National Climate Finance Strategy of Pakistan Revised 2026

Ministry of Climate Change & Environmental Coordination In Collaboration With:
Pakistan Climate Change Authority

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Executive Summary

Pakistan is among the countries most vulnerable to climate change despite contributing less than one percent of global greenhouse gas emissions. Increasing frequency and intensity of climate hazards, particularly floods, droughts, heatwaves, and glacial melt, have amplified socio-economic vulnerabilities and placed significant strain on national development. Recent flood events illustrate the scale of the challenge: during the 2025 monsoon season, approximately 8.85 million people were affected, over 1,000 lives were lost, and economic damages were estimated at PKR 822 billion. Climate shocks are increasingly intersecting with structural economic pressures, including fiscal constraints, water stress, and rapid population growth, thereby posing serious risks to macroeconomic stability and long-term development outcomes.

Pakistan's climate finance requirements are substantial. Under the country's updated Nationally Determined Contribution (NDC 3.0), Pakistan aims to reduce projected greenhouse gas emissions by up to 50 percent by 2035, including 17 percent through domestic resources and an additional 33 percent conditional on international support. Achieving these targets requires an estimated investment of approximately USD 565.7 billion by 2035. The World Bank's Country Climate and Development Report estimates climate-resilient and low-carbon investment needs of around USD 348 billion by 2030, indicating a large financing gap. At present, climate finance flows remain insufficient relative to national needs, with Pakistan having accessed only modest levels of international climate finance through mechanisms such as the Green Climate Fund, Global Environment Facility, Adaptation Fund, and other multilateral and bilateral sources.

Institutional and structural barriers continue to constrain the mobilization of climate finance. These include fragmented governance arrangements, limited institutional capacity to develop bankable climate projects, weak coordination between federal and provincial institutions following the 18th Constitutional Amendment, insufficient systems for tracking climate finance and greenhouse gas data, and a relatively shallow domestic financial market. Complex access procedures for international funds, combined with limited technical expertise in project preparation and monitoring, further restrict Pakistan's ability to attract large-scale climate investments.

The National Climate Finance Strategy (NCFS) provides a comprehensive framework to address these challenges by mobilizing, aligning, and scaling climate finance through a nationally owned and outcome-oriented system. The strategy seeks to strengthen coordination between federal and provincial institutions, integrate climate considerations into fiscal and development planning, and establish transparent mechanisms for tracking climate finance flows. It aligns climate finance with Pakistan's commitments under the National Climate Change Policy, National Adaptation Plan, and NDC 3.0, while promoting a whole-of-government approach to climate investment planning.

The strategy is anchored in five strategic pillars, under which forty-two actionable interventions have been identified. First, it aims to establish standardized definitions, fiscal risk assessments, and climate budget tagging systems to better quantify financing needs and track climate expenditures. Second, it prioritizes investments in adaptation, mitigation, and climate-resilient infrastructure aligned with national policy frameworks. Third, it proposes the development of a coordinated climate finance ecosystem, including the establishment of a national project pipeline and an integrated digital platform to consolidate climate finance data and monitoring systems. Fourth, it focuses on mobilizing domestic resources and leveraging private capital through instruments such as green bonds, blended finance, carbon markets, and public-private partnerships. Finally, the strategy emphasizes innovation, green entrepreneurship, and human capital development through green skills programs, research partnerships, and startup acceleration mechanisms.

Implementation of the strategy will be anchored in Pakistan's existing institutional architecture under the Pakistan Climate Change Act 2017. Political oversight will be provided by the Pakistan Climate Change Council, while policy coordination will be ensured through inter-ministerial mechanisms linking climate priorities with fiscal and development planning processes. Technical coordination will be supported by a Technical Committee on Climate Finance, with the Pakistan Climate Change Authority serving as the technical support and managing the Pakistan Climate Change Fund as a national vehicle for mobilizing and deploying climate finance.

A central feature of the strategy is the proposed Pakistan Climate Action Integrated Platform, which is being developed under the GCF Readiness Program to consolidate climate finance data, capacity development, coordinate project pipelines, and support monitoring, evaluation, reporting, and learning. Through this platform, the government will track climate finance flows, evaluate project implementation, and strengthen transparency in climate finance management.

The strategy outlines a phased implementation pathway. Immediate actions focus on operationalizing governance structures, establishing climate finance definitions and tracking systems, launching the integrated digital platform, and developing a national pipeline of climate projects aligned with NDC priorities. Medium-term efforts aim to strengthen project preparation capacity, mobilize private capital through blended finance and regulatory reforms, and improve Pakistan's access to international climate finance mechanisms. Over the long term, the strategy envisions the development of a mature climate finance ecosystem that integrates domestic financial markets, international climate funds, and private sector investment to support large-scale climate-resilient development.

Through these measures, the National Climate Finance Strategy seeks to transform Pakistan's climate finance architecture from fragmented and project-based funding toward a coordinated, transparent, and scalable system capable of mobilizing the resources required to address the country's climate challenges while supporting sustainable economic growth.

Table of Contents

List of Tables

List of Figures

Acronym

ADB	Asian Development Bank
ADP	Annual Development Programme
AIIB	Asian Infrastructure Investment Bank
CFU	Climate Finance Unit
COP	Conference of the Parties
CPF	Country Partnership Framework
EAD	Economic Affairs Division
GCF	Green Climate Fund
GHG	Greenhouse Gas
ICAP	Integrated Climate Action Platform
IFC	International Finance Corporation
IMF	International Monetary Fund
MERL	Monitoring, Evaluation, Reporting, and Learning
MoCC&EC	Ministry of Climate Change and Environmental Coordination
MoF	Ministry of Finance
MoPD&SI	Ministry of Planning, Development and Special Initiatives
MDB	Multilateral Development Bank
NDC	Nationally Determined Contribution
NCFS	National Climate Finance Strategy
PC-I	Planning Commission Project Document
PCCA	Pakistan Climate Change Authority
PCCF	Pakistan Climate Change Fund
PCCC	Pakistan Climate Change Council
PPP	Public–Private Partnership
PSDP	Public Sector Development Programme
RSF	Resilience and Sustainability Facility
SBP	State Bank of Pakistan
SECP	Securities and Exchange Commission of Pakistan
TCCF	Technical Committee on Climate Finance
TWG	Technical Working Group
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank

Chapter 1: Context, Goals, and Objectives

Climate Risk and Development Context

1.1.1 Pakistan's Climate Vulnerability Profile

Pakistan is among the **most climate-vulnerable countries globally**, despite contributing less than 1% of global greenhouse gas emissions. According to the **Global Climate Risk Index**[1] Pakistan has consistently ranked among the top ten countries most affected by extreme weather events over the past two decades. Climate risks intersect with existing development challenges, including rapid population growth, water stress, fiscal constraints, and structural economic vulnerabilities.

The **Global Shield Stocktake and Gap Analysis for Pakistan**[2] highlights that climate risks in Pakistan are **systemic, recurrent, and increasingly compounding**, affecting livelihoods, infrastructure, food security, public health, and macroeconomic stability. Climate shocks disproportionately impact poor and vulnerable populations, exacerbating inequality and undermining development gains.

1.1.2 Key Climate Hazards

Pakistan is highly susceptible to a wide range of climate hazards, including floods, droughts, heat waves, and glacial melt, with historical data indicating an increase in the frequency and intensity of these events due to climate change. During the monsoon season through September 2025, an estimated 8.85 million people resided in flood-affected areas, with approximately 2.82 million individuals identified as particularly vulnerable in these regions. (Flood Impact Analysis, WFP, 3rd Sep, 2025)[3].

Additionally, according to the preliminary assessment of flood damages in 2025, Pakistan reported that approximately 1039 lives were lost while 4 million people were internally displaced. Besides the loss of life, the other damages were substantial including infrastructure loss, destroying 229,763 houses, 2,811 Km of road network collapsed, and 790 bridges were destroyed. Apart from that, 2,267 educational institutes and 243 health facilities were damaged, which served as a deathblow to the already ailing economy of Pakistan. As per initial estimates, these damages translated into PKR 822 Bn, including PKR 307 Bn in terms of infrastructure loss and PKR 430 Bn in terms of agriculture.

[1] Germanwatch (2023), *Global Climate Risk Index*
https://www.germanwatch.org/en/cri
[2] Global Shield Against Climate Risks (2024), *Stocktake and Gap Analysis: Pakistan*
https://www.insuresilience.org/global-shield
[3] A Preliminary Assessment of Flood Impact on Pakistan Economy: MoPD & SI, Sep 2025

Yet, Climate change impacts are not gender-neutral and disproportionately affect women and girls due to structural inequalities in access to resources, decision-making, and economic opportunities. Evidence from the 2022 floods highlights these disparities, with approximately 650,000 pregnant women requiring urgent maternal health services (UNFPA, 2022)[4], alongside increased risks of malnutrition, displacement, and gender-based violence.

Besides, Climate shocks also pushed up to 9.1 million additional people into poverty (UNDP, 2024), with the greatest burden falling on low-income and rural households.

Women's disproportionate reliance on natural resources for livelihoods, combined with constraints in mobility and access to financial services, further exacerbates vulnerability. Similarly, children, elderly populations, and persons with disabilities face heightened exposure due to limited coping capacity and access to essential services. These dynamics underscore the need for climate finance strategies that are inclusive, equitable, and responsive to differentiated vulnerabilities.

1.1.3 Macroeconomic and Fiscal Implications

Climate shocks impose most significant macroeconomic and fiscal costs on Pakistan. According to the World Bank's Country Climate and Development Report (CCDR)[5]Climate-related disaster risk in Pakistan is also driven by social vulnerability. Pakistan ranks 37th in the climate vulnerability ranking, driven by its high rates of multidimensional poverty. Pakistan's GDP growth is projected to decline up to **18–20% by 2050** under high-emissions scenarios if resilience and adaptation measures are not scaled up. Fiscal impacts on the already ailing economy of Pakistan include:

- Rising disaster response along with reconstruction expenditures.
- Increased fiscal deficits and public debt.
- Disruption of revenue collection due to economic slowdowns
- Heightened contingent liabilities from energy subsidies, SOEs, triggering of force majeure, particularly in public-private partnership (PPP) projects, and agriculture support.

The **Global Shield Stocktake report[6]** underscores that Pakistan currently has a largely reactive fiscal framework, relying on post-disaster reallocations, external borrowing, and humanitarian assistance rather than ex-ante risk financing, insurance, or contingency mechanisms. Pakistan's vulnerability to climate change necessitates a robust financial strategy to support adaptation and mitigation efforts.

MU 27 October 2022.pdf

[5] World Bank (2022), *Pakistan Country Climate and Development Report*
https://www.worldbank.org

[6] Global Shield Against Climate Risks (2024), *Pakistan Stocktake and Gap Analysis*
https://www.globalshield.org/wp-content/uploads/2026/01/Global-Shield_Stocktake-and-Gap-Analysis_Pakistan.pdf

1.1.4 Climate Finance Needs and Investment Gap

Pakistan is one of the most climate-vulnerable countries in the world, with multiple sources of vulnerability.[7] The complexity of climate risks is linked with 10 agro-ecological zones,[8] Each zone has unique climate risks and extreme weather events. This diversity in ecosystems presents opportunities to partner with various funding sources by diversifying investment opportunities to suit the specific needs of each ecosystem.

Total public debt increased by 13% during FY-25 to PKR 80.5 trillion, with the public debt-to-GDP ratio reaching 70%[9]. By allocating a significant portion of revenues for loan repayment, Pakistan is reducing the allocation of domestic resources towards mitigation and adaptation activities. Climate extremes and slow-onset events are further indebting the country. The 2022 floods, for example, caused the growth rate to fall from 6 percent to 2.2 percent, with the largest percentage decrease in the agriculture sector by 0.9%[10]. Although the credit rating improved from CCC+ in April 2025 to B- in September 2025, Pakistan remains a high-risk country, making it a high-risk borrower with significant credit vulnerabilities. If Pakistan continues with domestic borrowing and taking on loans for recovery, its debt burden will worsen and fiscal space will be further constrained.

Pakistan has remained proactive in estimating financial needs through rapid assessments and diagnostics undertaken in partnership with development partners. In response to the 2022 floods, a Post-Disaster Needs Assessment (PDNA) was carried out, whereby an estimated economic cost of US$15.2 billion was identified, with a further USD16.3 Bn identified for rehabilitation and reconstruction efforts. Drawing from the PDNA report, the Resilient Recovery, Rehabilitation, and Reconstruction Framework (4RF) was developed, which prioritized needs around four strategic recovery objectives: housing, agriculture, livelihoods, and infrastructure. The framework included a financing strategy, implementation arrangements, and a monitoring framework. Pakistan's third-update of the Nationally Determined Contributions (NDC 3.0) aims to reduce GHG emissions up to 50% by 2035, including 17% unconditionally via policy measures and domestic resources, and 33% conditional on means of implementation. The estimated investment cost to achieve these goals is USD 565.7 Bn.[11], whereas CCDR estimates investment needs for Climate-resilient and Low-Carbon development between 2023 and 2030 at USD 348 Bn. The additional investment of USD 217.7 Bn will be required by 2035[12].

There remains a significant funding gap: estimated financing for the next decade stands at US$39 billion from public finance, including financing from multilateral

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[7] According to the Germanwatch Global Climate Risk Index, Pakistan is the 8th most vulnerable country to climate change impacts.
[8] The Pakistan Agricultural Research Council lists 10 agro-ecological zones based on factors such as climate and land use: Indus Delta, Southern Irrigated Plain, Sandy Desert, Northern Irrigated Plain, Barani (Rainfed) Terrains, Wet Mountains, Northern Dry Mountains, Western Dry Mountains, Dry Western Plateau, and Suleiman Piedmont.
[9] Annual debt review FY2025. Ministry of Finance https://www.finance.gov.pk/
[10] PAKISTAN FLOODS 2022 Post-Disaster Needs Assessment. https://thedocs.worldbank.org/
[11]Pakistan's NDC 3.0 https://unfccc.int/sites/default/files/2025-09/Pakistan_NDC3.0_24%20Sep.pdf
[12] CCDR Report

development banks (MDBs), and US$9 billion from PPPs for infrastructure projects.[13].. According to the 2025 NDC 3.0, out of the USD 565.7 Bn total implementation costs, clean energy alone will require USD 101 Bn by 2035, including renewable energy (including hydropower) and clean energy expected to reach about 38,472 MW and 43,202 MW, representing around 62% and 69% of the planned power generation capacity mix. Adaptation costs are estimated at USD 85.6 Bn for the period 2022–2030[14]. The financing requirements for climate mitigation and adaptation in Pakistan, as estimated by the CCDR, include USD 152 Bn for adaptation and resilience and USD 196 Bn for decarbonization efforts, i.e., mitigation. Major investments involve USD 84.7 Bn for low-carbon power, USD 57 Bn for decarbonizing the transport sector, and USD 4 Bn for irrigation modernization. Additional needs cover USD 55.2 Bn for water and sanitation, USD 7.5 Bn for wastewater management, and USD 85.7 Bn for disaster preparedness, under disaster risk preparedness and response by 2030 and US$139.1 billion by 2035, respectively. Similarly, according to the latest project of the United Kingdom Government titled 'Growth Gateway' programme, the projected total estimated cost of climate inaction in Pakistan is USD 250 Bn by 2030 and USD 1.2 Tn by 2050[15].

Furthermore, the Foreign Commonwealth & Development Office (FCDO) Evidence suggests that adaptation and resilience solutions investments are around 15-20% of the projected future economic impact. It is estimated that flood-induced settlements damage and the cost of involuntary displacement of flood-affected people could cumulatively cost USD 80 Bn by 2050, and flooding will likely displace approximately 90 million people. To address these financial gaps, Pakistan must optimize domestic resources, attract private investment, mobilize additional funding, and improve access to international climate finance.

