement.	5.2 Number of recreational infrastructure elements developed or improved in restored protected areas.	Q1 2030	Q4 2034					
Activity 5.3	Implement biodiversity net gain as a regulatory standard in planning by introducing a net gain policy for new development projects and establishing an offset program requiring developers to restore or compensante for habitat loss. Pilots in the target municipalities may be considered.	5.3.1 Number of new development projects applying biodiversity net gain (BNG) principles through offset or restoration requirements. 5.3.2 Number of policies, plans, or local development regulations that integrate nature-based solutions and biodiversity net gain principles.	Q1 2031	Q4 2034					
Measure 6	Fostering Climate Resilience Awareness Raising and Training for Adaptation and Mitigation				750.000	18.000	0	0	-732.000
Activity 6.1	6.1 Develop and deliver targeted training modules on climate change adaptation and mitigation for key practitioners, public institutions, municipalities, and essential service providers.	6.1. Number of training modules developed and delivered to public institutions and essential services.	Q1 2027	Q4 2030	375.000	18.000			
Activity 6.2	6.2 Conduct awareness-raising sessions for the general public and local communities, with a focus on high-priority climate risks, practical adaptation responses, and community-level resilience strategies.	6.2 Number of awareness-raising events conducted in climate-vulnerable communities.	Q1 2027	Q4 2030	375.000	0			
Activity 6.3	6.3 Organize tailored workshops and informational materials for businesses and start-ups, highlighting the role of ecosystems in adaptation, examples of nature-based solutions, and available funding opportunities to support climate-resilient innovation.	6.3. Number of business-oriented workshops conducted on nature-based solutions and climate financing.	Q1 2027	Q4 2030		0			
Activity 6.4	6.4 Raise awareness at the municipal level on the climate vulnerability of protected areas, through communication campaigns, stakeholder dialogues, and integration of ecosystem risk topics in local outreach events.	6.4. Number of municipalities conducted communication activities on ecosystem vulnerability.	Q1 2027	Q4 2030		0			
Measure 7	Innovative Climate Finance Mechanisms: Piloting Sustainable Financing Strategies				1.520.000,00			0	-1520000
Activity 7.1	7.1 Identify and assess potential climate finance instruments relevant for the national and municipal context, including insurance schemes, payments for ecosystem services (PES), entry permits, and conditional loans.	7.1. Climate finance strategy document completed and officially validated, incorporating assessed instruments relevant to national and municipal levels.	Q1 2028	Q4 2031	1.520.000				
Activity 7.2	7.2 Design a sustainable climate finance strategy, incorporating selected instruments and establishing guiding principles for pilot implementation in municipalities.	7.2. Climate finance strategy document completed and officially validated, incorporating assessed instruments relevant to national and municipal levels.	Q1 2028	Q4 2031					
Activity 7.3	7.3 Pilot selected financing mechanisms at the municipal level, in coordination with local authorities, to test feasibility, public acceptance, and institutional requirements.	7.3. Number of municipalities participating in pilot implementation of climate finance mechanisms.	Q1 2028	Q4 2031					
Measure 8	Piloting risk management Assessments for Climate-Resilient Businesses	1. Percentage of participating businesses implementing risk mitigation measures based on their assessments.			66.666,67	1.174.092	0	0	1107425,225

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
Activity 8.1	8.1 Conduct sector-specific risk assessments for selected private companies to identify climate vulnerabilities, operational risks, and potential adaptation opportunities tailored to each sector.	8.1.1. Number of private companies that completed climate risk and vulnerability assessments. 8.1.2. Number of sectors covered by pilot risk management assessments.	Q1 2028	Q4 2030	66666,67	1.174.092			
Activity 8.2	8.2 Develop and deliver practical tools, guidelines, and training modules to help companies understand, assess, and integrate climate-related risks into their risk management processes.	8.2. Number of practical tools and guidance materials developed and delivered for climate risk integration.	Q1 2028	Q4 2030		0			
Activity 8.3	8.3 Compile lessons learned and recommendations from pilot assessments to guide the future scaling up of climate-informed private sector risk management practices.	8.3. Completion of a summary report outlining key lessons learned, challenges, and recommendations (yes/no).	Q1 2028	Q4 2030		0			
Measure 9	Promoting Gender-Sensitive Climate Adaptation: Training Stakeholders and Developing Inclusive Tools								
Activity 9.1	9.1 Design and deliver gender-sensitive training sessions targeting national and local government officials, NGOs, community leaders, and technical staff involved in climate adaptation planning and implementation.	9.1. Number of gender-sensitive training sessions conducted at national and municipal levels.	Q1 2030	Q4 2031					
Activity 9.2	9.2 Develop and disseminate practical gender-responsive materials and tools, such as guidelines, checklists, and case studies, to support the integration of gender considerations into adaptation initiatives.	9.2.1. Number of gender-responsive tools and materials developed (e.g., checklists, guidelines, case studies). 9.2.2. Number of stakeholders who received or accessed gender-responsive materials.	Q1 2030	Q4 2031					
Activity 9.3	9.3 Ensure inclusive participation in trainings by actively engaging women, youth, and marginalized groups, and addressing barriers to access such as language, location, and scheduling.	9.3. Percentage of training events that achieved gender-balanced participation (at least 40% women).	Q1 2030	Q4 2031					
Measure 10	Educating Communities: Adaptation and disaster awareness-raising	1. Number of schools integrating climate change and adaptation topics into their curricula or extracurricular activities.							
Activity 10.1	10.1 Design and implement age-appropriate educational materials and activities for primary and secondary schools focused on climate change impacts, adaptation measures, and nature-based solutions.	10.1 Number of schools having received educational materials (e.g. guides, posters, actiivty books) for climate change adaptation and nature-based solutions.	Q1 2030	Q4 2033					
Activity 10.2	10.2 Organize community-based awareness events such as climate fairs, exhibitions, workshops, and interactive sessions to engage residents on disaster resilience and local adaptation practices.	10.2. Number of community awareness events held on climate adaptation and disaster resilience.	Q1 2030	Q4 2033					
II. Agriculture					49.157.180	15.729.642	23.751.275	9.577.673	-98.590
Measure 11	Empowering farmers: financial support for climate-resilient infrastructure				2960000	15.729.642	1.713.021	2.750.205	17.232.868
Activity 11.1	11.1 Design and implement targeted financial support schemes to enable farmers to invest in climate-resilient infrastructure.	11.1. Total amount of financial support allocated to farmers for climate-resilient infrastructure investments.	Q1 2028	Q4 2037	2960000	15729642	1713020,833	489.798	
Activity 11.2	11.2 Prioritize financing for the installation of hail protection systems, such as anti-hail nets or shelters, in regions most exposed to severe hailstorms.	11.2. Total area (in hectares) covered by hail protection systems installed with financial support.	Q1 2028	Q4 2037		0	0	300.000	
Activity 11.3	11.3 Promote the modernization of greenhouses by supporting investments in climate-resilient designs, including improved insulation, automated ventilation, and water-efficient technologies.	11.3. Total surface area (in m^2) of greenhouses upgraded or constructed with climate-resilient features through the financing scheme.	Q1 2028	Q4 2037		0	0	1.660.408	
Activity 11.4	11.4 Support the establishment of shelterbelts and windbreak systems, including tree rows or hedgerows, to reduce wind exposure, prevent soil erosion, and enhance microclimate stability on farms.	11.4. Number of farms implementing shelterbelt systems with financial support.	Q1 2028	Q4 2037		0	0	300.000	
Measure 12	Safeguarding farmers: Compensation and assitance programs for disaster recovery								
Activity 12.1	12.1 Design disaster relief funds and emergency assistance schemes to support farmers experiencing income loss due to climate-related disasters.	12.1. Total amount of funding allocated through disaster compensation and emergency assistance schemes.	Q1 2029	Q4 2038					
Activity 12.2	12.2 Establish clear eligibility criteria and application procedures to ensure timely and equitable access to compensation and assistance by affected farming households.		Q1 2029	Q4 2038					
Activity 12.3	12.3 Develop awareness and communication campaigns to inform farmers about the availability, conditions, and procedures of compensation mechanisms.	12.3. Percentage of targeted farming communities receiving communication materials on disaster compensation mechanisms.	Q1 2029	Q4 2038					
Measure 13	Action Plan for Invasive Species Under Changing Climate Conditions								
Activity 13.1	13.1 Conduct climate-sensitive risk assessments to identify priority invasive species whose distribution, impact, or resilience may increase under changing climate conditions.		Q1 2030	Q4 2032					
Activity 13.2	13.2 Define targets and strategic objectives for invasive species prevention, early detection, control, and eradication in alignment with national biodiversity and adaptation goals.		Q1 2030	Q4 2032					
Activity 13.3	13.3 Develop a phased implementation plan with clear timelines, responsibilities, and resource needs for each stage of the invasive species management cycle.	13.3. Validated and phased implementation plan for invasive species management developed, incorporating climate risk assessments and strategic targets (yes/no).	Q1 2030	Q4 2032					
Activity 13.4	13.4 Establish monitoring protocols and data collection mechanisms to evaluate effectiveness and inform adaptive management of invasive species under future climate scenarios.	13.4. Existence of standardized and operational monitoring system for climate-sensitive invasive species (yes/no).	Q1 2030	Q4 2032					
Measure 14	Strengthening Flood Protection: Riverbank Restoration and Floodplain Expansion Across Key Albanian Rivers				45.564.000	0	0	307.500	-45.256.500
Activity 14.1	Hydrological modeling and flood risk mapping in the priority rivers to identify vulnerable areas where riverbanks and floodplains require restoration.	14.1. Number of flood-prone areas mapped and prioritized through hydrological modeling and flood risk assessments.	Q1 2026	Q4 2027	354.000,00		0	50000	-304.000
Activity 14.2	Engineering design for the restoration works of vulnerable riverbanks and dams based on the vulnerabilities detected.	14.2. Number of engineering design plans completed for restoration of vulnerable riverbanks and dams	Q1 2026	Q4 2027	400.000,00		0	57500	-342.500
Activity 14.3	Riverbank Restoration and Dam Repairs: Focus on the restoration and repair of riverbanks embankments and dams along key river streams such as Drini, Buna, Mati, Ishmi, and Vjosa to restore the 300km of flood protection embankments identified in the National Strategy for Irrigation, Drainage and Flood Protections. Efforts will aim to strengthen existing and new flood protection infrastructure, improve erosion control, and prevent damage caused by heavy rainfall or rising sea levels. Emphasize sustainable practices that incorporate natural vegetation to reinforce riverbanks and promote ecosystem resilience.	14.3.1. Number of kilometers of riverbanks and flood protection embankments restored or repaired in priority river basins. 14.3.2. Number of restored river segments using nature-based solutions (e.g., vegetated embankments, riparian buffers) for erosion and flood control.	Q1 2028	Q4 2031	44.000.000,00		0	0	-44.000.000
Activity 14.4	Monitoring and Maintenance of River Protection Systems: Set up a monitoring system to track the effectiveness of riverbank restoration, floodplain expansion, and flood barrier construction. As well as early warning systems to be prepared against possible affections. Regular inspections will ensure that the infrastructure remains intact and continues to provide protection.	14.4. Number of operational early warning systems and flood monitoring stations installed in vulnerable river basins.	Q1 2028	Q4 2031	324.000,00		0	100000	-224.000
Activity 14.5	Community Engagement and Flood Risk Awareness: Engage local communities in flood risk management by raising awareness about flood protection measures, the importance of riverbank restoration, and the role of wetlands in flood mitigation. Encourage local participation in maintenance and restoration activities, empowering residents to take an active role in the protection of their environments. And stablish specific population evacuation plans in case of extreme climate hazards.	14.5.1. Number of communities reached through flood risk awareness campaigns and community engagement activities. 14.5.2. Number of municipalities with updated flood evacuation plans and community-based flood preparedness strategies.	Q1 2026	Q4 2031	486.000,00		0	100000	-386.000
Measure 15	Implementing Habitat Creation and Nature-Based Solutions to Combat Soil Erosion	1. Percentage reduction in soil erosion or sedimentation rates in treated zones. 2. Number of local adaptation plans or land-use plans integrating nature-based erosion control measures.			217.917	0	0	4.177.468	3.959.551
Activity 15.1	Identify and map erosion-prone areas for targeted areas. Conduct geospatial analysis and field surveys to map erosion-prone areas, compared with climate risk assessment to identify high-risk zones and define interventions aligned with local adaptation strategies.	15.1. Number of erosion-prone areas identified and mapped using geospatial and field-based assessments.	Q1 2028	Q4 2029	170000		0	494163,1071	324.163
Activity 15.2	Based on the needs identified, establish Vegetative Buffers and Restoring Natural Barriers by planting native grasses, shrubs, and trees along riverbanks, hillsides, and agricultural lands to stabilize soil and reduce sediment loss.	15.2. Number of hectares restored with vegetative buffers and natural erosion barriers using native plant species.	Q1 2030	Q4 2033	0		0	28326,21429	28.326

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
Activity 15.3	Implementating agroforestry and sustainable land management for soil stability by introducing agroforestry systems, using native perennial crops and intercropping methods to prevent soild depletion, and promoting regenerative farming techniques.	15.3. Number of hectares under agroforestry or regenerative land management systems established in erosion-prone agricultural areas.	Q1 2030	Q4 2033	0		0	1218326,214	1.218.326
