

MALAWI NAP FINANCING STRATEGY

Malawi Ministry of Natural Resources, Environmental Affairs Department



Ministry of
Natural
Resources &
Climate Change



GREEN
CLIMATE
FUND

Table of Content

Executive Summary	6
Three Pillars of the Strategy	7
Priority Recommendations	7
1. Introduction	9
1.1 Scope and Purpose of this Strategy	9
2. Global Climate Finance Context and Architecture	10
2.1 The New Collective Quantified Goal (NCQG)	10
2.2 Key multilateral climate finance mechanisms	10
2.3 COP30 and the Belém package: the adaptation-finance tripling goal	10
3. Adaptation Finance in Malawi: Policy, Institutions and Current Flows	11
3.1 Enabling policy environment and institutions	11
3.2 Malawi's NDC: financing requirement	11
3.3 Country financial and economic context	12
3.4 The adaptation-finance baseline	13
3.5 Barriers and enablers of adaptation finance	20
4. Pillars of the Adaptation Finance Strategy	21
4.1 Pillar 1: Establishing and addressing the adaptation funding gap	21
4.2 Pillar 2: Mobilizing and aligning public and external resources	27
4.3 Pillar 3: Crowding in private-sector financing	30
5. Financial Instruments for Climate Adaptation	37
5.1 Categories of financial instruments	37
5.2 Key takeaways for Malawi	37
5.3 Sovereign risk transfer: Malawi's experience with parametric insurance	37
5.4 Thematic bonds: green, blue and sustainability-linked	40
5.5 Climate-related financial risk: the Reserve Bank's side of the ledger	41
6. Stakeholder Consultations	43
6.1 Consultations undertaken	43
6.2 Method and its limitations	43
6.3 Opportunities identified	43
6.4 Barriers identified	43
6.5 Questions raised and responses given	44
6.6 Implications for the Financing Strategy	44
7. Operational Roadmap, Next Steps and Recommendations	45
7.1 Stakeholder consultations: summary of process and findings	45
7.2 Operational roadmap	46
7.3 A readiness framework for planning, accessing, delivering and monitoring adaptation finance	47
7.4 Recommendations for strengthening adaptation finance in Malawi	47
8. Structuring the Investment Programme: Intervention Types and Financing Horizons	52
8.1 Three intervention types	52
8.2 Matching instruments to intervention types	52
8.3 Financing horizons	52
9. Adaptation Measure Financing Profiles	54

9.1 Financing implementation activities.....	54
10. References and Data Sources.....	55

Acronyms

AF: Adaptation Fund

AfDB: African Development Bank

AFS: Adaptation Financing Strategy

BAU: Business-as-usual

BCR: Benefit–Cost Ratio

CAPEX: Capital Expenditure

CBA: Cost–Benefit Analysis

CBT: Climate Budget Tagging

COP: Conference of the Parties

CPEIR: Climate Public Expenditure and Institutional Review

DCCMS: Department of Climate Change and Meteorological Services

DFI: Development Finance Institution

DoDMA: Department of Disaster Management Affairs

DRM: Disaster Risk Management

EAD: Environmental Affairs Department

EWS: Early Warning System(s)

FAO: Food and Agriculture Organization of the United Nations

GCF: Green Climate Fund

GDP: Gross Domestic Product

GEF: Global Environment Facility

IFAD: International Fund for Agricultural Development

INFF: Integrated National Financing Framework

IRR: Internal Rate of Return

ITMO: Internationally Transferred Mitigation Outcome

LDC: Least Developed Country

LDCF: Least Developed Countries Fund

MDB: Multilateral Development Bank

MRV: Measurement, Reporting and Verification

MSME: Micro, Small and Medium Enterprise

MTEF: Medium-Term Expenditure Framework

NAP: National Adaptation Plan

NbS: Nature-based Solutions

NCQG: New Collective Quantified Goal

NDC: Nationally Determined Contribution

NFLRS: National Forest Landscape Restoration Strategy

NPV: Net Present Value

ODA: Official Development Assistance

OPEX: Operational Expenditure

PES: Payment for Ecosystem Services

PPP: Public–Private Partnership

RCP: Representative Concentration Pathway

Adaptation Financing Strategy – Revised report

SCCF: Special Climate Change Fund

TOR: Terms of Reference

UNEP: United Nations Environment Programme

UNFCCC: United Nations Framework Convention on Climate Change

VCM: Voluntary Carbon Market

WASH: Water, Sanitation and Hygiene

Executive Summary

This Climate Adaptation Financing Strategy (AFS) for Malawi has been developed under the National Adaptation Plan (NAP) project “Advancing the National Adaptation Plan (NAP) process: climate resilience for sustainable development in Malawi”, financed by the Green Climate Fund (GCF) and implemented by the United Nations Environment Programme (UNEP) in collaboration with the Environmental Affairs Department (EAD) of the Ministry of Natural Resources and Climate Change.

The AFS is grounded in the findings of the National Economic Appraisal and Cost–Benefit Analysis (CBA) of 22 priority NAP adaptation measures, in the stakeholder consultations undertaken across the eight target districts, and in a review of the current landscape of adaptation finance in Malawi.

The central finding of this Strategy is that Malawi faces a substantial adaptation financing gap. The CBA puts the capital requirement for the 22 priority adaptation measures at national scale at USD 4.58 billion of CAPEX, deployed over a five-year investment phase. Operating expenditure is additional (USD 437 million in the first year of operation, escalating at 5% per year) bringing the full cost of the programme over the 20-year appraisal period to approximately USD 14 billion undiscounted, or USD 7.2 billion in present value at the 8% social discount rate. The CBA reports a portfolio NPV of USD 5.76 billion under RCP 4.5; that figure is already net of the discounted costs of the measures and must not be set against the investment requirement a second time.

Establishing the precise gap requires comparing this investment envelope with the existing baseline of adaptation finance (domestic climate-tagged expenditure, ODA and multilateral climate-fund flows), data that lie outside the CBA and remain to be assembled from national sources.

Closing the gap requires a coordinated three-pillar approach:

- (1) quantifying and addressing the funding gap;*
- (2) mobilizing and aligning public and external resources; and*
- (3) crowding in private-sector finance, including through carbon-market revenues.*

Key Findings

The adaptation investment envelope is large and economically justified. The CBA values the national-scale capital requirement for the 22 priority measures at **USD 4.58 billion of CAPEX**, deployed over a five-year investment phase, with a full programme cost of about USD 7.2 billion in present value over the 20-year appraisal period, and a portfolio NPV of **USD 5.76 billion under RCP 4.5** (net of discounted costs). The portfolio internal rate of return is 33% under RCP 4.5, with measure-level IRRs ranging from 17% to 89%; returns are higher under RCP 8.5 because avoided losses are larger. Marketed benefits are roughly **USD 682.6 million per year under RCP 4.5 and USD 787 million under RCP 8.5**. Agriculture carries USD 3.24 billion of the capital requirement (71%), and irrigation schemes alone (USD 1.76 billion) close to 40% of it.

The adaptation-finance baseline has now been assembled from national and international sources. Malawi's First Phase CPEIR (2018) recorded MWK 388 billion of climate-related public expenditure in FY2016/17 (23% of total public expenditure) but weighted only 11% of budget climate expenditure as delivering adaptation benefit, and concluded that Malawi's adaptation gap lay between 80% and 90%. Malawi's First Biennial Transparency Report records USD 3.045 billion of climate finance committed or received between 2021 and 2023, of which USD 0.875 billion (USD 875 million) was actually received and 56% of the committed-or-received total (USD 1,717 million) was directed to adaptation. Set against the CBA requirement of USD 916 million per year of capital expenditure, this gives a coverage ratio of 169% on a gross-tagged basis (all climate-tagged domestic spending plus all external climate finance committed or received, across every objective rather than adaptation alone), 71% on an executed basis (domestic spending actually executed plus external finance actually received) and 22% on an adaptation-weighted basis (counting only the share that delivers adaptation benefit: 11% of domestic budget spending and 56% of external finance actually received, about USD 203 million a year)

— an annual funding gap of the order of USD 700 million, or USD 3.5 billion across the five-year investment phase. The convergence of this estimate with the CPEIR's independent 80–90% finding is the basis on which the gap is treated as established.¹

Two features of the gap require separate treatment. Operating expenditure of USD 437 million in the first year of operation, escalating at 5% per year, is not covered by any part of the baseline. Once the investment phase ends, the requirement shifts rather than disappears: recurrent costs rising from USD 437 million to about USD 531 million by the fifth year of operation compare with an adaptation-weighted baseline of about USD 203 million a year, leaving a recurrent gap of at least USD 234 million a year even if the entire baseline were redirected to operation and maintenance. And 71% of external climate finance remained committed rather than received over the reporting period, indicating that absorption capacity is a constraint at least as binding as mobilization.

Agriculture dominates the investment need (USD 3,237.51 million, 71% of CAPEX), ahead of forestry (USD 580.05 million), infrastructure and disaster risk reduction (USD 422.56 million), the social sector (USD 249.41 million) and fisheries (USD 92.68 million). Water security is financed through the agriculture measures (irrigation schemes and rainwater harvesting) rather than as a separate sector: the revised CBA describes the water sector for completeness but attributes to it no measure among the 22, and no cost, IRR or NPV. Forestry measures carry a distinctive financing opportunity: the CBA recommends monetizing afforestation, reforestation and community forestry through Article 6.2 of the Paris Agreement and Voluntary Carbon Markets (VCM), with carbon sequestration valued at USD 36–42 million per year. Given volatile carbon prices, the long lead times of forestry revenues and the unsettled state of Article 6.2 rules and corresponding adjustments, this Strategy treats carbon revenue as a complementary source rather than a core financing pillar.

The preferred financing modality across sectors is blended finance, combining concessional public resources with private capital and supplemented by grants for non-revenue-generating public goods (e.g. early-warning systems, watershed protection, resilient public infrastructure).

Three Pillars of the Strategy

- **Pillar 1 – Establishing and addressing the adaptation funding gap:** quantifying the total investment required (from the CBA), assembling the baseline of available resources, and calculating the structural financing gap across sectors and time periods.
- **Pillar 2 – Mobilizing and aligning public and external resources:** developing an action plan to deploy domestic budget resources, access multilateral climate funds, and align development-partner support with NAP priorities.
- **Pillar 3 – Crowding in private-sector financing:** removing barriers to private investment, deploying risk-sharing instruments, and creating enabling conditions for commercial and quasi-commercial adaptation finance, including carbon-market revenues.

Priority Recommendations

- Establish a Climate Finance Unit within the Ministry of Finance and Economic Affairs, mandated to coordinate NAP financing, manage the project pipeline, and produce annual adaptation-finance reports.
- Operationalize climate budget tagging across line ministries, starting with Agriculture, Water and Sanitation, Natural Resources and Climate Change, and Lands / Forestry.
- Design and capitalize an Adaptation / Resilience Facility, anchored in the Ministry of Finance and Economic Affairs, with initial capital from the GCF, GEF, MDBs and bilateral donors.
- Launch concessional green and resilience credit lines through the Reserve Bank of Malawi and domestic financial institutions for climate-smart agriculture, aquaculture and MSME adaptation.

¹ Government of Malawi, *First Biennial Transparency Report to the UNFCCC, 2025, covering 1 January 2021 to 31 December 2023*. Available at: <https://unfccc.int/documents/650251>.

Adaptation Financing Strategy – Revised report

- Mobilize carbon-market revenues for forestry and land-use measures through Article 6.2 bilateral agreements and Voluntary Carbon Markets, earmarking a share for community resilience (CBA Recommendation 4).
- Develop a National Green / Resilience Bond Framework to access capital markets over the medium term.
- Strengthen inter-ministerial coordination through a Climate Finance and Resilience Committee spanning Finance, Natural Resources and Climate Change, and key line ministries.

1. Introduction

1.1 Scope and Purpose of this Strategy

This Adaptation Financing Strategy (AFS) has been developed to maximize public, private and external financial resources for climate-change adaptation in Malawi, in order to increase implementation progress, innovation and impact. It is a deliverable of the GCF-financed NAP project, implemented by UNEP in collaboration with the Environmental Affairs Department (EAD) of the Ministry of Natural Resources and Climate Change.

The Strategy addresses existing and additional financing sources and instruments for climate-adaptation actions within the context of Malawi's National Adaptation Plan (NAP) process and its priority sectors. It focuses specifically on climate-adaptation finance rather than the broader concept of sustainable finance, recognizing the acute adaptation financing gap that highly climate-vulnerable Least Developed Countries such as Malawi face.

This document is structured to respond to three tasks:

- **Task 1:** Establish the adaptation funding gap, by comparing existing finance with the total estimated cost of the priority NAP measures.
- **Task 2:** Determine finance options, distinguishing public and private elements, analyzing barriers to private investment, and proposing a typology of instruments to address them.
- **Task 3:** Identify operational next steps, including a consultation and validation plan, a refined action plan, and recommendations for future work.

Definitions: Climate Finance and Adaptation Finance

Climate finance broadly refers to resources mobilized to facilitate, materialize or expand climate actions and measures. According to the UNFCCC, climate finance refers to local, national or transnational financing (drawn from public, private and alternative sources) that seeks to support mitigation and adaptation actions addressing climate change.

Adaptation finance is the subset of climate finance directed specifically to actions that reduce vulnerability to climate impacts and build resilience. Unlike mitigation finance, which generates measurable global public benefits (emission reductions), adaptation finance often delivers local and national benefits that are difficult to monetize, creating a structural market failure that justifies higher reliance on public and concessional sources.

For Malawi, the distinction is decisive: the country's greenhouse-gas emissions are negligible in global terms, but its exposure to climate impacts (droughts, floods, tropical storms and cyclones, and ecosystem degradation) is severe. The national finance strategy therefore prioritizes adaptation finance, while recognizing the co-benefits that many adaptation investments (notably in forestry and land use) generate for mitigation, biodiversity and sustainable development, and which can be monetized through carbon markets.

2. Global Climate Finance Context and Architecture

2.1 The New Collective Quantified Goal (NCQG)

The NCQG was adopted at COP29 in Baku (2024), setting a core target for developed countries to mobilize at least USD 300 billion annually by 2035 for developing countries, within a broader ambition of approximately USD 1.3 trillion per year by 2035, with explicit priority for LDCs and SIDS. The core NCQG figures have been verified against subsequent UNFCCC decisions and remain current as of the date of this draft.

2.2 Key multilateral climate finance mechanisms

The financial mechanism of the UNFCCC is operated by the GEF and the GCF; Parties have also established the SCCF, the LDCF and the Adaptation Fund. As an LDC, Malawi is a priority beneficiary and can access enhanced-access and grant / concessional windows across these mechanisms.

2.3 COP30 and the Belém package: the adaptation-finance tripling goal

The NCQG was not reopened at COP30, held in Belém in November 2025, but the adaptation picture changed in ways that bear directly on this Strategy. The Belém political package (the set of decisions adopted at the close of the conference, known as the Mutirão decision) includes a commitment to at least triple adaptation finance for developing countries by 2035.²

Three qualifications should travel with that headline, because the difference between the goal as reported and the goal as adopted is material for a country planning against it.

- **The baseline is not specified.** The decision does not name the figure being tripled. The widely used interpretation, advanced by the World Resources Institute among others, is that it triples the USD 40 billion adaptation finance goal agreed at COP26 in Glasgow, which would imply a target of about USD 120 billion a year. That reading is an interpretation of the text, not a figure contained in it.
- **The target sits inside the NCQG, not alongside it.** The decision frames the tripling as being 'in the context of' the USD 300 billion NCQG. The adaptation goal is therefore a component of that total rather than an additional commitment, and it inherits the NCQG's broad accounting, which counts mobilized private finance and voluntary contributions from wealthier developing countries alongside developed-country public finance.
- **The date slipped and the obligation is soft.** Least developed countries, supported by the small island states, the African Group and others, proposed tripling by 2030. The adopted text moved this to 2035 and stops short of a binding provision obligation. It is a political signal rather than a commitment against which delivery can be enforced.