1.1.5 International Financing Landscape

Article 9 of the Paris Agreement obliges developed country Parties to provide financial resources to support developing countries in both mitigation and adaptation efforts, building upon the collective commitment to mobilize USD 100 billion annually, first pledged at COP15 in 2009. Building on this commitment, Parties at COP29 adopted the New Collective Quantified Goal (NCQG), establishing a new floor of USD 300 billion annually by 2035. In addition, Decision 1/CMA.6 calls upon all actors to work collectively toward scaling climate finance from public and private sources to at least USD 1.3 trillion per year by 2035 under the Baku-to-Belém Roadmap.

[13] CCDR Report,2022, https://documents1.worldbank.org/

[14] Pakistan conducted the National Economic and Environmental Development Study during 2010–2011, which was one of the initial efforts to prioritize the mitigation and adaptation actions. The study identified that mitigation costs ranging between US$8 billion to US$17 billion are required to transition towards cleaner technologies by 2050. Adaptation costs were estimated at US$40 billion per annum.

[15] UN Common Country Analysis. CLIMATE FINANCING AND POLICY RECOMMENDATIONS. https://pakistan.un.org/

At the same time, the financing needs of developing countries continue to grow significantly. The costs communicated through updated Nationally Determined Contributions (NDCs) of developing countries are estimated at approximately USD 5.1–6.8 trillion through 2030, equivalent to roughly USD 455–584 billion annually (Decision 2/CP.29). Similarly, global adaptation finance needs are estimated at USD 215–387 billion annually through 2030 (UNEP Adaptation Gap Report, 2023). These figures highlight the widening gap between existing climate finance flows and the actual financing requirements of developing countries, particularly for adaptation and resilience-building. In this context, the proposed scale-up toward USD 1.3 trillion annually by 2035 should be viewed not as aspirational but as essential for achieving the objectives of the Paris Agreement.

In light of these global developments, the NCFS defines climate finance as financial resources mobilized to support mitigation, adaptation, resilience-building, and loss and damage interventions consistent with national climate priorities and international climate obligations. The strategy recognizes the importance of ensuring that climate finance remains "new and additional" to existing development finance flows and, where possible, is provided on concessional terms, particularly for adaptation and loss and damage interventions in vulnerable developing countries such as Pakistan.

The NCFS further aligns with Pakistan's international climate finance advocacy positions by emphasizing concessionality, grant-based financing, climate justice, and enhanced support for vulnerable countries. The strategy also recognizes the potential role of innovative international financing mechanisms, including Special Drawing Rights (SDRs), debt-related instruments, blended finance, and other risk-sharing approaches to support climate-resilient development.

In addition, the NCFS recognizes the importance of distinguishing between concessional and non-concessional climate finance flows, including grants, concessional loans, guarantees, equity, and blended finance instruments, in line with evolving international reporting frameworks and Pakistan's positions under the UNFCCC process.

1.2 Climate Finance Flows

Pakistan's access to United Nations Framework Convention on Climate Change (UNFCCC) climate funds remains low, having only received approximately USD 533 Mn.[16] from multilateral and bilateral sources to date. It is evident that this level of support remains highly inadequate when compared to the USD 348 Bn financing requirement identified in NDC 3.0 for mitigation and adaptation needs up to 2030.

Pakistan's portfolio with the Green Climate Fund (GCF) comprises 11 approved climate projects with total GCF financing of approximately USD 331.7 million[17]. These projects

[16] https://file.pide.org.pk/pdfpideresearch/discourse-2025-04-11-bridging-the-climate-finance-gap-pakistans-evolving-landscape-and-the-roadahead.pf

[17] See Annex IV

span core climate action sectors and reflect a balance between tackling vulnerability and reducing emissions. On the adaptation side, GCF funding supports resilience building in sectors such as water management, climate-smart agriculture, early warning systems, and disaster risk reduction, helping vulnerable communities better withstand climate impacts. In mitigation, GCF resources are directed toward expanding clean energy access and promoting low-carbon transport and industrial practices to cut greenhouse gas (GHG) emissions. There are also cross-cutting climate investments that strengthen institutional capacities, foster private-sector engagement in climate solutions, and enhance domestic climate finance readiness, enabling Pakistan to accelerate integrated sustainable development with international support. In addition, two national entities from Pakistan have been accredited to the GCF, National Rural Support Programme (NRSP) and JS Bank Limited. Pakistan has also benefited from 9 readiness activities, with approved readiness support amounting to USD 6.1 million, which has helped strengthen national systems, institutional coordination, and overall climate finance readiness.

Table 1: Pakistan's GCF Country Portfolio Matrix

Theme	Single-country Projects – Public Sector	Single-country Projects – Private Sector	Regional Projects – Public Sector	Regional Projects – Private Sector
Adaptation	4	1	2	0
Mitigation	1	1	0	0
Cross-cutting	0	1	0	1
Total	**5**	**3**	**2**	**1**

Pakistan's Global Environment Facility (GEF) portfolio includes 73 projects under the GEF Trust Fund, comprising 43 national projects with financing of approximately USD 116 Mn and 30 regional/global projects with financing of approximately USD 363 Mn (co-financing ratios ~5.77 and ~0.52, respectively). Pakistan also benefits from one regional project under the Multi-Trust Fund valued at USD 95 million and one national project under the Special Climate Change Fund (SCCF) for Pakistan, amounting to USD 3.3 million. Under the GEF-8 STAR allocation (2022-2026), Pakistan has an indicative allocation of USD 17.77 Mn spread across biodiversity (USD 5.74 Mn), climate change (USD 7.35 Mn), and land degradation (USD 4.68 Mn). Pakistan has so far utilized the full allocation across all thematic areas. In previous STAR cycles as well, including GEF-5 and GEF-7, the country received significant resource allocations.[18]

Table 2: Pakistan's GEF Country Portfolio Mix

GEF Funds	Number of Projects	Funding Amount	Remarks

[18] https://www.thegef.org/projects-operations/country-profiles/pakistan

GEF Trust Fund – National Projects (Pakistan)	43	116	National portfolio for Pakistan
GEF Trust Fund – Regional/Global Projects	30	363	Regional/global projects involving Pakistan
Multi-Trust Fund – Regional Project	1	95	Regional project
Special Climate Change Fund (SCCF) – National Project (Pakistan)	1	3.3	National project for Pakistan
Grand Total	75	577.3	

Pakistan has received funding for three single-country projects from the Adaptation Fund (AF), that costs around USD 20 Mn.[19]. The most recent project is the **Sustainable Actions for Ecosystems Restoration in Pakistan (SAFER Pakistan),** approved at roughly USD 10 Mn to strengthen nature-based adaptation across the Indus Basin and enhance ecosystem and community resilience to climate impacts. Pakistan has accessed the Climate Investment Funds (CIFs) for only one project.[20] and has benefited only marginally from bilateral and special-purpose climate funds[21]. These initiatives are modest in scale relative to Pakistan's vast climate risks and estimated needs.

During the period of 2017– 2021, within the South Asia region, India received the highest absolute adaptation finance (USD 7.5 Bn), followed by Bangladesh (USD 4.3 Bn) and Pakistan (USD 2.3 Bn). India, Bangladesh, and the Philippines ranked as the top 3 recipient countries of international public adaptation finance, while Pakistan ranked 8th in terms of number. [22].

MDBs are expected to remain the main source of international climate finance for Pakistan. In 2021, MDBs held an approximate 50% share of Pakistan's total climate financing. A large share of World Bank lending to Pakistan (44% in FY2021) is now linked to climate co-benefits, and 50% of the portfolio of the IFC is climate-tagged. Significantly more MDB financing will thus be required to accelerate green and climate-resilient financing in line with Pakistan's climate financing needs.

Climate finance support is being mobilized through a combination of multilateral and bilateral partners, including the World Bank.[23], which is providing USD 13.9 Mn in concessional loans through the International Development Association & International |Bank for Reconstruction and Development (IDA/IBRD), primarily for adaptation-focused

[19] https://www.adaptation-fund.org/wp-content/uploads/2025/08/Comprehensive-Evaluation_Inception-Report.pd

[20] The Balochistan Sustainable Energy Project worth US$0.57 million (all grant) under the Scaling Up Renewable Energy Program in Low Income Countries. The implementing partner is the International Bank for Reconstruction and Development (IBRD).

[21] Such as International Climate Finance, Global Climate Partnership Fund, Global Climate Change Initiative (GCPC), Norway's International Climate Forest Initiative, and REDD+ Early Movers (REDD stands for "reducing emissions from deforestation and forest degradation in developing countries. The "+" stands for additional forest-related activities that protect the climate, namely sustainable management of forests and the conservation and enhancement of forest carbon stocks.)

[22] https://pakistan.un.org/sites/default/files/202503/CCA%202024%20update_UN%20Pakistan_climate%20financing_CLEAN_ed_26feb25_.pdf

[23] https://ida.worldbank.org/en/country/pakistan

interventions, and the **Asian Development Bank**[24], contributing USD 43.4 Mn in loans and technical assistance grants to support mitigation efforts. In addition, bilateral donors such as **Japan**, **Germany**, the **United Kingdom**, and the **United States**[25] have jointly mobilized USD 93.0 Mn through grants and co-financing mechanisms, targeting both adaptation and mitigation priorities, thereby strengthening the overall climate finance portfolio and enhancing resilience and low-carbon development outcomes.

As per the annual budget report of the Government of Pakistan's **Economic Affairs Division (EAD)**, the sectoral distribution of new commitments reflects the GoP's priority development objectives. During the period from July to June 2024–25, Pakistan successfully mobilized project financing amounting to USD 2.71 Bn, with nearly 50% of these resources directed towards environment, climate change, and resilience-related initiatives, underscoring the country's strategic focus on strengthening climate adaptation, environmental sustainability, and long-term socio-economic resilience.

According to data provided by the **Asian Development Bank (ADB)**, Pakistan received approximately **USD 2.43 billion in climate finance commitments between 2022 and 2024**, with the majority directed toward **adaptation (USD 1.86 billion)**. Nearly all financing was **sovereign in nature**, reflecting the dominant role of public and development finance institutions in supporting climate-related investments, while **non-sovereign (private sector) climate finance remains limited.**[26].

Pakistan has also secured support under the **Resilience and Sustainability Facility** of the **International Monetary Fund**. In October 2023, the IMF approved an arrangement of approximately **SDR 1 billion (around USD 1.3 billion)** for Pakistan under the RSF to support reforms aimed at strengthening resilience to climate change and other long-term structural vulnerabilities. The facility supports policy measures to integrate climate considerations into macroeconomic and fiscal policymaking, strengthen climate-informed public investment planning, improve disaster risk financing frameworks, and enhance climate data and reporting systems. The RSF complements Pakistan's broader climate finance strategy by supporting institutional reforms that enable more effective mobilization and management of climate finance.[27].

The **World Bank Group** supports Pakistan's development and climate priorities through its **Country Partnership Framework (CPF) for FY2026–FY2035**, which establishes a long-term strategic partnership between the Government of Pakistan and the World Bank Group institutions, including the **International Development Association**, **International Bank for Reconstruction and Development**, **International Finance Corporation**, and **Multilateral Investment Guarantee Agency**. The framework aims to mobilize

[24] https://www.adb.org/where-we-work/pakistan/overview

[25] Financing Climate Action. https://transparency.org.pk/PUBLICATION/FinancingClimate-Action-Enhancing-Effectiveness-And-Transparency-In-Pakistan%27s-Climate-Governance-Frameworks.pdf

[26] Source: Asian Development Bank (ADB), Climate Change and Sustainable Development Department; communication from Asif Turangzai, Climate Change Officer.

[27] **International Monetary Fund** (2023). *IMF Executive Board Approves US$3 Billion Stand-By Arrangement for Pakistan and US$1.3 Billion under the Resilience and Sustainability Facility.* Available at: https://www.imf.org/en/News/Articles/2023/10/??/pr-pakistan-rsf (IMF Press Release, October 2023).

approximately **US$40 billion** in public and private financing to support inclusive and sustainable development. Key focus areas include strengthening climate resilience to floods and other climate risks, expanding clean and sustainable energy systems, improving water and food security, enhancing fiscal management and public expenditure efficiency, and promoting private sector investment and economic growth. Climate resilience and decarbonization are cross-cutting priorities across the CPF portfolio, supporting Pakistan's transition toward a low-carbon and climate-resilient development pathway.[28].

Pakistan's domestic climate finance ecosystem has steadily expanded over the past decade, transitioning from fragmented, project-based funding to a more structured portfolio of sovereign, market-based, and concessional instruments. This includes green bonds and sukuk[29], central bank refinance facilities, and pooled climate funds that blend domestic and international resources. Initiatives such as the State Bank of Pakistan's green refinance and taxonomy frameworks, the Ministry of Finance's Sustainable Financing Framework (2025) signal a clear move toward institutionalizing green finance. Together, these efforts reflect the emergence of an integrated ecosystem that aligns fiscal policy, financial regulation, and private sector mobilization to scale up climate investments in line with Pakistan's NDC 3.0 targets.

Pakistan issued its first "Policy Guidelines for Trading in Carbon Markets", which introduces a formal authorization process to ensure that projects transferring mitigation outcomes abroad are consistent with national climate targets and sustainable development priorities, including provisions for Corresponding Adjustments to prevent double counting. They also clarify institutional roles, designating the Ministry of Climate Change & Environmental Coordination (MOCC&EC) as the national focal point, and outline procedures for project registration, monitoring, reporting, verification, and the development of a national carbon registry. However, the framework remains high-level, with key operational elements such as registry design, baseline methodologies, fee structures, and benefit-sharing mechanisms requiring further elaboration through supplementary regulations, alongside significant capacity strengthening at both federal and provincial levels. Nonetheless, the issuance of these guidelines represents a critical transition from ad hoc, project-based participation to a state-coordinated approach aimed at leveraging carbon finance as a strategic tool for climate action, with the potential to position Pakistan as a credible and competitive actor in the evolving global carbon

1.3 Barriers to Mobilizing Climate Finance

Tracking Climate Finance is challenging and is one of the main factors for lower adaptation financial flows. Climate finance is often compounded by overlaps with SDG

[28] **World Bank Group** (2024). *Country Partnership Framework for the Islamic Republic of Pakistan for the Period FY2026–FY2035*. Washington, DC: World Bank. Available at: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099121324161568318

[29] The News. (2025). https://www.thenews.com.pk/print/1316514-pakistan-launches-first-sovereign-green-sukuk

finance, and hence is not accounted for[30]. Additionally, adaptation measures often deliver co-benefits such as poverty reduction, urban planning, and food security that can lead to the misreporting or underreporting of adaptation-specific finance. Public sector contributions in adaptation, accounting for 98 percent, dominate those of the private sector.[31] Since adaptation is a long-term process, it is often challenging to secure financing and investments for adaptation measures that will not have an immediate impact. This irregularity of funding hinders long-term planning and the implementation of sustainable adaptation measures, highlighting the need for better incentives or policy frameworks to direct more funding towards adaptation. Additionally, the high costs of adaptation, particularly in Pakistan, where many communities face basic needs challenges, limit private sector engagement due to lower commercial viability and unclear returns compared to mitigation projects such as renewable energy. This perception underlines the need for strengthening regulatory frameworks and incentive-based policies to direct more funding towards adaptation. These factors explain why it took several years for Pakistan to develop its NAP in 2023 despite formally prioritizing adaptation in its NDCs in 2016.

The NAP serves as the country's guidebook for prioritizing adaptation in its vulnerable sectors and developing provincial action plans for sustained climate action in six areas: agriculture; water and food security; nature-based solutions; community infrastructure; waste and water, sanitation, and hygiene; and health co-benefits**.** However, the NAP still lacks detailed project prioritization, which complicates resource mobilization between the provinces and the federal government and thereby impedes effective implementation of adaptation measures.