Activity 15.4	Soil bioengineering and green infrastructure for slope stabilization including: reinforcement of steep slopes through bioengineering solutions, applying geotextiles and biodegrdable erosion control blankets and utilizing deep-rooted native species to provide natural anchoring.	15.4. Number of slope stabilization interventions implemented using soil bioengineering and green infrastructure techniques.	Q1 2030	Q4 2033	0		0	1218326,214	1.218.326
Activity 15.5	Foster community-led reforestation and soil conservation programms to actively engage farmers, indigenous groups nad local organizations in land restoration efforts, including capacity buildings.	15.5. Number of community members (e.g., farmers, indigenous groups) trained or engaged in reforestation and soil conservation initiatives.	Q1 2028	Q4 2033	47.917		0	1218326,214	1.170.410
Measure 16	Enhancing IGEO's (Institute of Geosciences) Capacity for Coastal Monitoring and Data Provision on Environmental Changes and risks				161.100	0	90.775	400.000	329.675
Activity 16.1	16.1 Conduct a capacity needs assessment of IGEO to identify technical, human, and institutional gaps related to coastal and environmental monitoring.	16.1. Existence of a completed and formally validated capacity needs assessment report for IGEO (Yes/No).	Q1 2028	Q4 2029	161.100		24.536	100.000	
Activity 16.2	16.2 Upgrade technical infrastructure and equipment to support real-time data collection on coastal erosion, saltwater intrusion, groundwater quality, and vegetation cover in vulnerable coastal areas.	16.2. Percentage of progress in establishing an operational coastal and environmental monitoring system at IGEO, including infrastructure upgrades, standardized protocols, and staff training (%).	Q1 2028	Q4 2029			0	100.000	
Activity 16.3	16.3 Develop and implement standardized monitoring protocols to ensure data accuracy, consistency, and comparability across coastal sites.	contributes to Indicator 2	Q1 2028	Q4 2029			0	100.000	
Activity 16.4	16.4 Deliver targeted training programs for IGEO staff and partners on data collection methodologies, remote sensing, and data management systems related to climate impacts on coastal ecosystems.	contributes to Indicator 2	Q1 2028	Q4 2029			66.239	100.000	
Measure 17	Expanding and Modernizing Irrigation Systems for Enhanced Agricultural Resilience				24.000	0	21.947.478	1.750.000	23.673.478
Activity 17.1	Mapping and identifying existing irrigation systems and its status: Develop a specific map and/or clear list of each existing irrigation system and its status, followed by areas requiring new systems and feasiblity studies.		Q1 2027	Q4 2028	24.000		0	350.000	326.000
Activity 17.2	Construction of New Irrigation Systems: Develop and construct new irrigation systems across key agricultural regions, focusing on expanding irrigation coverage to 360,000 hectares. Prioritize the installation of modern irrigation technologies, such as drip and sprinkler systems, to improve water efficiency and ensure year-round crop production. Key areas of focus include Durres, Elbasan, Gjirokastër, Kukës, and Vlora.	17.2. Number of new irrigation systems constructed and existing irrigation systems rehabilitated.	Q1 2029	Q4 2032	0		11.249.842	350.000	11.599.842
Activity 17.3	Rehabilitation of Existing Irrigation Infrastructure up to 240,000 hectares: Undertake the rehabilitation and upgrade of existing irrigation systems, including the repair of aging infrastructure such as canals, pipes, and pumping stations. Special focus will be placed on rehabilitating water reservoirs and damaged dams in areas such as Përmet, ensuring a reliable and sustainable water supply for agriculture.	17.3. Total irrigation area (ha) expanded (target: from 230,000 to 360,000ha).	Q1 2029	Q4 2032	0		10.697.636	350.000	11.047.636
Activity 17.4	Development of Sustainable Water Management Practices: Promote the adoption of sustainable water management practices in agricultural regions, including the use of smart irrigation technologies and the efficient management of water resources. Train farmers in water conservation techniques and the efficient use of irrigation systems to maximize productivity while minimizing water waste.		Q1 2029	Q4 2032	0		0	350.000	350.000
Activity 17.5	Monitoring and Maintenance of Irrigation Systems: Implement a regular monitoring and maintenance program to ensure the continuous operation of irrigation systems. This will include scheduled inspections of all infrastructure, repairing any damages, and ensuring that water distribution is efficient. The program will also track the performance of the irrigation systems in enhancing agricultural productivity.	17.5. Percentage of irrigation systems under regular monitoring and maintenance schedules (%)	Q1 2029	Q4 2032	0		0	350.000	350.000
Measure 18	Sustainable Water Security through Rainwater Harvesting Infrastructure				230.163	0	0	192.500	-37663
Activity 18.1	Site assessment, prioritization of interventions and feasibility analysis in close cooperation with farmers and local communities. Based on existing and complementary vulnerability and water infrastructure assessments, design suitable interventions for rainwater infrastructure, water reserves and dams reparation.		Q1 2027	Q4 2028	230.163		0	50.000	-180.163
Activity 18.2	Construction of Rainwater Harvesting Infrastructure: Build or maintain rainwater harvesting systems in strategic locations identified in the previous activity to improve water availability, particularly in areas vulnerable to drought and water scarcity. These systems will collect and store rainwater for agricultural, domestic, and industrial use, increasing resilience to climate change impacts.	18.2. Total storage capacity (m^3) restored or created through water reserve rehabilitation and rainwater harvesting infrastructure.	Q1 2029	Q4 2032	0		0	55.000	55.000
Activity 18.3	Restoration of Water Reserves and repair of damaged dams to achieve the National targets : Focus on the restoration of existing water reserves to enhance their capacity to store water including the cleaning, reinforcement, and expansion of existing reservoirs and cisterns to improve water storage for use during dry periods, and of reparation of approximately 230 critical damaged dams (highlighted in blue points in the map) ensuring that the functionality of these dams will safeguard water supply for communities and ecosystems, especially during periods of irregular rainfall.	18.3.Number of critical water reserves and damaged dams restored in line with national targets (target: 230 sites).	Q1 2029	Q4 2032	0		0	25.000	25.000
Activity 18.4	Regular Maintenance of Rainwater Harvesting Infrastructure Systems: Implement a comprehensive maintenance program for rainwater harvesting systems and restored water reserves. This will involve periodic inspections, cleaning, and repairs to ensure the continued functionality and longevity of the infrastructure.	18.4. Percentage of rainwater harvesting and storage systems under active maintenance plans.	Q1 2029	Q4 2032	0		0	12.500	12.500
Activity 18.5	Capacity building and awareness-raising for Water Conservation Practices: Promote water conservation practices in regions equipped with rainwater harvesting infrastructure, ensuring that municipalities, communities, farmers, and industries use the collected water efficiently.	18.5. Percentage of users (households, farmers, institutions) in intervention areas reporting adoption of water conservation practices.	Q1 2029	Q4 2034	0		0	50.000	50.000
III. Forestry					120.369.253	5.589.777	101.681.686	3.750.976	-9.346.814
Measure 19	Enhancing Forestry Efficiency through EU Regulatory Compliance	EU Forestry Compliance Index			8.800.000		5.192.308	501.429	-3.106.264
Activity 19.1	Policy Alignment and Implementation: Review and Update National Policies: Ensure national forestry policies are aligned with EU regulations, such as the EU Forest Strategy for 2030 and the Regulation on Deforestation-free Products	19.1. Number of national forestry policies, strategies, or legislative instruments revised to align with EU regulations.	Q1 2026	Q4 2031	2.933.333				
Activity 19.2	Legislative Amendments: Amend existing forestry laws to incorporate EU standards and guidelines	19.2. Percentage of managed forest areas certified under recognized sustainable forest management schemes (e.g., FSC, PEFC).	Q1 2026	Q4 2031	2.933.333				
Activity 19.3	Sustainable Forest Management: Adopt Sustainable Practices: Implement sustainable forest management practices that comply with EU standards, focusing on biodiversity conservation and climate resilience	supports Indicator 1	Q1 2026	Q4 2031	2.933.334				
Activity 19.4	Certification Programs: Promote certification programs like FSC (Forest Stewardship Council) and PEFC (Programme for the Endorsement of Forest Certification) to ensure sustainable forestry practices	supports Indicators 2, 3	Q1 2026	Q4 2031					
Activity 19.5	Capacity Building and Training: Training Programs: Develop and conduct training programs for forestry professionals on EU regulations and sustainable forest management practices	19.5. Number of forestry professionals trained in EU-aligned sustainable forest management practices.	Q1 2026	Q4 2031					
Activity 19.6	Knowledge Sharing: Facilitate knowledge sharing and best practices among forestry stakeholders through workshops and seminars	supports Indicators 3 and 5	Q1 2026	Q4 2031					
Activity 19.7	Monitoring and Reporting: Forest Monitoring Systems: Establish robust forest monitoring systems to track compliance with EU regulations and assess the health and sustainability of forests. Data Collection and Reporting: Implement standardized data collection and reporting mechanisms to provide accurate information on forest conditions and management	19.7. Number of forest monitoring systems established or upgraded to track compliance with EU forestry standards.	Q1 2026	Q4 2031					
Activity 19.8	Stakeholder Engagement: Collaborative Platforms: Create platforms for collaboration among government agencies, NGOs, and private sector stakeholders to ensure coordinated efforts in forestry management. Public	19.8. Number of multi-stakeholder coordination platforms or consultations conducted to support EU-aligned forestry governance.	Q1 2026	Q4 2031					

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
	Awareness Campaigns: Conduct public awareness campaigns to educate communities about the importance of sustainable forestry and compliance with EU regulations								
Activity 19.9	Financial Incentives: Funding Programs: Develop funding programs to support sustainable forestry initiatives and compliance with EU regulations	supports Indicator 6	Q1 2026	Q4 2031					
Activity 19.10	Subsidies and Grants: Provide subsidies and grants to forest owners and managers who adopt sustainable practices and comply with EU standards	19.10. Total amount of funding or financial incentives disbursed to support sustainable forestry practices and compliance with EU regulations.	Q1 2026	Q4 2031					
Measure 20	**Advancing Sustainable Forestry: Afforestation Fund and Green Procurement Initiatives**				**2.135.000,00**		**4.805.769**		2670769,231
Activity 20.1	20.1 Design the governance and financing structure of the Afforestation Fund, including eligibility criteria, priority areas, and allocation mechanisms aligned with national adaptation and biodiversity strategies.	20.1. Formally approved governance and financing structure for the Afforestation Fund, including eligibility criteria, priority areas, and allocation mechanisms (yes/no).	Q1 2028	Q4 2031	2.135.000		4.805.769		
Activity 20.2	20.2 Conduct a spatial assessment to identify degraded or climate-vulnerable areas suitable for afforestation, ensuring ecological integrity and alignment with local land-use plans.		Q1 2028	Q4 2031					
Activity 20.3	20.3 Launch a pilot phase of the afforestation program, including financial disbursement to local projects and community-based initiatives.	20.3. Total amount of funding disbursed through the Afforestation Fund for pilot projects and community-based afforestation initiatives.	Q1 2028	Q4 2031					
Activity 20.4	20.4 Develop and adopt green procurement guidelines for the forestry sector, promoting sustainably sourced timber and ecosystem-friendly practices.	20.4. Percentage of forestry sector institutions and agencies that have received the green procurement guideline.	Q1 2028	Q4 2031					
Measure 21	**Revitalizing Damaged Lands: Integrating NbS and EBA with Agroforestry Practices**	1. Number of NbS and EBA measures implemented in forest degraded areas to support forest regeneration.			**51.058.668**	**5.463.807**	**21.279.707**	**0**	-24315154,55
Activity 21.1	Site identification, assessment and strategic planning. Through a mapping exercise of degraded areas in the regions identified, the affected regions will be classified by level of degradation, to develop a priority restoration plan.	21.1. Number of hectares of degraded land identified, mapped, and classified by degradation level in priority regions	Q1 2026	Q4 2027	340.000	30.420	0	0	-309.580,0
Activity 21.2	Forest regeneration and reforestation in target areas: Has, Kukës, Pukë, Fushë-Arrëz, Mirditë, Mat, Klos, Dibër, Bulqizë, Shkodër, Krujë, Korçë, Kolonjë, Vlorë. The activity will restore native tree species through planting of local and fire-resistant species and through the introduction of fire prevention and resilience techniques such as buffer zones and firebreaks, mixed-species reforestations and fire-resistant tree belts to minimize the spread of future wildfires.	21.2. Total area (ha) of reforested and enhanced forest ecosystems (target: 169,000ha).	Q1 2028	Q4 2031	49.051.418	0	7.305.446	0	-41.745.972,5
Activity 21.3	Implementing NBS and bioengineering for soil and infrastructure protection in forest areas in teh target areas of Tropojë, Has, Kukës, Mirditë, Dibër, Mat, Bulqizë, Klos, Bovillë (Tiranë), Krujë, Gramsh, Skrapar, Tepelenë. Interventions may include techniques such as firewalls, vegetated retaining wall, and soil-stabilizing plant species to prevent erosion.	21.3. Number of NbS and bioengineering measures implemented in target areas for soil and infrastructure protection.	Q1 2028	Q4 2031	0	5.433.387	12.192.719	0	17.626.106,3
Activity 21.4	Fire prevention, monitoring and risk mitigation measures by enhancing wildfire risk monitoring and early warning systems and training local communities and forestry teams in fire prevention and rapid response strategies.	21.4. Number of training sessions conducted with local communities and forestry teams in fire prevention and rapid response strategies.	Q1 2028	Q4 2031	1.046.250	0	1.781.542	0	735.291,7
Activity 21.5	Promoting Community-Based Sustainable Forest Management: Engage local communities in forest restoration through capacity-building programs, sustainable harvesting, and fire prevention training.	21.5. Number of engagement sessions conducted with local communities in forest restoration through capacity building programs, sustainable harvesting and fire prevention training.	Q1 2026	Q4 2031	621.000	0	0	0	-621.000,0