For scale, the Independent High-Level Expert Group on Climate Finance estimates that developing countries excluding China need in the order of USD 400 billion a year for adaptation and resilience by 2035. A tripled goal of roughly USD 120 billion would meet under a third of that. Malawi should plan on the basis that international adaptation finance will grow but will remain well short of assessed need, which is the assumption underlying the financing allocation in Table 12 and the emphasis throughout this Strategy on absorption capacity and domestic instruments rather than on mobilization alone.

Three further COP30 outcomes are directly relevant to the NAP process this Strategy serves. Parties adopted 59 voluntary, non-prescriptive indicators for the Global Goal on Adaptation (the Belém Adaptation Indicators) spanning water, food, health, ecosystems, infrastructure and livelihoods, with cross-cutting coverage of finance, technology and capacity-building. Malawi's adaptation-finance indicators, including those proposed in the fact sheets in Chapter 9, should be mapped against that indicator set before the Strategy is finalized, so that national reporting and the Global Goal on Adaptation framework draw on the same measurements. Second, decision text on National Adaptation Plans was agreed after several years without agreement, and the Baku Adaptation Roadmap was

² UNFCCC, COP30 Belém political package (Mutirão decision) and associated decisions on the Global Goal on Adaptation, National Adaptation Plans and climate finance, Belém, November 2025. Available at: <https://unfccc.int/cop30>.

concluded with a work programme running from 2026 to 2028 up to the next Global Stocktake. Third, a two-year work programme on climate finance was established, covering Article 9.1 of the Paris Agreement among other matters — the provision under which developed countries are to provide public finance, and the channel through which the concerns of LDCs about the public-finance component of the NCQG will be pursued.

Sources: COP30 Belém political package and Mutirão decision, November 2025; COP30 Presidency communications; analyses by the World Resources Institute, Carbon Brief, IISD and ODI. The interpretation of the tripling baseline is contested; the adopted text should be read directly before the figure is quoted in a funding proposal. Verify against any decisions taken since this draft.

3. Adaptation Finance in Malawi: Policy, Institutions and Current Flows

3.1 Enabling policy environment and institutions

Malawi is highly exposed to physical climate risks (recurrent droughts, floods, tropical storms and cyclones (e.g. Ana, Idai, Gombe, Freddy) and, most recently, El Niño) that threaten water security, agriculture and a largely climate-sensitive, rain-fed economy. The country has developed an enabling environment for climate action, including the National Climate Change Management Policy, the National Resilience Strategy (2018–2030), the National Forest Landscape Restoration Strategy (2017), the Malawi National Disaster Risk Management Policy (2015), and sectoral policies on agriculture (National Agriculture Policy, 2024), irrigation (Malawi Irrigation Master Plan, 2015–2035) and water.

Climate-change coordination is led by the Environmental Affairs Department (EAD) within the Ministry of Natural Resources and Climate Change. Key institutions include the Department of Disaster Management Affairs (DoDMA), the Department of Climate Change and Meteorological Services (DCCMS), the Ministry of Water and Sanitation, District Councils and Civil Protection Committees. The Ministry of Finance and Economic Affairs is responsible for fiscal policy and public financial management.

3.2 Malawi's NDC: financing requirement

Malawi submitted its updated Nationally Determined Contribution to the UNFCCC on 30 July 2021, adopting an economy-wide emissions reduction target of 6% unconditional and a further 45% conditional on international support by 2040. The NDC presents 115 measures, of which 80 relate to adaptation and 35 to mitigation, across ten sectors.

The NDC costing is the national reference against which this Strategy's investment envelope must be reconciled. Malawi's First Biennial Transparency Report (BTR1) to the UNFCCC states a total requirement of USD 41.8 billion for mitigation and USD 4.5 billion for adaptation from 2020 through 2040, a combined USD 46.3 billion. Of these amounts, USD 24.58 billion is required from external sources for mitigation, USD 2.185 billion for adaptation and USD 0.753 billion for cross-cutting measures. Around one quarter of the total is expected to be met domestically or unconditionally, with roughly one third of the requirement falling in 2020–2030 and two thirds in 2030–2040.

Table 1: Malawi's NDC financing requirement and the CBA investment envelope compared³

Reference	Scope and period	Total (USD)	Of which external (USD)
NDC / BTR1 — adaptation	80 adaptation measures, 2020–2040	4.50 billion	2.185 billion

³ Sources: Malawi's First Biennial Transparency Report to the UNFCCC (2025), sections 4.3.2 and 4.10; revised National CBA of priority NAP adaptation measures (July 2026). The two envelopes are not additive and are not directly comparable: the NDC adaptation figure spans 2020–2040 and covers 80 measures, while the CBA capital requirement covers 22 measures deployed over five years.

Reference	Scope and period	Total (USD)	Of which external (USD)
NDC / BTR1 — cross-cutting	Agroforestry, conservation, agriculture, afforestation, 2020–2040	0.753 billion	0.753 billion
NDC / BTR1 — mitigation	35 mitigation measures, 2020–2040	41.80 billion	24.58 billion
NDC / BTR1 — combined	All climate measures, 2020–2040	46.30 billion	27.52 billion
National CBA (NAP) — CAPEX	22 priority NAP measures, 5-year investment phase	4.582 billion	not disaggregated
National CBA (NAP) — full programme	CAPEX + OPEX, 20-year appraisal, present value at 8%	7.20 billion	not disaggregated

The proximity of the two adaptation figures (USD 4.50 billion in the NDC and USD 4.58 billion of CBA capital requirement) is a useful cross-check on order of magnitude, but the two are constructed differently and should not be summed. The NDC figure is a 20-year envelope built bottom-up from 80 measures at national policy level; the CBA figure is the capital cost of 22 appraised measures deployed over five years, excluding the operating expenditure that follows. Where the CBA and the NDC address the same measure, the CBA costing should be treated as the more recent and more detailed estimate.

3.3 Country financial and economic context

Malawi is a Least Developed Country with a largely agrarian, rain-fed economy and severely constrained fiscal space. The macro-fiscal position is the binding constraint on any domestically financed adaptation programme, and has deteriorated over the period covered by this Strategy.

Table 2: Malawi macro-fiscal indicators⁴

Indicator	2023	2024	2025
Real GDP growth (%)	1.9	1.8	2.4 (proj.)
Nominal GDP (MWK billion)	15,475	20,322	25,956 (proj.)
Consumer prices, end of period (%)	34.5	28.1	25.4 (proj.)
Total public debt (% of GDP)	—	88 (end-2024)	—
Overall fiscal deficit (% of GDP)	—	10.1 (FY2024/25)	—
Interest bill on public debt (% of GDP)	—	approaching 7	—
Policy rate (%)	—	26	26
Exchange rate (MWK per USD, period average)	1,134.53	1,722.78	—

⁴ Sources: IMF 2025 Article IV Consultation with Malawi (Press Release 25/261, July 2025) and IMF Country Report 25/226 for growth, GDP, inflation, debt, deficit and policy rate; Reserve Bank of Malawi exchange rates as reported in Malawi's First Biennial Transparency Report (2025), Table 15.1. Figures should be refreshed against the next Article IV and the Ministry of Finance Budget Policy Statement before finalization. Note a discrepancy on the fiscal balance: the IMF reports an overall deficit of 10.1% of GDP for FY2024/25, while the August 2025 Global Shield gap analysis states a fiscal deficit of 18.7% for 2024. The two are likely measured on different bases and the definition should be reconciled with the Ministry of Finance before either figure is quoted.

Three features of this picture bear directly on the design of the Strategy. First, growth has been below population growth, so real income per head has been falling; the economy is not generating the fiscal base for a large domestically financed investment programme. Second, total public debt reached 88% of GDP at end-2024 and the interest bill is approaching 7% of GDP, leaving effectively no room for additional non-concessional borrowing; the IMF notes that around 90% of external debt is owed to multilateral development banks, so there is little restructurable debt. Third, the 2023 Extended Credit Facility terminated in May 2025 without a completed review, and Official Development Assistance is declining. Taken together, these conditions mean that the adaptation programme must be financed overwhelmingly through grants and highly concessional resources, and that instruments which add to the debt stock should be avoided except where they finance measures with demonstrable, near-term revenue.⁵

The exchange rate is a further complication for this analysis. The kwacha depreciated from 800 MWK per USD in 2021 to 1,723 in 2024. Any comparison of domestic climate expenditure across years, when expressed in US dollars, is therefore dominated by the exchange rate rather than by real spending decisions. Domestic figures in this chapter are given in kwacha with the conversion rate stated.

3.4 The adaptation-finance baseline

Malawi's adaptation-finance baseline is assembled here from three sources: the Climate Public Expenditure and Institutional Review for domestic public expenditure; the First Biennial Transparency Report for external climate finance received and committed; and the portfolios of the multilateral climate funds for the current project pipeline.

Domestic public climate expenditure: the CPEIR evidence

Malawi has conducted a Climate Public Expenditure and Institutional Review. The Malawi First Phase CPEIR was carried out in September and October 2018 by a Mokoro / Climate Scrutiny team led by Kit Nicholson, funded and managed by UNDP under the ADAPT PLAN project with GEF-LDCF support, and issued as a final report dated 31 December 2018. It classified expenditure recorded in the Approved Financial Statement, the Aid Management Platform and National Local Government Finance Committee data, and piloted a district-level assessment in Nkhata Bay, Ntcheu and Zomba.⁶

Its principal findings are the starting point for the funding-gap analysis in Chapter 4:

- **Scale of climate expenditure:** MWK 388 billion of public spending in FY2016/17 made some contribution to adaptation and/or mitigation. Of this, MWK 258 billion was recorded in the Approved Financial Statement (MWK 94 billion recurrent central government, MWK 24 billion Local Councils, MWK 139 billion development), with a further MWK 36 billion of foreign-funded development projects and MWK 94 billion of disaster risk management recorded in the Aid Management Platform but not in the budget (about USD 50 million) At the FY2016/17 rate of 724 MWK per USD, this is approximately USD 536 million.
- **Share of the budget:** climate-related expenditure was 23% of total public expenditure of MWK 1,137.5 billion in FY2016/17. Climate-related development expenditure rose from between 2% and 5% of total public expenditure before 2013/14 to between 9% and 12% afterwards, a step change driven largely by World Bank lending for the Agriculture Sector-Wide Approach and the Malawi Social Action Fund
- **Adaptation Benefit Share:** the CPEIR weighted expenditure by the share of total benefits attributable to adaptation. The average was 11% for all climate expenditure in the budget, 13% for development expenditure, and 26% for donor-funded climate expenditure, which is concentrated in higher-relevance projects. District pilot assessments produced shares of 16% to 23%

⁵ International Monetary Fund, 2025 Article IV Consultation with Malawi, Press Release 25/261 and Country Report 25/226, July 2025. Available at: <https://www.imf.org/en/Countries/MWI>.

⁶ Malawi First Phase Climate Public Expenditure and Institutional Review, Final Report, 31 December 2018 (Mokoro / Climate Scrutiny for UNDP and the Ministry of Natural Resources, Energy and Mining). Available at: <https://mokoro.co.uk/project/malawi-climate-public-expenditure-and-institutional-review/>.

Adaptation Financing Strategy – Revised report

- **Adaptation Gap:** the CPEIR concluded that Malawi's adaptation gap was between 80% and 90%, and recommended a Strategy for Reducing the Adaptation Gap with targets of 70% in the short term, 60% in the medium term and 50% in the long term
- **Data constraint:** the review could not analyse actual expenditure because the Integrated Financial Management Information System does not record spending by cost centre. It recommended a second-phase CPEIR examining payment requests in pilot ministries. This Strategy is not aware of a completed second phase

Source: Malawi First Phase CPEIR, Final Report, 31 December 2018 (Mokoro / Climate Scrutiny for UNDP and the Ministry of Natural Resources, Energy and Mining), Summary and sections 3.2, 3.3 and 5. Exchange rate for FY2016/17: 724 MWK per USD.

Two caveats attach to these figures. The data are for FY2016/17 and are now close to a decade old; the budget structure, the exchange rate and the donor landscape have all changed materially since. And the CPEIR classification is a screening exercise applied to sub-programmes, not a measurement of adaptation outcomes. Updating the CPEIR is the single most valuable statistical investment available to this Strategy, and is carried into the roadmap in Chapter 7.

External climate finance received and committed

Malawi's First Biennial Transparency Report, covering 1 January 2021 to 31 December 2023, reports climate finance on a consistent basis for the first time. A total of USD 3.045 billion was either committed or received across all climate objectives during the reporting period, of which USD 0.875 billion was actually received — 29% of the total earmarked. Adaptation accounted for USD 1.717 billion of the committed-or-received total (56%), cross-cutting measures for USD 0.72 billion and mitigation for USD 0.607 billion. The “Objective” breakdown in Table 3 is BTR1's own classification of each flow as adaptation, mitigation or cross-cutting; it is not the OECD Rio marker “principal objective” score. The figures are therefore not comparable with Table 5, which is smaller for three reasons: Table 5 covers bilateral ODA only, it reports annual commitments rather than a three-year committed-or-received total (USD 1.717 billion over three years is about USD 572 million a year), and it draws on donor rather than Government reporting.

Table 3: External climate finance to Malawi, 2021–2023⁷

Dimension	Breakdown	USD billion	Share
Status	Committed	2.170	71%
	Received	0.875	29%
Objective	Adaptation	1.717	56%
	Cross-cutting	0.720	24%
	Mitigation	0.607	20%
Progress	Completed	0.515	17%
	On-going	1.436	47%
Instrument	Planned	1.094	36%
	Grant	2.032	67%
	Grant combined with another instrument	0.994	33%

⁷ Source: Malawi's First Biennial Transparency Report to the UNFCCC (2025), section 4.4 and Figures 4.2 to 4.5. Shares of the USD 3.045 billion committed-or-received total. Percentages for the objective and progress splits are calculated by this Strategy from the reported absolute values and are subject to rounding.

Dimension	Breakdown	USD billion	Share
	Concessional loan	0.018	0.6%

Three observations follow. The instrument mix is overwhelmingly grant-based (67% grants and only 0.6% concessional loans) which is consistent with Malawi's LDC status and its debt position, and confirms that the realistic financing architecture for adaptation is a grant-and-concession architecture rather than a leveraged one. The gap between commitment and receipt is large — 71% committed against 29% received — pointing to absorption capacity as a constraint at least as binding as mobilization (developed below). And adaptation's 56% share of climate finance is high by international standards, reflecting Malawi's negligible emissions. That share reflects how activities are labelled by reporting partners; whether the funded activities actually address climate risk, as opposed to reducing business-as-usual vulnerability, has not been assessed at a granular level.

Current multilateral climate fund portfolio

Three single-country GCF projects make up Malawi's directly attributable GCF adaptation portfolio, together with one multi-country project in which Malawi participates. The portfolio is set out below with funding proposal identifiers, so that each entry can be traced to the GCF project record.

Table 4: Malawi's GCF adaptation portfolio⁸

FP ID	Project (accredited entity)	Approved	GCF financing (USD)	Status and disbursement
FP002	Saving Lives and Protecting Agriculture-based Livelihoods: Scaling up the use of Modernized Climate Information and Early Warning Systems (M-CLIMES) — UNDP	B.13, 2016	12,294,545	Implemented through DoDMA and DCCMS; reported to have reached around 2 million people with early warnings
FP238	Ecosystems-based Adaptation for Resilient Watersheds and Communities in Malawi (EbAM) — FAO	B.39, 23 July 2024	42,808,151	Under implementation to July 2030 in 11 districts; USD 4,881,263 disbursed, 11% of GCF financing, at the date of consultation. Co-financing USD 10,416,675, giving a total project value of about USD 53.2 million. Implementation period: July 2024 to July 2030 (six years).
FP244	Climate Resilient Health and Well-Being for Rural Communities in southern Malawi (CHWBRC) — Save the Children Australia	B.40, October 2024	33,000,000	Implementation April 2025 to March 2030 in Balaka, Ntcheu, Machinga, Mangochi, Phalombe and Zomba; 1.7 million direct beneficiaries. Co-financing above USD 3 million from GSK, Foundation S, Moondance Foundation, FCDO and the

⁸ Sources: GCF project records FP002, FP238, FP244 and FP257; FAO and GCF announcements of the EbAM approval (July 2024) and inception (December 2024); Save the Children and GCF Board decision B.40 for CHWBRC; GCF project page for FP257. The FP002 financing figure should be confirmed against the GCF project record before publication. Disbursement data are point-in-time and change continuously.