Therefore, Given Pakistan's fiscal constraints and rising debt vulnerabilities, the NCFS prioritizes grant-based and highly concessional financing—particularly for adaptation, resilience-building, and loss and damage interventions—while recognizing the complementary role of blended and market-based instruments for mitigation and commercially viable sectors.

Pakistan is making **notable progress toward institutionalizing climate finance transparency and tracking**, an important step for improving domestic climate budgeting and enhancing access to international climate funds. Under the ongoing **Extended Fund Facility with the International Monetary Fund (IMF)**, the government has expanded its **Climate Budget Tagging (CBT)** system, integrating climate markers into the national financial management system and budget formulation processes. Around **35 % of non-tax revenue and 9.4 % of gross revenues for FY 2025–26** have been classified as climate-relevant, reflecting efforts to mainstream climate considerations into fiscal policy

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[30] In this context, a letter by the EAD to MoCC dated 18-Dec-2025 also provides a significant reason. The crux of the letter is that the EAD does not treat climate financing as additionality to existing allocations. The letter also states that MoCC is the National Designated Authority regarding climate finance, and hence it should develop a framework for tracking climate finance.

[31] Climate Policy Initiative. November 2023. *Global Landscape of Climate Finance 2023*.

https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/

and planning.[32] [33]Climate Budget Tagging has been institutionalized within the federal PFM system through an SAP-based process.

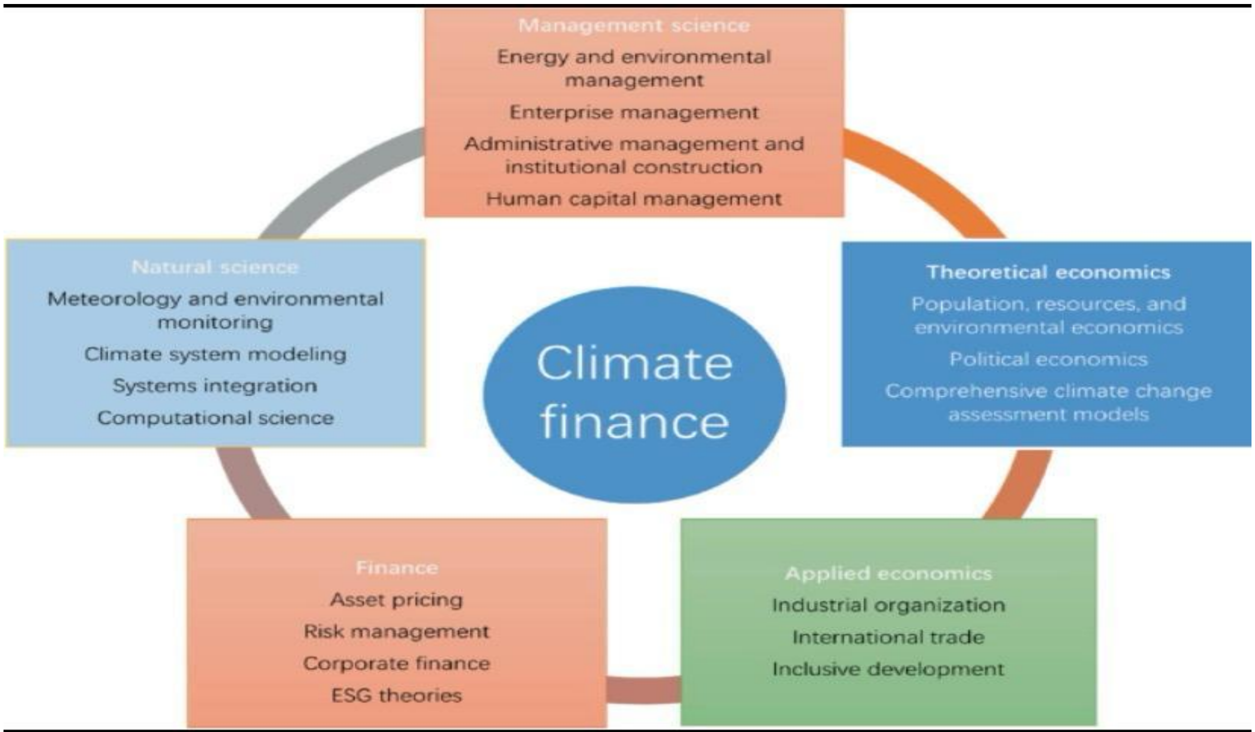

Figure 1: Complexity of Climate Finance Across Scientific, Financial, and Policy Domains

Pakistan has finalized its national green taxonomy through the **Pakistan Green Taxonomy**, marking a major step in strengthening its climate finance architecture. Notified and operationalized by the State Bank of Pakistan, the taxonomy provides a standardized framework to classify climate-aligned and environmentally sustainable economic activities across key sectors. It is being integrated into green banking, sustainable finance, and disclosure regulations, including those of the Securities and Exchange Commission of Pakistan (SECP), to guide lending, investment, and reporting practices. By improving transparency, reducing greenwashing risks, and aligning financial flows with national climate priorities, the finalized taxonomy enhances investor confidence and strengthens Pakistan's capacity to mobilize private and institutional climate finance at scale.

Pakistan is far from mobilizing its climate financing needs, both domestically and internationally, due to structural, institutional, and capacity constraints. The absence of binding fiscal mechanisms—such as dedicated climate financing within provincial budgets or incentives in the **National Finance Commission (NFC) Award** means that

[32] Budget 2025-26 from a climate lens https://www.thenews.com.pk/print/1320978-budget-2025-26-from-a-climate-lens

[33] Budget in Brief & Annual Budget Statement

substantial public resources can flow without being directed toward climate priorities, even where needs are high.

A **major barrier to scaling climate finance** is the **complex, bureaucratic, and lengthy procedures for accessing international funds**, coupled with **weak institutional capacities** to develop bankable climate projects, prepare competitive proposals, and meet stringent fiduciary requirements. This capacity gap is particularly acute at provincial and local levels, where data limitations, fragmented planning processes, limited technical expertise in emissions accounting and project design, and weak project feasibility in the PSDP and PPP regime that do not take climate assessments into consideration impede participation in global financing mechanisms.[34]

Moreover, **inadequate systems for tracking climate expenditures and greenhouse gas (GHG) data** undermine transparency and the effective use of existing resources. Although Pakistan's Third National Communication highlights substantial gaps in GHG inventory preparation, data collection, and monitoring systems, there is a growing urgency to develop an **integrated, accessible emissions repository and climate finance tracking platform** to support decision-making and investment prioritization across sectors and tiers of government.[35].

Pakistan's domestic financial landscape continues to face **structural constraints that limit the availability of long-term capital for climate action**. According to the **Economic Survey of Pakistan 2024–25**, the national savings-to-GDP ratio increased modestly to around **14.1 % in FY2025**, up from approximately **12.6 % in FY2024**, but remains low by emerging-market standards, constraining the pool of domestic resources available for climate mitigation and adaptation investments. Similarly, the investment-to-GDP ratio remained subdued at about **13.8 percent in FY2025**, only a marginal improvement over **13.1 percent in FY2024**[36], reflecting weak capital formation and limited expansion of productive capacity. External financing also remains modest, with net foreign direct investment during July–April FY2025 at around **US $1.78 billion**, underscoring Pakistan's continued difficulty in attracting stable, long-term private capital. At the same time, the shallow depth of domestic capital markets—evidenced by just **527 listed companies** on the **Pakistan Stock Exchange** as of March 2025 limits access to equity financing and green investment instruments. Collectively, these constraints reduce the country's capacity to mobilize domestic climate finance, increase reliance on concessional external flows, and weaken the scaling of green bonds, blended finance, and private-sector-led climate investments.

The reliance on foreign currency-denominated funds is a significant barrier to mobilizing climate finance, as it can have adverse effects, particularly when coupled with the expected depreciation of the Pakistani Rupee and ongoing

[34] Pakistan's 3rd National Communication on Climate Change
[35] https://cdn.climatepolicyradar.org/navigator/PAK/2025/pakistan-national-communicationnc3_4e2ccc50b2dbb9cff490f4126fa6b569.pdf?
[36] Pakistan's Economic Survey 2024-2025: Wins, warnings and what next
https://tribune.com.pk/story/2550006/pakistan-economic-survey-202425-wins-warnings-and-whats-next

political instability. These challenges create uncertainty around future policies and regulatory frameworks, discouraging long-term investment and commitment to climate projects. The potential for disruptions to impact project viability and profitability further deters investors, making it difficult to secure sustainable climate finance. There is a need to increase reliance and explore government-led measures to hedge against currency devaluation, using local currencies for needs-based financing.

Pakistan's fiscal policy is intrinsically linked to its climate challenges due to binding fiscal constraints and resource scarcity. The government is constantly struggling to navigate complex trade-offs between immediate economic needs and long-term climate resilience within a highly constrained fiscal environment. To address this situation, the NCFS seeks innovative financing mechanisms, strengthens its capacity to access and effectively utilize international and domestic climate finance, and implements gradual, well-planned reforms that balance economic growth with climate resilience.

There is a clear link between fiscal policy and Pakistan's climate challenges, primarily manifested through fiscal policy trade-offs. The country’s narrow fiscal space is further skewed by high public debt, budget deficits, and limited revenue collection. All this restricts the government's ability to allocate substantial resources to climate adaptation and mitigation efforts. As the government must make difficult choices in allocating its limited resources, the binding fiscal constraints force policymakers to respond to prioritization challenges between immediate economic needs and long-term climate resilience investments.

Pakistan's high debt burden limits its ability to borrow for climate projects, leaving the government to balance debt sustainability with the need for climate investments. As a developing country, Pakistan is eligible for various forms of international climate finance, including grants and concessional loans. In Pakistan’s experience, however, the grants, concessional loans, and budgetary support are neither sufficiently large nor predictable to help meet the country’s growing fiscal needs. Pakistan faces significant climate-related challenges that require substantial financial resources, and this creates a complex scenario wherein climate finance needs must be balanced against debt management objectives. In the context of Pakistan's debt sustainability, the country's high debt levels limit its ability to borrow additional funds for climate-related projects.

Inadequate data integration between the MoCC&EC and other key ministries has often resulted in fragmented efforts, duplication, and missed opportunities to leverage climate finance effectively. In addition to challenges with inter-ministerial coordination, provincial coordination regarding the development of bankable projects, especially in the wake of the devolved subject, that is, post 18^{th} amendment, remains weak due to the lack of capacity among provincial counterparts. While the MoCC&EC serves as the designated National Entity, provinces develop and implement localized climate action plans aligned with national strategies. It is crucial to include provinces in key environmental and climate decisions, as their involvement is vital for attracting climate finance. Since provinces can directly apply for funding from global sources, their participation in these decisions ensures that efforts complement national commitments rather than work in isolation or contradiction. Without provincial buy-in, securing and effectively utilizing climate finance becomes much more challenging. The lack of coordination is most evident in the energy sector, which, despite being the largest recipient of climate finance, still has not fully aligned its policies and action plans with Pakistan's climate targets.

Local governments are not fully operational, and their functionality varies across provinces. It is crucial to operationalize local governments and connect them with provincial and federal authorities to implement bottom-up approaches for addressing climate disasters. In developing countries such as Pakistan, cities and municipalities play a key role in tackling climate change. Additionally, urban climate finance tends to focus more on mitigation rather than adaptation. Key factors contributing to low urban climate finance outcomes include national governance and fiscal structures, lack of technical and financial capacity, control over resources, workable funding models, the capacity of cities to plan and manage finances, and the alignment of city-level investments with appropriate climate finance instruments.

While the foundation for an elaborate climate finance ecosystem exists, it requires greater coherence and coordination. A key challenge is encouraging banks and other financial institutions to expand their climate-related portfolios and motivating corporations to actively explore climate finance. One significant barrier is the weak institutional capacity of private sector investors. Domestic investors in Pakistan often lack the expertise needed for green transformation and the development of climate finance strategies based on climate risk and modeling.

Several factors hinder effective collaboration between the government and the private sector on climate change in Pakistan. Policy inconsistency creates uncertainty for businesses, discouraging long-term investments in climate solutions. The government has not provided sufficient financial or regulatory incentives to encourage private sector participation in climate initiatives. There is a lack of reliable, sector-specific data on climate risks and opportunities, making it difficult for businesses to make informed decisions. Both government agencies and private companies often lack the technical expertise and resources to develop and implement effective climate strategies. Additionally, climate-related initiatives are often implemented in silos within different government departments and business sectors, limiting synergies and knowledge sharing.

The difficulty in pricing climate risk is hindering the effective implementation of climate strategies. Pricing climate risk is essential for attracting private investment. Without clear policies and regulations that internalize the benefits of climate mitigation and adaptation, making a compelling business case for financing climate projects becomes challenging. Establishing dedicated regulatory frameworks could help overcome this barrier by clearly valuing mitigation and adaptation benefits and illustrating the costs associated with inaction, thereby encouraging private sector participation.

Additionally, gaps in data availability and quality severely limit Pakistan's ability to formulate effective climate strategies. Reliable climate data, such as historical records and localized projections, are crucial for assessing specific risks and vulnerabilities. The lack of capacity and expertise to create well-defined project pipelines further complicates the situation, as MDBs and climate funds require detailed proposals that many developing nations are unable to produce. Accreditation barriers also restrict access to vital climate funding, while limited engagement with local organizations prevents climate finance from being effectively targeted and implemented at the community level. Addressing these interconnected challenges is essential for successfully mobilizing resources and implementing a comprehensive climate finance strategy.

Pakistan is still in the process of developing sector-specific or provincial targets and priorities, and no official assessment of the climate finance system is currently available that covers all public, development, and private financial institutional stakeholders and sources of finance, such as federal budgets, MDBs, commercial banks, and equity houses. While grants, concessional loans, and budgetary contributions are preferred by Pakistan, publicly available documents have not listed or analysed other financial instruments or established a hierarchy of preferences for them across various sectors or public investment priorities; these may include debt swaps, corporate debt, equity, green bonds, sukuks, or other potentially available instruments. Such additional options require an improved policy and regulatory environment, market readiness, and the necessary technical capacity and expertise. As the NDCs, NAP, NCCP, and specific-sector financial estimates are eventually developed, these can be linked with potential sources of financing and available financial instruments or aligned with policy and regulatory incentives. It is therefore anticipated that future editions of the NCFS will connect national and sectoral priorities and projects specifically to climate finance sources, instruments, and approaches. This will help guide or channel investments to the specific areas and pipelines where they are needed and support the implementation of NDC, NAP, and NCCP.

Fragmented climate finance flows significantly weaken national negotiating power because resources are channeled through multiple bilateral, multilateral, and private mechanisms without a unified national tracking and reporting framework. In the absence of consolidated data aligned with reporting requirements under the UNFCCC, countries are unable to present a coherent picture of actual needs, gaps, and absorptive capacity. In Pakistan’s case, climate finance is routed through diverse institutions and projects, often operating in silos, with limited coordination led by MoCC&EC. This lack of standardized reporting and centralized oversight undermines transparency, weakens evidence-based advocacy, and reduces credibility in international negotiations. As a result, fragmented flows constrain the country’s ability to negotiate for predictable, scaled-up, and needs-based finance, while also limiting strategic planning, accountability, and long-term alignment with national climate priorities.