Measure 22	**Strengthening Forest and Pasture Protection: Investments in Human Capacity and Firefighting Resources**				118.750	125.970	8.510.505	142.857	8.660.582
Activity 22.1	22.1 Conduct a needs assessment to identify gaps in personnel, training, and equipment for forest and pasture fire prevention and response in climate-vulnerable areas.	22.1. Validated needs assessment on personnel, training, and equipment gaps for forest and pasture fire prevention and response completed (yes/no).	Q1 2028	Q4 2031	118750	7020	1853940		
Activity 22.2	22.2 Design and implement 10 targeted training programs for firefighting personnel, focusing on climate-adaptive fire prevention, early detection, and rapid response strategies.	22.2. Proportion of firefighting personnel in climate-vulnerable areas trained in climate-adaptive fire prevention, detection, and response.	Q1 2028	Q4 2031		76050	210600		
Activity 22.3	22.3 Upgrade and procure firefighting equipment adapted to the needs of forest and pasture environments, including vehicles, protective gear, communication tools, and water transport systems.	22.3. Fire prevention and response system operational, including upgraded equipment and functional early warning and monitoring systems (yes/no).	Q1 2028	Q4 2031		0	1781541,667	142857,1429	
Activity 22.4	22.4 Establish or enhance early warning and fire risk monitoring systems, integrating meteorological data and climate projections to improve preparedness.	contributes indirectly to Indicator 3	Q1 2028	Q4 2031		0	4664423,077		
Activity 22.5	22.5 Promote inter-agency coordination and 6 joint simulation exercises between forestry departments, local governments, and emergency services to strengthen institutional response capacity.	22.5. Number of joint simulation exercises conducted to test inter-agency wildfire response coordination.	Q1 2028	Q4 2031		42.900	0		
Measure 23	**Advancing Afforestation: Establishing Regional Nurseries for Drought-Resistant Species**	1. Total area (km²) of bare and eroded forest lands affected by wildfires and logging afforested and/or reforested.			308.820	0	61.893.398	0	61.584.578
Activity 23.1	Site selection, land acquisiton and infrastructure development for the four nurseries. Site suitability and availability assessments will be performed to identify the four suitable locations. After this, an implementation plan for the nurseries will be drafted with the definiton of infrastructure needed (soil preparation, shadow/greenhouse areas, drip irrigation, water tanks, storage facilities etc.)		Q1 2026	Q4 2027	10.000		11.633.677	0	11.623.677
Activity 23.2	Constructing and Equipping Regional Nurseries: Develop four strategically located nurseries with irrigation systems, seed storage, and controlled environments to optimize seedling growth.	23.2. Number of regional forest nurseries established to support afforestation and reforestation efforts in bare and eroded forest lands affected by wildfires and logging (target: 4 nurseries).	Q1 2028	Q4 2035	141.950		37.855.875	0	37.713.925
Activity 23.3	Cultivating Native and Drought-Resistant Tree Species: Propagate and maintain a diverse selection of native tree species adapted to local climate conditions for long-term afforestation success.	23.3. Number of native and drought-resistant tree species cultivated.	Q1 2028	Q4 2035	51.300		12.403.846	0	12.352.546
Activity 23.4	Establishing a Seed Collection and Storage Program: Develop a seed bank to collect and store genetically diverse, locally adapted seeds for continuous nursery operations and climate resilience.		Q1 2028	Q4 2035	47.520		0	0	-47.520
Activity 23.5	Training and Capacity Building for Local Communities: Provide technical training for local communities and forestry professionals on nursery management, seed collection, and sustainable planting techniques.	23.5. Number of community members and forestry professionals trained in nursery management and sustainable planting techniques.	Q1 2026	Q4 2027	32.400		0	0	-32.400
Activity 23.6	Developing a Monitoring System for Seedling Growth and Survival: Implement a monitoring framework to track seedling health, growth rates, and post-planting survival in afforestation sites.		Q1 2028	Q4 2035	25.650		0	0	-25.650
Measure 24	**Supporting Migration of Rare and Endemic Forest Species**	1. Number of forest tree species detected in higher altitudes. 2. Amount of investment allocated for establishing and managing the new high altitude areas (USD/year).			98.730	0		0	-98.730
Activity 24.1	Identifying Suitable High-Altitude Habitats: Conduct ecological assessments to identify optimal high-altitude areas with the necessary climatic and soil conditions for species relocation.	24.2. Total area (ha) of suitable high-altitude habitats identified with appropriate climatic and soil conditions for species relocation.	Q1 2028	Q4 2029	54.000				-54.000
Activity 24.2	Developing Assisted Migration Protocols: Establish guidelines for transplanting rare and endemic species, ensuring minimal ecological disruption and maximizing adaptation success.		Q1 2030	Q4 2033	0				0
Activity 24.3	Establishing Experimental Relocation Plots: Set up pilot plots to monitor species adaptation and refine best practices for future large-scale migrations.		Q1 2030	Q4 2033	0				0
Activity 24.4	Providing Financial and Technical Support for Habitat Management: Offer incentives and training for local stakeholders to manage new high-altitude habitats, ensuring long-term conservation.	24.4. Number of training sessions conducted for establishing and managing new high altitude areas.	Q1 2028	Q4 2033	44.730				-44.730
Activity 24.5	Monitoring and Long-Term Adaptation Strategy Development: Implement a continuous monitoring program to track species health, ecosystem interactions, and necessary adaptations over time.		Q1 2030	Q4 2033	0				0
Measure 25	**Restoring Vital Ecosystems: Protecting and Regenerating Coastal and Riverine Green Belts and Protective Ecosystems**	1. Percentage of coastal protection structures integrating eco-friendly materials or nature-based components. 2. Number of site-specific coastal risk and hydrological assessments completed to guide intervention planning.			36.645.422	0	0	349.893	-36.295.529

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
		3. Number of monitoring sites established for tracking coastal and riverine ecosystem restoration using satellite and field-based methods							
Activity 25.1	Site selection, risk assessment and strategic planning. Hydrological, geomorphological, risk assessment and remote sensins studies to identify intervention areas and to define a plan for intervention.	contributes to Indicator 6	Q1 2026	Q4 2027	340.000			0	-340.000
Activity 25.2	Implementing bio-engineering measures for coastal erosion management in Velipoje, Kepi Rodonit, Bishti I Palles, Kurbin (Patok), Fier (Darzeze), Durres (Rushkull) and Vlore (Pylli Sodes). Use vegetated embankments, dune stabilization, and wetland restoration in sensitive coastal areas to mitigate erosion and enhance flood defenses	25.2. Number of coastal sites with bio-engineering erosion control measures implemented.	Q1 2028	Q4 2031	5.500.000			0	-5.500.000
Activity 25.3	Protecting and regenerating coastal green belts in the areas of Velipoje, Patok Lagoon, Rrushkull, Karpen, Spille, Karavasta, Vjosa discharge, Dukat, Karaburun, Pishë-Poro, Lukova, and Saranda. Protect, expand, and improve existing coastal green belts by planting native vegetation, improving connectivity between coastal ecosystems and implementing coastal buffer zones to filter pollutants.	25.3. Number of hectares of coastal green belts restored or expanded with native vegetation.	Q1 2028	Q4 2031	16.592.500			0	-16.592.500
Activity 25.4	Engineering coastal protection works (grey infrastructure) in the areas of Velipoje, Kune-Vain, Patok-Fushë Kuqe, Rrushkull, Divjake-Karavasta, Narta, and Butrint. Interventions may include the construction of coastal embankments, breakwaters to reduce wave action, and sea walls to protect against high tides and storm surges, limiting coastal retreat. Susstainability of structures will be promoted by integrating eco-friendly materials where possible.	25.4. Number of grey infrastructure coastal protection works completed (e.g., embankments, breakwaters, sea walls).	Q1 2028	Q4 2031	10.917.500			0	-10.917.500
Activity 25.5	Strengthening Riverine Ecosystem Resilience: Implement soil stabilization with native plants and vegetal erosion control measures in riverine zones, particularly in Bovilla and watersheds in Drini, Mati, Erzeni, Shkumbini, Vjosa, and Semani, to reduce sedimentation and enhance flood management.	25.5. Number of watersheds with soil stabilization and erosion control measures implemented using native vegetation.	Q1 2028	Q4 2031	2.880.000			321.047	-2.558.953
Activity 25.6	Enhancing Monitoring and Adaptive Management Strategies: Establish long-term monitoring programs for coastal and riverine ecosystems, integrating satellite imagery and on-site biodiversity assessments to measure the effectiveness of restoration efforts.	contributes to Indicator 7	Q1 2028	Q4 2031	415.422			28.846	-386.576
Measure 26	Sustainable Financing Through Payment for Ecosystem Services (PES)								
Activity26.1	26.1 Conduct an assessment to identify key ecosystem services (e.g., water regulation, carbon sequestration, biodiversity protection) and their main beneficiaries at national and local levels.	26.1. Existence of a national assessment report identifying key ecosystem services and their main beneficiaries at national and local levels (Yes/No).	Q1 2033	Q4 2038					
Activity26.2	26.2 Develop a institutional framework to enable and regulate PES schemes, including procedures for contracting, fund management, benefit-sharing, and monitoring.	26.2. Existence of an institutional and regulatory framework for PES schemes formally adopted (Yes/No).	Q1 2033	Q4 2038					
Activity26.3	26.3 Pilot PES agreements in selected areas by establishing formal contracts between service beneficiaries and service providers, with mechanisms to channel funds towards sustainable land and ecosystem management.	26.3. Number of formal PES contracts signed between service providers and beneficiaries in pilot areas.	Q1 2033	Q4 2038					
Activity26.4	26.4 Provide technical assistance to local stakeholders to ensure effective participation in PES schemes.	26.4. Percentage of targeted stakeholders receiving technical assistance on PES scheme participation.	Q1 2033	Q4 2038					
Measure 27	Integrated Ecosystem Restoration and Resilience: Addressing Soil Erosion in Key Albanian Regions	1. Total area (ha) of degraded land improved to combat erosion and ecosystem resilience in Përmet (target: 3,834.44 ha). 2. Total area (ha) of degraded land improved to combat erosion and ecosystem resilience in Vlora (target: 374,57 ha).							
Activity 27.1	27.1 Site selection, risk assessment and strategic planning. Hydrological, geomorphological, risk assessment and remote sensing studies to identify intervention areas and to define a plan for intervention.		Q1 2033	Q4 2040					
Activity 27.2	27.2 Implementing Bio-Engineering and Riparian Buffers to Combat Soil Erosion: Utilize bio-engineering solutions such as vegetative buffers, terracing, and erosion-resistant native plant species for slope stabilization. Protect and restore riparian and wetland vegetation in erosion-prone areas to enhance water retention, filter pollutants, and support biodiversity	27.2. Number of bioengineering measures implemented to combat soil erosion and enhanced ecosystem resilience in degraded lands.	Q1 2033	Q4 2040					
Activity 27.3	27.3 Enhancing Community Engagement and Sustainable Land Management: Develop local training programs to promote sustainable agricultural and forestry practices that reduce soil erosion and enhance ecosystem resilience.		Q1 2033	Q4 2040					
Activity 27.4	27.4 Strengthening Monitoring and Adaptive Management Strategies: Establish long-term ecosystem monitoring to be prepared in case of climate hazards, track the effectiveness of restoration efforts, and refine adaptive management approaches.		Q1 2033	Q4 2040					
Measure 28	Combating Erosion and Flooding: Strategic Habitat Restoration and Reforestation in Key Albanian Regions	1. Percentage increase in vegetative ground cover in restored forest and pastureland areas. 2. Number of ecological monitoring sites established to track vegetation growth, soil stability, and biodiversity in restored areas.			21.203.863	0	0	2.756.797	-18.447.066
Activity 28.1	Site selection to identify specific areas and interventions for implementing habitat creation and restoration to reduce soil erosion, prevent flooding, and enhance ecosystem resilience in the strategic locations identified.		Q1 2026	Q4 2027	456.000			0	-456.000
Activity 28.2	Restoring Degraded Forests and Pasturelands in Key Regions: Implement reforestation in Durrës (194,84 ha.) and Fier (931,96 ha.) targeting areas degraded by wildfires, overgrazing, and deforestation.	28.2. Total area (ha) of degraded forests and pasturelands restored through reforestation and vegetation-based erosion control in Durrës and Fier (target: 1,126.8 ha)	Q1 2028	Q4 2033	862.002			226.891	-635.111
Activity 28.3	Establishing Green Belts Along the Vjosa and Seman Rivers: Plant native tree species along the Vjosa (137,8 ha) and Seman rivers (Fier) (55,63 ha.) to stabilize riverbanks, reduce sedimentation, and mitigate flood risks.	28.3. Total area (ha) of green belts with native species established along the Vjosa and Seman rivers (targets: 137.8 ha in Vjosa and 55.63 ha in Seman)	Q1 2028	Q4 2033	237.982			741.177	503.194
Activity 28.4	Nature-Based Solutions (NbS) for Erosion and Flood Control: Implement NbS, such as bio-engineering solutions, terracing, and vegetation barriers, to restore degraded areas and control soil erosion in forested and pastureland regions.	28.4. Number of sites where nature-based solutions (e.g., terracing, vegetative barriers, bioengineering) are implemented for erosion and flood control.	Q1 2028	Q4 2033	6.622.560			0	-6.622.560
Activity 28.5	Focused Restoration in Vlora Coastal and Mountain Ecosystems: Restore key ecosystems in Dukat, Llogora, Karaburun to protect against soil erosion, and Pishë-Poro Forest (6740ha) to protect against coastal erosion and biodiversity loss.	28.5. Total area (ha) restored in Pishë-Poro Forest to protect against coastal erosion and biodiversity loss (target: 6,740 ha)	Q1 2028	Q4 2033	12.374.640			1.788.729	-10.585.911
Activity 28.6	Targeted Reforestation in Dukat i Vjetër: Restore 354,4 hectares of degraded forest in Dukat i Vjetër (Vlora), where soil erosion and deforestation have led to land degradation and loss of productive land.	28.6. Total area (ha) reforested in Dukat i Vjetër to reduce erosion and restore degraded land (target: 354.4 ha)	Q1 2028	Q4 2033	650.678			0	-650.678
Measure 29	Sustainable Landscape Management: Enhancing Water Quality and Biodiversity at Viroi Lake in Gjirokastër	1. Total area (ha) of land restored around Viroi Lake in Gjirokastër (target: 339,85 ha).							