FP ID	Project (accredited entity)	Approved	GCF financing (USD)	Status and disbursement
				Ministry of Health Implementation period: April 2025 to March 2030 (five years).
	Country total — single-country projects		88,102,696	
FP257	RE-GAIN: Scaling solutions for food loss in Africa (memo item) — multi-country	B.41, February 2025	75,623,754 across seven countries	Burkina Faso, Ethiopia, Kenya, Malawi, Tanzania, Uganda and Zambia. Malawi's share is not disclosed in the sources consulted and is therefore excluded from the country total

Three points follow, and each bears on the analysis in Chapter 4.

First, the directly attributable GCF adaptation portfolio is USD 88.1 million, not the larger figure obtained by adding multi-country envelopes. RE-GAIN is a seven-country project and its full GCF financing cannot be counted as Malawi finance. Country programming documents that aggregate multi-country projects at face value overstate the national portfolio, and the error is readily detected by the Fund.

Second, the portfolio is small relative to need. USD 88.1 million of approved GCF adaptation financing is under 2% of the CBA capital requirement of USD 4.58 billion, and under 10% of a single year of that requirement. The GCF is an essential channel but cannot, on any realistic trajectory, be the principal one.

Third, and most important for the design of this Strategy, approval is not disbursement. EbAM had disbursed 11% of its GCF financing some eighteen months after approval, and CHWBRC began implementation in April 2025. This is the project-level expression of the pattern already visible in the BTR1 aggregates, where 71% of climate finance remained committed rather than received. Any credible plan to close the funding gap must treat disbursement capacity as a first-order constraint alongside mobilization, and the readiness framework in Chapter 7 addresses it explicitly under the 'deliver' component.

Bilateral adaptation ODA: the OECD Rio marker evidence

The Rio markers are the standard instrument for identifying the climate content of bilateral aid. Donors reporting to the OECD Development Assistance Committee score each activity against the adaptation marker: principal objective, where adaptation is the reason the activity exists; significant objective, where adaptation is an explicit but secondary aim; screened but not targeted; and not screened. The marker records intent at the point of commitment, not the amount of adaptation delivered, and this distinction governs how the figures below should be read.

Table A1 in Annex A gives bilateral ODA to Malawi by Rio adaptation marker (2023–2024).

Four readings follow, and the order matters.

First, adaptation-marked bilateral commitments are far smaller than headline climate finance figures suggest. Even at face value, commitments carrying either adaptation marker fell from USD 280.5 million in 2023 to USD 218.6 million in 2024. Weighting significant-objective commitments at 40% (on the reasoning that adaptation is a secondary aim of those activities, not their purpose) brings the figure to roughly USD 144 million and USD 116 million respectively. Commitments where adaptation is the principal objective are smaller still, at USD 47–53 million a year, or under 5% of bilateral ODA in 2024.

Second, this triangulates with the baseline established earlier in this chapter. The weighted bilateral figure of USD 116–144 million a year sits close to the USD 164 million of adaptation-weighted external

climate finance derived from BTR1 in Chapter 4, and the two are constructed from entirely separate reporting systems. They should not be added: the Rio marker data and the BTR1 data describe overlapping flows recorded by different reporting chains, the first from donors at commitment and the second by Government at commitment and receipt. Their convergence is a validity check on the baseline, not an increment to it.

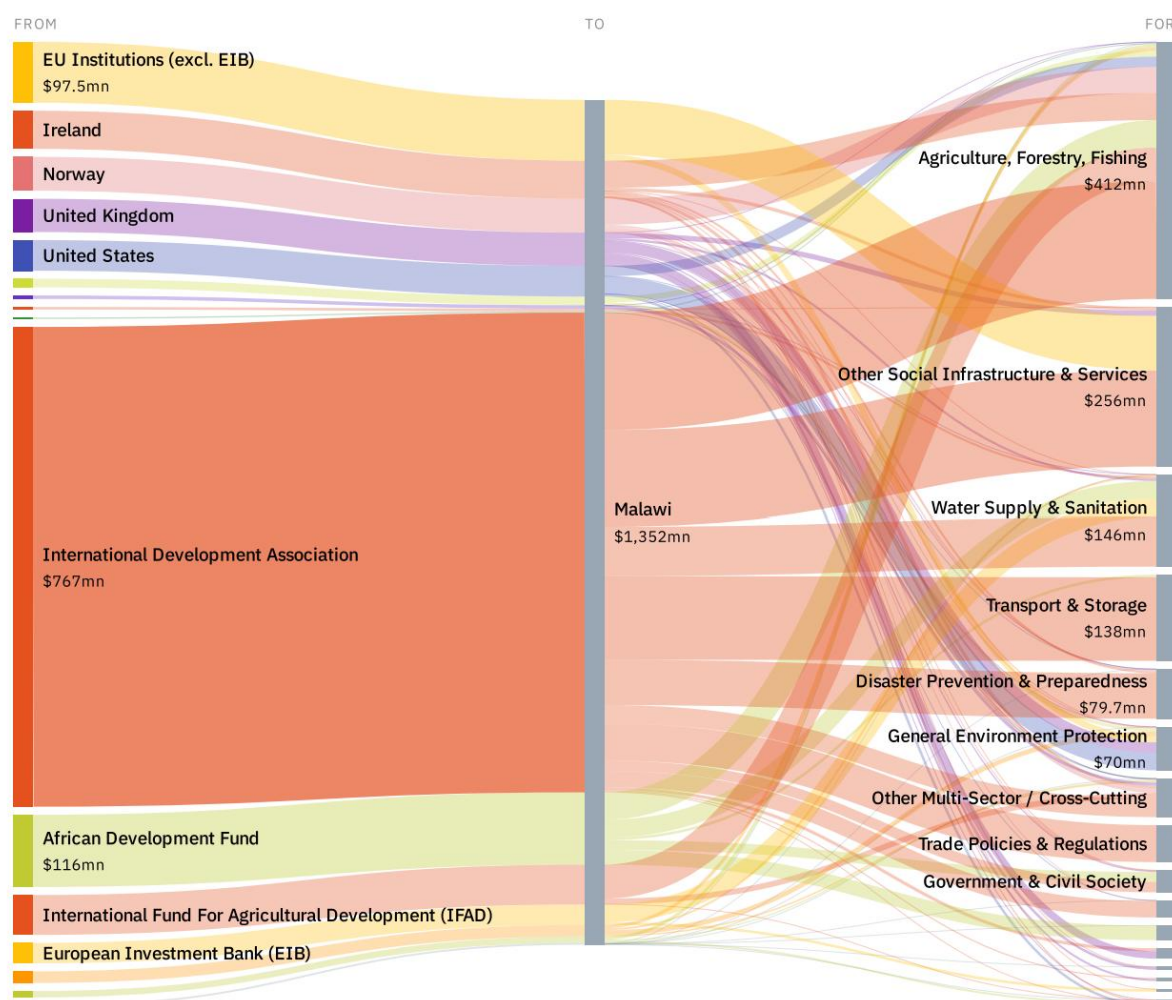
Fourth, the largest category is the most interesting one for policy. In 2024, USD 773.1 million of bilateral ODA to Malawi (77% of the total) was screened against the adaptation marker and scored zero: donors examined these activities and concluded they do not address adaptation. Much of this will be in roads, health, education and general budget support, all of which are exposed to the same climate risks the CBA quantifies. The opportunity is to build climate risk screening into the design of that mainstream portfolio, so that infrastructure is specified to withstand the flood return periods now expected and service delivery is planned around drought. It is worth being precise about what this does and does not mean: the objective is to change what those projects contain, not to re-mark them. Re-scoring unchanged activities would inflate reported adaptation finance without improving a single asset, and is the practice for which Rio-marker reporting is most often criticized.

The long-run picture: two decades of adaptation finance

The CPEIR, the Biennial Transparency Report and the Rio markers each capture a slice of time. Aid Atlas, the Stockholm Environment Institute's platform for OECD Creditor Reporting System data, provides the long series. Between 2002 and 2021, all funders worldwide committed USD 1.35 billion in development finance to Malawi targeting climate adaptation, against USD 22.4 billion of total development finance to the country over the same period — adaptation therefore accounts for about 6% of all development finance received.⁹

Table A2 in Annex A gives adaptation finance to Malawi by funder, 2002–2021 (Aid Atlas).

⁹ Atteridge, A., Savvidou, G., Sadowski, S., Gortana, F., Meintrup, L., and Dzebo, A. (2019). *Aid Atlas*, Stockholm Environment Institute. Profile: Climate Adaptation during 2002–2021, All Donors to Malawi, commitments basis; aid-atlas.org. Available at: <https://aid-atlas.org/profile/all/malawi/climate-adaptation/2002-2021>.



The concentration is the first thing to note, and it is extreme. A single funder (IDA) accounts for 57% of two decades of adaptation finance, and the four multilateral development banks and funds together (IDA, the African Development Fund, IFAD and the EIB) for 72%. Bilateral partners are individually small: Ireland at USD 61 million and Norway at USD 54.3 million rank above the United Kingdom and the United States. Dedicated climate funds barely register over this period, with the Global Environment Facility at USD 18.6 million and the Adaptation Fund at USD 10.3 million; the Green Climate Fund does not appear at all before 2021, which places the GCF portfolio in Table 4 in perspective as a recent and rapid entry rather than a long-standing channel. The strategic implication is uncomfortable: a financing base this concentrated is exposed to the lending decisions of one institution.

Table A3 in Annex A gives adaptation finance to Malawi by sector, 2002–2021 (Aid Atlas).

Instrument mix: the long series contradicts the recent one

Over 2002–2021 the instrument composition was: multilateral development bank loans 48.6%, ODA grants 30.1%, MDB grants 19.1%, ODA loans 2.1%, and private development finance below 0.001%. Slightly more than half of two decades of adaptation finance (50.7%) was therefore debt-creating.

This sits beside the BTR1 picture (Table 3), where grants are 67% of recent climate finance and concessional loans 0.6% — a real shift away from lending towards grants, coinciding with the deterioration of Malawi's debt position. The Strategy's recommendation to build a grant-and-concession architecture is therefore consistent with the recent trend rather than a departure from it, but it should be stated for what it is: a break with how most adaptation finance to Malawi has historically been delivered.

Private development finance at below 0.001% of the twenty-year total is the most stark figure in this chapter. It is the quantitative form of the finding that emerged qualitatively from the July 2026 private-sector consultations in Chapter 6, and it should temper the ambition of any private-mobilization target: the base is not small, it is effectively zero.

Disbursement: a third independent measurement

Aid Atlas reports a disbursement ratio of 71.6% for adaptation finance to Malawi over 2002–2021, against 83.2% for all development finance worldwide in the same period. For funders excluding the MDBs, USD 436 million was committed and USD 312 million disbursed. Aid Atlas notes that low disbursement ratios may indicate implementation difficulties or that funding was redirected after approval.

This is the third independent measurement of the same problem. Malawi's Biennial Transparency Report records 29% of climate finance received against 71% still committed over 2021–2023. The GCF project record shows EbAM at 11% disbursed some eighteen months after approval. And the OECD data now show a twenty-year disbursement shortfall of about twelve percentage points against the global average. Three reporting systems, three methods, one conclusion: Malawi's constraint is not only how much finance is committed but how much of it converts into spending. No financing strategy that addresses mobilization alone will close the gap in Table 11.

A note on scale is needed before this series is used in the gap analysis. The USD 1.35 billion that all funders committed to Malawi for adaptation between 2002 and 2021 (Aid Atlas; see “The long-run picture” above) averages roughly USD 68 million a year, which is under 8% of the CBA's annual capital requirement of USD 916 million (USD 4,582.20 million of CAPEX spread over the five-year investment phase; see Section 4.1 and Table 11). That twenty-year average understates recent flows (not the requirement): the Aid Atlas time series is close to zero before 2010 and peaks above USD 300 million in the late 2010s, with pronounced year-to-year volatility. Even at that peak, flows covered only about a third of the USD 916 million annual requirement. The long-run average should therefore be read as evidence of the historic scale of adaptation finance and of its volatility, not as a current run rate; the 2021–2024 figures in Tables 3 and 5 are the better guide to present flows.

Source: Aid Atlas, Climate Adaptation during 2002–2021 (All Donors to Malawi), commitments in USD, Stockholm Environment Institute, aid-atlas.org, top ten supported projects. Suggested citation: Atteridge, A., Savvidou, G., Sadowski, S., Gortana, F., Meintrup, L., and Dzebo, A. (2019). Aid Atlas.

Domestic instruments already in place

Two domestic instruments are relevant and are sometimes overlooked. A Carbon Levy capitalizes a Climate Change Account managed by the Malawi Environment Protection Authority (MEPA); the first cohort of community projects financed from domestically generated funds received grants of MWK 150 million each. And, with GCF support, the Government is establishing a National Climate Change Fund intended to act as a single basket for domestic and international resources. A climate finance management information system has also been developed to track inflows. The existence of these instruments materially changes the institutional recommendations in Chapter 7: the priority is to capitalize and connect what exists rather than to design new vehicles.

The August 2025 Global Shield gap analysis is more specific about this, and less encouraging. Three funds exist under different policy mandates (the National Disaster Risk Management Fund, the National Disaster Preparedness and Relief Fund, and the National Climate Change Fund) but the National Disaster Risk Management Fund and the National Climate Change Fund are not yet operational. In the case of the Climate Change Fund this is because the implementing regulations have not been developed; both face gaps in capitalization as well as in implementation. The practical consequence for this Strategy is that the institutional recommendation is not to design new machinery but to issue the outstanding regulations and capitalize what has already been legislated.

Source: Gap Analysis Report on Climate and Disaster Risk Finance in Malawi, Ministry of Finance and Economic Affairs, contribution to the in-country process of the Global Shield against Climate Risks, August 2025, sections 2.6 and 3.5.

Sources: Malawi BTR1 (2025), section 4.1.1, on the National Climate Change Fund and the climate finance management information system; UNDP Malawi reporting on the Africa Green Business and Financing Initiative country roadmap launch for the Carbon Levy and MEPA Climate Change Account. The legal basis, annual yield and governance of the Carbon Levy should be confirmed with MEPA and the Ministry of Finance.

3.5 Barriers and enablers of adaptation finance

Key barriers (consistent with the CBA): limited and donor-dependent funding; technical-capacity gaps; weak private-sector involvement; and poor cross-sector coordination. Key enablers: a growing portfolio of GCF, GEF and MDB adaptation projects; the national policy framework (National Resilience Strategy, NFLRS); Malawi's strong forestry / land-use carbon potential (Article 6.2 and VCM); and the high economic returns of the priority measures demonstrated by the CBA.

The most detailed diagnosis available of the financial-sector barriers is the Gap Analysis Report on Climate and Disaster Risk Finance prepared by the Ministry of Finance and Economic Affairs in August 2025 as Malawi's contribution to the in-country process of the Global Shield against Climate Risks. It draws on stakeholder interviews and on the national Global Shield workshop held in Lilongwe on 29–30 April 2025. Several of its findings are constraints this Strategy has to design around rather than assume away, and they are summarized below.¹⁰

Table A4 in Annex A gives the full financial-sector and institutional constraints matrix.

Set against these constraints, the same report identifies enablers that this Strategy builds on: a policy landscape comprising Malawi 2063, the National Resilience Strategy and the disaster risk management legal framework; the reach of mobile money as a delivery channel; an updated disaster risk financing strategy under development; and Malawi's active engagement with the Global Shield against Climate Risks, which is itself a financing channel for the risk-finance components of this Strategy and should be pursued in parallel with the climate-fund pathways in Chapter 4.2.