- The 18th Constitutional Amendment in Pakistan transferred a broad range of responsibilities, including environmental management, to the provincial level. This devolution has resulted in overlapping mandates and inconsistencies across provinces. A key tension arises from the fact that while the federal government is tasked with fulfilling international climate commitments and coordinating carbon markets, provincial governments retain control over critical carbon assets, including forests, land use, and agricultural practices. This misalignment has raised concerns around authority, accountability, and revenue-sharing, creating potential for conflict.
- A critical gap in Pakistan's climate finance architecture is the absence of a nationally agreed and operational definition of climate finance, aligned with international standards such as those used under the UNFCCC and multilateral development banks, which undermines consistent tracking, prioritization, and accountability.
- Establishing a clear national climate finance definition supported by mandatory eligibility criteria, screening standards, and tagging rules is therefore essential to ensure that public and international funds are systematically diverted toward priority adaptation and mitigation needs across all provinces. Such a framework would also strengthen transparency, enhance credibility with international partners, and enable more equitable and needs-based distribution of projects and financing throughout the country, in line with emerging global best practices.

Pakistan has made significant progress in integrating climate considerations into public financial management systems, including climate budget tagging, climate screening, and climate budget reporting. Building on this foundation, the NCFS focuses on expanding climate finance tracking and mobilization beyond budgetary systems to include international, private, and blended finance flows, while strengthening, rather than duplicating, existing institutional and financial mechanisms.

1.4 Strategic Objectives of NCFS

Pakistan's National Climate Finance Strategy aligns with ongoing macro-fiscal and structural reform efforts under the **IMF's Resilience and Sustainability Facility (RSF)**. The RSF helps integrate climate considerations into **public financial management**, including **climate-informed public investment management**, **climate budget tagging**, and improved transparency in **climate finance reporting**.

The **NCFS** implements these reforms by introducing standardized climate screening frameworks, creating an integrated climate finance platform, and strengthening institutional coordination across federal and provincial levels. This alignment ensures that climate finance reforms are incorporated into broader fiscal sustainability and governance frameworks.

Nevertheless, the **primary goal** of the NCFS is to **mobilize, align, and scale climate finance** through **a nationally owned, constitutionally aligned, outcome-driven framework** that supports Pakistan's NDCs, NAP, NCAP, and NCCP.

Based on the primary goal, the NCFS has the following objectives:

1. Strengthen Climate Finance Coordination and Governance to establish a whole-of-government climate finance governance framework that clarifies federal, provincial, and sectoral roles post-18th Constitutional Amendment.
2. To align public financial management[37]t and developmental planning with climate priorities with NDC 3.0 and NAP by climate-proofing sectoral policies.
3. Build on and expand existing CBT to include non-budget climate finance, including developing climate tagging of institutionalization of bilateral, multi-lateral, and private (PPPs, etc.) financing.
4. Mobilize and manage international and domestic climate finance strategically by operationalizing a National Climate Fund with direct access accreditation, improving readiness for multilateral climate funds, and ensuring alignment of external finance with national priorities and results frameworks.
5. Catalyze climate finance sourced from the private sector to enable large-scale private investment in climate action by removing market and policy barriers, introducing green taxonomy and green banking frameworks, and piloting risk-sharing and blended finance instruments.
6. Foster green entrepreneurship by identifying and nurturing a pipeline of green startups through university-commercialization linkages, which catalyze market-ready climate solutions aligned with Pakistan's NDCs and development priorities.
7. Strengthen a robust pipeline of carbon projects aligned with NDCs, NAP, and SDGs by linking the carbon project pipelines to financing sources and delivery mechanisms.
8. Enhance transparency, data, and accountability by operationalizing integrated climate finance tracking, reporting, and disclosure systems, including the Country Platform (Pakistan Climate Action Integrated Platform), to support evidence-based decision-making and results verification.
9. Strengthen institutional capacity for climate finance mobilization and delivery within MoCC&EC, its attached departments and bodies, including its provincial counterparts.

[37] A consolidated overview of key international climate finance windows and instruments available to Pakistan is provided in Annex 3 to support strategic access and pipeline development.

Chapter 2: Operational Mandate and Strategic Pillars

2.1 Operational Mandate

The National Climate Finance Strategy (NCFS) operationalizes Pakistan's climate commitments under the national and international frameworks, particularly NDC 3.0. It provides a structured framework to align climate finance with constitutional responsibilities, national development planning, and measurable implementation systems.

The NCFS mandate is to:

- Align climate finance flows with mitigation and adaptation targets
- Ensure federal–provincial coordination consistent with the 18th Constitutional Amendment
- Institutionalize climate finance tracking within public financial management systems
- Build an integrated ecosystem for project pipeline development
- Diversify domestic and private sector climate finance sources
- Establish measurable governance and monitoring frameworks

The NCFS strengthens existing institutions rather than creating parallel structures and focuses on systemic reforms that enable sustainable climate finance mobilization. While section 2.3 delineates the strategic pillars of this document, the ensuing section briefly describes the Global nature of Climate Finance Architecture

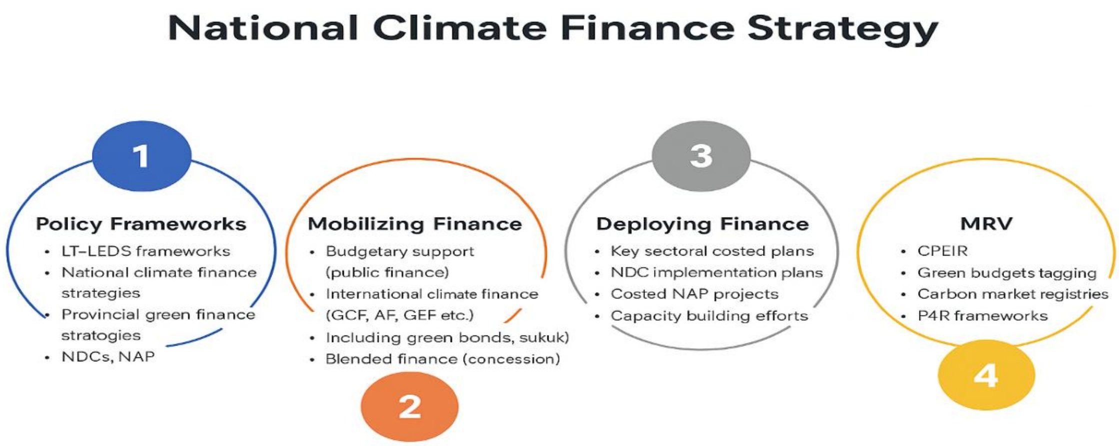

Figure 2: A Schematic View of the Revised NCFS 2026

2.2 Global Climate Finance Architecture

Global climate finance is delivered through a complex architecture of bilateral, multilateral, and private financial mechanisms. Multilateral climate funds operating under and outside the UNFCCC, along with development banks and bilateral agencies, constitute the primary channels through which climate finance flows from contributors to recipient countries. Figure X illustrates the global climate finance architecture and the major institutional channels through which resources are mobilized and delivered.

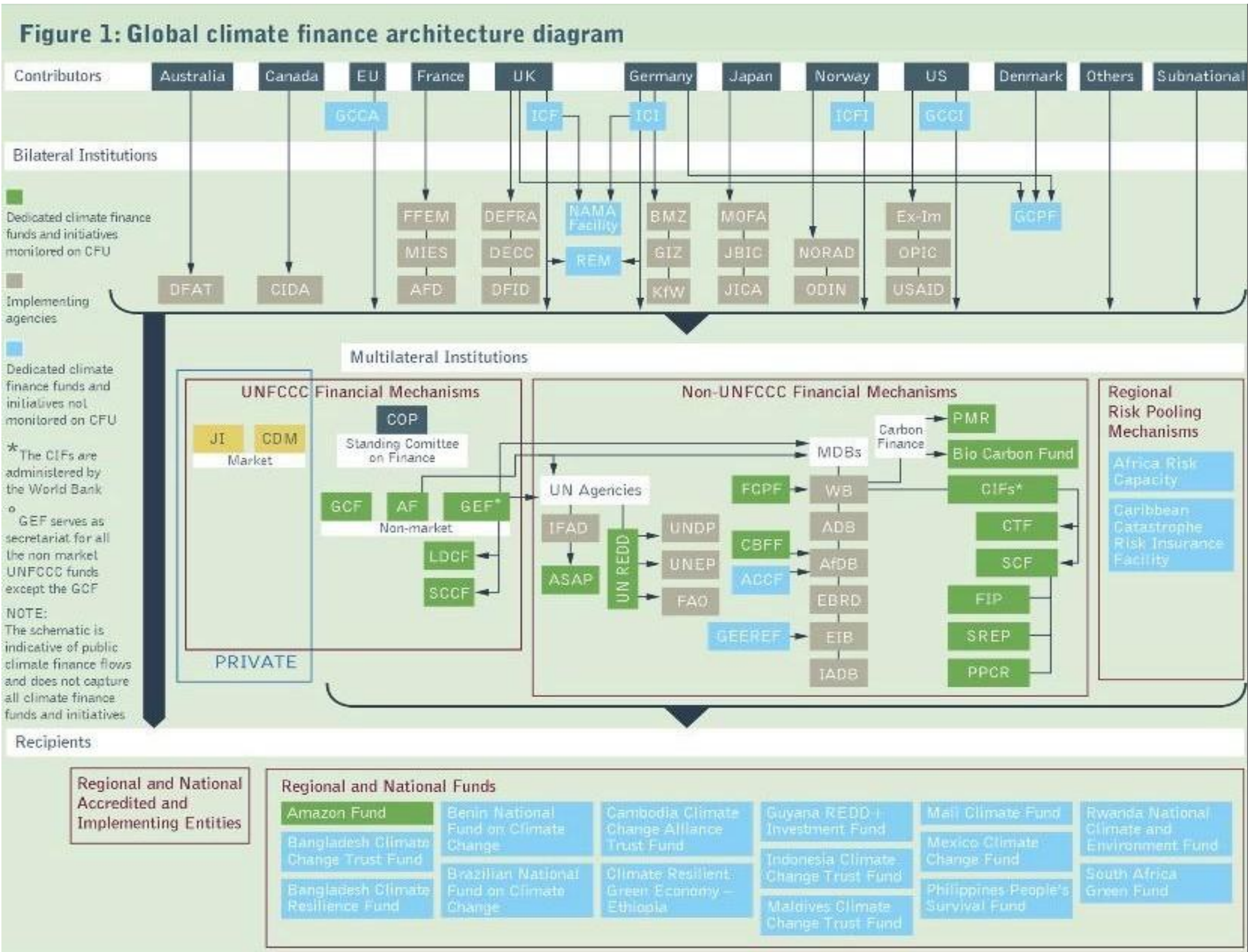

Figure 3: The Global Climate Finance Architecture

2.3 Strategic Pillars

Pillar 1: Financial Needs Assessment

A. Rationale

Pakistan's NDC 3.0 commits to reducing projected greenhouse gas emissions by 50% till 2035, with 17% unconditional and 33% conditional upon international finance. The total estimated investment requirement exceeds USD 565.7 Bn by 2035 for mitigation and adaptation.

While Pakistan has made significant progress in climate budget tagging and reporting for public expenditures, gaps remain in tracking non-budgetary climate finance, including international, private, and PPP flows. There is no mechanism to have a streamlined source of information on how much financing has been captured as green financing from all these resources.

Without consolidating tagging systems, Pakistan cannot credibly quantify conditional finance needs, assess domestic co-financing, or demonstrate progress under international reporting obligations.

B. Strategic Focus Areas

• National climate finance definition and taxonomy
• NDC 3.0 sectoral financial gap validation
• Climate budget tagging integration
• Climate fiscal risk assessment
• A phased and coordinated approach will be adopted in collaboration with ongoing provincial initiatives.

C. Key Actions

Table 3: Modalities to achieve the targets of pillar 1

Action	Lead Institution	Timeline	Output Indicator
Notify National Climate Finance Taxonomy aligned with NDC sectors.	MoCC&EC, PCCA & MoF	12 months	Gazette notification issued
Fully integrate climate change into Development Projects.	Ministry of Planning	18 months	Manual notified
Build on and expand existing CBT to include non-budget climate finance	Ministry of Finance, MoCC, PCCA	12 months	Climate Budget Statement annexed
Conduct validated NDC 3.0 sector-wise costing and financing gap analysis.	MoCC & EC & GCISC	12 months	Published gap assessment
Gap Analysis and fully integrate Climate Fiscal Risk Assessment into the Medium-Term Fiscal Framework.	Ministry of Finance	18 months	Climate fiscal risk annex included

D. Expected Outcomes

Climate finance becomes visible, standardized, and measurable across federal and provincial budgets. Fiscal planning aligns with NDC 3.0 commitments. Pakistan strengthens credibility in international negotiations and improves evidence-based resource mobilization.

Pillar 2: Focus Areas – Adaptation, Mitigation, and Resilience

A. Rationale

National frameworks, including the NDC 3.0, the National Adaptation Plan (NAP), the National Climate Change Policy (NCCP), and the National Clean Air Plan (NCAP), identified priority sectors requiring investment in renewable energy, transport decarbonization, resilient agriculture, water security, disaster risk reduction, and ecosystem restoration.

Public investment processes remain largely project-driven and do not systematically integrate climate risk screening or outcome-based prioritization. Institutional responsibilities across federal and provincial tiers require clearer operational alignment.

This pillar translates policy commitments into prioritized and climate-proofed investment pathways.

B. Strategic Focus Areas

- Sector prioritization aligned with NDC, NAP, NCCP, NCAP
- Climate risk screening in PSDP and ADPs
- Federal–provincial responsibility matrix
- Resilient infrastructure standards
- Outcome-based investment logic

C. Key Actions

Table 4: Modalities to achieve the targets of pillar 2

Action	Lead Institution	Timeline	Output Indicator
Conduct a structured capacity-building programme on the application of the 2024 Climate Appraisal Guidelines and associated tools across federal ministries and provinces	Planning Commission (with PCCA support)	18 months	National training programme launched and completed across key ministries and provinces.
Establish a National Climate Data & Risk Repository to support project appraisal, vulnerability assessment, and fiscal risk analysis.	MoCC&EC & PCCA (with PMD, NDMA & Provinces)	18–24 months	The centralized climate data repository is operational and accessible to federal and provincial entities.
Further Strengthening Federal–Provincial Climate Responsibility Matrix	MoCC&EC, PCCC & PCCA Secretariat	12 months	Approved matrix
Issue National Climate-Resilient Infrastructure Guidelines	MoCC & EC	18 months	Guidelines notified
Integrate NDC/NAP/NCCP/NCAP sector targets into the next 5-Year Development Plan. Adaptation prioritization will be guided by NAP costing and climate investment metrics.	GCISC & Planning Commission	24 months	Climate-aligned plan published

Strengthening District Adaptation/Climate Action Planning	MoCC &EC, Provinces through PCCA and Local Government	36 months	District-level climate adaptation plans prepared and notified
Integrate gender and social inclusion criteria into climate budget tagging and project screening frameworks.	MoF / Planning Commission / PCCA	12 months	Inclusion criteria were formally adopted in CBT and screening guidelines.

D. Expected Outcomes

Public investments reflect climate risk-adjusted planning. Federal and provincial roles are clarified. Infrastructure development integrates resilience standards. Sectoral investment decisions align with measurable national climate targets.

Pillar 3: Ecosystem Development & Project Pipeline Creation

A. Rationale

While the governance architecture for climate finance is defined separately, effective mobilization of climate finance requires an operational ecosystem that integrates public institutions, provinces, financial sector actors, academia, development partners, and the private sector.

At present, climate-related initiatives are fragmented across ministries and provinces, project concepts are not systematically screened for readiness, and there is no integrated digital platform consolidating data, pipeline status, reporting, and learning.

To transition from institutional arrangements to functional delivery, a Whole-of-Stakeholders approach is required to a) improve coordination beyond formal committees, b) strengthen technical screening and safeguards, c) enhance project preparation and bankability, d) digitize monitoring, evaluation, research, and learning (MERL), and consolidate climate finance data and pipeline information.