Activity 29.1	29.1 Site assessment, planning and stakeholder engagement by conducting ecological and hydrological assessment, GIS mapping and remote sensing to identify areas for intervention and to define a plan for restoration interventions involving relevant stakeholders and communities.		Q1 2033	Q4 2034					
Activity 29.2	29.2 Reforestation with Native Species: Implement reforestation initiatives around Viroi Lake using native tree and shrub species to restore degraded areas, stabilize the soil, and enhance biodiversity. Strengthening riparian buffer zones will help reduce sediment inflow into the lake, improving water quality and ecosystem resilience. Drought-resistant vegetation will be prioritized to adapt to changing climatic conditions.	29.2. Number of native tree species detected in reforested areas.	Q1 2034	Q4 2035					
Activity 29.3	29.3 Erosion Control Measures: Establish erosion control measures such as vegetative buffers, terracing, and bioengineering techniques to reduce soil erosion and prevent sedimentation in the lake. These actions will protect water quality and enhance the resilience of surrounding landscapes.	29.3. Total area (ha) covered by erosion control measures (vegetative buffers, terracing, and bioengineering techniques) to reduce soil erosion and prevent sedimentation in the lake.	Q1 2034	Q4 2035					
Activity 29.4	29.4 Water Quality Improvement Initiatives: Implement measures to enhance water quality in Viroi Lake by reducing pollution sources, improving wastewater management, and promoting sustainable agricultural	29.4. Increase in water quality according to physical (temperature, turbidity, color and odor, total suspended solids), chemical (pH, dissolved oxygen, nitrates and phosphates, conductivity and total dissolved solids, heavy metals, chemical oxygen demand and biological oxygen demand) and biological	Q1 2034	Q4 2035					

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
	practices in the surrounding areas. This includes establishing buffer zones, controlling nutrient runoff, and monitoring water quality parameters.	(coliform bacteria, especially E. coli, macroinvertebrate diversity and algal presence) parameters and standards and indices (e.g. Water Quality Index, WQI).							
Activity 29.5	29.5 Biodiversity Conservation and Habitat Enhancement: Strengthen biodiversity conservation by restoring natural habitats, reintroducing native species, and creating ecological corridors around the lake. This includes protecting wetland areas, improving fish habitats, and enhancing conditions for bird and aquatic species.		Q1 2034	Q4 2035					
Measure 30	Enhancing Climate Resilience in National Parks and Protected Areas	1. Area (ha) of habitats protected and number of Natura 2000 species under protection within and beyond protected areas in the municipality of Vlora.							
Activity 30.1	30.1 Climate Change Impact Assessments and Specific CC Adaptation Plans in Protected Areas: Conduct thorough climate change impact assessments for national parks and protected areas, with a particular focus on the "Bredhi i Hotovës-Dangëlli" National Park in Përmet. This will involve studying the effects of climate change on rare and endemic species, evaluating shifts in habitat distribution, identifying vulnerable areas, and identifying adaptive measures.	30.1. Number of climate change impact assessments conducted.	Q1 2032	Q4 2039					
Activity 30.2	30.2 Establishment of Buffer Zones around Protected Areas: Promote the creation and enforcement of buffer zones around Bredhi i Hotovës-Dangëlli, the Vjosa River National Park and other protected areas in Vlora to reduce external pressures such as urban development, agriculture, and tourism. These zones will act as natural buffers to safeguard biodiversity and maintain ecosystem functions.	30.2. Total area (ha) of buffer zones established around the Vjosa River National Park and other protected areas.	Q1 2032	Q4 2039					
Activity 30.3	30.3 Monitoring of Endemic and Rare Species: Implement a comprehensive monitoring system for endemic and rare species within the Vjosa River and "Bredhi i Hotovës-Dangëlli" National Park. Regular surveys will track population dynamics and health of these species, ensuring timely interventions if necessary.	30.3. Number of habitats and species identified under Natura 2000 in the municipality of Vlora, within and beyond protected areas.	Q1 2032	Q4 2039					
Activity 30.4	30.4 Capacity Building for Local Communities and Stakeholders: Strengthen the capacity of local communities, conservationists, and government agencies to manage protected areas and buffer zones. This will include training on climate change adaptation strategies, biodiversity conservation, and sustainable land management practices.		Q1 2032	Q4 2039					
Measure 31	Restoration of forest layers to protect crops in Vlora	1. Increased crop resilience according to agronomic and biophysical (yield stability, yield gap, drought or flood tolerance, pest and disease resistance), physiological and genetic (root system depth and structure, stomatal conductance, leaf temperature and resilient genotypes), environmental (soil health and organic matter, agro biodiversity and water use efficiency) indicators and composite indices and frameworks (Crop Resilience Index).							
Activity 31.1	31.1 Studies to determine optimal locations for forest layer integration and engagement with farmers and local communities to define the areas and necessary interventions to identify the best options and species to provide wind protection for agricultural crops.		Q1 2029	Q4 2035					
Activity 31.2	31.2 Restoration of Forest Layers Between Agricultural Areas in Vlora to cover 345,47 ha: Promote the restoration of forest layers between agricultural surfaces in Vlora, specifically in areas such as Dukat i Ri, Tragjas, and Radhimë. These forest layers will help create microhabitats that enhance biodiversity, improve soil fertility, and provide natural windbreaks for crops, reducing the negative impact of strong winds and improving overall crop resilience, promoting the plantation of native tree species that can support biodiversity.	31.2.1. Total area (ha) of forest layers between agricultural surfaces restored (target: 345,47 ha). 31.2.2. Percentage increase in average crop yield in areas adjacent to restored forest layers.	Q1 2029	Q4 2035					
Activity 31.3	31.3 Community Involvement and Sustainable Practices: Involve local farmers and communities in the restoration process, ensuring that forest layers are maintained sustainably over time. Provide training and resources on agroforestry practices and the long-term benefits of integrating trees with crops.		Q1 2029	Q4 2035					
IV. Tourism					1.746.625	136.484	726.250	445.584	-438.307
Measure 32	Strategic Spatial Planning for tourism: Redirecting Development from High-Risk Areas		Q1 2026	Q4 2027	600.000		343.750	105.825	-150.425
Activity 32.1	32.1 Conduct spatial risk mapping to identify flood plains, surface water accumulation zones, and buffer zones of protected areas that are unsuitable for tourism development.	32.1. Existence of a spatial risk map identifying flood plains, surface water accumulation zones, and buffer zones of protected areas unsuitable for tourism development (Yes/No).	Q1 2026	Q4 2027	300.000				
Activity 32.2	32.2 Develop spatial planning guidelines that integrate climate risk considerations, defining no-build zones and priority areas for tourism redirection.	32.2. Number of spatial planning guidelines developed and adopted that define no-build zones and redirection priorities for tourism infrastructure.	Q1 2026	Q4 2027	300.000				
Activity 32.3	32.3 Engage stakeholders—including municipalities, tourism investors, and environmental authorities—in participatory planning workshops to align spatial planning with economic and conservation goals.		Q1 2026	Q4 2027					
Activity 32.4	32.4 Establish financial mechanisms (e.g., conditional permits, incentives, or redirection subsidies) to support the relocation or redesign of tourism developments away from high-risk areas.	32.4. Number of tourism development projects redirected or redesigned based on financial mechanisms supporting relocation from high-risk areas.	Q1 2026	Q4 2027					
Activity 32.5	32.5 Implement zoning regulations and enforce land-use plans through monitoring, inspections, and penalties for non-compliance.	32.5. Number of enforcement actions taken to ensure compliance with zoning regulations and climate-informed land-use plans in tourism areas.	Q1 2026	Q4 2027					
Measure 33	Climate-proofing tourism infrastructure: Incentive packages for climate-proofing the tourism sector infrastructure								
Activity 33.1	33.1 Define a long-term renovation action plan for climate-resilient tourism infrastructure based on findings from the sectoral vulnerability and risk analysis.	33.1. Tourism sector renovation action plan developed and formally adopted, integrating climate resilience and findings from vulnerability and risk analysis (Yes/No).	Q1 2030	Q4 2032					
Activity 33.2	33.2 Develop and adopt climate-resilient procurement and construction standards to guide renovation and new developments in the tourism sector.	33.2. Climate-resilient procurement and construction standards for tourism infrastructure developed (Yes/No).	Q1 2030	Q4 2032					
Activity 33.3	33.3 Design and launch a financial incentive package to support energy-efficient and climate-resilient thermal comfort solutions (e.g., use of high albedo materials, shading systems, green roofs, vertical greening, natural ventilation, and thermal insulation) for tourism accommodations.	33.3. Total amount (USD) allocated through operational financial incentive schemes to support energy-efficient and climate-resilient renovation of tourism accommodations.	Q1 2030	Q4 2032					
Activity 33.4	33.4 Establish technical support mechanisms to assist tourism businesses in accessing financing, complying with new standards, and implementing renovation measures.	33.4. Number of tourism businesses receiving technical assistance to access financing and implement climate-resilient renovation measures.	Q1 2030	Q4 2032					
Measure 34	Strategic Planning for Coastal Resilience: Buffer Zones and Sea Gate Adaptations								
Activity 34.1	Key Activities for Determining Buffer Zones		Q1 2029	Q4 2031					
Activity 34.1.1	34.1.1 Identify areas most vulnerable to sea level rise and increased river bed levels		Q1 2029	Q4 2031					
Activity 34.1.2	34.1.2 Use GIS and remote sensing to map areas prone to flooding and erosion	34.1.2. Number of vulnerable coastal and riverine areas identified and mapped using GIS and remote sensing tools.	Q1 2029	Q4 2031					
Activity 34.1.3	34.1.3 Develop and enforce regulations that define buffer zone widths and restrictions on development within these zones		Q1 2029	Q4 2031					
Activity 34.1.4	34.1.4 Ensure buffer zones are integrated into local and regional land-use plans	34.1.4. Number of buffer zones legally designated and integrated into local or regional land-use plans.	Q1 2029	Q4 2031					
Activity 34.1.5	34.1.5 Educate communities about the importance of buffer zones for flood and erosion protection	34.1.5. Number of community awareness and stakeholder engagement sessions conducted on buffer zones and flood risk management.	Q1 2029	Q4 2031					
Activity 34.1.6	34.1.6 Engage local stakeholders, in the planning and implementation process		Q1 2029	Q4 2031					
Activity 34.1.7	34.1.7 Establish vegetated buffers with native plant species to stabilize soil and reduce erosion	34.1.7. Number of hectares of vegetated buffer zones established or restored with native plant species.	Q1 2029	Q4 2031					
Activity 34.1.8	34.1.8 Implement ongoing monitoring and maintenance programs to ensure the effectiveness of buffer zones	34.1.8. Percentage of buffer zones and sea gates under active monitoring and maintenance programs.	Q1 2029	Q4 2031					
Activity 34.2	Key Activities for Implementing Sea Gates		Q1 2029	Q4 2031					
Activity 34.2.1	34.2.1 Assess the technical, economic, and environmental feasibility of sea gate installations	34.2.1 Number of sea gate feasibility assessments and engineering designs completed and approved.	Q1 2029	Q4 2031					

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
Activity 34.2.2	34.2.2 Develop detailed designs and engineering plans for sea gates, considering local conditions and potential impacts		Q1 2029	Q4 2031					
Activity 34.2.3	34.2.3 Secure all required permits and approvals from relevant authorities		Q1 2029	Q4 2031					
Activity 34.2.4	34.2.4 Conduct thorough environmental impact assessments to identify and mitigate potential adverse effects		Q1 2029	Q4 2031					
Activity 34.2.5	34.2.5 Construct and install sea gates, ensuring they are built to withstand local environmental conditions	34.2.5. Number of sea gates constructed and operational with established storm event protocols.	Q1 2029	Q4 2031					
Activity 34.2.6	34.2.7 Establish protocols for the operation of sea gates, including opening and closing procedures during storm events		Q1 2029	Q4 2031					
Activity 34.2.7	34.2.8 Implement a schedule for regular inspections and maintenance to ensure the sea gates remain functional and effective	34.2.8. Percentage of buffer zones and sea gates under active monitoring and maintenance programs.	Q1 2029	Q4 2031					
Measure 35	**Protecting Vlora Bay: Preserving Posidonia Habitats and Underwater Cultural Heritage Against Climate Impacts**								
Activity 35.1	35.1 Conduct seabed mapping and assessment of Posidonia meadows to define the scope and options for the restoration efforts.	35.1. Number of hectares of Posidonia meadows assessed, restored, or newly established through transplantation and conservation efforts.	Q1 2034	Q4 2037					
Activity 35.2	35.2 Restoring and Expanding Posidonia Seagrass Meadows: Actively restore degraded Posidonia meadows through transplanting and conservation efforts to enhance coastal resilience.		Q1 2034	Q4 2037					