¹⁰ Government of Malawi, Ministry of Finance and Economic Affairs, *Gap Analysis Report: Climate and Disaster Risk Finance in Malawi — Contribution to the In-Country Process of the Global Shield against Climate Risks*, August 2025. Available at: <https://www.globalshield.org>.

4. Pillars of the Adaptation Finance Strategy

The Adaptation Finance Strategy for Malawi is built on three sequential, mutually reinforcing pillars that together aim to maximize public, private and external financial resources for climate resilience. The approach is evidence-based and moves from gap analysis to concrete, implementable financing solutions, aligned with the NAP process and Malawi's Vision 2063.

Substantively, the Strategy is built on a two-track analytical process. In the near term, the priority adaptation measures identified in the CBA are fine-tuned in financial terms with sector ministries, District Councils and utilities (clarifying CAPEX and OPEX needs, avoided losses, livelihood impacts and co-benefits. In parallel, the current finance baseline) climate-tagged budget lines, ODA and climate funds, IFI support and private / co-finance — is to be compared with total NAP needs to establish the adaptation funding gap under high / low mobilization scenarios.

- **Pillar 1:** Establishing and addressing the adaptation funding gap, based on the CBA of the 22 priority NAP measures and on Malawi's NDC / national planning framework.
- **Pillar 2:** Mobilizing and aligning public and external resources around a pragmatic, sequenced implementation action plan.
- **Pillar 3:** Crowding in private finance and carbon-market revenues by removing targeted barriers and deploying appropriate policy, regulatory and financial instruments.

4.1 Pillar 1: Establishing and addressing the adaptation funding gap

This section responds to Task 1: to determine the adaptation funding gap by comparing existing funding with the total estimated cost of the priority NAP measures. The analysis draws on the National CBA study, complemented by national climate public-expenditure data and external climate-fund data that remain to be compiled.

Basis for estimating adaptation investment needs

The National CBA provides the quantitative benchmark for adaptation investment needs. It appraises 22 adaptation measures across five priority sectors (agriculture, fisheries, forestry, infrastructure and disaster risk reduction, and the social sector) at national scale, aligned with the Climate Risk and Vulnerability Assessments prepared for eight districts (Phalombe, Balaka, Chikwawa, Dedza, Karonga, Kasungu, Rumphi and Salima). Health is not treated as a sixth sector: it is addressed transversally through the infrastructure and DRR measures (resilient health facilities and the assets on which service delivery depends) and the social-sector measures (access to health care, surveillance, community response, workforce capacity). Education is embedded in the social sector. The revised CBA finds that:

- **Capital requirement:** the capital requirement to implement the 22 measures at national scale is USD 4,582.20 million (USD 4.58 billion) of CAPEX, deployed over a five-year investment phase (Y1–Y5). Operating expenditure is modelled separately at USD 437 million in the first year of operation, escalating at 5% per year, so that the full cost of the programme over the 20-year appraisal period is approximately USD 14 billion undiscounted, or USD 7.2 billion in present value at the 8% discount rate. Earlier drafts of this Strategy described the USD 4.5 billion as CAPEX plus OPEX; the revised CBA is explicit that it is the capital requirement alone, and the financing architecture in this Strategy is sized accordingly.
- **Economic returns:** the portfolio NPV of the 22 measures is USD 5,760.56 million under RCP 4.5, already net of their discounted costs, with a portfolio IRR of 33%. Measure-level IRRs range from 17.09% (reforestation) to 89.19% (crop diversification) under RCP 4.5. Under RCP 8.5 the same measures perform better (several exceed 120% IRR) because avoided losses are larger on a high-emissions pathway. The two pathways are reported side by side and neither is designated as the reference case: RCP 4.5 is the conservative estimate of the economic case for adaptation and RCP 8.5 the upper bound. No low-emissions pathway (RCP 2.6) is appraised.
- **Concentration of needs:** agriculture accounts for 71% of the capital requirement, and irrigation schemes alone (USD 1.76 billion) for close to 40% of it, reflecting Malawi's underutilized

irrigation potential and the central role of water security. The four smallest sectors combined (forestry, infrastructure and DRR, social and fisheries) account for USD 1.34 billion, yet several of their measures rank highest on IRR — which is the central message for prioritization and for the sequencing of finance.

Table 9: Adaptation investment envelope and returns (revised National CBA, July 2026)¹¹

Indicator	Amount (USD)	Basis
Capital requirement (CAPEX, 22 measures)	4,582.20 million	Total CAPEX at national scale, deployed over the five-year investment phase (Y1–Y5)
Operating expenditure (OPEX)	437 million (Y1 of operation)	Modelled separately from CAPEX; escalating at 5% per year over the appraisal period
Full programme cost (CAPEX + OPEX)	~14 billion / ~7.2 billion	Undiscounted over the 20-year appraisal period / present value at the 8% discount rate
Portfolio NPV (RCP 4.5)	5,760.56 million	Sum of the NPVs of the 22 measures — already net of their discounted costs, so not to be netted against the CAPEX a second time
Portfolio IRR (RCP 4.5)	33%	Base case of the CBA sensitivity analysis; 20% at +30% cost overrun, 16% at –30% benefit shortfall
Marketed benefits per year (RCP 4.5 / RCP 8.5)	682.6 / 787 million	Annual marketed economic benefits (increased crop yields; income stability)
Carbon sequestration benefits per year	36–42 million	Monetized avoided GHG emissions at conservative carbon prices (USD 15/tCO _{2e} ARR, USD 8.5 conservation, USD 15 carbon farming), per the CBA conclusions

Capital requirement by sector and by measure

The revised CBA disaggregates the capital requirement by priority sector for all five sectors and by measure for the ten most capital-intensive measures. The remaining twelve of the 22 measures are appraised in the CBA in the same way, with measure-level IRRs, but their capital costs are reported only within the sector totals: all social and fisheries measures, and the smaller agriculture, forestry and infrastructure measures (Table 10). This closes a gap flagged in the previous draft of this Strategy and allows sector financing plans, and the sequencing of external proposals, to be built on published figures rather than on the national aggregate alone. The profile is highly concentrated: agriculture carries 71% of the capital requirement and irrigation schemes alone close to 40%, while fisheries and the social sector carry the smallest capital requirements yet contain several of the highest-ranking measures on IRR.

¹¹ Source: National Economic Appraisal and CBA of priority NAP adaptation measures, Malawi (revised report, 17 July 2026), sections 3.8.3–3.8.5 and Tables 25–28. The CBA reports investment on a national-scale basis and does not publish a risk-adjusted “priority portfolio” figure, a portfolio benefit–cost ratio or Monte-Carlo confidence intervals; such figures are therefore not reproduced here. The carbon-sequestration benefit is taken as USD 36–42 million per year, per the CBA conclusions.

Table 10: Capital requirement by priority sector and by measure (revised National CBA)¹²

Priority sector	CAPEX (USD million, Y1–Y5)	Largest measures within the sector (CAPEX, USD million)
Agriculture	3,237.51	Irrigation schemes 1,760.00; drought-tolerant crops 400.00; crop diversification 260.01; afforestation / reforestation 260.00; climate-smart agriculture 200.00; improve soil fertility 175.00; rainwater harvesting 112.50
Forestry	580.05	Reforestation 307.28; community forest management 165.46
Infrastructure and DRR	422.56	Flood management 354.55
Social	249.41	Not disaggregated by measure in the CBA
Fisheries	92.68	Not disaggregated by measure in the CBA
Total — 22 measures	4,582.20	—

Two figures in the CBA narrative need to be read with care. Section 3.8.3 of the CBA describes rainwater harvesting as requiring under USD 7 million and the fisheries measures as requiring under USD 5 million, while the CBA cost tables (Tables 25–26) give USD 112.50 million for rainwater harvesting and USD 92.68 million for the fisheries sector. The narrative figures refer to single pilot schemes; the tables refer to national-scale deployment. This Strategy uses the national-scale figures throughout, consistent with the USD 4,582.20 million capital envelope.

Robustness of the investment case

The CBA sensitivity analysis, run under RCP 4.5, gives a base case of 33% portfolio IRR and USD 5,760.56 million NPV. The portfolio remains strongly positive under adverse assumptions: a 30% cost overrun reduces the IRR to 20% and the NPV to USD 3,427.41 million, and a 30% shortfall in benefits reduces them to 16% and USD 1,699.24 million. For financing purposes this has three implications. First, the economic case does not depend on the optimistic pathway: it holds under RCP 4.5 with materially adverse cost and benefit assumptions, which is the case that should be presented to concessional funders. Second, a contingency of at least 20–30% on capital costs is prudent in project budgets, given Malawi's inflation and procurement history. Third, infrastructure-heavy measures are the most sensitive to cost overruns and to the discount rate, which argues for phasing, co-financing and viability-gap support in that cluster, whereas the social-sector and community-based measures deliver early returns at low capital cost and are the natural candidates for immediate domestic and grant financing.

The CBA applies standard financial methodology (the social Internal Rate of Return (IRR) and the Net Present Value (NPV)) to determine the economic feasibility of each measure over a 20-year period, incorporating private and public cash flows within each sector and integrating non-market values. Key model assumptions include a social discount rate of 8% (aligned with GCF practice for least-developed countries, below the 13% average observed in Malawi over 1963–2016, and tested between 5% and 10% in the sensitivity analysis); an investment period of twenty years from 2025, with a five-year capital-deployment phase and results reported at the 2040 and 2080 horizons; USD cost escalation of 5% per year; and climate risk appraised under RCP 4.5 and RCP 8.5 against a single common BAU

¹² Source: revised National CBA, Tables 25 and 26 (total CAPEX over the Y1–Y5 investment phase, at the national scale of deployment assumed in the costing). Twelve of the 22 measures are not individually costed in the published report. The CBA narrative in section 3.8.3 describes rainwater harvesting as requiring under USD 7 million and aquaculture development and sustainable fishing as requiring under USD 5 million each. These narrative figures are per-scheme (pilot-scale) costs, whereas Tables 25–26 cost the same measures at national-scale deployment; the USD 112.50 million and USD 92.68 million figures used throughout this Strategy are the national-scale figures and are the correct basis for the funding gap.

counterfactual, with costs and implementation timelines held identical across the two pathways and only the benefits differing.

Costs of inaction: the rationale for financing adaptation

The CBA quantifies the escalating economic losses that Malawi faces under the business-as-usual (BAU) scenario, which underpin the urgency of mobilizing adaptation finance:

- **Macro-economic losses:** cumulative losses across the five sectors equivalent to 6–20% of GDP by 2040, rising to over 30% by 2080 under high-emission pathways.
- **Agriculture:** present value of losses for smallholder farmers of about USD 1.6 billion (2020–2050), i.e. an average annual loss of about USD 103 million; land degradation costs equivalent to 7.4% of GDP.
- **Fisheries:** annual economic losses estimated between USD 156 and 280 million under inaction.
- **Forestry:** 30,000 to 40,000 hectares of forest lost every year; 247,000 hectares of tree cover lost between 2001 and 2023.
- **Infrastructure:** GDP losses of 3–9% by 2040 under RCP 4.5, surpassing 10% under RCP 8.5 and exceeding 15% cumulatively by 2080.
- **Disasters:** catastrophes between 2015 and 2023 have cost Malawi an estimated USD 1.19 billion (DoDMA).

Methodology for assessing existing finance

To estimate the adaptation funding gap, the Strategy compares the cost of implementing the priority NAP measures with existing and projected resources from domestic and external sources. Three data streams are combined, each now populated from national and international sources as set out in Chapter 3.

- **Domestic public finance:** climate-relevant allocations in the national budget, from the Malawi First Phase CPEIR (FY2016/17 data, published December 2018), weighted by the Adaptation Benefit Share
- **External public climate finance:** climate finance received and committed 2021–2023, from Malawi's First Biennial Transparency Report, disaggregated by objective and instrument, together with the active GCF, GEF and Adaptation Fund portfolio
- **Emerging private adaptation finance:** not separately measured. The July 2026 private-sector consultations (Chapter 6) confirmed activity in carbon project development, micro-insurance, clean cooking and MSME lending, but no aggregate figure exists. Private adaptation finance is therefore treated as zero in the baseline, which makes the gap estimate conservative in the direction of overstating it

Because tracking of adaptation finance is still incomplete, the Strategy presents the gap on three bases rather than as a single number. This follows the CPEIR's own approach of distinguishing gross climate expenditure from adaptation-weighted expenditure, and avoids the two errors that most often distort adaptation-finance analysis: counting all climate-tagged spending as adaptation, and counting commitments as though they were disbursements.

Financing progress and the funding gap

The annualized requirement is derived from the CBA. The capital requirement of USD 4,582.20 million is deployed over a five-year investment phase, giving an average of USD 916 million per year of capital expenditure. Operating expenditure of USD 437 million in the first year of operation, escalating at 5% per year, falls due after the investment phase and is treated separately below.

The baseline is annualized on the same basis. Domestic climate expenditure is taken from the CPEIR at MWK 388 billion of total climate-related spending and MWK 258 billion recorded in the Approved Financial Statement, converted at the FY2016/17 rate of 724 MWK per USD. External finance is taken from BTR1 over its three-year reporting period. The adaptation-weighted column applies the CPEIR's Adaptation Benefit Share of 11% to domestic budget expenditure and the BTR1 adaptation share of 56% to external finance received.

Table 11: The adaptation funding gap on three bases (USD million per year)¹³

Component	Gross-tagged (USD million/yr)	Executed / received (USD million/yr)	Adaptation-weighted (USD million/yr)
Domestic public climate expenditure	536	356	39
External climate finance	1,015	292	164
Private adaptation finance	not measured	not measured	not measured
Total baseline (a)	1,551	648	203
CBA annual capital requirement (b)	916	916	916
Coverage (a ÷ b)	169%	71%	22%
Annual funding gap (b – a)	none apparent	268	713

The spread between the three columns is the substantive finding, and it is more useful than any single figure. On a gross-tagged basis Malawi appears to be over-financing adaptation, which is why headline climate-expenditure percentages are misleading. On an executed basis the country covers roughly seven-tenths of the annual capital requirement. On an adaptation-weighted basis (counting only the share of expenditure that actually delivers adaptation benefit) coverage falls to about a fifth, and the gap is of the order of USD 700 million per year, or USD 3.5 billion over the five-year investment phase.

This adaptation-weighted result corroborates the CPEIR's independent conclusion that Malawi's adaptation gap lay between 80% and 90%. The two estimates were produced by different methods, on different data, eight years apart, and converge on the same order of magnitude. That convergence is the basis on which this Strategy treats the gap as established rather than indicative, while recognizing that a second-phase CPEIR and a refreshed expenditure classification are needed to narrow the range.

A third, independent source points the same way. OECD Rio marker data for bilateral ODA commitments to Malawi (Chapter 3.4, Table 5) give adaptation-marked commitments of USD 116–144 million a year across 2023 and 2024 once significant-objective activities are weighted, against USD 47–53 million a year where adaptation is the principal objective. These figures are drawn from donor reporting rather than from Government reporting, and they fall in the same range as the adaptation-weighted external finance in the table above. Three reporting systems (a national expenditure review, a UNFCCC transparency report and the OECD Creditor Reporting System) converge on an adaptation finance baseline of roughly one fifth of the annual capital requirement.

Two features of the gap deserve separate treatment. Operating expenditure of USD 437 million in the first year of operation, escalating at 5% per year, is not covered by any part of the baseline above: it falls on recurrent national and district budgets at a time when the interest bill alone approaches 7% of GDP. And, as the disbursement analysis in this chapter shows, a substantial part of the gap is an absorption problem: additional commitments will not close a gap caused partly by the inability to disburse against commitments already made.

Stakeholder engagement undertaken through the NAP process and the CBA consultations across the eight districts confirmed that adaptation activities are largely donor-dependent, with limited nationally budgeted adaptation finance, weak private-sector participation, and poor coordination between sectors.