The Pakistan Climate Change Authority (PCCA), as the Technical Secretariat under the national governance structure, will operationalize this ecosystem through standardized systems, digital platforms, and structured pipeline development.

This pillar focuses on activating the climate finance ecosystem and improving project readiness rather than establishing governance bodies.

B. Strategic Focus Areas

- Whole-of-Stakeholders approach
- Integrated Climate Action Platform
- PCCA as Technical Secretariat (operational role
- Standardized climate project screening standards
- Operationalization of Pakistan Climate Change Fund
- Inclusive climate finance and community-based engagement, including Loss & Damage mechanisms
- Structured climate project pipeline development

C. Key Actions

Table 5: Modalities to achieve the targets of pillar 3

Action	Lead Institution	Timeline	Output Indicator

Develop a Whole-of-Stakeholders engagement framework integrating federal ministries, provinces, financial institutions, academia, and private sector actors	PCCA	12 months	Stakeholder engagement framework approved
Launch the Integrated Climate Action Platform/Country Platform[38], consolidating project pipeline, climate finance data, and MERL functions	PCCA & CFU MoCC & EC	12 months	Platform operational and accessible to stakeholders
Develop and adopt National Climate Project Screening Standards aligned with NDC and international safeguards	PCCA	12 months	Screening standards formally adopted
Establish a structured national climate project pipeline[39] linked to priority sectors and NDC pathways	PCCA & Line Ministries	18 months	National pipeline repository established
Operationalize Pakistan Climate Change Fund (PCCF) to support project preparation, co-financing, and climate finance partnerships	PCCA & MoCC & EC	1 months	PCCF notified
Provide structured project preparation and readiness support to ministries and provinces (initially GCF-focused, expandable to other funds)	PCCA	24 months	Number of projects supported for international submission
Align NCFS implementation with IMF RSF reform actions on climate-informed PFM, including screening, tagging, and reporting systems	MoCC&EC, MOPD MoF, Provinces	12 months	RSF-aligned reform actions integrated into NCFS reporting
Facilitate engagement of community-based organizations (CBOs) for registration as Organizations, Bodies, Networks, and Experts (OBNEs) under the Santiago Network to enhance access to technical assistance on Loss and Damage	MoCC&EC PCCA	12 months	Number of CBOs supported for OBNE registration

D. Expected Outcomes

[38] A consolidated overview of key international climate finance windows and instruments available to Pakistan is provided in Annex 3 to support strategic access and pipeline development.

40 CVF has developed the Climate Prosperity Plan, which includes an initial list of Projects for review by the lead institutions. See Annex-2. The Climate Vulnerable Forum (CVF) and V20 Group have pioneered Climate Prosperity Plans (CPPs) as a flagship initiative to help climate-vulnerable countries turn climate risks into bankable investment opportunities. A CPP goes beyond a traditional planning document by offering a multi-phase national strategy that combines climate action, economic development, and nature-based solutions. It includes macroeconomic modeling across different development scenarios, outlines green industrial policies and supportive regulatory frameworks, and identifies a prioritized pipeline of catalytic projects with financing options. Countries like Bangladesh, Sri Lanka, and Ghana have already developed CPPs, with ongoing efforts in Pakistan, reflecting a move toward investment-driven, climate-resilient growth strategies.

• Functional climate finance ecosystem beyond formal governance
• Improved project quality and safeguard compliance
• Reduced fragmentation across institutions
• Bankable climate project pipeline aligned with NDC priorities
• Digitized tracking and reporting of climate finance flows
• Enhanced readiness for multilateral and bilateral climate finance

Pillar 4: Domestic Resource Mobilization, Market Mechanisms & Private Capital Leverage

A. Rationale

While governance structures for climate finance are being institutionalized, Pakistan must simultaneously expand domestic resource mobilization and unlock private capital to reduce dependence on external climate finance flows.

The Pakistan Climate Change Fund (PCCF) must evolve beyond a governance framework into an active mobilization and partnership platform capable of pooling domestic and international capital.

Similarly, although carbon market guidelines have been approved, operational readiness, including rules notification, registry development, project pipeline preparation, and ecosystem strengthening, remains incomplete.

Additionally, Pakistan's Public–Private Partnership (PPP) frameworks at both federal and provincial levels provide an important opportunity to mobilize private capital for climate-resilient infrastructure and low-carbon investments. While PPP frameworks exist across provinces and at the federal level, implementation remains fragmented across sectors and jurisdictions. Integrating climate considerations into PPP pipelines and strengthening coordination between PPP units and climate finance institutions can significantly expand investment in climate-aligned infrastructure, including renewable energy, resilient transport, water management, and urban services.

To support NAP implementation, Pakistan must:

- Activate Article 6 market participation
- Create revenue recycling mechanisms
- Expand innovative financial instruments
- Introduce fiscal and tax incentives for private investment
- De-risk climate projects through blended finance

The operationalization of innovative climate finance instruments under this pillar will follow a phased and sequenced approach. In the short term, priority will be given to establishing enabling regulatory and institutional frameworks for instruments such as green bonds, sustainability-linked finance, blended finance facilities, and carbon market operationalization. In the medium term, the focus will shift toward deployment of risk-sharing mechanisms, co-financing windows through the Pakistan Climate Change Fund (PCCF), climate-aligned Public–Private Partnerships (PPPs), and development of bankable investment pipelines. Over the longer term, the strategy aims to scale market-based climate finance mechanisms, including carbon markets, resilience-linked financial instruments, climate-focused investment vehicles, and private capital mobilization platforms to support sustained low-carbon and climate-resilient development.

This pillar therefore, focuses on market activation, domestic resource mobilization, and capital leverage through coordinated public and private sector action.

B. Strategic Focus Area

- PCCF resource mobilization and partnership platform
- Article 6 operational readiness (rules, registry, pipeline)
- Carbon revenue recycling mechanisms, blended finance, and risk-sharing instruments
- Sovereign and sub-sovereign green bond frameworks
- Climate-related tax incentives and fiscal instruments

- Leveraging private capital through regulatory signals
- Green Public-Private Partnerships (PPPs)
- Phased operationalization of innovative climate finance instruments and market mechanisms
- Phased operationalization roadmap for innovative climate finance instruments

C. Key Actions

Table 6: Modalities to achieve the targets of pillar 4

Action	Lead Institution	Timeline	Output Indicator
Develop PCCF Resource Mobilization Strategy, including domestic, philanthropic, and MDB partnership windows	PCCA, CFU, MoCC & EC, & MoF	12 months	Mobilization strategy approved
Establish a PCCF co-financing window to support bankable climate projects	PCCA & MoF	18 months	Co-financing window operational
Notify Carbon Market Rules under approved guidelines	MoCC&EC	06 months	Rules officially notified
Develop and operationalize the National Carbon Registry	MoCC&EC	18 months	Registry functional
Develop a national pipeline of Article 6 eligible mitigation projects	MoCC&EC & Line Ministries	18 months	Pipeline published
Issue Carbon Revenue Recycling Framework to reinvest proceeds into adaptation and resilience	MoF	18 months	Framework approved
Design Blended Finance Risk-Sharing Facility in collaboration with SBP & DFIs	MoF & SBP	24 months	Facility structure approved
Develop Green Bond & Sustainability-Linked Bond issuance guidelines (federal and provincial)	MoF & SBP	18 months	Issuance framework notified
Introduce climate-aligned tax incentives for the private sector (e.g., accelerated depreciation for green technologies)	FBR & MoF	24 months	Tax amendment proposal submitted
Issue regulatory guidance encouraging financial institutions to scale climate lending portfolios	SBP	18 months	SBP circular issued
Develop Climate-Aligned PPP Guidelines and integrate climate-resilient infrastructure projects into federal and provincial PPP pipelines	Ministry of Finance, Planning Commission & Provincial PPP Units	18 months	Climate appraisal guidance incorporated into PPP frameworks

D. Expected Outcomes

• PCCF transitions from passive fund structure to active mobilization platform
• Article 6 participation becomes operational rather than conceptual
• Carbon revenue recycling enhances adaptation financing
• Private capital mobilization increases through risk-sharing mechanisms
• Climate-aligned tax architecture incentivizes private investment
• Financial sector integrates climate into core lending practices
• Pakistan improves the leverage ratio of domestic-to-international finance

• PCCF transitions from passive fund structure to active mobilization platform
• Article 6 participation becomes operational rather than conceptual
• Carbon revenue recycling enhances adaptation financing
• Private capital mobilization increases through risk-sharing mechanisms
• Climate-aligned tax architecture incentivizes private investment
• Financial sector integrates climate into core lending practices
• Pakistan improves the leverage ratio of domestic-to-international finance

Pillar 5: Innovation, Green Startups, Green University & Shark Tank Mechanism

A. Rationale

Pakistan's transition toward a low-carbon, climate-resilient economy requires not only financial mobilization but also structural transformation of skills, innovation systems, and entrepreneurial ecosystems. Climate change presents both risks and economic opportunities. Harnessing these opportunities requires investment in green skills, research, technology transfer, and startup acceleration mechanisms.

Pakistan’s youth population, expanding digital ecosystem, and growing entrepreneurial base provide a strong foundation for green growth. However, structural gaps persist, including limited green skills mapping, weak research-to-market linkages, fragmented investor networks, limited commercialization support, and inadequate access to early-stage climate finance.

The Green Growth Strategy under the NCFS aims to mainstream sustainability across education, research, industry, and entrepreneurship by:

- Developing green human capital,
- Strengthening research and technology transfer,
- Supporting green startups and innovation ecosystems,
- Catalyzing private investment into climate-smart enterprises.

This pillar aligns with Pakistan’s commitments under the Paris Agreement (Articles 6, 10, and 11), the Sustainable Development Goals (SDGs 4, 7, 9, 13, and 17), and the Just Transition agenda.

The strategy does not seek to create isolated institutions but to establish coordinated mechanisms that link universities, industry, government, investors, and development partners into a functioning green growth ecosystem.

B. Strategic Focus Areas

- Establishment of a Green University as a national hub for green skills, research, and innovation
- Development of a National Green Skills Action Plan
- Strengthening GHG inventory, MRV, and data analytics capacities
- Promotion of technology transfer and localization of green solutions
- Launch of a National Green Startup Innovation Challenge (Shark Tank Model)
- Establishment of a Green Research & Innovation Fund (PCCF-linked or an independent fund)
- Strengthening incubators, accelerators, and investor linkages
- Embedding green competencies within STEM, TVET, and higher education systems
- Public-private-academia partnerships for commercialization and job creation

C. Key Actions

Table 7: Modalities to Achieve Targets of Pillar 5

Action	Lead Institution	Timeline	Output Indicator

Develop Green Skills Action Plan	MoCC&EC (with GCISC & HEC support)	9 months	Action Plan published
Notify framework for Green University (institutional model & governance)	MoCC&EC	12 months	Framework approved
Establish GCISC as a focal coordination hub	MoCC&EC	6 months	Notification issued
Launch National Green Startup Innovation Challenge (NGSIC)	MoCC&EC with private sector partners	12 months	First national competition held
Develop operational guidelines for Green Research & Innovation Fund	MoCC&EC / PCCA	9 months	Fund framework approved
Integrate green competencies into NSQF & TVET curricula	NAVTTC / TEVTAs	18 months	Revised curriculum issued
Establish formal collaboration agreements with foreign universities	MoCC&EC / HEC	12 months	MoUs signed
Develop a national capacity-building program through partnerships with the private sector, academia, and development partners to minimize fiscal burden	MoCC&EC / GCISC	12 months	Training modules operational
Establish an investor engagement platform for green startups	MoCC&EC / Private Sector	12 months	Investor roundtable conducted
Develop targeted capacity-building programs on gender-responsive climate finance and inclusive project design	PCCA / MoCC&EC / Provinces	12–18 months	Training programs delivered; gender-responsive guidelines issued

Note: These are institutional activation steps, and not fiscal commitments.

D. Expected Outcomes

- National green skills framework operational.
- Strengthened national gender-based capacity in Green intervention/ businesses/ startups.
- Institutionalized innovation pipeline linking academia and industry.

- Functioning national-level startup pitching and investment platform.
- Improved commercialization of climate-smart technologies.
- Increased private-sector engagement in green entrepreneurship.
- Enhanced youth employment opportunities in green sectors.
- Strengthened compliance with international reporting and transparency obligations.

Chapter 3: Implementation Mechanism

3.1 Governance Architecture

Implementation of the National Climate Finance Strategy (NCFS) is anchored within Pakistan's existing institutional framework established under the Pakistan Climate Change Act 2017 and the country's public finance and development planning systems. The governance architecture aims to strengthen coordination, technical rigor, and financial mobilization while respecting constitutional mandates and provincial autonomy.

The framework establishes clear roles across four levels: political oversight, policy coordination, technical coordination, and implementation. This arrangement ensures that climate finance priorities are aligned with national development planning, sectoral strategies, and provincial actions.

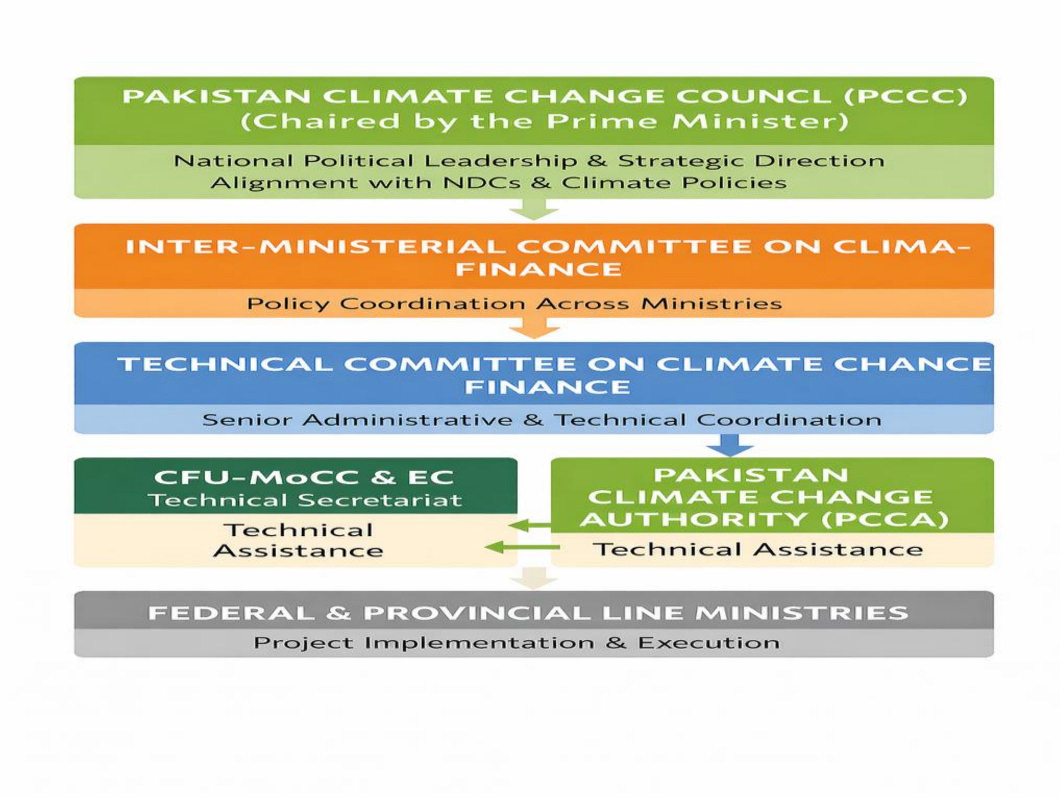

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Figure 4: Governance Architecture for National Climate Finance Strategy

At the apex of the governance structure is the **Pakistan Climate Change Council (PCCC)**, chaired by the Prime Minister. The Council provides national political leadership and strategic direction on climate policy and finance, ensuring alignment with Pakistan's international commitments, including the Nationally Determined Contributions (NDCs) and national climate policy frameworks.