Activity 35.3	35.3 Promoting Natural Beach Areas and Protecting Posidonia Banquettes: Encourage the use of natural beach areas while preserving Posidonia beach casts and banquettes to maintain ecosystem balance including the development of sustainable tourism activities.	35.3. Number of natural beach areas designated and managed for the protection of Posidonia banquettes and promotion of sustainable tourism.	Q1 2034	Q4 2037					
Activity 35.4	35.4 Monitoring Climate Impacts on Underwater Cultural Heritage: Develop monitoring programs to assess the effects of rising sea temperatures and erosion on submerged archaeological sites.	35.4. Number of monitoring sites established to track the impact of climate change on underwater cultural heritage in Vlora Bay.	Q1 2034	Q4 2037					
Activity 35.5	35.5 Implementing Marine Protected Areas (MPAs) for Conservation: Designate and enforce marine protected zones in Vlora Bay to safeguard Posidonia habitats and underwater heritage from human and climate-induced threats.	35.5. Number of marine protected areas (MPAs) designated and enforced for Posidonia habitat and underwater heritage protection in Vlora Bay.	Q1 2034	Q4 2037					
Activity 35.6	35.6 Engaging Local Communities in Conservation Efforts: Promote capacity building around conservation and community-led initiatives and sustainable tourism practices to support conservation while ensuring economic benefits for the region.	35.6. Percentage increase in awareness and participation of local communities in Posidonia and marine heritage conservation activities.	Q1 2034	Q4 2037					
Activity 35.7	35.7 Sustainable monitoring systems to protect seagrass meadows: Install eco-friendly mooring buoys to prevent anchor damage to Posidonia meadows and other sensitive marine ecosystems.	35.7. Number of sustainable mooring systems (e.g., eco-friendly buoys) installed to protect seagrass meadows from anchor damage.	Q1 2034	Q4 2037					
Activity 35.8	35.8 Marine debris removal and plastic waste reduction programs: Establish local initiatives for beach and seabed cleanup to reduce pollution impacting marine biodiversity and tourism appeal.	35.8. Volume of marine debris removed from priority areas of Vlora Bay through cleanup campaigns and plastic waste reduction programs.	Q1 2034	Q4 2037					
Measure 36	**Strengthening the policy and regulatory framework for Sustainable Tourism: Policy Review and Regulatory Enhancement**		Q1 2028	Q4 2031	30.125	136.484	0	0	106.359
Activity 36.1	36.1 Conduct a diagnostic review of tourism-related laws, policies, and regulatory instruments to identify gaps, inconsistencies, and opportunities for integrating stronger sustainability provisions.	36.1. Diagnostic review of tourism-related policies and regulations completed, identifying gaps and opportunities for integrating sustainability and climate resilience (Yes/No).	Q1 2028	Q4 2031	30.125	45.495			
Activity 36.2	36.2 Develop policy recommendations and proposed amendments to align tourism regulations with national climate adaptation goals, sustainability standards, and environmental protection priorities.	36.2. Number of policy recommendations or legal amendments proposed to strengthen sustainability and climate adaptation in tourism regulations.	Q1 2028	Q4 2031		45.495			
Activity 36.3	36.3 Update or develop legal and regulatory instruments to reinforce sustainable tourism practices, including specific provisions on environmental safeguards, land-use restrictions in ecologically sensitive areas, and climate resilience requirements for tourism infrastructure.	36.3. Number of updated or newly adopted legal and regulatory instruments promoting sustainable and climate-resilient tourism practices.	Q1 2028	Q4 2031		45.495			
Measure 37	**Integrating Climate Data for Sustainable Tourism: Guidelines for resilient business management and National Reporting**		Q1 2026	Q4 2028	290.000			25687,5	-264312,5
Activity 37.1	37.1 Develop and implement guidelines for standardized data collection in the tourism sector, focusing on indicators related to climate vulnerability, environmental impacts, and sustainability performance.	37.1. Standardized guidelines for climate vulnerability and environmental impact data collection in the tourism sector developed and formally adopted (Yes/No).	Q1 2026	Q4 2028	96.667				
Activity 37.2	37.2 Strengthen institutional and technical capacities of tourism authorities and private sector actors through training and technical assistance on data collection, analysis, and reporting practices.	37.2. Percentage of targeted tourism stakeholders trained on data collection, analysis, and reporting practices related to climate vulnerability and environmental sustainability.	Q1 2026	Q4 2028	96.667				
Activity 37.3	37.3 Establish or upgrade digital platforms or databases to compile and manage climate-related tourism data, ensuring interoperability with national reporting and monitoring systems.	37.3. Number of digital platforms or databases established or upgraded to manage climate-related tourism data with links to national reporting systems.	Q1 2026	Q4 2028	96.667				
Measure 38 (TBC)	**Climate-proofing Tourism Infrastructure: Adaptive Designs for Climate Risk Mitigation**		Q1 2027	Q4 2036			2.500	0	2500
Activity 38.1	Climate risk assessment for existing and planned tourism infrastructure and site selection for areas that are particularly vulnerable to define direct interventions by the public sector and study potential for private sector involvement.	38.1. Climate risk assessment completed and climate-resilient design standards incorporated into updated building codes for tourism infrastructure (Yes/No).	Q1 2027	Q4 2036			0 USD		
Activity 38.2	Review the building codes and analyse whether the inclusion of additional climate-resilient design principles to construct or refurbish climate-resilient tourism infrastructure is necessary, emphasizing also enforcement : Defining and incorporating resilience criteria in the design and building of hotels, lodges and recreational spaces with elevated foundations, flood-proof materails and reinforced structures, and drainage systems to withstand extreme weather events through the building codes. Moreover, enforcement shall be reinforced through auditing and inspection mechanisms.		Q1 2027	Q4 2036			500 USD		
Activity 38.3	Provide capacity building to key tourism operators and constructors into the new climate-resilient principles and good practices in the sector, covering the inclusion of nature-based solutions to protect coastal resorts and recreational areas while promoting biodiversity.	38.3. Percentage of targeted tourism developers and construction professionals trained in climate-resilient building techniques and nature-based solutions.	Q1 2027	Q4 2036			750 USD		
Activity 38.4	Implementing climate-resilient measures in specific public touristic areas detected in the study of risks to ensure the infrastructure is climate-proofed against the different climate threats and expected impacts.	38.4. Total number of public tourism infrastructure sites constructed or retrofitted with climate-resilient design features in high-risk areas.	Q1 2027	Q4 2036			1.250 USD		
Measure 39	**Protecting Coastal Zones: Integrated Regulations, Planning and Management for Climate Resilience and Sustainable Development**								
Activity 39.1	39.1 Identify areas most vulnerable to sea-level rise, storm surges, and beach erosion		Q1 2029	Q4 2033					
Activity 39.2	39.2 Use GIS and remote sensing to map areas prone to flooding and erosion	39.2. Number of coastal areas mapped for flood and erosion risk using GIS and remote sensing tools.	Q1 2029	Q4 2033					
Activity 39.3	39.3 Develop Integrated Coastal Management Plans and Maritime Spatial Planning: Create comprehensive plans that address climate resilience and sustainable development	39.3. Number of Integrated Coastal Management Plans and Maritime Spatial Plans developed and approved for high-risk coastal areas.	Q1 2029	Q4 2033					
Activity 39.4	39.4 Establish Coastal Setback Regulations: Implement regulations to ensure infrastructure is set back from high-risk areas		Q1 2029	Q4 2033					
Activity 39.5	39.5 Enforce Zoning Laws: Regulate coastal development to prevent maladaptive practices	39.5. Percentage of new coastal development projects complying with setback regulations and zoning laws.	Q1 2029	Q4 2033					
Activity 39.6	39.6 Public Awareness Campaigns: Educate communities about the importance of coastal zone protection and climate resilience	39.6. Number of public awareness and stakeholder engagement initiatives conducted to promote coastal resilience and sustainable coastal development.	Q1 2029	Q4 2033					
Activity 39.7	39.7 Stakeholder Involvement: Engage local stakeholders, including property owners and developers, in the planning and implementation process		Q1 2029	Q4 2033					

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
Activity 39.8	39.8 Implement regular monitoring and maintenance systems to ensure the effectiveness of coastal protection measures, including tracking changes in sea-level rise, coastal erosion, and storm-related impacts. conditions, including sea-level rise, erosion rates, and storm impacts.	39.8. Number of coastal monitoring stations established or upgraded to track sea-level rise, erosion rates, and storm impacts.	Q1 2029	Q4 2033					
Activity 39.9	39.9 Adaptive Management Strategies: Use monitoring data to inform adaptive management strategies and make necessary adjustments	39.9. Number of adaptive management decisions or revisions made to coastal plans or strategies based on monitoring data.	Q1 2029	Q4 2033					
Measure 40	**Building Climate Resilience Capacity: Training Tourism Operators in Sustainable Practices and Adaptation Strategies**		Q1 2027	Q4 2028	430.000		30.000	82.242	-317.758
Activity 40.1	40.1 Design and develop tailored training modules on climate adaptation, risk reduction, and sustainable tourism practices, adapted to the needs of different types of tourism operators (e.g., hotels, tour guides, travel agencies).	40.1. Number of tailored training modules developed on climate adaptation, risk reduction, and sustainable tourism practices for tourism operators.	Q1 2027	Q4 2028	215.000				
Activity 40.2	40.2 Develop practical toolkits and guidelines to support the integration of climate resilience and environmental sustainability into day-to-day tourism operations.	40.2. Number of toolkits and practical guidelines developed to support integration of climate resilience and sustainability into tourism operations.	Q1 2027	Q4 2028	215.000				
Measure 41	**Digital Hubs for Climate-Resilient Tourism: Sharing Knowledge and Best Practices**		Q1 2027	Q4 2028	34.000		200.000	108.467	274.467
Activity 41.1	41.1 Design and launch a centralized online platform tailored to the tourism sector, with user-friendly access to climate adaptation resources, sustainability guidelines, and practical tools.	41.1 Centralized online platform for the tourism sector developed and operational, providing access to climate adaptation resources (Yes/No)	Q1 2027	Q4 2028	17.000				
Activity 41.2	41.2 Upload and regularly update content including training modules, case studies, toolkits, policy documents, and technical guides to support climate-resilient practices in tourism.	41.1 Number of climate adaptation resources (e.g. toolkits, training modules, policy documents) uploaded and maintained on the platform.	Q1 2027	Q4 2028	17.000				
Activity 41.3	41.3 Promote the platform through awareness campaigns targeting tourism businesses, public agencies, and local communities to encourage widespread use and engagement.	41.3. Number of tourism stakeholders reached through awareness campaigns promoting the use of the online platform.	Q1 2027	Q4 2028					
Measure 42	**Protecting Tourism Assets: Enforcing Regulations and Restoring Ecosystems for Sustainable Development**		Q1 2028	Q4 2031	362.500		150.000	123.363	-89.138
Activity 42.2	42.1 Conduct enforcement actions to ensure compliance with existing environmental and land-use regulations in tourism development zones, especially coastal and forested areas.	41.1 Mechanism for regular enforcement of environmental and land-use regulations operational in tourism development zones (Yes/No).	Q1 2028	Q4 2031	362.500				
	42.2 Promote sustainable construction practices by developing and disseminating guidelines on climate-resilient and environmentally sound tourism infrastructure. These guidelines will include sustainable practices to protect coastal and natural tourism assets, with a focus on restoring degraded ecosystems, preserving biodiversity, and promoting low-impact design approaches that ensure the long-term environmental sustainability of tourism activities.	42.2. Guidelines on climate-resilient and environmentally sound tourism infrastructure developed and disseminated to relevant stakeholders (Yes/No).	Q1 2028	Q4 2031					
V. Urban development					**1.803.500**	**38.393**	**546.367**	**664.258**	**-554.483**
Measure 43	**Maritime and Territorial Planning for Climate Resilience: Preparing for Rising Seas and Changing Environments**								
Activity 43.1	43.1 Conduct a spatial vulnerability assessment of coastal and low-lying urban areas to identify zones at risk using GIS tools, climate projections, and socio-economic data.	43.1. Spatial vulnerability assessments completed for coastal and low-lying urban areas using climate projections and socio-economic data (yes/no).	Q1 2031	Q4 2033					
Activity 43.2	43.2 Develop land-use planning guidelines based on climate risk data, defining priority zones for protection, managed retreat, restricted development, and resilient infrastructure placement.	43.2. Land-use planning guidelines developed incorporating sea-level rise, storm surge, and erosion risk data (yes/no).	Q1 2031	Q4 2033					
Activity 43.3	43.3 Prepare a Climate-Resilient Territorial Development Plan that integrates risk-informed land use, zoning restrictions, and adaptation infrastructure priorities to guide sustainable urban expansion and redevelopment in vulnerable areas.	43.3. Number of municipalities or coastal zones covered by an approved Climate-Resilient Territorial Development Plan.	Q1 2031	Q4 2033					
Measure 44	**Strategic Spatial Planning for Risk Reduction: Redirecting Developments and Managing Surface Water Flood Risks**				504.500	38.393	0	178.266	-287.841