¹³ Calculated by this Strategy. Gross-tagged domestic = MWK 388 billion at 724 MWK/USD (CPEIR, FY2016/17); executed/received domestic = MWK 258 billion recorded in the Approved Financial Statement on the same basis; adaptation-weighted domestic applies the CPEIR Adaptation Benefit Share of 11%. Gross-tagged external = USD 3.045 billion committed-or-received ÷ 3 years; executed/received external = USD 0.875 billion received ÷ 3 years; adaptation-weighted external applies the BTR1 adaptation share of 56% to committed-or-received adaptation finance of USD 1.717 billion ÷ 3 years, then discounts for the received share. Requirement = USD 4,582.20 million ÷ 5 years. The three columns draw on different years (FY2016/17 for domestic, 2021–2023 for external) and are therefore indicative of order of magnitude, not a reconciled national account.

This reinforces the quantitative analysis and underscores the urgency of the finance-mobilization actions set out in the following sections.

The structural adaptation funding gap

Closing a gap of this size requires an explicit view of where the money is to come from. The indicative allocation below is calibrated to the evidence assembled in Chapter 3 rather than transposed from other countries, and is offered for discussion with the Ministry of Finance and Economic Affairs and development partners.

Table 12: Indicative financing allocation for the CBA capital requirement¹⁴

Source	Indicative share	Basis for the proposed share
Multilateral climate funds (GCF, AF, LDCF/SCCF, GEF)	30%	LDC priority access and grant windows; existing GCF pipeline; adaptation is 56% of current external climate finance
MDB concessional finance (World Bank, AfDB, IFAD, EIB)	30%	Already the largest channel; BTR1 identifies MDBs as preferred for debt terms; concessional windows only, given the debt position
Bilateral partners	15%	Historically significant but declining; the IMF flags falling ODA as a downside risk
Domestic budget and MTEF	10%	Constrained by a 10.1% fiscal deficit and debt at 88% of GDP; consistent with sustaining rather than expanding current climate-tagged allocations
Private investment and carbon-market revenue	15%	Bankable measures in agriculture, aquaculture and resilient infrastructure; carbon revenue treated as complementary, and subject to the fiscal constraints reported in the July 2026 consultations

The implication of this allocation is uncomfortable but should be stated plainly. Roughly three quarters of the capital requirement would have to come from external concessional and grant sources. Malawi does not have the fiscal space to close this gap domestically: as Chapter 3.3 sets out, sovereign borrowing and domestic bond issuance are foreclosed by the debt position (88% of GDP). The realistic strategy is therefore to maximize grant and highly concessional access, to improve absorption so that existing commitments convert into disbursements, and to sequence the portfolio so that the highest-return measures identified in the CBA are financed first.

Cost of implementing the Strategy

A financing strategy should estimate the cost of its own implementation. The table below gives indicative costs for the enabling measures recommended in Chapter 7, distinguishing those anchored on observed Malawi costs from those that remain to be costed.

Table 13: Indicative cost of implementing the enabling measures¹⁵

¹⁴ Proposed by this Strategy for calibration; not a finding of the CBA or of any national document. Shares should be revisited once a second-phase CPEIR establishes the domestic baseline and once the outcome of debt restructuring negotiations is known.

¹⁵ Source: enabling-measure costs are indicative estimates by this Strategy; observed unit costs are drawn from the sources cited in the accompanying text.

Measure	Indicative cost (USD)	Basis
Second-phase CPEIR and expenditure classification	0.3–0.6 million	Order of magnitude for a two-phase diagnostic with district fieldwork; to be confirmed with UNDP and the Ministry of Finance
Climate transparency and MRV systems	1.16 million	Observed: Malawi Climate Transparency Framework under CBIT, as reported in BTR1
BTR and National Communication reporting cycle	0.57 million	Observed: preparation of BTR1 and NC4, as reported in BTR1
NDC tracking framework (ICAT)	0.17 million	Observed: Initiative for Climate Action Transparency, as reported in BTR1
National Framework for Water and Climate Services, 2024–2029	63.41 million	Observed: costed national framework requiring external support, as reported in BTR1
Climate Finance Unit within the Ministry of Finance	to be costed	Staffing and systems cost; should be established as a mandate within existing structures rather than a new unit where possible
Climate budget tagging system	to be costed	Depends on whether IFMIS can be adapted; the CPEIR found cost-centre reporting is not currently possible
Article 6 readiness and carbon market framework	to be costed	Requires designated authority, registry and MRV arrangements
Capitalization of the National Climate Change Fund	to be determined	Fund is under establishment with GCF support; capitalization is a policy decision

Observed costs from Malawi's First Biennial Transparency Report (2025), Table 15.9 and section 5.1.2. Items marked 'to be costed' require a costing exercise and are not estimated here.

4.2 Pillar 2: Mobilizing and aligning public and external resources

This section responds to Task 2: to determine finance options by identifying which elements of the adaptation strategy can be privately funded, analyzing barriers to private investment, proposing a typology of instruments to address them, and developing action plans and estimates of potential funding amounts.

The starting point is the portfolio of 22 priority adaptation measures and their IRR and NPV from the CBA. Measures are grouped into investment clusters (climate-smart agriculture, integrated water security, resilient infrastructure and settlements, forestry and nature-based solutions, resilient fisheries, and social protection / early warning) and assigned to financing archetypes: (i) public-good investments funded primarily from domestic budgets and grants; (ii) income- or savings-generating measures able to attract private capital under the right conditions; and (iii) mixed packages requiring blended-finance structures.

Mapping adaptation measures into public, private and blended finance

The table below maps the 22 CBA-prioritized measures to finance archetypes, showing their economic performance under RCP 4.5. Publicly clear priorities (early-warning systems, social safety nets, watershed and forest protection) are mapped to public finance. Bankable themes (climate-smart irrigation and outgrower schemes, aquaculture, resilient storage) are mapped to blended structures. Forestry and land-use measures carry an additional carbon-finance channel (Article 6.2 and VCM).

Table 14: Mapping of CBA priority measures to finance archetypes (economic indicators under RCP 4.5)¹⁶

Sector	Measure	IRR	NPV (USD)	Finance archetype	Indicative instruments
Agriculture	Crop diversification	89.19%	800,241,509	Blended	IFAD, AfDB, GCF; concessional credit, guarantees
Agriculture	Climate-smart agriculture	40.97%	221,462,676	Blended	IFAD, AfDB, GCF; concessional credit, guarantees
Agriculture	Drought-tolerant crops	32.54%	153,523,844	Blended	IFAD, AfDB, GCF; concessional credit, guarantees
Agriculture	Improve soil fertility	30.96%	243,491,899	Public + Blended	IFAD, AfDB, GCF; concessional credit, guarantees
Agriculture	Irrigation schemes	27.70%	2,079,087,918	Public + Blended / PPP	IFAD, AfDB, GCF; concessional credit, guarantees
Agriculture	Rainwater harvesting	22.32%	90,027,270	Public + Blended	IFAD, AfDB, GCF; concessional credit, guarantees
Agriculture	Afforestation / Reforestation	19.12%	171,369,266	Public + Blended (carbon)	IFAD, AfDB, GCF; concessional credit, guarantees
Agriculture	Conservation agriculture	18.53%	48,657,914	Public + Blended	IFAD, AfDB, GCF; concessional credit, guarantees
Social	Access to services	56.20%	154,666,755	Public	Govt budget, World Bank, GCF, UNICEF; grants
Social	Livelihood diversification	55.95%	125,760,154	Public + Blended	Govt budget, World Bank, GCF, UNICEF; grants
Social	Social safety nets	49.98%	172,231,194	Public	Govt budget, World Bank, GCF, UNICEF; grants
Social	Awareness and education	30.49%	16,209,818	Public	Govt budget, World Bank, GCF, UNICEF; grants

¹⁶ Source: IRR and NPV values from the National CBA ranking of the 22 adaptation measures under RCP 4.5 (Table 29 of the revised CBA). Finance archetypes and indicative instruments are analytical proposals of this Strategy. Per-measure CAPEX is now published in the revised CBA for the ten most capital-intensive measures and by sector for all five sectors (see Table 10 above); the remaining measures are not disaggregated in the source, and a full per-measure CAPEX/OPEX extract from the CBA cost model is still required to complete the sector financing plans.

Sector	Measure	IRR	NPV (USD)	Finance archetype	Indicative instruments
Infrastructure	Flood management	48.25%	721,388,324	Public + Blended	World Bank, AfDB, GCF; PPPs, green bonds
Infrastructure	Resilient infrastructure	44.86%	69,056,593	Public + Blended / PPP	World Bank, AfDB, GCF; PPPs, green bonds
Infrastructure	Early warning systems	35.66%	24,811,507	Public	World Bank, AfDB, GCF; PPPs, green bonds
Forestry	Community forest management	43.86%	289,759,881	Public + Blended (carbon)	GCF, GEF; Article 6.2 & VCM carbon finance, PES
Forestry	Sustainable forest management	43.13%	97,883,779	Public + Blended (carbon)	GCF, GEF; Article 6.2 & VCM carbon finance, PES
Forestry	Fire management	35.97%	36,877,456	Public	GCF, GEF; Article 6.2 & VCM carbon finance, PES
Forestry	Reforestation	17.09%	155,794,949	Public + Blended (carbon)	GCF, GEF; Article 6.2 & VCM carbon finance, PES
Fisheries	Sustainable fishing	46.56%	6,901,750	Public + Blended	IFAD, FAO, GCF; blended finance, concessional credit
Fisheries	Aquaculture development	28.44%	13,534,337	Private + Blended	IFAD, FAO, GCF; blended finance, concessional credit
Fisheries	Protect / restore habitats	24.62%	67,824,350	Public	IFAD, FAO, GCF; blended finance, concessional credit

The public sector must lead and sequence a practical action plan to put the proposed instruments in place. The table below sets out an indicative public-sector action plan for discussion with the NAP team, the Ministry of Finance and Economic Affairs, and line ministries.

Table 15: Public-sector action plan for adaptation-finance options¹⁷

Priority action	Instrument type	Lead institution(s)	Timeframe	Key outputs / deliverables
1. Establish a Climate Finance Unit / NAP Finance Taskforce	Coordination	Ministry of Finance & Economic Affairs / EAD / NAP Team	Short (1–2 yrs)	Operational unit; annual adaptation-finance report; pipeline coordination
2. Operationalize climate budget tagging	Policy / PFM	Ministry of Finance & Economic Affairs	Short–medium	Tagging methodology; tagged

¹⁷ Source: public-sector action plan compiled by this Strategy from the CBA priorities and the institutional analysis in this chapter.

Priority action	Instrument type	Lead institution(s)	Timeframe	Key outputs / deliverables
				budget lines in priority ministries
3. Design and capitalize an Adaptation / Resilience Facility	Blended finance	Ministry of Finance & Economic Affairs	Medium	Facility design and governance; initial capitalization; first de-risked portfolio
4. Launch green / resilience credit lines	Financial / risk-sharing	Reserve Bank of Malawi, DFIs, commercial banks	Short–medium	Credit-line and guarantee agreements; volume of climate-smart loans
5. Establish carbon-market readiness (Article 6.2 & VCM)	Market / revenue	EAD / Ministry of Natural Resources & Climate Change	Medium	Article 6.2 framework; VCM pipeline for forestry / land-use measures
6. Update building codes, water and land-use regulations	Policy regulatory	Line ministries; District Councils	Medium	Updated resilience standards; compliance monitoring
7. Set up a climate-risk information & project-preparation platform	Information capacity	EAD / DCCMS / statistics office	Short–medium	Climate-risk portal; number of bankable projects prepared
8. Strengthen GCF / AF access and pipeline	Institutional access	EAD (NDA function) / NAP Team	Short	Project pipeline; national entity accredited to GCF and/or AF

Complementing these actions, a typology of instruments can be deployed to unlock private and blended finance, each linked to a specific constraint: policy and regulatory instruments create predictable rules and standards; legal instruments reduce contractual and tenure uncertainty; fiscal instruments (time-bound tax incentives, viability-gap funding, earmarked climate levies) improve project IRR; financial and risk-sharing instruments (credit lines, guarantees, first-loss facilities, insurance) de-risk projects for local lenders; information and capacity instruments reduce transaction costs; and coordination mechanisms ensure instruments are deployed coherently around a common NAP investment pipeline.

4.3 Pillar 3: Crowding in private-sector financing

Barrier analysis: private-sector finance

Given Malawi's Least Developed Country status and limited fiscal headroom, private finance is indispensable for scaling up adaptation, particularly in agriculture, water, forestry, infrastructure and climate-resilient value chains. Public budgets and international climate funds will remain critical but cannot, on their own, deliver the USD 4.58 billion of capital investment required, still less the recurrent costs that follow it. The Strategy therefore emphasizes where commercial or quasi-commercial models are feasible, how private finance can be crowded in through blended structures, and what enabling measures are required for households, MSMEs, cooperatives, utilities and larger investors to invest in resilience.

A structured barrier analysis, drawing on the CBA consultations, examines the constraints on private adaptation investment in Malawi. The CBA identified financial and institutional barriers: limited

Adaptation Financing Strategy – Revised report

funding, with heavy reliance on international donors and NGOs; technical-capacity gaps; weak private-sector involvement; and poor coordination between sectors operating in silos.

These CBA-derived findings were tested and extended through two private-sector sensitization workshops held under Activity 2.2 of the NAP process, in Lilongwe on 8 July 2026 and in Blantyre on 10 July 2026. Participants from carbon project development, insurance, microfinance and SACCOs, commercial banking, agribusiness, telecommunications, water utilities, construction, and off-grid energy and clean cooking identified both entry points for investment and the constraints that currently prevent it. Their contributions are reflected in the barrier analysis below, in the entry-point mapping that follows, and in Chapter 6.

Table 16: Barriers to private adaptation investment in Malawi¹⁸

Barrier category	Description	Affected sectors / investors	Consequence
Policy & regulatory	Limited integration of climate risk into sector policies; unclear PPP and land-use frameworks	Infrastructure, utilities, real estate, NbS investors	Unclear pipeline; high perceived regulatory risk
Legal & contractual	Weak standard contracts for PPPs and guarantees; tenure uncertainty on customary land	Infrastructure, NbS, community-based investments	Difficult to structure bankable deals and secure collateral
Fiscal & pricing	Tariffs and charges not reflecting resilience benefits; limited fiscal incentives	Water, energy, housing, agriculture	Insufficient revenue; low IRR for resilient investments
Financial-sector constraints	Short loan tenors, high collateral, limited climate-risk assessment capacity	Banks, MFIs, insurers, SMEs, farmers	Limited access to affordable long-term adaptation finance
Information & data	Limited local climate-risk data and project-preparation capacity	All sectors, especially SMEs and financial institutions	High transaction costs; inability to price adaptation
Awareness & behavioural	Low awareness of adaptation benefits among households, SMEs and financiers	Farmers, MSMEs, households, local banks	Preference for business-as-usual investments
Market demand	Household demand prioritizes basic needs over adaptation goods and services, limiting willingness to pay (PS workshops, July 2026)	Insurance, microfinance, clean cooking, agri-inputs, retail	Weak revenue base; adaptation products remain sub-scale
Fiscal treatment of carbon revenue	Taxation levels, annual payment structures and returns reported as below the effort and capital committed in tree-based carbon projects (PS workshops, July 2026)	Carbon project developers, forestry, community forestry	Reduced viability of afforestation / reforestation carbon projects
Coordination among private actors	Few standing platforms for interaction between firms active in climate-related sectors (PS workshops, July 2026)	All private-sector segments	No aggregation of pipeline; missed co-investment and risk-sharing

¹⁸ Source: barrier analysis by this Strategy, drawing on the CBA consultations and the July 2026 private-sector workshops (Chapter 6).