Beneath the Council, an **Inter-Ministerial Committee** comprising key federal ministers provides policy-level coordination across ministries responsible for finance, planning, and climate-related sectors. This mechanism ensures alignment between climate priorities and national economic and fiscal decision-making processes.

Operational coordination is carried out through the **Technical Committee on Climate Change Finance (TCCF)**, which functions at the senior administrative and technical level. The TCCF brings together representatives from federal ministries, provincial governments, and co-opted experts to support the development of standards, screening criteria, and prioritization mechanisms for climate finance investments. The committee also serves as a coordination platform for aligning sectoral pipelines with national climate finance priorities.

CFU-MoCC & EC will serve as the technical secretariat, whereas the **Pakistan Climate Change Authority (PCCA)** shall provide technical assistance. In this capacity, PCCA provides technical support to the climate finance governance system and facilitates coordination across ministries, provinces, and development partners. Its functions include supporting project pipeline development, maintaining technical standards and safeguards frameworks, facilitating capacity-building activities, and operating digital monitoring systems.

In addition, pursuant to Section 12 of the Pakistan Climate Change Act 2017, PCCA manages the **Pakistan Climate Change Fund (PCCF)**. Under the NCFS framework, the PCCF serves as a national climate finance vehicle to mobilize domestic and international resources, support project preparation, and provide catalytic co-financing for priority climate investments.

Technical support to the governance system is further strengthened through **Technical Working Groups (TWGs)**. At the federal level, sector-specific TWGs will be notified by the Pakistan Climate Change Council to provide technical inputs on sectoral climate finance priorities and project development. At the provincial level, governments have already notified Technical Working Groups within their respective jurisdictions. These provincial groups support coordination among sector departments and contribute to identifying and preparing climate-relevant projects.

Federal and provincial line ministries remain responsible for identifying and implementing climate-related investments within their respective mandates. The NCFS therefore does not centralize implementation authority but strengthens coordination, prioritization, and monitoring of climate finance activities across the government system.

Through this governance architecture, the NCFS integrates climate finance planning into Pakistan's existing policy, budgeting, and development frameworks while strengthening institutional capacity to mobilize and effectively utilize climate finance. The governance structure builds on existing institutional arrangements and minimizes additional administrative layers.

Table 8: Institutional Responsibilities under the Governance Architecture of NCFS

Level	Institution / Entity	Composition	Role under NCFS	Key Outputs

Political Oversight	**Pakistan Climate Change Council (PCCC)**	Federal & Provincial leadership	Provides national political direction and ownership of the climate finance agenda	Strategic guidance; annual performance review
Policy Coordination	**Inter-Ministerial Coordination Mechanism (Chaired by MoCC&EC)**	MoCC&EC, MoF, MOPD & SI, EAD, and relevant federal ministries	Aligns climate finance priorities with policy, budgeting, and development planning systems	Endorsed national climate finance priorities
Technical Coordination	**Technical Committee for Climate Finance (TCCF)**	Technical representatives from ministries, provincial focal points, experts, and **PCCA as Co-opted Members**	Develops climate finance definitions, screening standards, and prioritization criteria	Validated pipeline; technical standards
CFU-MoCC & EC	**Technical Secretariate**	Support provided for TCCF, the Interministerial committee, and PCCC	Technical working paper, coordination/meetings, any other task assigned	
Technical Assistance & Fund Management	**Pakistan Climate Change Authority (PCCA)** **Pakistan Climate Change Fund (PCCF)** (managed by PCCA)	Statutory body under the Climate Change Act 2017 Public climate fund under Section 12 of the Act	Serves as a technical entity, and manages operational coordination; administers the **Pakistan Climate Change Fund (PCCF)** Mobilizes domestic and external climate finance; supports priority mitigation and adaptation actions	Consolidated project pipeline; MERL operation; PCCF mobilization and allocation reports Co-financing support; domestic

				equity signaling
Implementation Layer (Federal)	Federal Line Ministries & Agencies	Sector ministries (Water, Energy, Agriculture, Industry, Transport, Housing, etc.)	Develop and implement climate-aligned sector projects	PC-I/Project CNs submissions; sector pipelines
Implementation Layer (Provincial)	Provincial Governments & Departments	Provincial P&D, Finance, sector departments	Identify, prioritize, and implement provincial climate actions	Provincial project pipelines
Provincial Climate Funds	Provincial Climate / Green Funds (where established)	Province-managed climate financing instruments	Mobilize and allocate provincial climate resources; co-finance local priorities.	Provincial co-financing; local investment leverage
Monitoring & Learning	Digital MERL System (Operated by PCCA/CFU)	National digital platform/dashboard at MoCC	Tracks finance flows, implementation progress, and climate outcomes	Annual climate finance report, dashboard, and track other enabling conditions

3.2 Pakistan Climate Action Integrated Platform

To operationalize coordination and transparency in climate finance management, the NCFS proposes the establishment of a **Pakistan Climate Action Integrated Platform**, functioning as the national **Country Platform**.

The platform will serve as a digital and institutional mechanism to consolidate climate finance information, facilitate coordination among stakeholders, and support the development of a national pipeline of climate investments aligned with Pakistan's climate commitments.

The platform will be developed and operated by the **Pakistan Climate Change Authority (PCCA)** in coordination with the Climate Finance Unit (CFU)-MoCC & EC in its capacity as Technical Secretariat to the climate finance governance system. Additionally, the platform will build on and integrate with existing public financial management systems, including CBT, to expand coverage to non-budget climate finance

The Integrated Platform will perform four primary functions.

First, it will serve as a **central repository for climate project pipelines**, consolidating project proposals from federal ministries, provincial governments, and relevant institutions. This will allow policymakers and development partners to identify priority investments aligned with national climate objectives.

Third, the platform will facilitate **coordination across public institutions, development partners, financial institutions, and private sector stakeholders**, improving information sharing and reducing fragmentation in climate finance activities.

Fourth, the platform will integrate **monitoring, reporting, and knowledge management functions** to support evidence-based decision-making and strengthen transparency in climate finance management.

Project proposals originating from federal ministries or provincial governments will be uploaded to the platform and reviewed against established screening standards. Following technical review and prioritization through the governance system, projects may be supported for further development, financing, or inclusion in national investment pipelines.

The platform will also facilitate alignment with Pakistan's **public investment and external financing systems**, including:

- the Public Sector Development Programme (PSDP)
- PC-I project approval processes
- external financing negotiations through the Economic Affairs Division (EAD)

By integrating these systems, the Country Platform will help ensure that climate finance priorities are embedded within Pakistan's broader development planning and budgeting processes.

3.3 Monitoring, Evaluation, Reporting, and Learning (MERL)

Monitoring, Evaluation, Reporting, and Learning (MERL) will be integrated within the Pakistan Climate Action Integrated Platform to strengthen transparency, accountability, and evidence-based decision-making in climate finance management.

The MERL system will function as a **digital dashboard and reporting system** operated by the Pakistan Climate Change Authority. It will track climate finance flows, project implementation progress, and institutional actions under the NCFS.

The MERL framework will support three key monitoring functions.

First, it will track the **implementation of the national climate interventions**, monitoring institutional milestones such as policy notifications, framework development, institutional activation, and operationalization of climate finance mechanisms.

Second, it will support **tracking of climate finance flows** across federal and provincial governments. This will be aligned with Pakistan's climate budget tagging system and other public financial management tools to improve transparency in reporting climate-related expenditures.

The NCFS proposes the development of an integrated climate finance tracking and reporting mechanism, building on existing public financial management systems and Climate Budget Tagging processes. The mechanism will support standardized classification and reporting of climate finance flows across public, private, international, concessional, and non-concessional sources. Climate finance data will progressively be integrated into a centralized climate finance dashboard to improve transparency, consistency, and evidence-based decision-making.

Third, the system will support **performance reporting and learning**, enabling government institutions to track progress toward national climate objectives and identify implementation challenges.

Information collected through the MERL system will be used to prepare an **Annual State of Climate Report**, which will be presented through the governance structure for review and policy guidance.

The MERL system will also serve as a knowledge platform, allowing stakeholders to access information on climate projects, financing opportunities, and institutional progress in implementing the NCFS.

3.4 Action Matrix

The Action Matrix translates the strategic pillars of the NCFS into a set of measurable institutional actions designed to operationalize climate finance governance, strengthen institutional systems, and support the mobilization of climate finance.

The matrix focuses on institutional and policy milestones rather than financial commitments. These actions emphasize the establishment of governance mechanisms, the development of policy frameworks, the strengthening of coordination systems, and the operationalization of digital monitoring tools.

Table 9: Action Matrix for Measurable Institutional and Policy Actions.

Action	Lead Institution	Support Institutions	Timeline	Indicator
Notify operational arrangements for NCFS governance architecture	MoCC&EC	MoF, Planning Commission, EAD	6 months	Notification issued
Fully operationalize the Technical Committee on Climate Change Finance (TCCF)	MoCC&EC	Federal ministries, provinces	6 months	Committee meetings initiated
Notify federal Technical Working Groups under the PCCC	MoCC&EC	PCCA	12 months	TWGs formally notified
Operationalize PCCA as the Technical Secretariat to the climate finance governance system	MoCC&EC	PCCA	6 months	Secretariat functions assigned
Develop and launch the Pakistan Climate Action Integrated Platform	PCCA/CFU	MoCC&EC	12 months	Platform operational
Develop National Climate Project Screening and Safeguards Guidelines	PCCA	Relevant ministries	12 months	Guidelines notified
Operationalize Pakistan Climate Change Fund (PCCF)	PCCA	MoF	18 months	Fund governance and financing windows established
Establish a national climate project pipeline linked to NDC priorities[40]	PCCA	Federal and provincial ministries	18 months	Pipeline repository established
Launch Digital MERL Dashboard	PCCA	MoCC&EC	12 months	Dashboard operational
Publish Annual State of Climate Finance Report	MoCC&EC	PCCA	Annual	Report published

[40] A consolidated overview of key international climate finance windows and instruments available to Pakistan is provided in Annex 3 to support strategic access and pipeline development.

Chapter 4: Way Forward

The National Climate Finance Strategy (NCFS) establishes the institutional and financial foundations required to mobilize and manage climate finance at the scale needed for Pakistan's climate transition. Implementing the strategy will require coordinated action across federal and provincial institutions, stronger integration of climate considerations into fiscal and development planning systems, and the development of a robust pipeline of climate investments aligned with national priorities. Given Pakistan's significant climate vulnerability, limited fiscal space, and growing financing needs, implementation must follow a phased approach that prioritizes early institutional activation, strengthens financing systems over time, and gradually expands domestic and international investment flows.

The pathway outlined in this chapter identifies immediate priorities required to operationalize the strategy, medium-term actions to consolidate financing systems and partnerships, and a long-term vision in which Pakistan's climate finance architecture functions as a mature, coordinated, and country-led framework capable of mobilizing large-scale resources for climate-resilient development.

4.1 Immediate Actions (0–12 Months)

1. The initial phase of implementation will focus on activating the core institutional mechanisms and operational systems required to support coordinated climate finance mobilization.
2. Priority actions include:
3. **Operationalizing the NCFS governance architecture**, including the Technical Committee on Climate Finance and relevant Technical Working Groups.
4. **Launching the Pakistan Climate Action Integrated Platform** to consolidate climate project pipelines, finance tracking, and monitoring systems.
5. **Operationalizing the Pakistan Climate Change Fund (PCCF)** and initiating its resource mobilization strategy to support project preparation and catalytic co-financing. The PCCF will operate in alignment with national budgetary and public financial management systems and will not create parallel or off-budget financing channels.
6. **Notifying national climate finance definitions, taxonomy alignment, and project screening standards** to support consistent identification and tracking of climate investments.
7. **Integrating climate budget tagging within federal fiscal reporting**, including publication of an annual Climate Budget Statement.
8. **Developing an initial national climate project pipeline** aligned with NDC sector priorities.
9. **Notifying operational rules for carbon market participation and initiating development of the national carbon registry.**
10. **Launching targeted capacity-building programs** for federal ministries and provincial governments to strengthen climate finance readiness and project preparation.

These actions will establish the operational foundations necessary for coordinated climate finance governance and investment mobilization.

4.2 Medium-Term Consolidation (1–3 Years)

Following the initial establishment of coordination mechanisms and implementation arrangements, the medium-term phase should focus on consolidating systems that can scale climate finance flows, strengthen the national investment pipeline, and improve Pakistan's engagement with international financing mechanisms.

1. Pipeline strengthening

A priority intervention during this phase will be the development of a structured national pipeline of climate investments aligned with Pakistan's NDC, NAP, and sectoral climate priorities. The Pakistan Climate Change Authority, acting as the technical secretariat, should coordinate the screening, preparation, and prioritization of projects through standardized climate project appraisal and readiness criteria. Sector ministries and provincial governments should fully integrate climate risk screening into the Public Sector Development Programme (PSDP) and provincial Annual Development Programmes (ADPs) to ensure that future public investments incorporate resilience and mitigation considerations. Dedicated project preparation facilities, supported by development partners, can further strengthen the technical and financial structuring of projects to meet the requirements of multilateral climate funds and development finance institutions.

2. Private capital mobilization

Scaling climate investment will require stronger participation from the private sector. During this phase, the government should introduce market-enabling policy and regulatory measures, including developing a national green finance taxonomy and expanding green banking frameworks to guide financial institutions in identifying and financing climate-aligned projects. In this context, the Pakistan Climate Change Fund **(PCCF)** can play an important catalytic role in mobilizing private investment. As envisioned under Track 5 of the strategy, the PCCF can support blended finance structures that combine concessional public resources with private capital to reduce investment risks in priority sectors. Through instruments such as co-investment facilities, risk-sharing arrangements, and concessional financing windows, the PCCF can help crowd in private investors and support commercially viable climate projects.

Over time, stronger engagement with domestic financial institutions, including commercial banks, pension funds, and insurance companies, will be essential for expanding the pool of capital available for climate-related investments. Similarly, Green PPP policies are essential to spur Climate Investments in medium to large-scale climate-related interventions.

3. International positioning and access

Improving Pakistan's access to international climate finance will require enhanced institutional readiness and stronger alignment between national investment priorities and available funding windows. Operationalizing the National Climate Fund architecture, including the PCCF, can help streamline resource mobilization and strengthen Pakistan's capacity to channel international climate finance toward nationally prioritized investments. At the same time, strengthening climate finance tracking and reporting systems through the Pakistan Climate Action Integrated Platform will improve transparency, support evidence-based decision-making, and enhance Pakistan's credibility in international climate finance discussions under the United Nations Framework Convention on Climate Change.

4.3 Long-Term Vision

Over the longer term, Pakistan's objective should be to establish a mature climate finance ecosystem that effectively integrates public finance, international support, and private investment within a coherent national framework. Achieving this vision will require sustained institutional strengthening, the gradual expansion of domestic capital markets, and the development of financing mechanisms capable of supporting large-scale climate investments across sectors. A robust climate finance architecture will enable Pakistan not only to meet its national climate commitments but also to position itself as a credible partner in global climate finance initiatives.

1. Institutional maturity

A key long-term priority is the development of institutions capable of managing complex climate finance systems and coordinating effectively across federal and provincial levels. Strengthening technical capacity within ministries, development finance institutions, and provincial agencies will be essential to improve project preparation, financial structuring, and program implementation. Over time, specialized expertise in climate risk assessment, financial engineering, and results-based financing will need to be embedded within public sector institutions.