Activity 44.1	44.1 Conduct a spatial analysis and mapping of high-risk areas in targeted municipalities, including flood plains and protected area buffer zones, using hydrological modelling and land-use data.	44.1. Number of municipalities with high-risk areas mapped using hydrological modelling and integrated land-use data.	Q1 2028	Q4 2033	504.500				
Activity 44.2	44.2 Prepare a Surface Water Management Plan for municipalities with significant flood risk, identifying causes, vulnerable zones, and potential nature-based or engineered mitigation measures.	44.2. Number of Surface Water Management Plans developed for municipalities with significant surface water flood risk.	Q1 2028	Q4 2033					
Activity 44.3	44.3 Integrate the results into updated spatial planning instruments at municipal level, including zoning regulations and land-use restrictions that prevent new developments in high-risk areas.	44.3. Number of updated municipal spatial planning instruments incorporating zoning regulations or land-use restrictions in high-risk flood-prone areas.	Q1 2028	Q4 2033					
Activity 44.4	44.4 Allocate funding and technical support for the implementation of priority actions from the Surface Water Management Plans, including green infrastructure and flood mitigation projects.	44.4. Amount of funding allocated or mobilized for implementation of priority actions from Surface Water Management Plans, including nature-based solutions.	Q1 2028	Q4 2033					
Measure 45	**Incentive schemes to increase extreme temperature resilience of the building stock**								
Activity 45.1	45.1 Conduct a detailed assessment of the national building stock to identify vulnerabilities and prioritize buildings (public and private) most exposed to heat stress and poor energy performance.	45.1. Number of building stock assessments completed identifying vulnerabilities to heat stress and poor energy performance across public and private sectors.	Q1 2033	Q4 2042					
Activity 45.2	45.2 Design a financial incentive package that supports the installation of passive cooling and insulation measures, clearly differentiating support lines for the public and private sectors.	45.2. Number of financial incentive schemes designed and operationalized for passive cooling and thermal insulation measures in public and private buildings.	Q1 2033	Q4 2042					
Activity 45.3	45.3 Prioritize public sector buildings offering essential services (e.g. hospitals, kindergartens, schools, emergency shelters) for the first phase of financial support, ensuring equitable geographic distribution.	45.3. Number of public buildings offering essential services (e.g. hospitals, schools, emergency shelters) receiving financial support for the installation of passive cooling and insulation measures.	Q1 2033	Q4 2042					
Activity 45.4	45.4 Launch a targeted support program for private buildings, including awareness campaigns and technical guidance to encourage uptake of cooling measures in homes and businesses.	45.4. Number of private households or businesses receiving financial or technical support for the implementation of passive cooling solutions.	Q1 2033	Q4 2042					
Measure 46	**Integrating Green Spaces into Public Infrastructure Development through Green Public Procurement**								
Activity 46.1	46.1 Develop voluntary national Green Public Procurement (GPP) standards aligned with EU GPP criteria, specifically incorporating requirements for integrating green infrastructure and nature-based elements in all public infrastructure projects.	46.11. Number of voluntary Green Public Procurement (GPP) standards developed and adopted that include green infrastructure and nature-based solutions for public infrastructure projects.	Q1 2030	Q4 2032					
Activity 46.2	46.2 Create practical guidelines and templates for procurement officers and contracting authorities to include green space components in tenders related to roads, parks, sport areas, parking lots, and other public facilities.	46.22. Number of procurement guidelines and tender templates developed to support the integration of green space components in public infrastructure projects.	Q1 2030	Q4 2032					
Activity 46.3	46.3 Deliver training programs and awareness-raising workshops for public procurement officials and technical staff at national and municipal levels on the application of the GPP standards.	46.3. Number of procurement officials and technical staff trained on green public procurement standards and nature-based infrastructure integration.	Q1 2030	Q4 2032					
Activity 46.4	46.4 Pilot the application of the new GPP standards in selected municipalities to assess feasibility, gather feedback, and identify opportunities for wider rollout and refinement of the approach.	46.4. Number of municipalities piloting the application of voluntary GPP standards in public infrastructure procurement processes.	Q1 2030	Q4 2032					
Measure 47	**Restoring Green Corridors: Reforestation and Urban Greening Initiatives**								
Activity 47.1	47.1 Conduct ecological and environmental assessments and map and prioritize areas for restoration and planting of green corridors in alignment with Local Adaptation Plans in Gjirokastêr and Pêrmet.		Q1 2029	Q4 2034					
Activity 47.2	47.2 Prepare land and conduct planting activities to restore and develop new green corridors promoting connectivity of green spaces and fostering urban green spaces to mitigate heat island effects. The restoration and planting exercise aims at improving soil quality, reducing erosion, protecting and restoring ecosystems and reducing extreme weather impacts.	47.2.1. Total area (km²) of re-greening in Gjirokastra city. 47.2.2. Total area (km²) of green belts with Plane and poplar trees rebuilt along the Drino and Vjosa River. 47.2.3. Length (km) of greenbelts along the Drino River. 47.2.4. Length (km) of greenbelts along the Vjosa River.	Q1 2029	Q4 2034					

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
Measure 48	Climate Risk Assessment for Durrës, Elbasan, Fier, and Beyond: Developing a Comprehensive Vulnerability Map				49.000			40.189	-8.811
Activity 48.1	48.1 Collect and consolidate existing climate hazard data (flooding, storm surge, droughts, heatwaves, and storms) from national and local sources for each targeted municipality.	48.1. Number of municipalities with completed and validated GIS-based Climate Vulnerability Maps integrating multi-hazard data and socio-economic vulnerability indicators.	Q1 2028	Q4 2031	49.000				
Activity 48.2	48.2 Conduct participatory risk assessments with local authorities and stakeholders to identify exposure, sensitivity, and adaptive capacity of populations, infrastructure, and ecosystems.	48.2. Number of participatory risk assessments conducted with local stakeholders to identify vulnerability and adaptive capacity in target municipalities.	Q1 2028	Q4 2031					
Activity 48.3	48.3 Develop and validate a GIS-based Climate Vulnerability Map for each municipality, integrating multi-hazard data and socio-economic vulnerability indicators.	48.3. Number of municipal datasets consolidated and integrated into the national climate hazard information system for vulnerability mapping.	Q1 2028	Q4 2031					
Measure 49	Flood event emergency plans				1.250.000		177.250	111.053	-961.697
Activity 49.1	49.1 Develop or update Flood Event Emergency Response Plans for the municipalities of Durrës, Elbasan, Gjirokastër, Kukës, Përmet, and Vlora, detailing clear protocols, roles, and responsibilities.	49.1. Number of municipalities with updated and approved Flood Event Emergency Response Plans that include protocols, roles, and responsibilities.	Q1 2027	Q4 2030	625.000				
Activity 49.2	49.2 Conduct annual reviews and simulation exercises to test the effectiveness of the emergency plans, assess gaps in response capacity, and incorporate lessons learned.	49.2. Number of flood emergency simulation exercises conducted annually in target municipalities to test plan effectiveness and coordination capacity.	Q1 2027	Q4 2030	625.000				
Activity 49.3	49.3 Identify and allocate necessary emergency resources (e.g., equipment, personnel, shelters, communication systems) to ensure municipalities are prepared to implement the plans efficiently.	49.3. Percentage of target municipalities with essential emergency response resources (equipment, shelters, communication systems) identified and allocated in accordance with emergency plans.	Q1 2027	Q4 2030					
Activity 49.4	49.4 Train local authorities, first responders, and community leaders on emergency procedures, communication protocols, and flood response coordination mechanisms.	49.4. Number of local authorities, first responders, and community leaders trained on flood emergency procedures and coordination protocols in target municipalities.	Q1 2027	Q4 2030					
Measure 50 (TBC)	Enhancing Urban Resilience: Assessing Greenspaces and Sustainable Drainage Solutions				0		369.117	334.750	703.867
Activity 50.1	Assessment and planning to analyse feasibility and priority spots for increasing the volume of greenspaces and sustainable urban drainage systems in municipalities, considering land use with a focus in Vlora, Elbasan and Durrës municipalities, defining a plan for implementation of the interventions.	50.1. Number of feasibility studies conducted for increasing the volume of green spaces and sustainable urban drainage systems in Vlora, Elbasan and Durrës.	Q1 2026	Q4 2033			134.742	111.583	
Activity 50.2	Implement tree-planting initiatives in key urban zones to increase water retention and mitigate flood risks in the priority municipalities.		Q1 2026	Q4 2033			234.375	111.583	
Activity 50.3	Implementing Permeable Pavements and sustainable urban drainage systems in High-Risk Areas: Replace impermeable surfaces with permeable pavements in key urban locations to improve groundwater recharge and reduce flash flooding.	50.3. Number of permeable pavements and sustainable urban drainage systems implemented.	Q1 2026	Q4 2033			0	111.583	
Measure 51	Sustainable Urban Design: Conservation and Restoration of Permeable and Infiltration Areas								
Activity 51.1	51.1 Develop policy and regulatory provisions that mandate a minimum percentage of permeable surfaces in all new urban developments and major renovations, including the prohibition of excessive surface sealing.	51.1. Number of urban planning policies or regulations adopted mandating minimum percentages of permeable surfaces in new developments and major renovations.	Q1 2035	Q4 2039					
Activity 51.2	51.2 Integrate nature-based solutions (NbS) for urban permeability—such as bioswales, green roofs, permeable pavements, and rain gardens—into national and local policy frameworks and urban design codes.	51.2. Number of national or local policy frameworks updated to integrate nature-based solutions (e.g. bioswales, green roofs, rain gardens) for improved urban permeability.	Q1 2035	Q4 2039					
Activity 51.3	51.3 Draft and adopt national guidelines for incorporating permeable areas and infiltration features into infrastructure planning and public works, promoting their standard use in roads, parking areas, and open spaces.	51.3. Number of national guidelines developed and officially adopted for integrating permeable areas and infiltration measures into infrastructure development.	Q1 2035	Q4 2039					
VI. Energy					40.088.750	0	7.413.046	22.448.863	-10.226.841
Measure 52	Protecting Energy Infrastructure against strong winds: Rehabilitating Substations and Transmission Lines								
Activity 52.1	52.1 Study on vulnerable and affected electrical substations and power transmissions lines and design of interventions to address the vulnerabilities detected.		Q1 2031	Q4 2036					
Activity 52.2	52.2 Upgrading Transmission Towers with Wind-Resistant Designs: Reinforce or replace transmission towers with wind-resistant structures, using materials and designs that withstand high wind loads.	52.2. Number of transmission towers with wind resistant structures upgraded.	Q1 2031	Q4 2036					
Activity 52.3	52.3 Installing Aerodynamic Insulators and Cables: Use aerodynamic conductors and dampers to reduce wind-induced vibrations and minimize the risk of cable galloping or breakage.	52.3. Number of aerodynamic conductors and dampers installed to reduce wind induced vibrations and minimize the risk of cable galloping or breakage.	Q1 2031	Q4 2036					
Activity 52.4	52.4 Strengthening Substation Structures Against Wind Loads: Retrofit substations with reinforced roofing, wind barriers, and secure equipment anchoring to prevent damage from high winds.	52.4. Number of substations retrofitted with the reinforced roofs, wind barriers or secure equipment anchoring to prevent from high damage winds.	Q1 2031	Q4 2036					
Activity 52.5	52.5 Implementing Vegetative Windbreaks Around Energy Infrastructure: Plant rows of resilient trees and shrubs to act as natural wind barriers, reducing wind speed and protecting transmission lines and substations.	52.5. Number of vegetative windbreaks implemented around energy infrastructure to reduce wind speed and protecting transmission lines and substations.	Q1 2031	Q4 2036					
Measure 53	Enhancing Building Efficiency: Energy Performance Certificates and Resilient Standards								
Activity 53.1	53.1 Develop a national framework for Energy Performance Certification (EPC), including classification criteria, assessment methodology, and compliance procedures.	53.1. Number of buildings issued with Energy Performance Certificates (EPCs) in accordance with the national framework.	Q1 2031	Q4 2035					
Activity 53.2	53.2 Develop and adopt climate-resilient building standards, incorporating energy efficiency, passive cooling, water management, and material resilience to extreme weather events.	53.2. Number of climate-resilient building standards developed and officially adopted, addressing energy efficiency, passive cooling, and material resilience.	Q1 2031	Q4 2035					
Activity 53.3	53.3 Provide technical guidance and training for engineers, architects, and construction professionals on the application of EPCs and climate-resilient design standards.	53.3. Number of professionals (engineers, architects, builders) trained on EPC implementation and climate-resilient design standards.	Q1 2031	Q4 2035					