Barrier category	Description	Affected sectors / investors	Consequence
Physical exposure of enabling infrastructure	Recurrent flooding in the Lower Shire damages telecommunications and other critical infrastructure, disrupting early-warning dissemination (PS workshops, July 2026)	Telecommunications, utilities, insurance, DRM	Service interruption; higher operating risk; weaker basis for risk pricing

Barrier categories consistent with the financial and institutional barriers identified in the Malawi CBA; descriptions adapted to the Malawi context.

Typology of instruments to address private-sector barriers

Building on the barrier analysis, the following instruments can be deployed by Government and partners to unlock private investment in adaptation. Together they form a practical toolbox to shift the risk–return profile of adaptation projects in favour of private investment.

Table 17: Instruments to address barriers to private adaptation investment¹⁹

Barrier(s) addressed	Instrument type	Example instruments / reforms	Intended effect on finance
Policy & regulatory	Policy / regulatory	Integrate climate risk into sector policies; resilient building codes; PPP framework with resilience rules	Predictable rules that make resilient projects mandatory and bankable
Legal & contractual	Legal	Standardized PPP contracts and risk-sharing clauses; clearer customary-land tenure	Reduced legal uncertainty; collateralization; structured NbS / PPP investments
Fiscal & pricing	Fiscal	Time-bound tax incentives; viability-gap funding; climate levies earmarked for adaptation	Improved project IRR; closed viability gaps; earmarked public resources
Financial-sector constraints	Financial / risk-sharing	Green / resilience credit lines; partial credit guarantees; first-loss facilities; index insurance	Extended tenors; lower collateral; de-risked projects for local lenders
Information & data; awareness	Information / capacity	Climate-risk information platform; project-preparation facility; TA to banks and SMEs	Reduced transaction costs; improved appraisal and pipeline quality
Revenue additionality /	Market / carbon	Article 6.2 bilateral agreements; VCM projects for forestry and land use	New revenue streams; crowd-in of private investment; community benefit-sharing
All	Coordination	Climate Finance Unit; blended-finance platform; sector financing roundtables	Aligned public and private actors around a common NAP pipeline

Private-sector entry points

The two workshops produced a mapping of concrete entry points against the Government's adaptation strategies. Nineteen opportunities were documented (a twentieth entry, on alternative energy sources,

¹⁹ Source: instrument typology proposed by this Strategy, mapping the barriers in Table 16 to available financial instruments.

was left incomplete in the minutes). Table 18 groups them into the clusters most relevant to this Strategy. The mapping reflects self-declared interest expressed in a consultation setting; it is not evidence of committed capital and should be treated as a pipeline hypothesis to be tested with the institutions concerned.

Table 18: Private-sector entry points identified in the Activity 2.2 workshops (Lilongwe and Blantyre, July 2026)²⁰

Entry point	Private-sector actor identified	Relevant Government adaptation strategy	Sector
Climate-smart agriculture and drought-tolerant varieties	Carbon project developers; agribusiness	Climate Smart Agriculture; Drought Tolerant Crops	Agriculture
Afforestation, reforestation and community forest management, including siltation and fire management	Carbon project developers; water boards	Afforestation / Reforestation; Community Forest Management; Fire	Forestry
Biomass and improved cookstove partnerships with farming households	Carbon project developers; clean cooking companies	Livelihood Diversification	Forestry / Social
Micro-insurance and index products for smallholders	Insurance sector	Access to Services	Social
Credit for MSMEs in climate-related activities; climate-friendly product lines	Commercial banks; microfinance institutions; SACCOs	Livelihood Diversification	Social
Resilient construction materials, resilient infrastructure and Build Back Better	Construction and infrastructure firms; insurance sector	Resilient Infrastructure	Infrastructure
Climate services and awareness / education programmes	Water boards; education sector; telecommunications	Access to Services; Awareness and Education	Cross-cutting
Income-generating activities and CSR-linked community programmes	Agribusiness; banks; cross-sector	Social Safety Nets; Livelihood Diversification	Social
Consolidated investment portfolio to present adaptation opportunities to investors	Insurance sector; business associations	Cross-cutting support to all adaptation strategies	All sectors

Prioritizing the private-sector entry points

The 19 entry points identified in the consultations are not equally ready for investment. To move from a list to a pipeline, the Strategy screens them on two axes: adaptation impact, drawn from the internal rate of return and beneficiary reach of the underlying CBA measure; and investment feasibility, drawn from revenue potential, the existence of a delivery channel, and the severity of the barriers in Table 16. The screening is qualitative and is the Strategy's own assessment, offered to structure the private-sector dialogue rather than to pre-empt it.

²⁰ Source: minutes of the Activity 2.2 private-sector sensitization workshops, Lilongwe (8 July 2026) and Blantyre (10 July 2026), consolidated by the consultant team.

Table 19: Prioritization of private-sector entry points (impact vs feasibility)²¹

Quadrant	Entry points	Reading
High impact, high feasibility — the shortlist	1. Micro-insurance and index products for smallholders; 2. Credit for MSMEs in climate-related activities; 3. Aquaculture production and value chains; 4. Climate-smart agriculture inputs and advisory; 5. Improved-cookstove and biomass partnerships	Revenue-generating or attached to an existing delivery channel (insurance, MFIs/SACCOs, carbon). These 5 form the investable pipeline to take forward first
High impact, lower feasibility — enable then invest	6. Reforestation and community-forestry carbon; 7. Resilient construction materials and Build Back Better	Strong returns but blocked by the carbon fiscal review (Chapter 4.3) or by the absence of resilient-design standards; investable once the enabling step is done
Lower impact, high feasibility — quick wins	8. Climate services and awareness delivery; 9. CSR-linked community programmes	Low capital, easy to mobilize, useful for early private-sector engagement and demonstration effect
Cross-cutting enabler	Consolidated investment portfolio presented to investors through MCCCCI	Not an investment itself but the mechanism that aggregates the pipeline; the natural first action for the private-sector strand

Table 20: Risk assessment of the shortlisted entry points²²

Shortlisted opportunity	Regulatory risk	Fiscal risk	Market risk
Micro-insurance and index products	Microinsurance policy applied inconsistently; claims directive not integrated	VAT burden on premiums for vulnerable farmers	Low demand at current risk literacy; basis risk on index products
MSME climate credit	Limited; standard prudential regime	None specific	Thin collateral; correlated default in a rain-fed loan book
Aquaculture value chains	Fisheries licensing and water permits	None specific	No lending track record; 13% banking access; input-price and disease exposure
Climate-smart agriculture inputs	Input-quality and seed regulation	Interaction with the input subsidy programme	Adoption risk; advisory-capacity dependence
Cookstove and biomass partnerships	Carbon-project registration and Article 6 readiness	Carbon-revenue taxation and payment structure (Chapter 4.3)	Carbon-price volatility; household willingness to pay

The operational conclusion is that the private-sector strand of this Strategy should not pursue all 19 entry points in parallel. It should take the five shortlisted opportunities forward as a pipeline through MCCCCI,

²¹ Assessment by this Strategy, screening the entry points in Table 18 against the returns in the CBA and the barriers in Table 16. Numbering is for reference within this table.

²² Assessment by this Strategy, drawing on the enabling-environment findings in the August 2025 Global Shield gap analysis and the July 2026 consultations. Risks are indicative and should be validated with the institutions concerned before any transaction.

complete the two enabling steps that unlock the second quadrant, and use the two quick wins to build early engagement — a sequence, not a menu.

Source: minutes of the Activity 2.2 private-sector sensitization workshops, Lilongwe (8 July 2026) and Blantyre (10 July 2026), consolidated by the consultant team.

Carbon markets as an adaptation-finance channel

A distinctive feature of the Malawi portfolio, highlighted in the CBA, is the potential to monetize forestry and land-use measures through carbon finance. The CBA recommends (Recommendation 4) monetizing afforestation, reforestation and community forestry via Article 6.2 of the Paris Agreement and Voluntary Carbon Markets, and values carbon sequestration at USD 36–42 million per year (based on conservative carbon prices of USD 15 per tCO₂e for afforestation / reforestation, USD 8.5 for conservation and USD 15 for carbon removals). Article 6.2 bilateral agreements with countries seeking mitigation outcomes, together with high-integrity VCM channels, can unlock climate finance to support the National Forest Landscape Restoration Strategy and provide flexible funding for other priority adaptation measures. A share of carbon revenues should be earmarked for community resilience.

The July 2026 consultations qualified this potential in an important respect. Participants already engaged in carbon project development reported that reforestation and other tree-based carbon projects are difficult to make work financially in Malawi, citing taxation levels, annual payment structures and returns that fall short of the effort and capital committed. They recommended a review of the incentives applying to such investments. This is first-hand market evidence that the fiscal and contractual treatment of carbon revenues is a binding constraint, not a secondary one: without it, the sequestration value estimated in the CBA will not translate into investable projects. Two implications follow. First, a review of the tax and payment treatment of carbon-project revenues, including the timing of payment obligations relative to credit issuance, should be added to the enabling-conditions agenda under Pillar 3. Second, and consistent with the uncertainty still attaching to Article 6 rules and carbon prices, carbon finance should be presented as a complementary revenue stream that can improve project economics, not as a core financing pillar on which delivery of the adaptation portfolio depends.

Carbon-revenue sensitivity

Because carbon prices are volatile, the Strategy should not plan against a single carbon-revenue figure. The table below shows how annual revenue scales with the carbon price, holding the sequestration volume constant. It is anchored on the CBA's conclusions range of USD 36–42 million per year, which corresponds to the blended conservative prices the CBA applied (USD 15 per tCO₂e for afforestation and reforestation, USD 8.5 for conservation, USD 15 for carbon removals), and scales linearly from there. Revenue is directly proportional to price, so a doubling of the effective price doubles the revenue.

Table 21: Sensitivity of annual carbon revenue to the carbon price²³

Effective carbon price (USD/tCO ₂ e)	Annual revenue — lower basis (USD m)	Annual revenue — upper basis (USD m)	Reading
5	12–14	13–15	Below the level at which tree-based projects were viable in the July 2026 consultations
8.5–15 (CBA blended, conservative)	36–42	36–42	The CBA conclusions basis; used for planning throughout this Strategy
20	48–56	48–56	Upper end of near-term voluntary-market pricing for

²³ Calculated by this Strategy by linear scaling from the CBA conclusions range of USD 36–42 million per year at the CBA's blended conservative prices. Figures are indicative: actual revenue depends on verified sequestration volumes, credit issuance timing, buyer discounts and the fiscal treatment reported in the July 2026 consultations, and should not be quoted as a projection.

Effective carbon price (USD/tCO ₂ e)	Annual revenue — lower basis (USD m)	Annual revenue — upper basis (USD m)	Reading
			high-integrity African forestry credits

Two warnings must travel with any use of these figures in a funding proposal. First, the revenue in the table is gross of the taxation, annual-payment and returns problems that carbon developers reported in the July 2026 consultations; the net figure reaching a project is lower and, on the developers' account, currently too low to sustain tree-based projects at any of these prices without the incentive review recommended earlier in this chapter. Second, the international rules are not settled: the Article 6.4 mechanism (the centralized crediting mechanism under the Paris Agreement) remains subject to ongoing methodological decisions, and Article 6.2 corresponding-adjustment practice is still maturing. Carbon revenue should therefore be treated as an upside to be captured once these conditions are met, not as a line the financing plan depends on.

Indicative estimates of finance unlocked

The finance baseline assembled in Chapter 3.4 now allows these scenarios to be sized. Both are expressed as coverage of the CBA's annual capital requirement of USD 916 million, on the adaptation-weighted basis used in Table 11, where current coverage is 22% — a baseline of about USD 203 million a year. They are planning scenarios constructed by this Strategy from the verified baseline, not projections, and neither should be quoted as a forecast.

- **Conservative scenario:** no increase in commitments, but disbursement performance improves from Malawi's 71.6% adaptation disbursement ratio to the 83.2% global average recorded by Aid Atlas. That alone raises delivered finance by roughly a sixth from existing commitments, lifting the adaptation-weighted baseline to about USD 235 million a year and coverage from 22% to approximately 26%. Mobilization remains concentrated in concessional green and resilience credit lines for climate-smart agriculture and aquaculture, MSME guarantee facilities, and early carbon-market revenue from forestry pilots.
- **Ambitious scenario:** the COP30 commitment to at least triple adaptation finance by 2035 translates proportionally into flows to Malawi, alongside the disbursement improvement above, a capitalized National Climate Change Fund, carbon revenue realized after the fiscal review recommended in Chapter 4.3, and a first domestic green or resilience bond issuance. On a proportional reading of the tripling goal, external adaptation finance to Malawi would rise towards USD 490 million a year, taking total adaptation-weighted coverage to roughly 55-60% of the annual capital requirement by 2035.

The conclusion that matters is common to both scenarios: neither closes the gap. Even on the ambitious reading, in which a global tripling commitment translates proportionally into national flows and every domestic instrument performs, Malawi would still be financing little more than half of the capital requirement identified in the CBA. The planning implication is that the portfolio must be sequenced by return and by readiness rather than delivered in full - the purpose of the intervention-type analysis in Chapter 8 - and that the recurrent operating expenditure of USD 437 million in the first year of operation has to be secured domestically, because no external scenario covers it.

5. Financial Instruments for Climate Adaptation

This chapter provides a reference overview of the main categories of financial instruments applicable to climate-adaptation finance. Strategic selection for Malawi is addressed in Chapter 4.

5.1 Categories of financial instruments

- **Debt instruments:** concessional and non-concessional loans, credit lines, bonds and notes providing repayable finance. Currently the dominant channel for international public climate finance to LDCs.
- **Equity instruments:** direct equity, venture capital and impact-investment stakes providing risk-sharing capital — relevant for climate-resilient agribusiness, aquaculture and off-grid renewable energy.
- **Credit-enhancement instruments:** guarantees, subordinated tranches, blended-finance facilities and results-based payments that reduce risk for senior lenders and crowd in private capital.
- **Risk-transfer instruments:** insurance products including agricultural index insurance, sovereign drought / flood coverage (e.g. African Risk Capacity) and catastrophe bonds.
- **Carbon-market instruments:** Article 6.2 cooperative approaches (ITMOs) and Voluntary Carbon Market credits monetizing forestry and land-use co-benefits — a priority channel for Malawi.

5.2 Key takeaways for Malawi

Given Malawi's macro-fiscal conditions, the most appropriate instruments for public-good adaptation are grants and highly concessional loans from multilateral climate funds (GCF, Adaptation Fund, LDCF) and bilateral partners. For commercially viable adaptation in agriculture, aquaculture, water services and infrastructure, blended-finance structures combining concessional first-loss capital with commercial lending are most appropriate. Agricultural index insurance and sovereign disaster-risk coverage offer near-term protection. Carbon-market instruments and, over the medium term, green / resilience bonds represent important complementary channels.

5.3 Sovereign risk transfer: Malawi's experience with parametric insurance

Of the instrument categories above, risk transfer is the one where Malawi already has an operating track record, and it is under-represented in adaptation financing strategies generally. Parametric (index-based) insurance pays out against an objective trigger such as satellite-measured rainfall or modelled crop water deficit, rather than against assessed loss. This removes the loss-adjustment step and compresses the time between event and liquidity from months to days, which is the difference between households receiving support and households selling productive assets to survive.

This matters for the architecture of this Strategy because risk transfer does a different job from the physical measures appraised in the CBA. Investment in irrigation, watershed protection or resilient infrastructure reduces the probability and severity of loss. Parametric cover absorbs the residual loss that remains once those measures are in place, and it does so on a pre-arranged, budgeted basis rather than through emergency reallocation and humanitarian appeal. The two are complements, not alternatives, and a financing strategy that funds only the first leaves the fiscal shock unaddressed.

Malawi is a member of the African Risk Capacity (ARC) Group, a specialized agency of the African Union, and has drawn on sovereign parametric cover in successive drought seasons.

Table 22: Malawi's sovereign parametric insurance payouts, 2024–2025²⁴

²⁴ Sources: African Development Bank press release on the USD 11.2 million payout presented in Lilongwe on 2 August 2024; ARC Group press release of 25 July 2025 and ARC Ltd confirmation of the combined USD 3,376,783 payout for the 2024/25 season. In March 2024 the Government declared a state of disaster in the worst-affected areas and in April launched a National El Niño Response Appeal.