Institutional maturity will also require integrating climate considerations into core public financial management systems. Institutionalizing **climate finance tracking, climate budget tagging, and climate risk assessment** within national and provincial budgeting processes will enable policymakers to better align fiscal resources with climate priorities. Strengthening monitoring, reporting, and verification systems will further improve transparency and accountability in climate finance flows, while enabling more effective engagement with international climate finance mechanisms operating under the United Nations Framework Convention on Climate Change.

In the longer term, improved coordination mechanisms between federal and provincial governments will also be essential to ensure that climate investments are aligned with national priorities while reflecting regional development needs.

2. Scaled domestic capital

A sustainable climate finance model will require a gradual shift toward greater mobilization of domestic capital. Strengthening Pakistan's financial markets and expanding investment instruments, such as **green bonds, sukuk, sustainability-linked loans, and climate-focused investment funds**, can help attract domestic institutional investors and expand long-term financing for climate and infrastructure projects.

Policy and regulatory reforms will also play an important role in enabling greater participation from domestic financial institutions. Encouraging climate-aligned lending frameworks within commercial banks, developing guidelines for sustainable investment, and strengthening disclosure standards for climate-related financial risks can help deepen the domestic sustainable finance market.

In this context, the **Pakistan Climate Change Fund (PCCF)** can serve as a central platform for mobilizing both domestic and international climate finance. By deploying blended finance instruments, concessional financing windows, and co-investment mechanisms, the PCCF can help crowd in private capital and reduce investment risks in priority sectors such as renewable energy, climate-resilient infrastructure, sustainable agriculture, and water resource management.

Over time, the PCCF can also support the development of **domestic climate investment vehicles**, enabling pension funds, insurance companies, and other institutional investors to participate in climate-related investments. This role will be critical in gradually reducing reliance on concessional external resources while strengthening national ownership of climate finance flows.

3. Pakistan as a country-led climate finance model

With strengthened institutions, a robust project pipeline, and diversified financing sources, Pakistan can position itself as a country-led model for integrating development finance, climate finance, and private investment within a unified national framework. Such an approach would allow the government to align financing flows more closely with national development priorities while ensuring that climate considerations are systematically integrated into infrastructure planning, economic policy, and sectoral development strategies.

A well-functioning climate finance ecosystem will also enhance Pakistan's ability to attract international investment and leverage partnerships with multilateral development banks, bilateral donors, and global climate funds. By demonstrating strong governance frameworks, transparent financial systems, and credible investment pipelines, Pakistan can strengthen investor confidence and expand access to international climate finance.

Over the longer term, this model can contribute to positioning Pakistan as a regional example of how developing countries can combine domestic policy reforms, institutional innovation, and international partnerships to mobilize large-scale financing for climate-resilient and low-carbon development.

Annex-1

Donor Funded Climate Resilience Projects

Asian Development Bank

S. No.	Type of Aid (Project loan/ Program loan/Policy-based loan/Grant/TA Title Executing Agency Project Cost	Title	Executing Agency	Project Cost (US Mn)
1	Project Loan	Access to Clean Energy Investment Program	Pakhtunkhwa Energy Development Organization (PEDO), GoKP, and Energy Department, GoPunjab	285

2	Project Loan	Khyber Pakhtunkhwa Rural Roads Development Project	Pakhtunkhwa Highways Authority (PKHA), GoKP	320
3	Project Loan	Karachi Bus Rapid Transit Red Line Project	TransKarachi Company	49
4	Project Loan	Emergency Flood Assistance Project	NHA, Works & Services Deptt Sindh, Irrigation Deptt KP, Irrigation Deptt Balochistan, Agriculture & Cooperatives Deptt Balochistan	480
5	Project Loan	Khyber Pakhtunkhwa Food Security Support Project	Agriculture Department, GoKP	82.4
6	Project Loan	Integrated Social Protection Development Program-Additional Financing	Benazir Income Support Programme (BISP)	330
7	Project Loan	Developing Resilient Environments and Advancing Municipal Services in Punjab	Local Government and Community Development	180
8	Project Loan	Khyber Pakhtunkhwa Cities Improvement Project	Local Government, Elections & Rural Development Department	361
9	Project Loan	Sindh Emergency Housing Reconstruction Project	Sindh Peoples Housing for Flood Affectees (SPHF), GoSindh	400
10	Project Loan	Sindh Secondary Education Improvement Project	Sindh Education and Literacy Department (SELD), GoS	350
11	Project Loan	Climate and Disaster Resilience Enhancement Program -Subprogram 1	Ministry of Finance	500
TOTAL				**3337.4**

World Bank

S. No.	Type of Aid (Project loan/ Program loan/Policy-based loan/Grant/TA Title Executing Agency Project Cost	Title	Executing Agency	Project Cost (US Mn)

1.	Loan- IPF	Sindh Floods Emergency Housing Reconstruction Project	GoSindh	950
2.	Loan- IPF	Sindh Floods Emergency Rehabilitation Project	GoSindh	650
3.	Loan- IPF	Sindh Water and Agriculture Transformation Project	GoSindh	292
4.	Loan- IPF	Balochistan Water Security and Productivity Improvement Project	GoSindh	94
5.	Loan- IPF	Integrated Flood Resilience Adaptation Project (IFRAP)	MoPD&SI, Government of Pakistan	245
6.	Loan- PForR	Punjab Clean Air Program	GoPunjab	300
7.	Loan- PForR	Punjab Green Development Program	GoPunjab	200
8.	Loan- IPF	Balochistan Water Security and Productivity Improvement Project	GoBalochistan	94
9.	Loan- PForR	Pak. Crisis-Resilient Social Protection	BISP	1000
10	Loan- PForR	Punjab Cities Program (PCP)	GoPunjab	200
11	Loan- IPF	Punjab Resilient & Inclusive Agri.Transformation	GoPunjab	200
12	Loan- IPF	Punjab Rural Sustainable Water Supply & Sanitation	GoPunjab	442.4
13	Loan- PForR	Resilient Accessible Microfinance Project (including US$23Million in Grant)	MoFinance/SBP	125
14	Loan- IPF	Girls' Agenda for the Development of Education Sector in Punjab Province (GRADES)	GoPunjab	150
15	Loan- IPF	Competitive & Livable City of Karachi	GoSindh	230
16	Loan- IPF	Karachi Water & Sewerage Services Prog.	GoSindh	40
17	Loan- IPF	2nd Karachi Water & Sewerage Services Prog.	GoSindh	240
18	Loan- IPF	Sindh Barrages Improvement Project	GoSindh	291.2
19	Loan- IPF	Karachi S. Waste Emergency & Efficiency	GoSindh	100

20	Loan- IPF	Sindh Livestock & Aquaculture Sectors Transformation Project	GoSindh	135
21	Loan- IPF	Sindh Early Learning Enhancement Project	GoSindh	154.8
22	Loan- IPF	Sindh Integrated Health and Population Project	GoSindh	200
23	Loan- IPF	KP Rural Accessibility Project	GoKP	378
24	Loan- IPF	KP Irrigated-Agriculture Improvement Project	GoKP	171
25	Loan- IPF	Getting Results: Access and Delivery of Quality Education Services in Balochistan	GoBalochistan	100
TOTAL				**6982.4**

Annex-II

Initial List of Climate Investment Projects developed as Climate Prosperity Plan (CPP)

Title of Project	Location	Funding Needs $M
Digital Dera Climate Smart Villages Network	Pakistan	$45.00
Carbon Offset through Afforestation, Reforestation, and Revegetation (ARR)	Balochistan	$30.00
Punjab Recycling Parks Package	Punjab	$350.00

Punjab Landfill Valorization Program	Punjab	$350.00
Climate Precision Agriculture	Punjab	$21.50
Faisalabad Garment City Industrial Complex (FGCC-PP)	Faisalabad, Punjab	$13.90
Emerging Pakistan Green Fund	Pakistan	$50.00
Pakistan Biochar Project	South & Central Punjab	$6.15
Development of Ski Resorts	Chilim Valley, Deosai Plains, Babusar, Naltar, Bagrote (GB).	$28.00
Sustainable Timber Harvesting Project	Punjab and KPK	$50.00
Balochistan Solar Energy Project	Hub, Gwadar, Quetta, and Bostan, Balochistan	$58.00
Economia Manufacturing Project	Pakistan	$220.00
Electric Mobility as a Service (EMaaS)	Pakistan	$45.50
EV Retrofitting Project	Pakistan	$120.00

Annex-III

Climate Financing Windows

Name	Description	Theme	Scale
Readiness and Preparatory Support (GCF) Programme (country window)	Country-driven support to strengthen institutional capacities, governance, and planning/programming frameworks; accessed through NDAs/Focal Points, and can also strengthen Direct Access Entities.	• Adaptation planning • Mitigation planning • Institutional capacity	Up to USD 7 million per country over 4 years under the 2024-2027 country window.
(GCF) Project Preparation Facility (PPF)	Financial and technical support to develop high-quality	• Project preparation /	Up to USD 1.5 million per application.

	GCF funding proposals, including grants and equity support.	pipeline development	
(GCF) Simplified Approval Process (SAP)	A streamlined GCF application route for projects/programmes with significant climate impact potential, ready for scaling up and with minimal environmental and social risks.	• Small-scale adaptation and mitigation, scaling up	Up to USD 25 million GCF contribution.
(GCF) Enhancing Direct Access (EDA)	A dedicated access window for GCF's Direct Access Entities that devolves funding decisions and project oversight to the national or regional level.	• Locally led climate action, direct access, community projects	USD 200 million approved for the pilot programme.
(GCF) Private Sector Facility (PSF)	GCF facility to engage local and global private sector actors to support climate mitigation and adaptation projects in developing countries.	• Private sector climate finance	$3.26 billion of project approvals for the Year 2025.
Mitigation Action Facility (2026 Call for Projects)	Multi-donor programme that funds ambitious mitigation projects with technical support and climate finance; the 2026 call was launched at COP30.	• Energy, • Industry • Transport • Decarbonization, • Cross-sectoral projects	EUR 100 million overall call volume; requested implementation funding is strictly EUR 5-25 million per project.
International Climate Initiative (IKI)	Comprehensive German funding instrument operating through multiple active lines: Large Grants (flagship projects) Medium Grants (innovative /locally-led) Small Grants (local/regional	• Mitigation • Adaptation, • Biodiversity conservation • Natural carbon sinks • REDD+, • Circular economy	Large: EUR 12-20M per project. Medium: Up to EUR 300,000-800,000.

	orgs), and IKI Invest (mobilising private capital).		Small: EUR 60,000-200,000 depending on the specific line.
ALTERRA, UAE Private Climate Investment Vehicle	With this US$30 billion commitment, ALTÉRRA becomes the world's largest private investment vehicle for climate change action and will aim to mobilize US$250 billion globally by 2030. It aims to steer private markets towards climate investments and focus on transforming emerging markets and developing economies, where traditional investment has been lacking due to the higher perceived risks across those geographies.	• Energy Transition • Industrial Decarbonization • Sustainable Living • Climate Technologies	US$30 billion commitment to the newly launched catalytic climate vehicle, ALTÉRRA, that will drive forward international efforts to create a fairer climate finance system, with an emphasis on improving access to funding for the Global South.
Middle East Green Initiative	The Middle East Green Initiative (MGI) is catalyzing a collaborative regional approach to combating climate change. MGI will build a greener future for generations to come, while fostering economic diversification, creating jobs, and attracting private sector investment. 50+ countries are members or endorse MGI.	• Carbon capture and utilization • Carbon sequestration • Emission Reduction • Reforestation and Restoration	$2.5bn commitment by Saudi Arabia to support MGI.

Adaptation Fund	The impact of the Fund is clear. It has committed US$1.5 billion to over 200 concrete adaptation projects in 108 countries through country systems and local leadership, with about half its portfolio in Least Developed Countries (LDCs) and Small Island Developing States (SIDS). It is producing measurable resilience for more than 65 million people, protecting nearly 1 million hectares of natural habitat and creating over 600 early warning systems.	• Locally led adaptation • Resilience • Agriculture • Food security • Water management • DRR • Ecosystem based adaptation	Adaptation Fund Mobilizes US$ 135 Million for Most Vulnerable at COP30.
Emerging Market Climate Action Fund (EMCAF)	Emerging Market Climate Action Fund (EMCAF) is an innovative blended finance Fund of Funds created in partnership by Allianz Global Investors (AllianzGI) and the European Investment Bank (EIB). The Fund provides highly catalytic early-stage equity financing to greenfield climate mitigation and adaptation projects in emerging and developing markets by backing fund managers and project	• Climate Mitigation & Adaptation • Renewable Energy • Energy Efficiency in Developing Markets	EMCAF will mobilize EUR 10bn to fill in the climate finance gap in emerging and developing markets. It will catalyze around 9-10 GW of clean energy capacity. The fund will comply with EIB’s Environmental & Social (“E&S”) standards.

	developers active in this area.		
Fund for Responding to Loss and Damage (FRLD)	The Fund for Responding to Loss and Damage (FRLD), an operating entity under the financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC), addresses the growing needs of vulnerable communities in developing countries facing the irreversible impacts of climate change. By financing recovery initiatives from climate-related losses and damage, the Fund empowers communities to rebuild and adapt. It strives for country-led locally driven solutions, ensuring interventions are aligned to country needs, priorities and contexts.	• Mitigation and Adaptation • Climate Justice	As of November 19th, 2025, a total of USD 821.74 million has been pledged to the FRLD.
Least Developed Countries Fund (LDCF) and Special Climate Change Fund (SCCF)	the Least Developed Countries Fund (LDCF) is the only facility exclusively dedicated to helping these countries adapt to new climate realities. The LDCF, along with the Special Climate Change Fund	• Adaptation • Climate resilience for vulnerable nations • Vulnerable sectors • Agriculture • Water • DRR • Coastal management	LDCF $2.39 billion in funding, supporting 446 projects across 51 countries. As of June 30, 2024, the LDCF has financed 423 projects and programs with

	(SCCF), is mandated to serve the Paris Agreement. Both funds are managed by the Global Environment Facility.	• Infrastructure • Sustainable alternate livelihoods • Food security • Health	nearly $2.1 billion in grants
New Collective Quantified Goal on Climate Finance (NCQG)	The New Collective Quantified Goal on Climate Finance (NCQG) is a new global climate finance goal that the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) shall set from a floor of USD 100 billion per year, prior to 2025. This new goal will be set in the context of meaningful mitigation actions and transparency on implementation, taking into account the needs and priorities of developing countries	• Climate change • Adaptation • Mitigation • Loss and Damage • Cross-cutting sectors	Actors to work together to enable the scaling up of financing to developing country Parties for climate action from all public and private sources to at least USD 1.3 trillion per year by 2035
The Climate Finance Action Fund	The Climate Finance Action Fund (CFAF) proposes a novel approach to increasing climate finance flows by involving fossil-fuel-producing countries and companies. CFAF will be established as an investment fund focused on income-generating investments in developing economies	• Climate-related projects • Renewable energy • Mitigation • Adaptation	CFAF's establishment will be contingent upon securing pledges from at least 10 countries and reaching a collective funding target of at least USD 1 billion, and participating parties will acquire shareholder status within the CFAF.

	that foster climate action and drive development outcomes.		
Tropical Forests Forever Facility (TFFF)	The TFFF is offering a new way forward and will operate by mobilizing philanthropic, public and private capital, then reinvesting these resources in a diversified investment portfolio. Revenues generated by the TFFF will reward Tropical Forest Countries a fixed amount per hectare of conserved or restored forest while seeking to maintain the TFFF’s capital base, ensuring the facility’s long-term sustainability. Pakistan among the 66 countries that has endorsed the launch of TFFF.	• Forests conservation and restoration • Forest ecosystem preservation • Forest carbon markets and REDD+	COP30 concluded on November 22nd with more than US$ 6.7 billion in announced contributions to the Tropical Forests Forever Facility (TFFF).
Belem Package	Belem Package include a commitment to triple adaptation finance by 2035, emphasizing the need for developed countries to significantly boost climate finance for developing nations. The Global Implementation Accelerator: A collaborative and voluntary initiative	• Low-carbon development	Countries agreed to triple the $40 billion adaptation finance goal established four years ago at COP26 in Glasgow, Scotland, effectively creating a new $120 billion target. The final outcome in the Belem package calls for efforts to reach this new

	launched under the leadership of the COP30 and COP31 Presidencies to support countries in implementing their NDCs and National Adaptation Plans (NAPs). The Belem Mission to 1.5: An action-oriented platform under the COP29-COP31 troika to foster enhanced ambition and international cooperation across mitigation, adaptation, and investment.		target as part of the broader $300 billion in climate finance (known as NCQG).
Belem Health Action Package	The Belem Health Action Plan is structured around three interconnected lines of action, guided by cross-cutting principles of health equity, climate justice, and participatory governance. These pillars include: surveillance and monitoring; evidence-based policies, strategies, and capacity strengthening; and innovation, production, and digital health. Implementation will be coordinated in collaboration with the Alliance for Transformative Action on Climate and Health	• Health and Climate • Climate-resilient health systems • Disease prevention • Health equity • Health justice	Climate and Health Funders Coalition announced an initial investment of USD 300 million to support this international commitment.