Measure 54	Exploring the Energy sector Potential: Demand-Side Management and Energy Storage Studies								
Activity 54.1	54.1 Conduct a national-level assessment of current electricity demand patterns, identifying opportunities for demand-side management and energy storage to respond to climate-induced stresses on the power system.	54.1. Completion of a national assessment report identifying electricity demand patterns and opportunities for demand-side management and storage under climate stress scenarios.	Q1 2029	Q4 2031					
Activity 54.2	54.2 Analyze the technical and economic potential of various energy storage technologies in different climate scenarios.	54.2. Number of energy storage technologies assessed for technical and economic feasibility under multiple climate-related hazard scenarios.	Q1 2029	Q4 2031					
Activity 54.3	54.3 Identify and prioritize interventions to enhance power grid flexibility, including infrastructure upgrades, regulatory measures, and incentive schemes for demand-side management and storage integration.	54.3. List of prioritized interventions for enhancing grid flexibility finalized, including infrastructure, regulatory, and financial mechanisms for integration of storage and demand-side measures.	Q1 2029	Q4 2031					
Measure 55	Protecting the energy infrastructure: Monitoring Emergency and Risk Areas		Q1 2028	Q4 2031	218.750		2.625.000	12.341.445	14.747.695
Activity 55.1	55.1 Identify and map energy infrastructure sites exposed to climate-related hazards, prioritizing critical facilities.	55.1. Percentage of critical energy infrastructure sites mapped and classified by level of exposure to climate-related hazards.	Q1 2028	Q4 2031	218.750				
Activity 55.2	55.2 Develop and implement a risk-based monitoring protocol for the identified sites, incorporating early warning indicators and thresholds for emergency response.	55.2. Number of energy infrastructure sites with an operational risk-based monitoring protocol, including early warning thresholds.	Q1 2028	Q4 2031					
Activity 55.3	55.3 Establish a centralized data system to collect and manage real-time information on environmental risks affecting energy infrastructure, ensuring accessibility to relevant authorities for rapid decision-making.	55.3. Centralized data system for real-time monitoring of environmental risks affecting energy infrastructure is operational and accessible to designated authorities.	Q1 2028	Q4 2031					
Measure 56	Enhancing Heatwave resilience through Efficient Air Conditioning Technology Deployment and Climate Refuges								
Activity 56.1	56.1 Provide financial and technical support for the installation of energy-efficient air conditioning systems in buildings located in municipalities with high exposure to extreme heat, prioritizing those identified in Local Adaptation Plans (LAPs).	56.1. Number of buildings equipped with energy-efficient air conditioning systems in heat-prone municipalities.	Q1 2036	Q4 2040					
Activity 56.2	56.2 Support the implementation of retrofitting measures for improved thermal insulation and passive cooling as outlined in the National Adaptation Plan (NAP), with special attention to vulnerable households and essential services.	56.2. Number of vulnerable households and essential service buildings retrofitted for thermal comfort.	Q1 2036	Q4 2040					

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
Activity 56.3	56.3 Identify and map potential public climate refuges, including libraries, community centers, and shaded green spaces, ensuring equitable geographic coverage and accessibility for vulnerable groups.	56.3. Number of public climate refuges identified, mapped, and made accessible.	Q1 2036	Q4 2040					
Activity 56.4	56.4 Promote the creation and improvement of urban public spaces as climate refuges through the integration of vegetation, water features, shade structures, and heat-resilient design principles.	56.4. Area (in m²) of urban public space upgraded with vegetation, water features, or shade structures.	Q1 2036	Q4 2040					
Measure 57	Optimizing Renewable Energy for Resilient Systems: Grid Innovation and Storage Investments								
Activity 57.1	57.1 Promote the installation of renewable energy systems in climate-vulnerable areas, prioritizing critical infrastructure and public facilities.	57.1. Installed renewable energy capacity in climate-vulnerable areas (MW).	Q1 2033	Q4 2042					
Activity 57.2	57.2 Support the deployment of smart grid technologies to improve real-time energy distribution, enhance grid flexibility, and ensure system stability under extreme climate conditions through a combination of technical assistance, regulatory facilitation, and targeted financial incentives.	57.2. Number of smart grid systems or components deployed in priority regions.	Q1 2033	Q4 2042					
Activity 57.3	57.3 Facilitate investment in energy storage solutions, such as battery storage systems, through public-private partnerships, targeted financing schemes, and incentive mechanisms.	57.3. Energy storage capacity added to the national grid (MWh).	Q1 2033	Q4 2042					
Activity 57.4	57.4 Strengthen the regulatory framework to streamline permitting processes and encourage integration of decentralized renewable energy into the national grid.	57.4. Number of regulatory reforms adopted to enable renewable energy integration.	Q1 2033	Q4 2042					
Measure 58	Advancing Gender Equity in Energy: Training and Support for Women in Renewable Energy Projects	1. Percentage increase in women's employment in the renewable energy sector.	Q1 2027	Q4 2031	1.960.000		2.350.546	5.302.778	5.693.324
Activity 58.1	58.1 Design and deliver training programs for women focused on skills development in renewable energy technologies, tailored to local energy needs.	58.1. Number of women trained in renewable energy technologies through targeted programs.	Q1 2027	Q4 2031	980.000				
Activity 58.2	58.2 Establish mentorship and internship opportunities in the energy sector for women and young professionals to promote long-term career pathways.		Q1 2027	Q4 2031	980.000				
Activity 58.3	58.3 Provide technical and financial support to women-led renewable energy projects, especially in underserved and rural communities.	58.3. Number of women-led renewable energy projects supported with technical and/or financial assistance.	Q1 2027	Q4 2031					
Activity 58.4	58.4 Promote gender-sensitive policies within the energy sector to encourage inclusive hiring practices, leadership roles for women, and supportive working environments in climate-resilient energy initiatives.		Q1 2027	Q4 2031					
Measure 59	Building Resilience in Hydropower: Optimized Operations and Strengthened Infrastructure				37.910.000		2.437.500	4.804.640	-30.667.860
Activity 59.1	Updating Dam and Reservoir Operation Protocols: Revise reservoir management protocols and define optimize water storage and release based on climate projections and changing seasonal patterns.	59.1. Number of dam and reservoir operation protocols revised.	Q1 2028	Q4 2030	37.910.000		609.375	95.257	-37.205.368
Activity 59.2	Retrofitting Hydropower Facilities for Climate Resilience: Implement structural upgrades to dams and turbines to withstand prolonged droughts and extreme weather events, such as heavy rainfall.	59.2.1. Number of hydropower facilities retrofitted with structural upgrades to dams and turbines. 59.2.2. Number of structural upgrades to dams and turbines implemented to withstand prolonged droughts and extreme weather events such as heavy rainfall.	Q1 2030	Q4 2033	0		609.375	4.518.868	5.128.243
Activity 59.3	Enhancing Sediment Management in Reservoirs: Apply sustainable dredging and controlled diversions, to maintain storage capacity and operational efficiency.	59.3. Number of reservoirs applied with sustainable dredging and controlled diversions to maintain storage capacity and operational efficiency.	Q1 2030	Q4 2033	0		609.375	95.257	704.632
Activity 59.4	Implementing Advanced Climate and Hydrological Monitoring Systems: Deploy sensors and forecasting models to monitor real-time variations in precipitation and water inflows.	59.4. Number of sensors and forecasting models deployed in advanced climate and hydrological monitoring systems to monitor real time variations in precipitation and water inflows.	Q1 2030	Q4 2033	0		609.375	95.257	704.632
VII. Transportation					1.571.500	224.356	602.762	207.749	-536.633
Measure 60	Regular Vulnerability and Risk Analysis and Definition of Resilience-Building Measures for Road Infrastructure				76.167	124.356	301.381	20.434	370.005
Activity 60.1	60.1 Conduct climate vulnerability and risk assessments of critical road infrastructure, bridges, and tunnels at the national level, focusing on exposure to floods, landslides, heatwaves, and other climate-related hazards.	60.1. Number of climate vulnerability and risk assessments completed for critical transport infrastructure.	Q1 2028	Q4 2033	76.167				
Activity 60.2	60.2 Establish a national schedule for periodic reassessment of risks to critical transport infrastructure to ensure that assessments remain current and responsive to evolving climate scenarios.		Q1 2028	Q4 2033					
Activity 60.3	60.3 Identify and prioritize risk-reduction interventions in high-risk municipalities (Durrës, Elbasan, Krujë, Kukës, and Vlora), including structural upgrades, improved drainage systems, and slope stabilization measures.	60.3.1. Number of high-risk transport infrastructure sites prioritized for risk-reduction interventions. 60.3.2. Percentage of identified priority sites with completed intervention plans.	Q1 2028	Q4 2033					
Measure 61	Geological Studies for Sustainable Roads: Bio-Engineering Solutions to reduce Erosion and Flood risks	3. Percentage reduction in landslide- or erosion-related road disruptions in treated segments.							
Activity 61.1	61.1 Conduct detailed geological and geotechnical studies in the identified vulnerable areas to assess soil stability, erosion patterns, and risk of landslides, with specific focus on the listed municipalities and road segments.	61.1. Number of geological and geotechnical studies completed in targeted road segments.	Q1 2030	Q4 2035					
Activity 61.2	61.2 Design and propose site-specific bio-engineering solutions, such as vegetative slope stabilization, retaining structures, and drainage systems tailored to each location's conditions and risk level.	61.2. Number of road segments with bio-engineering designs completed and approved.	Q1 2030	Q4 2035					
Measure 62	Advancing Sustainable and Climate Resilient Urban Mobility: Developing and Reviewing Urban Mobility Plans								
Activity 62.1	62.1 Develop or review Sustainable Urban Mobility Plans at municipal level, ensuring they are climate-proofed and aligned with national adaptation priorities. These plans shall cover adaptation-relevant elements such as:	62.1. Number of municipalities with climate-proofed Sustainable Urban Mobility Plans developed or revised.	Q1 2034	Q4 2037					
a	a) Guidelines for assessing vulnerabilities and hazards affecting the road network;	62.1.a. Number of Sustainable Urban Mobility Plans incorporating vulnerability assessments and climate hazard mapping.	Q1 2034	Q4 2037					
b	b) Development and implementation of climate-resilient plans for road infrastructure projects;		Q1 2034	Q4 2037					
c	c) Definition of road maintenance mechanisms through multiannual road maintenance plans and Road Asset Management Systems.	62.1.c. Number of municipalities implementing multiannual climate-resilient road maintenance plans.	Q1 2034	Q4 2037					
Activity 62.2	62.2 Pilot the implementation of climate-resilient Sustainable Urban Mobility Plans in Durrës, Elbasan, Gjirokastër, Përmet, and Fier, ensuring participatory planning, intersectoral coordination, and alignment with identified climate risks.	62.2.1. Percentage of road infrastructure projects in pilot cities designed or upgraded using climate-resilient standards. 62.2.2. Number of participatory consultations conducted during Sustainable Urban Mobility Plan development and implementation.	Q1 2034	Q4 2037					
Measure 63	Adapting Critical Transport Infrastructure: Advanced Risk Assessment and Resilient Design Solutions	5. Percentage reduction in disruption time for transport services during extreme weather events	Q1 2028	Q4 2029	1.350.000	100.000	301.381	51.086	-897.533
Activity 63.1	63.1 Conduct climate vulnerability and risk assessments of maritime, railway, and other critical transport infrastructure using advanced climate modelling to evaluate future exposure to extreme events such as floods, droughts, and storms.	63.1. Number of climate vulnerability and risk assessments conducted for critical transport infrastructure.	Q1 2028	Q4 2029	1.350.000				
Activity 63.2	63.2 Incorporate adaptive infrastructure measures into national and sectoral transport plans, such as flood-resistant road designs, elevated rail lines, reinforced tracks, climate-resilient construction materials, seawalls, and storm-resistant port structures.	63.2. Percentage of national and sectoral transport plans incorporating climate-resilient infrastructure measures.	Q1 2028	Q4 2029					
Activity 63.3	63.3 Mainstream climate adaptation in maritime and railway transport regulations, ensuring that planning, construction, and maintenance standards reflect projected climate conditions and resilience criteria.	63.3. Number of updated maritime and railway regulations incorporating climate adaptation standards.	Q1 2028	Q4 2029					
Activity 63.4	63.4 Strengthen early warning systems and emergency response protocols for transport systems, particularly in high-risk zones, to reduce service disruptions and damages during extreme weather events.	63.4. Number of transport facilities equipped with enhanced early warning systems and emergency response protocols.	Q1 2028	Q4 2029					
Measure 64	Integrating Nature-Based Solutions and environmental based adaptation for Transport sector resilience: Enhancing Infrastructure with Nature-Based and Ecosystem-Based Adaptation	1. Percentage reduction in transport infrastructure disruptions due to climate-related hazards (e.g., flooding, erosion, landslides) in areas with NbS interventions.							