Season / event	Policy type	Payout (USD)	Premium financed by	Date
2023/24 El Niño drought	Traditional sovereign drought policy	11,200,000	African Development Bank, through the African Development Fund and the Africa Disaster Risk Financing Programme Multi-Donor Trust Fund (ADRFi-MDTF)	2 August 2024
2024/25 season	Traditional sovereign drought policy	3,065,746	AfDB ADRFi-MDTF	25 July 2025
2024/25 season	Anticipatory policy	311,037	KfW on behalf of the German Government	25 July 2025
	Total, 2024/25 season	3,376,783		

Two features of this record are directly useful to the Strategy. The anticipatory policy (which pays on a forecast of planting-season failure rather than after the failure has occurred) is an innovation Malawi has already tested at small scale, and it is the instrument most closely aligned with the early-warning measures appraised in the CBA. And premiums for both policies were donor-financed, by the AfDB and KfW respectively. That is appropriate at this stage but is not a durable arrangement: cover lapses if the subsidy lapses, and the protection is therefore only as reliable as the donor cycle.

Malawi also participates in the ARC Regional Emergency Preparedness and Access to Inclusive Recovery (REPAIR) programme, under which ARC reported disbursements of over USD 22.3 million to Malawi and Mozambique combined within seven days in January 2026. The country split is not disclosed in the source consulted and no amount is attributed to Malawi here.

A layered disaster risk financing architecture

Parametric insurance is efficient only for the top of the risk distribution. Insuring frequent, small losses is more expensive than budgeting for them, because the premium must cover the expected loss plus loading. The standard architecture therefore assigns each layer of risk to the cheapest instrument that can carry it.

Table 23: Indicative layered disaster risk financing architecture for Malawi²⁵

Risk layer	Event profile	Instrument	Institutional lead
Top	High severity, low frequency — for example a one-in-ten-year drought or a major tropical cyclone	Sovereign parametric insurance through ARC Ltd, including anticipatory cover; regional risk pooling	Ministry of Finance and Economic Affairs, with DoDMA
Middle	Moderate severity and frequency — seasonal dry spells, localized crop failure	Contingent credit lines and a national reserve or contingency fund. Malawi has used this layer before: a CAT-DDO of USD 30.8 million was committed by IDA in 2019. The National Climate Change Fund could carry the reserve component once the implementing regulations are issued and it is capitalized	Ministry of Finance and Economic Affairs, with MDB partners

²⁵ Structure adapted from standard disaster risk financing practice and applied to Malawi's institutional context by this Strategy. Instrument availability at the middle layer requires confirmation with the Ministry of Finance and Economic Affairs.

Risk layer	Event profile	Instrument	Institutional lead
Bottom	Low severity, high frequency — annual localized flooding, household-level shocks	National and district contingency budget lines, the Social Cash Transfer Programme, and agricultural micro-insurance distributed through banks, MFIs and SACCOs	District Councils, Ministry of Gender and Social Welfare, private insurers

Three implications follow for this Strategy. First, sovereign premium financing should be put on a domestic footing over time. A dedicated budget line for climate risk premiums, blending domestic revenue with Carbon Levy proceeds and concessional resources, would convert an aid-dependent arrangement into a national instrument; this is carried into the recommendations in Chapter 7. Second, basis risk (the divergence between the index and actual losses on the ground) is the principal technical weakness of parametric cover, and it is reduced by exactly the hydro-meteorological investment already under way through FP002 (see Table 4). Improving the observation network therefore serves two purposes at once. Third, payouts only protect households if they can be delivered quickly: linking ARC triggers to the Social Cash Transfer Programme and to DoDMA contingency plans in advance, with digital payment channels in place, is what converts a payout into protection.

The delivery channel: shock-responsive social protection

A payout only protects households if it reaches them. Malawi has already built much of the delivery machinery that parametric cover requires, and the linkage between sovereign risk transfer and social protection is not a proposal but an existing arrangement: the Social Cash Transfer Programme has been reinforced with an ARC risk transfer instrument since June 2020. When a payout is triggered, the Ministry of Finance and Economic Affairs and the Ministry of Agriculture pool resources, and beneficiaries are identified through the Unified Beneficiary Registry.

Table 24: Shock-responsive social protection instruments and their risk-finance linkage²⁶

Instrument	Coverage	Risk-finance linkage	Constraint
Social Cash Transfer Programme (Mtukula pa Khomo), from 2006	10% of ultra-poor, labour-constrained households — about 303,000 households; intended to rise to 15%	Reinforced with an ARC risk transfer instrument since June 2020; payouts delivered in cash or in kind through the UBR	Average annual cost USD 5 million and a maximum of USD 11.1 million, expected to rise with drought frequency; 10% of households are selected per district irrespective of the district's poverty rate, which under-serves the south
Social Support for Resilient Livelihoods Project, from 2021	Vertical expansion of benefit amounts and horizontal expansion of about 7% more households during shocks	Malawi's flagship ex-ante disaster risk financing mechanism; parametric insurance covered part of the cost in the 2023/24 and 2024/25 seasons and the system met reinsurance standards	Project-financed; continuity depends on the next financing cycle

²⁶ Source: *Gap Analysis Report on Climate and Disaster Risk Finance in Malawi*, Ministry of Finance and Economic Affairs, contribution to the in-country process of the *Global Shield against Climate Risks*, August 2025, section 2.7. Coverage figures are as reported in that document and should be refreshed at finalization.

Instrument	Coverage	Risk-finance linkage	Constraint
NLGFC social protection insurance (scalable mechanism)	8 districts and 145,000 households	Inclusive insurance mechanism attached to the social protection system	Nearing its end with a two-year funding gap anticipated; bridge financing required to avoid a break in coverage
Unified Beneficiary Registry, from 2016	4.2 million households and 17 million people at March 2025 — 77% of all households and 96% of rural households, across 17 of the 28 districts	The targeting layer that allows a payout to be converted into household transfers quickly	Updated every four years rather than dynamically; limited integration of climate vulnerability data; urban roll-out incomplete

Three consequences follow for this Strategy. The recommendation to pre-link ARC triggers to social protection is therefore a matter of continuation and extension rather than new design, and the binding constraints are financial: premium financing for the sovereign policies, bridge financing for the NLGFC mechanism, and the fact that ARC Replica (used successfully in the past) currently lacks premium financing altogether. The coverage rules matter as much as the coverage: selecting 10% of households in every district irrespective of poverty rates systematically under-serves the southern districts that the CBA and the Climate Risk and Vulnerability Assessments identify as most exposed, and correcting that targeting rule would improve the return on every kwacha of payout without additional finance. And the protection remains partial in an important respect: sovereign cover is for drought. A significant protection gap exists for floods, where policies are still under development, there is no sovereign cover for multi-peril or cascading hazards, and no mechanism yet exists for sub-sovereign or district-level coverage. Extending sovereign cover to flood is the single most valuable addition to the risk-transfer layer of Table 23.

5.4 Thematic bonds: green, blue and sustainability-linked

Bonds appear only in passing elsewhere in this Strategy, yet they are the instrument most often proposed for scaling adaptation finance beyond the grant and concessional envelope. This section sets out what is realistic for Malawi and what is not, because the honest answer differs sharply by bond type and by issuer.

A thematic bond is an ordinary debt instrument distinguished only by a commitment about how the proceeds are used or what results they achieve. A green bond ring-fences proceeds for eligible environmental projects; a blue bond does the same for water and aquatic ecosystems; a sustainability-linked bond instead ties the coupon to the issuer meeting defined targets, with no restriction on use of proceeds. None of these changes the fundamental character of the instrument: a bond is debt, it must be repaid with interest, and it adds to the liability whose weight Chapter 3.3 has already described. That single fact governs everything below.

The sovereign route is largely foreclosed

For the Government of Malawi, a sovereign thematic bond is not a near-term option. With total public debt at 88% of GDP, an interest bill approaching 7% of GDP and around 90% of external debt owed to multilateral creditors on concessional terms, issuing market-priced debt (thematic or not) would substitute expensive money for cheap money and worsen the debt position. A green label does not lower the coupon enough to change that arithmetic; the 'greenium' observed in international markets is measured in a handful of basis points, not the several percentage points that separate Malawi's market cost of borrowing from its concessional cost. A sovereign issuance should therefore be treated as a long-term possibility contingent on debt restructuring and a materially stronger fiscal position, not as an instrument for this Strategy's investment phase.

Where thematic bonds can work for Malawi

The realistic entry points are three, and none of them is a sovereign benchmark issuance.

Table 25: Thematic bond options and their applicability to Malawi²⁷

Option	Structure	Applicability to Malawi	Precondition
MDB-intermediated use-of-proceeds	A multilateral partner issues the bond on its own balance sheet and on-lends the proceeds to Malawi on concessional terms	The only route that raises market finance without adding market-priced debt to the sovereign. Fits the hard-infrastructure and water measures in Chapter 8	Depends on the MDB's own programming, not on a Malawi framework; requires a qualifying project pipeline
Blue bond for the lake and aquaculture economy	Use-of-proceeds bond, most plausibly MDB-intermediated or supported by a debt-conversion structure, ring-fenced for freshwater and aquatic investments	Malawi's landlocked status does not exclude a blue bond: Lake Malawi, the Shire river system, aquaculture (measure 21) and habitat protection (measure 22) form a credible freshwater pipeline	A defined pipeline of aquatic projects and a monitoring framework; blue-bond precedent in Africa is thin and costs of issuance are high relative to size
Corporate or project green bond	A creditworthy domestic issuer (a utility, a bank, or a renewable-energy or aquaculture developer) issues against its own revenues	Sidesteps the sovereign debt constraint entirely by placing the liability with a revenue-generating entity; but the domestic capital market is shallow and few issuers would qualify	A capital market able to absorb the issue and an issuer with a bankable revenue stream; realistically a medium-term prospect
Sustainability-linked instrument	Coupon steps up if the issuer misses agreed adaptation or resilience targets; proceeds unrestricted	Of limited use to a sovereign that cannot take on market debt at all, and demanding to structure credibly; more relevant to a future corporate issuer	Robust, independently verified KPIs; the risk analytics that Chapter 3.5 shows Malawi currently lacks

Two practical steps follow, and they are modest by design. First, any green or blue bond framework Malawi develops should begin as an eligible-expenditure taxonomy rather than an issuance plan: a clear, monitorable list of which adaptation investments qualify (water security, resilient infrastructure, ecosystem and habitat restoration, aquaculture) which is useful immediately to MDB-intermediated structures and to any future corporate issuer, and costs little to prepare. This is the eligible-expenditure list already referenced in the fact sheets for measures 13, 14 and 22. Second, the Reserve Bank of Malawi and the Ministry of Finance and Economic Affairs should treat capital-market development as a long-horizon enabling condition, not a source of finance for this Strategy's investment phase. Presenting a bond as a live financing pillar now would misrepresent both the debt position and the depth of the domestic market.

5.5 Climate-related financial risk: the Reserve Bank's side of the ledger

Every section so far treats climate finance as money flowing towards adaptation. This one turns the ledger over. Climate change is also a source of risk to Malawi's financial system and public finances, and that risk is the mirror image of the case for the instruments in this chapter: it is what the country pays if adaptation and risk transfer are not put in place. It belongs in a financing strategy because it is the Reserve Bank of Malawi's stake in the argument, and because it strengthens the case for risk transfer by quantifying the alternative.

²⁷ Analytical assessment of this Strategy, drawing on the debt position in Chapter 3.3 and the instrument analysis in Chapter 4.3. No thematic bond issuance by or for Malawi is assumed in the financing allocation in Table 12.

Three transmission channels matter for Malawi, each traceable to figures already established in this Strategy.

Table 26: Channels of climate-related financial risk in Malawi²⁸

Channel	Mechanism	Evidence in this Strategy	Mitigant
Credit risk in banking and microfinance	A correlated drought or flood causes simultaneous default across an agricultural loan book, because exposures are not diversifiable within a rain-fed economy; non-performing loans surge together	13% banking access and a concentrated banking sector (Table 6); agriculture dominates the economy and the loan book alike	Agricultural micro-insurance and index products that de-correlate the loan book; the credit-guarantee instruments in Chapter 4.3
Sovereign and fiscal risk	Repeated disaster response forces emergency reallocation and borrowing, widening the deficit and raising the debt-service burden; the fiscal cost of each event compounds the constraint on financing the next	Fiscal deficit of about 10% of GDP and debt at 88% (Table 2); the Social Cash Transfer drought component alone costs up to USD 11.1 million a year	Sovereign parametric insurance and the layered DRF architecture in Chapter 5.3, which convert an unbudgeted shock into a pre-arranged payout
Insurance-sector retrenchment	As disaster frequency rises, general insurers absorb losses, reprice or withdraw cover; a shallow market thins further, removing private risk capacity precisely when it is most needed	Insurance penetration of 2.5%, among the lowest in Southern Africa (Table 6); general insurers already absorbing climate losses	Regional risk pooling through ARC; premium support that keeps cover in place; the market-development measures in Chapter 6

The physical exposure of the financial system's own infrastructure compounds all three channels. The July 2026 consultations reported that recurrent flooding in the Lower Shire damages telecommunications and critical infrastructure and interrupts the dissemination of early warnings — which is also the channel through which mobile money, the delivery mechanism for over 80% of financial transactions and for insurance payouts, reaches rural households. A climate shock can therefore degrade the payment system at the same moment it triggers the losses that system is needed to settle.

Two implications follow for this Strategy, and both point back to instruments already recommended rather than to new ones. The Reserve Bank of Malawi has a supervisory interest in the resilience of the institutions it regulates, which makes it a natural co-sponsor of the agricultural insurance, credit-guarantee and risk-pooling measures set out elsewhere in this chapter; framing these as financial-stability measures, not only as development measures, widens the coalition behind them. And the case for spending on adaptation and risk transfer is strengthened by naming the cost of inaction: the correlated credit losses, the fiscal shocks and the insurance retrenchment above are what the country pays if the instruments in this Strategy are not put in place (see Section 4.1, “Costs of inaction: the rationale for financing adaptation”). That framing belongs in any funding proposal drawn from this document, because it converts adaptation finance from a cost into the avoidance of a larger one.

A note on scope and capacity. A full assessment of climate-related financial risk (supervisory stress testing of the banking system against climate scenarios, and a climate risk disclosure regime) is beyond what this Strategy can deliver and beyond current national capacity: Chapter 3.5 records that Malawi has no national flood model and that catastrophe modelling relies on downscaled global products. The realistic first step is a qualitative supervisory review by the Reserve Bank of the concentration of climate exposure in the loan books it oversees, using existing data, which requires no new modelling and would establish the baseline for anything more sophisticated later.

²⁸ Analytical framework of this Strategy, applied to the Malawi evidence assembled in Chapters 3.3, 3.5 and 5.3. The transmission mechanisms follow standard central-bank treatments of climate-related financial risk; the Malawi-specific evidence is as cited.

6. Stakeholder Consultations

6.1 Consultations undertaken

The consultation record supporting this Strategy comprises the CBA district consultations across the eight target districts, the CBA validation workshop held in Lilongwe in July 2026, and two private-sector sensitization workshops held under Activity 2.2 of the NAP process. The latter are the primary source for this annex. They were convened in Lilongwe on 8 July 2026 and in Blantyre on 10 July 2026, each from 09:00 to 15:30, with the stated objectives of introducing the financing strategy component, identifying sector priorities for adaptation finance, and collecting feedback on investment opportunities and barriers. Attendance lists record 16 participants in Lilongwe and 27 in Blantyre. A standalone consultations report dated 14 July 2026 documents both sessions in full.

A full record of the consultation process, including attendance and methodology, is provided in the separate Activity 2.2 workshop report (14 July 2026); this chapter focuses on the results and their implications for the Strategy.