	(ATACH), under the supervision of the World Health Organization (WHO).		

Annex IV

1) Green Climate Fund (GCF)

S.No	Project Title	Total Budget ($ M)	GCF Financin ($ M)	Location	Duration	Expected Outcomes
1	Scaling up of Glacial Lake Outburst Flood (GLOF) Risk Reduction in Northern Pakistan (UNDP)	37.5	36.9	KP and GB	2017-2025	Built 250 engineering structures (dams, ponds, spillways, drainage, tree plantation) to reduce flood risk, benefitting 29.2 M people
2	Transforming the Indus Basin with Climate Resilient Agriculture and	47.7	34.9	Punjab and Sindh	2020-2026	This project will develop the country's capacity to use the information it needs to adapt to the

	Climate Smart Water Management. **(FAO)**					impacts of climate change on agriculture and water management by putting in place state-of-the art technology, benefitting 17.3 M people.
3	Green BRT Karachi **(ADB)**	583.5	49	Karachi	2020-2025	The project aims to establish a 30 kilometre, fully segregated bus rapid transit (BRT) system operated with the "world's first" biomethane hybrid bus fleet. Tons of emissions avoided: 2.6 M.
4	Pakistan Distributed Solar Project (JS Bank)	54	10	Pakistan	2023-2033	The project will provide tailored financing solutions for distributed solar PV products to help bridge the financing gap for these investments in Pakistan. Tons of emissions avoided: 848.7 K
5	Recharge Pakistan: Building Pakistan's resilience to climate change through ecosystem-based adaptation for integrated flood risk management. (WWF)	72.8	66	Balochistan, Sindh and KPK	2024-2031	The primary objective of the Recharge Pakistan initiative is to transform the country's approach to flood and water resource management in local watershed sites in the Indus-Basin River system, benefitting 7.7 M people.
6	Community Resilience Partnership Regional Program. (ADB)	750 (Pakistan' share is 107.1)	120 (Pakistan' share is6aprx. 24)	Sindh	2024-2033	By focusing attention on vulnerable communities, CRPP will foster a stronger sense of ownership over local adaptation endeavors to ultimately increase the collective benefits derived from these efforts, benefitting 7.7 M people.
7	Acumen Climate Action Pakistan Fund (Acumen Fund)	90	28	Pakistan	2024-2034	The Project's goal is to improve the climate resilience of vulnerable farmers and their

						livelihoods by providing access to climate adaptation solutions for smallholder farmers, benefitting 13.1 M people.
8	Integrated Climate Risk Management for Strengthened Resilience to Climate Change in Buner and Shangla Districts of Khyber Pakhtunkhwa Province, Pakistan. (WFP)	10	8.78	KPK	2024-2028	The project will enhance flood early warning and anticipatory action by strengthening the value chain and dissemination of climate information services and early-warning systems, benefitting 1.6 M people.
9	Resilient Water Infrastructure Facility (RWI) (IFC)	1300 (108.33 Pakistan's share)	258 (Pakistan' share is aprx. 21.62)	Pakistan	25 years	i. Public Private Partnership (PPP) structure facility; and. ii. Blended Finance facility
10	Harnessing the Domestic Private Sector Ecosystem for Climate Action in Pakistan (NRSP)	50	25	Pakistan	12 years	The initiative aims to create a climate action venture studio environment, offering space for climate discourse, a consortium of stakeholders, pre-seed grant financing, later-stage debt financing, mentorship for women, PWDs, and transgender entrepreneurs, and gender-responsive technical assistance.
11	Glaciers to Farms (G2F) Regional Program: Advancing Climate Resilience & Sustainable Development in Central and West Asia (ADB)	3500 (Pakistan's share approx. 80)	250 (Pakistan's share 27.7) (currently approved project	Pakistan		The Glaciers to Farms (G2F) Programme responds to this crisis by integrating climate science into development planning and deploying concrete adaptation measures in glacier-dependent river basins. The programme focuses 100 per cent on adaptation and aligns with national priorities,

						including National Adaptation Plans (NAP), Nationally Determined Contributions (NDCs) and Sustainable Development Goals (SDGs)
Tot al		**6458 (Pakatan 's share 1240.93)**	**849.68 (331.9)**			

2) GEF Portfolio (GEF 1-GEF 8)

S.No	Project Title & Agency	Total Budget	GEF Financing	Status	GEF Period
1	Integrated management of land and water resources for strengthening climate resilience in flood-affected areas of Baluchistan, Pakistan (United Nations Development Programme (UNDP))	$11.79 M	$2.00 M	Concept Approved	GEF-8
2	Reduction of greenhouse gas emissions by enhancing efficiency and transparency in Pakistan's leather industry (United Nations Industrial Development Organization (UNIDO))	$12.64 M	$2.64 M	Concept Approved	GEF-8
3	Decarbonization through innovative clean hydrogen technology in Pakistan (Child Project of the Global Clean Hydrogen Programme for Pakistan) (United Nations Industrial Development Organization (UNIDO))	$46.71 M	$1.33 M	Concept Approved	GEF-8
4	Mainstreaming Natural Capital Accounting into Planning and Implementation of Sustainable Landscape Management in Pakistan (United Nations Environment Programme (UNEP))	$8.38 M	$1.78 M	Concept Approved	GEF-8
5	Sustainable and regenerative management of rice production in Pakistan (Food and Agriculture Organization (FAO))	$67.26 M	$6.89 M	Project Approved (FY2025)	GEF-8
6	Bananas in Pakistan's Bioeconomy: Transforming Waste into Textile (Food and Agriculture Organization (FAO))	$20.30 M	$3.27 M	Project Approved (FY2024)	GEF-8

7	Development of National Action Plan for Artisanal and Small-Scale Gold Mining in the Islamic Republic of Pakistan (United Nations Environment Programme (UNEP))	$0.50 M	$0.50 M	Project Approved (FY2022)	GEF-7
8	Accelerating low-carbon circular economy through cleantech innovation towards sustainable development in Pakistan (United Nations Industrial Development Organization (UNIDO))	$13.58 M	$1.78 M	Project Approved (FY2023)	GEF-7
9	Combating Climate Change through the Promotion and Application of Sustainable Biomass Energy Technologies in Pakistan (PASBET) (United Nations Development Programme (UNDP))	$24.59 M	$3.44 M	Project Approved (FY2023)	GEF-7
10	Combating land degradation through integrated and sustainable range and livestock management to promote resilient livelihoods in Northern Punjab (Food and Agriculture Organization (FAO))	$15.29 M	$2.18 M	Project Approved (FY2022)	GEF-7
11	Strengthening Community-managed Protected Areas for Conserving Biodiversity and Improving Local Livelihoods in Pakistan (United Nations Development Programme (UNDP))	$10.61 M	$2.34 M	Concept Approved	GEF-7
12	Transforming the Leather Processing Industries towards Low Emissions and Climate Resilient Development Paths in Pakistan (United Nations Industrial Development Organization (UNIDO))	$14.20 M	$2.00 M	Project Approved (FY2018)	GEF-6
13	Reversing Deforestation and Degradation in High Conservation Value Chilgoza Pine Forests in Pakistan (Food	$27.98 M	$3.98 M	Project Approved (FY2018)	GEF-6

	and Agriculture Organization (FAO))				
14	Sixth Operational Phase of the GEF Small Grants Programme in Pakistan (United Nations Development Programme (UNDP))	$5.78 M	$2.66 M	Completed (FY2017)	GEF-6
15	Snow Leopard and Ecosystem Protection Program (United Nations Development Programme (UNDP))	$19.77 M	$4.64 M	Project Approved (FY2018)	GEF-6
16	Delivering the Transition to Energy Efficient Lighting in Residential, Commercial, Industrial, and Outdoor Sectors (United Nations Environment Programme (UNEP))	$7.36 M	$1.58 M	Project Approved (FY2016)	GEF-5
17	Mainstreaming Climate Change Adaptation through Water Resource Management in Leather Industrial Zone Development (United Nations Industrial Development Organization (UNIDO))	$18.01 M	$3.31 M	Project Approved (FY2015)	GEF-5
18	Sustainable Forest Management to Secure Multiple Benefits in High Conservation Value Forests (United Nations Development Programme (UNDP))	$57.76 M	$8.34 M	Completed (FY2015)	GEF-5
19	Support for the Revision of the NBSAPs and Development of Fifth National Report to the CBD (United Nations Environment Programme (UNEP))	$0.47 M	$0.22 M	Project Approved (FY2014)	GEF-5
20	GEF UNIDO Cleantech Programme for SMEs (United Nations Industrial Development Organization (UNIDO))	$5.37 M	$1.37 M	Completed (FY2013)	GEF-5
21	Generating Global Environmental Benefits from Improved Decision Making Systems and Local Planning in	$1.94 M	$1.00 M	Completed (FY2015)	GEF-5

	Pakistan (United Nations Development Programme (UNDP))				
22	Sustainable Land Management Programme to Combat Desertification (United Nations Development Programme (UNDP))	$20.42 M	$3.79 M	Completed (FY2013)	GEF-5
23	Sustainable Energy Initiative for Industries (United Nations Industrial Development Organization (UNIDO))	$34.75 M	$3.55 M	Completed (FY2014)	GEF-5
24	Comprehensive Reduction and Elimination of Persistent Organic Pollutants in Pakistan (United Nations Development Programme (UNDP))	$39.38 M	$5.15 M	Completed (FY2014)	GEF-5
25	Fifth Operational Phase of the GEF Small Grants Programme in Pakistan (United Nations Development Programme (UNDP))	$6.34 M	$2.78 M	Completed (FY2011)	GEF-5
26	Promoting Sustainable Energy Production and Use from Biomass in Pakistan (United Nations Industrial Development Organization (UNIDO))	$7.16 M	$1.82 M	Completed (FY2012)	GEF-4
27	Mountains and Markets: Biodiversity and Business in Northern Pakistan (United Nations Development Programme (UNDP))	$5.28 M	$1.79 M	Completed (FY2011)	GEF-4
28	Development of a National Clearing House Mechanism, Capacity Assessment for ABS, Preservation of Traditional Knowledge and In situ Ex situ conservation in Pakistan (United Nations Environment Programme (UNEP))	$0.41 M	$0.38 M	Completed (FY2010)	GEF-4
29	Pakistan Sustainable Transport Project (United Nations Development Programme (UNDP))	$78.02 M	$4.80 M	Completed (FY2010)	GEF-4

30	Productive Uses of Renewable Energy in Chitral District, Pakistan (PURE-Chitral) (United Nations Development Programme (UNDP))	$5.65 M	$0.95 M	Completed (FY2008)	GEF-4
31	Promotion of Energy Efficient Cooking, Heating and Housing Technologies (PEECH) (United Nations Development Programme (UNDP))	$2.46 M	$0.97 M	Completed (FY2007)	GEF-4
32	Sustainable Land Management for Combating Desertification (Phase I) (United Nations Development Programme (UNDP))	$4.60 M	$2.00 M	Completed (FY2007)	GEF-3
33	Expedited Financing for Interim Measures for Capacity Building in Priority Areas (Phase II) (United Nations Environment Programme (UNEP))	$0.10 M	$0.10 M	Completed (FY2003)	GEF-3
34	National Capacity Needs Self-Assessment for Global Environmental Management in Pakistan (United Nations Development Programme (UNDP))	$0.22 M	$0.20 M	Completed (FY2003)	GEF-3
35	POPs Enabling Activity: Preparation of the POPs National Implementation Plan under the Stockholm Convention (United Nations Development Programme (UNDP))	$0.65 M	$0.50 M	Completed (FY2002)	GEF-3
36	Conservation of habitats and species of global significance in Arid and Semi-arid Ecosystems in Balochistan (United Nations Development Programme (UNDP))	$1.23 M	$0.77 M	Completed (FY2003)	GEF-3
37	Mainstreaming Biodiversity Conservation into Production Systems in the Juniper Forest Ecosystem (United Nations Development Programme (UNDP))	$2.52 M	$0.97 M	Completed (FY2005)	GEF-3

38	Sustainable Development of Utility-Scale Wind Power Production (Phase 1) (United Nations Development Programme (UNDP))	$3.82 M	$3.10 M	Completed (FY2005)	GEF-3
39	Protection and Management of Pakistan Wetlands (United Nations Development Programme (UNDP))	$11.79 M	$2.99 M	Completed (FY2004)	GEF-3
40	Mountain Areas Conservancy Project (MACP) (United Nations Development Programme (UNDP))	$16.35 M	$8.10 M	Completed (FY1999)	GEF-2
41	Enabling Activities for the Preparation of Initial National Communications Related to the UNFCCC (United Nations Environment Programme (UNEP))	$0.27 M	$0.27 M	Completed (FY1998)	GEF-2
42	First National Report to the CBD and establishment of a CHM (United Nations Environment Programme (UNEP))	$0.04 M	$0.04 M	Completed (FY1998)	GEF-1
43	Fuel Efficiency in the Road Transport Sector (United Nations Development Programme (UNDP))	$7.00 M	$7.00 M	Completed (FY1992)	Pilot Phase
44	Protected Areas Management Project (The World Bank)	$10.82 M	$10.16 M	Completed (FY1998)	GEF-1
Grand Total		**$530.163**	**$119.425 M**		

3. Adaptation Fund

- Under the Adaptation Fund, Pakistan has 2 ongoing projects worth $ 16 million.

S. No	Project Title	Budget ($ M)	Location	Outcomes
1	Reducing Risks and Vulnerabilities from Glacial Lake Outburst Floods in Northern Pakistan **(UNDP)**	3.60	Gilgit-Baltistan & Chitral (KP) — Bagrot, Drongagh & Bindo Gol valleys	Reduced human and material losses in vulnerable communities in Northern Pakistan through GLOF early warnings and other adaptation measures.
2	Enhance community, local, and national-level urban climate change resilience to water scarcity, caused by floods and droughts in Rawalpindi and Nowshera districts **(UN-Habitat)**	6.0	Nowshera, KP	To enhance the community and household level in flood-resilient water harvesting facilities.
3	Sustainable Actions for Ecosystems Restoration in Pakistan (SAFER Pakistan) **(ICIMOD)**	10	Gilgit, Hunza, Chitral	Component 1: Cryosphere Disaster Risk Reduction Component 2: Spring shed Revival and Management Component 3: Groundwater Management and Resilient Community Water Supply Component 4: Ecosystem Based Adaptation Component 5: Surface Water Conservation Component 6: Adaptive capacities and empowered communities for strengthened resilience to climate change
Total		**19.60**		