Nr.	Activities under the Implementation of Specific Measures	Performance Indicators/Measurement of Implementation	Implementation Timeline		Indicative cost (in USD)	Source of Funding			Financing gap
			Starting year	Ending year		State budget	Other public funding	Foregin financing	
Activity 64.1	64.1 Carry out an assessment of options to implement green corridors alongside road infrastructure to mitigate climate change impacts preventing the heat island effect, mitigating flood risks and erosion. The analysis shall identify the kms and surrounding surfaces of specific roads in which interventions are to be conducted, together with the implementation plan and feasibility analysis.		Q1 2031	Q4 2036					
Activity 64.2	64.2 Riparian Buffer Strips Along River-Adjacent Roads: Establishing vegetative buffer zones along roads near rivers to reduce erosion, stabilize banks, and minimize flood damage.	64.2. Number of riparian buffer strips or coastal wetlands restored or established to protect adjacent transport infrastructure.	Q1 2031	Q4 2036					
Activity 64.3	64.3 Permeable Pavements and Green Drainage in Urban Transport: Replacing conventional pavements with permeable alternatives.	64.3. Percentage of newly designed or rehabilitated transport infrastructure segments incorporating low-impact technologies (e.g., permeable pavements, green drainage systems).	Q1 2031	Q4 2036					
Activity 64.4	64.4 Afforestation and terracing for Landslide Prevention on Mountain Roads: Planting native trees and vegetation on slopes along key transport routes, and implement terrace systems to reduce soil erosion and landslide risks.		Q1 2031	Q4 2036					
Activity 64.5	64.5 Coastal Wetland Protection for Transport Resilience: Restore and conserve coastal wetlands to act as natural barriers against storm surges and coastal erosion affecting transport infrastructure.	64.5. Number of riparian buffer strips or coastal wetlands restored or established to protect adjacent transport infrastructure.	Q1 2031	Q4 2036					
Activity 64.6	64.6 Sustainable Dredging Practices for Navigable Waterways: Implement environmentally responsible dredging techniques to maintain transport waterways while preserving marine biodiversity.		Q1 2031	Q4 2036					
Activity 64.7	64.7 Green Corridors Along highways and Railways: Restoration and instauration of tree lined corridors and green belts along major roads and railway lines to reduce heat stress, provide shade, absorb pollutants, work as noise barriers, and improve biodiversity connectivity.	64.7. Length (km) of transport infrastructure (roads or railways) with green corridors or vegetative buffers established.	Q1 2031	Q4 2036					
Activity 64.8	64.8 Bio-engineering for road and railway stabilization: Use bio techniques for slope stabilization like vegetative covers and planted terraces along vulnerable transport routes prone to landslides or erosion in non-mountainous areas.	64.8. Number of transport infrastructure segments where bio-engineering or slope stabilization techniques have been implemented.	Q1 2031	Q4 2036					
Activity 64.9	64.9 Living shorelines for coastal transport resilience: use oyster reefs, vegetative buffers to stabilize shorelines and protect transport infrastructure from wave action and sea-level rise.		Q1 2031	Q4 2036					
Activity 64.10	64.10 Integration of green bridges for wildlife crossings: develop eco-friendly overpasses and underpasses for wildlife to prevent roadkill and ensure safe species migration across transport networks.	64.10. Number of eco-bridges or wildlife crossings constructed or upgraded along transport corridors.	Q1 2031	Q4 2036					
Measure 65	Climate Resilience Transport Policies: Embedding Climate Adaptation in Regulatory Frameworks				145.333			136.229	-9.105
Activity 65.1	65.1 Review and revise existing transport-related policies and regulatory frameworks to integrate climate adaptation objectives, ensuring consistency with national and sectoral climate strategies.	65.1. Number of transport policies and regulatory frameworks revised to integrate climate adaptation.	Q1 2027	Q4 2029	72.667				
Activity 65.2	65.2 Establish cross-sectoral coordination mechanisms to align transport planning with land use, environmental protection, and climate adaptation efforts, promoting a systems-level approach to infrastructure development.	65.2. Number of operational cross-sectoral coordination mechanisms established.	Q1 2027	Q4 2029	72.667				
Activity 65.3	65.3 Develop legal provisions and planning guidelines that mandate climate risk assessments and the incorporation of adaptation measures in all new transport infrastructure projects.	65.3. Number of legal provisions or planning guidelines developed mandating climate adaptation in transport planning.	Q1 2027	Q4 2029					
Activity 65.4	65.4 Organize technical consultations and policy dialogues between ministries of transport, environment, urban development, and finance to identify synergies and strengthen institutional coordination for climate-resilient transport planning.	65.4. Number of inter-ministerial technical consultations and policy dialogues conducted.	Q1 2027	Q4 2029					
Measure 66	Innovative Partnerships for Sustainable Transport: Funding Climate-Resilient Transport Infrastructure	1: Percentage of infrastructure projects incorporating low-impact technologies							
Activity 66.1	66.1 Design climate finance instruments to support investments in resilient infrastructure, renewable energy integration, and low-impact construction technologies in the transport sector.	66.1. Number of climate finance instruments designed and operationalized	Q1 2036	Q4 2040					
Activity 66.2	66.2 Establish public-private partnerships (PPPs) to mobilize co-financing for climate-resilient transport infrastructure, ensuring alignment with national adaptation priorities and long-term sustainability.	66.2. Volume of private capital mobilized through PPPs	Q1 2036	Q4 2040					
Activity 66.3	66.3 Conduct a needs assessment at national and regional levels to identify context-specific technological gaps and financial barriers to the adoption of low-impact, innovative solutions in infrastructure development.	66.3. Number of national and regional needs assessments completed	Q1 2036	Q4 2040					
Activity 66.4	66.4 Develop financial incentives and regulatory frameworks to promote the uptake of advanced climate-resilient materials and construction practices by private contractors and infrastructure developers.	66.4. Number of financial and regulatory incentive schemes implemented	Q1 2036	Q4 2040					
TOTAL (Cross-sectorial + Agriculture + Forestry + Tourism + Urban development + Energy + Transportation)					218.595.140,12	24.424.228	134.721.385	37.112.602	-22.336.925

ANNEX III: ADAPTATION MEASURES IMPLEMENTATION PLAN

No.	Adaptation Measure	Implementation start dates											Continuation years					
		Short-term start period			Medium-term start period				Long-term start period									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
1	Strengthening Regional Resilience: Supporting the Western Balkans Adaptation Roadmap																	
2	Optimizing Climate Coordination: Strengthening the IMWGCC Framework																	
3	Enhancing Capacities for Adaptation: Support for the Climate Change Technical Group and create and capacitate a Steering Group																	
4	Enhancing climate resilience through improved data systems																	
5	Nature-based solutions and Biodiversity Net Gain Developer Schemes																	
6	Fostering Climate Resilience Awareness Raising and Training for Adaptation and Mitigation																	
7	Innovative Climate Finance Mechanisms: Piloting Sustainable Financing Strategies																	
8	Piloting risk management Assessments for Climate-Resilient Businesses																	
9	Promoting Gender-Sensitive Climate Adaptation: Training Stakeholders and Developing Inclusive Tools																	
10	Educating Communities: Adaptation and disaster awareness-raising																	
11	Empowering farmers: financial support for climate-resilient infrastructure																	
12	Safeguarding farmers: Compensation and assistance programs for disaster recovery																	
13	Action Plan for Invasive Species Under Changing Climate Conditions																	
14	Strengthening Flood Protection: Riverbank Restoration and Floodplain Expansion Across Key Albanian Rivers																	
15	Implementing Habitat Creation and Nature-Based Solutions to Combat Soil Erosion																	
16	Enhancing IGEO's Capacity for Coastal Monitoring and Data Provision on Environmental Changes and risks																	
17	Expanding and Modernizing Irrigation Systems for Enhanced Agricultural Resilience																	
18	Sustainable Water Security through Rainwater Harvesting Infrastructure																	
19	Enhancing Forestry Efficiency through EU Regulatory Compliance																	
20	Advancing Sustainable Forestry: Afforestation Fund and Green Procurement Initiatives																	
21	Revitalizing Damaged Lands: Integrating NbS and EBA with Agroforestry Practices																	
22	Strengthening Forest and Pasture Protection: Investments in Human Capacity and Firefighting Resources																	
23	Advancing Afforestation: Establishing Regional Nurseries for Drought-Resistant Species																	
24	Supporting Migration of Rare and Endemic Forest Species to higher altitudes																	
25	Restoring Vital Ecosystems: Protecting and Regenerating Coastal and Riverine Green Belts and Protective Ecosystems																	
26	Sustainable Financing Through Payment for Ecosystem Services (PES)																	
27	Integrated Ecosystem Restoration and Resilience: Addressing Soil Erosion in Key Regions																	
28	Combating Erosion and Flooding: Strategic Habitat Restoration and Reforestation in Key Albanian Regions																	
29	Sustainable Landscape Management: Enhancing Water Quality and Biodiversity at Viroi Lake in Gjirokastër																	
30	Enhancing Climate Resilience in National Parks and Protected Areas																	
31	Restoration of forest layers to protect crops in Vlora																	
32	Strategic Spatial Planning for tourism: Redirecting Development from High-Risk Areas																	
33	Climate-proofing tourism infrastructure: Incentive packages for climate-proofing the tourism sector infrastructure																	
34	Strategic Planning for Coastal Resilience: Buffer Zones and Sea Gate Adaptations																	
35	Protecting Vlora Bay: Preserving Posidonia Habitats and Underwater Cultural Heritage Against Climate Impacts																	
36	Strengthening the policy and regulatory framework for Sustainable Tourism: Policy Review and Regulatory Enhancement																	
37	Integrating Climate Data for Sustainable Tourism: Guidelines for resilient business management and National Reporting																	
38	Climate-proofing Tourism Infrastructure: Adaptive Designs for Climate Risk Mitigation																	
39	Protecting Coastal Zones: Integrated Regulations, Planning and Management for Climate Resilience and Sustainable Development																	
40	Building Climate Resilience Capacity: Training Tourism Operators in Sustainable Practices and Adaptation Strategies																	
41	Digital Hubs for Climate-Resilient Tourism: Sharing Knowledge and Best Practices																	
42	Protecting Tourism Assets: Enforcing Regulations and Restoring Ecosystems for Sustainable Development																	
43	Maritime and Territorial Planning for Climate Resilience: Preparing for Rising Seas and Changing Environments																	
44	Strategic Spatial Planning for Risk Reduction: Redirecting Developments and Managing Surface Water Flood Risks																	
45	Incentive schemes to increase extreme temperature resilience of the building stock																	
46	Integrating Green Spaces into Public Infrastructure Development through GPP																	
47	Restoring Green Corridors: Reforestation and Urban Greening Initiatives																	
48	Climate Risk Assessment for Durrës, Elbasan, Fier, and Beyond: Developing a Comprehensive Vulnerability Map																	

No.	Adaptation Measure	Implementation start dates											Continuation years					
		Short-term start period			Medium-term start period				Long-term start period									
		2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
49	Flood event emergency plans																	
50	Enhancing Urban Resilience: Assessing Greenspaces and Sustainable Drainage Solutions																	
51	Sustainable Urban Design: Conservation and Restoration of Permeable and Infiltration Areas																	
52	Protecting Energy Infrastructure against strong winds: Rehabilitating Substations and Transmission Lines																	
53	Enhancing Building Efficiency: Energy Performance Certificates and Resilient Standards																	
54	Exploring the Energy sector Potential: Demand-Side Management and Energy Storage Studies																	
55	Protecting the energy infrastructure: Monitoring Emergency and Risk Areas																	
56	Enhancing Heatwave resilience through Efficient Air Conditioning Technology Deployment and Climate Refuges																	
57	Optimizing Renewable Energy for Resilient Systems: Grid Innovation and Storage Investments																	
58	Advancing Gender Equity in Energy: Training and Support for Women in RE Projects																	
59	Building Resilience in Hydropower: Optimized Operations and Strengthened Infrastructure																	
60	Regular Vulnerability and Risk Analysis and Definition of Resilience-Building Measures for Road Infrastructure																	
61	Geological Studies for Sustainable Roads: Bio-Engineering Solutions to reduce Erosion and Flood risks																	
62	Advancing Sustainable and Climate Resilient Urban Mobility: Developing and Reviewing Urban Mobility Plans																	
63	Adapting Critical Transport Infrastructure: Advanced Risk Assessment and Resilient Design Solutions																	
64	Integrating Nature-Based Solutions and environmental based adaptation for Transport sector resilience: Enhancing Infrastructure with Nature-Based and Ecosystem-Based Adaptation																	
65	Climate Resilience Transport Policies: Embedding Climate Adaptation in Regulatory Frameworks																	
66	Innovative Partnerships for Sustainable Transport: Funding Climate-Resilient Transport Infrastructure																	

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