6.2 Method and its limitations

Both sessions were conducted as facilitated plenary discussions, with responses documented in real time; the breakout groups foreseen in the agenda were not held, owing to time constraints and participant numbers. Discussion was structured around two questions: what adaptation investment opportunities participants saw in their thematic areas, and what prevented their organization or sector from investing. Three limitations should be borne in mind when reading the findings. Participation was weighted towards technical officers rather than decision-makers, a point raised by participants themselves. Public institutions accounted for a substantial share of attendance in both sessions. And a plenary format tends to surface consensus views more readily than dissenting or commercially sensitive ones. The findings below are therefore a reliable indication of perceived opportunity and constraint, but not a measure of investment appetite.

6.3 Opportunities identified

Participants identified nineteen entry points for private-sector contribution to Malawi's adaptation priorities, each mapped to a Government adaptation strategy; a twentieth entry, on alternative energy sources, was recorded without further detail. The clusters are set out in Table 18. In summary: carbon project developers identified climate-smart agriculture, drought-tolerant varieties, afforestation and reforestation, and biomass and improved-cookstove partnerships with farming households; the insurance sector identified micro-insurance for smallholders, resilient-infrastructure and Build Back Better approaches, and the development of a consolidated investment portfolio capable of attracting investors; banks, microfinance institutions and SACCOs identified MSME lending for climate-related activities and climate-friendly product lines; construction and infrastructure firms identified resilient construction materials and infrastructure serving vulnerable communities; water boards identified siltation and fire management through community forestry, and awareness and education; and cross-sector participants identified CSR-linked community programmes and income-generating activities.

6.4 Barriers identified

Eight constraints were reported. Access to capital was the most frequently cited: financing is not available to implement adaptation plans that already exist. Coordination among private-sector actors in climate-related sectors was described as minimal, with one participant observing that the workshop itself was the occasion for the encounter. Participants pointed to a needed shift in how climate investment is perceived within firms, and to limited technical expertise on climate investment and on emerging markets such as carbon finance. Carbon project developers reported that taxation levels, annual payment structures and returns below the effort committed make tree-based carbon projects difficult to sustain, and recommended a review of the applicable incentives. Household demand was said to prioritize basic needs over adaptation goods and services, limiting the commercial case. Recurrent flooding in the Lower Shire was reported to damage telecommunications and other critical infrastructure, interrupting the

dissemination of early warnings. Finally, weak data recording, documentation and follow-up across sectors was identified as a constraint on institutional learning and continuity.

6.5 Questions raised and responses given

Four themes emerged in the question sessions. On access to Green Climate Fund resources, the response given at the workshop was that financing is accessed through accredited institutions or intermediaries; the entities named on the day have since been checked. All three GCF projects in Malawi to date are delivered through international accredited entities - UNDP for FP002, FAO for FP238 and Save the Children Australia for FP244 - and no Malawian national direct access entity could be confirmed as accredited to the Fund at the date of this draft. The National Designated Authority function sits with the Environmental Affairs Department. Guidance issued to the private sector should therefore describe the international accredited entity route rather than naming domestic institutions, and the absence of a national direct access entity should be read alongside the accreditation recommendation in Chapter 7. On follow-up, participants questioned how workshop conclusions would be adopted within their institutions given that attendance was largely technical; the response emphasized equipping technical teams to make the internal business case. On the flexibility of climate grants and concessional loans, it was explained that many windows operate on a rolling basis through accredited entities and cover both mitigation and adaptation. On deforestation, the response linked private-sector engagement under this Strategy directly to afforestation, reforestation and sustainable land management.

6.6 Implications for the Financing Strategy

Five conclusions carry into the body of this Strategy. The barrier analysis in Pillar 3 has been extended to cover demand-side constraints, the fiscal treatment of carbon revenues, the absence of coordination platforms, and the physical exposure of enabling infrastructure. The treatment of carbon markets has been qualified: market participants report that current fiscal and payment arrangements undermine project viability, which supports positioning carbon finance as a complementary revenue stream rather than a core pillar, and adding an incentive review to the enabling-conditions agenda. The consultation plan now anticipates working through MCCCCI and existing sector associations rather than creating new structures. Future engagement is to be pitched at decision-making level. And awareness and capacity building on adaptation investment is treated as a funded enabling measure in its own right, given that it was raised as both an opportunity and a constraint.

Remaining consultation requirement: this annex covers private-sector engagement only. Consultations with the Ministry of Finance and Economic Affairs, the Reserve Bank of Malawi, District Councils, academia and development partners - and the national validation workshop for this Strategy - remain outstanding, and the annex will need to be completed accordingly.

Consultations should engage: line ministries and public agencies (Agriculture, Water and Sanitation, Natural Resources and Climate Change, Health, Finance and Economic Affairs); DoDMA, DCCMS and the Reserve Bank of Malawi; District Councils; academia (University of Malawi, LUANAR, MUST); and development partners (UNEP, UNDP, FAO, IFAD, World Bank, AfDB, GCF). Key themes to confirm include the recognition of the adaptation financing gap, support for MTEF mainstreaming and climate budget tagging, private-sector interest and barriers, capacity constraints for accessing external finance, data and information gaps, and gender and social inclusion.

7. Operational Roadmap, Next Steps and Recommendations

This section responds to Task 3: to identify operational next steps, carry out and validate consultations, refine the funding strategy based on feedback, and develop an action plan with timelines, responsibilities and indicative costs. It draws on the stakeholder engagement undertaken through the NAP process and the CBA consultations across the eight target districts.

7.1 Stakeholder consultations: summary of process and findings

The CBA process included consultations across the priority districts and sectors, capturing sector-level findings that directly inform the financing strategy. Reported constraints included limited and donor-dependent funding, technical-capacity gaps, weak private-sector involvement, and poor cross-sector coordination. A national validation workshop for the CBA was convened in Lilongwe (July 2026); the financing strategy will be validated through a dedicated consultation and validation process.

Two private-sector sensitization workshops were subsequently held under Activity 2.2 of the NAP process: in Lilongwe on 8 July 2026 and in Blantyre on 10 July 2026, each running from 09:00 to 15:30. The attendance lists record 16 participants in Lilongwe and 27 in Blantyre, drawn from the Environmental Affairs Department and other public institutions alongside private firms in carbon project development, telecommunications, off-grid and clean-cooking energy, microfinance and savings and credit cooperatives, construction, and agribusiness. Both sessions were run as facilitated plenary discussions rather than the breakout groups originally planned, because of time and participant numbers. Findings are set out in Chapter 6 and are reflected in Pillar 3. A separate national validation workshop for this Financing Strategy remains to be convened.

Key finding: adaptation activities in Malawi remain largely donor-dependent, with limited nationally budgeted adaptation finance and weak private-sector participation. Establishing a nationally budgeted, well-coordinated adaptation-finance architecture (anchored in the Ministry of Finance and Economic Affairs) is the single most important systemic reform.

Financing gaps identified by sector

- **Agriculture and food security:** farmers report reduced yields and limited access to drought-resistant seed; adoption of climate-smart agriculture is constrained by lack of financial incentives and limited extension services.
- **Fisheries and aquatic resources:** declining fish stocks and income losses; limited investment in sustainable aquaculture and stock restoration.
- **Infrastructure and DRM:** flood damage has raised maintenance costs; investment in flood-resilient infrastructure is a priority need.
- **Water resources and irrigation:** limited access to irrigation technology due to high costs and lack of financing mechanisms.
- **Energy and forestry:** unsustainable charcoal production drives deforestation; reforestation is constrained by lack of financial incentives — an area where carbon finance can play a catalytic role.
- **Health and social vulnerabilities:** climate-induced displacement and disease; gender disparities in access to adaptation resources.

Flagship initiatives for the investment pipeline

Drawing on the CBA priorities and district-level needs, an indicative pipeline of flagship initiatives can anchor the AFS. The list below should be refined and costed with line ministries and District Councils.

Table B1 in Annex B lists the indicative flagship initiatives for the AFS pipeline.

Indicative pipeline derived from CBA priority measures; finance sources are analytical proposals to be confirmed with partners.

7.2 Operational roadmap

The Roadmap translates the analytical work on the funding gap and finance options into a practical, owned and sequenced implementation matrix that can be integrated into the NAP process, the MTEF and sector plans. It will be co-developed with national stakeholders and finalized following the validation process.

Consultation and validation plan

The roadmap will be developed with the NAP Team, a NAP climate-finance working group, and a wide range of stakeholders, structured around three groups:

- **Government and public institutions:** EAD and the Ministry of Natural Resources and Climate Change (NAP lead); the Ministry of Finance and Economic Affairs (Budget, Debt and Aid Coordination); line ministries (Agriculture, Water and Sanitation, Lands / Forestry, Health, Transport, Local Government); DoDMA; DCCMS; the Reserve Bank of Malawi; and District Councils and Civil Protection Committees.
- **Private sector and financial actors:** the Bankers Association and commercial banks; insurers involved in climate / disaster risk cover; the Chamber of Commerce; agribusiness and cooperative platforms; MSME and microfinance institutions and DFIs.
- **Other stakeholders and development partners:** civil society and community-based organizations; academia and research institutions (University of Malawi, LUANAR, MUST); and development partners including UNEP, UNDP, FAO, IFAD, the World Bank, AfDB and the GCF.

Two lessons from the July 2026 workshops should shape the remaining consultation process. First, the Malawi Confederation of Chambers of Commerce and Industry (MCCCI) was identified during the discussion as an existing platform for coordination and communication among private-sector organizations; using it to convene the private-sector strand is preferable to establishing a new structure. Second, participants noted that those attending were largely technical officers rather than institutional decision-makers, and that internal policies in some institutions constrain the investments discussed. Subsequent sessions should therefore be designed to reach board- and executive-level participants, with technical staff supported to make the internal business case.

The consultation process will use bilateral meetings, sectoral / thematic focus groups, and at least one national validation workshop, with five core objectives: validate funding-gap estimates; prioritize instruments and reforms; test the feasibility and design of proposed measures; assess private-sector appetite; and agree on institutional roles and coordination mechanisms.

Next steps: refinement and final action plan

Feedback from the consultation process will be used to refine and prioritize the proposed instruments, reforms and investments: adjusting the prioritization of public and private instruments; sequencing measures into short-term (1–2 years), medium-term (3–5 years) and longer-term (beyond 5 years); refining sector financing plans that link priority NAP measures, finance archetypes and specific instruments and sources; and finalizing a consolidated implementation matrix with lead institutions, timelines, indicative resource needs, and links to NAP and NDC targets.

The action plan is structured across three horizons: short-term (Year 1–2) foundational actions to establish enabling conditions and mobilize first tranches of finance; medium-term (Year 2–3) scaling up through mainstreaming and a first pipeline of external proposals; and long-term (Year 3–5) sustained flows through institutionalized mechanisms and private-sector engagement.

7.3 A readiness framework for planning, accessing, delivering and monitoring adaptation finance

The roadmap above sets out what needs to be done and by when. The companion Financing Mechanisms and Framework report structures how the capacity to do it is built, using the climate-finance readiness approach: the capacities a country needs to plan for finance, to access it in its different forms, to deliver and execute, and to monitor what has been spent and what it achieved. Applied to Malawi, the four components translate into a sequenced capacity agenda that runs alongside the institutional and instrument reforms already identified.

Table B2 in Annex B sets out the climate-finance readiness components applied to Malawi.

Two points deserve emphasis. First, the readiness components are sequential in capability but concurrent in time: waiting for planning capacity to mature before building access capacity would delay both. Second, the monitoring component is the one most often deferred and the one that most determines credibility with funders, because it is what allows Malawi to demonstrate what past finance achieved when requesting the next tranche.

Table B3 in Annex B gives the indicative operational roadmap to 2030.

The roadmap is conceived as a living document, updated periodically to reflect new information on climate risks and costs, evolving fiscal space, progress in accessing climate funds, and the emergence of new instruments and private-sector opportunities. Updates will be aligned with Malawi's MTEF cycle, NDC revision cycles and NAP updates.

7.4 Recommendations for strengthening adaptation finance in Malawi

Risk management and de-risking instruments

Given Malawi's shallow domestic capital market, individual adaptation projects are often too small and too risky to attract commercial finance. Malawi should aggregate small climate-resilient investments (solar for clinics and schools, climate-smart irrigation schemes, rehabilitated rural roads, nature-based flood protection) into larger portfolios financed through a single facility. Bundling increases ticket size, spreads project-specific risk and reduces transaction costs. A national DFI or the proposed Adaptation / Resilience Facility could provide first-loss capital or partial credit guarantees for priority NAP projects.

Risk transfer belongs in this toolkit alongside de-risking. Malawi's sovereign parametric cover through ARC Ltd (Chapter 5.3) has paid out in two successive seasons, but premiums for both the traditional and the anticipatory policy were met by the AfDB and KfW. The Ministry of Finance and Economic Affairs should establish a dedicated climate risk premium line in the national budget and set a trajectory for progressively co-financing premiums from domestic revenue, Carbon Levy proceeds and concessional resources, so that cover does not lapse with the donor cycle. In parallel, ARC payout triggers should be pre-linked to the Social Cash Transfer Programme and DoDMA contingency plans, and the risk layers set out in Table 23 should be assigned explicitly to instruments in the MTEF.

Institutional strengthening

The effectiveness of adaptation finance is constrained by limited institutional capacity and fragmented responsibilities. Strengthening the mandate, staffing and analytical capacity of a Climate Finance Unit within the Ministry of Finance and Economic Affairs is a priority. A clear legal and policy framework should assign roles for project origination, appraisal, fiduciary oversight and results reporting across the ministries responsible for finance, natural resources and climate change, water, agriculture, infrastructure and disaster-risk management.

A Climate Change Financing Framework as the organizing instrument

The institutional measures above - a Climate Finance Unit, climate budget tagging, MTEF mainstreaming and adaptation-finance tracking - are more effective when assembled into a single

instrument rather than pursued separately. A Climate Change Financing Framework (CCFF) does this: it links the national climate strategy to the budget cycle by defining how climate objectives enter budget formulation, how expenditure is tagged and tracked through execution, and how results are reported back. For Malawi this would mean anchoring the CCFF in the Ministry of Finance and Economic Affairs, aligning it to the MTEF cycle, and using it as the vehicle through which the NAP investment pipeline reaches sector budget submissions. It also gives development partners a single framework to align behind, which reduces the fragmentation of parallel reporting requirements that currently absorbs institutional capacity.

Implementation should be staged in line with public financial management capacity rather than introduced wholesale. International experience with PFM reform is consistent on two points: reforms succeed where government ownership is strong and where scope is deliberately narrow, and capacity building takes considerably longer than reform timetables usually assume. A realistic sequence for Malawi is to begin with budget tagging on a limited set of votes, extend to expenditure tracking once the classification is stable, and add performance-based elements only when the reporting chain is reliable. The specific entry points should be set against Malawi's most recent PEFA assessment. [Reference to be verified.]

Private-sector commitment and participation

Engaging the private sector more systematically is essential for scaling up adaptation finance. Government, with business associations and financial regulators, should promote climate-risk disclosure and dedicated public–private dialogue platforms on climate-resilient value chains (agriculture, water, fisheries, forestry). These should be linked to targeted instruments — risk-sharing facilities for climate-smart agriculture credit, performance-based grants for SME resilience upgrades, and PPP models for resilient infrastructure.

The July 2026 consultations point to three practical additions here. Dialogue should be convened through MCCCCI and existing sector associations rather than new bodies; it should be pitched at decision-making level, since technical attendance alone does not shift institutional policy; and it should include a standing forum for private-sector actors in climate-related sectors to meet one another, which participants identified as largely absent today. Awareness and education on adaptation investment - repeatedly raised as both an opportunity and a constraint - should be treated as an enabling measure with its own budget line rather than as a by-product of project implementation.

Raising public awareness and demand for resilience

A national communication effort is needed to link climate resilience with issues that matter to citizens (food security, safe water, reliable infrastructure and public health) tailored to farmers, youth, local leaders, entrepreneurs and cooperatives. Stronger public awareness creates political demand for sustained investment and eases mobilization of domestic resources.

Gender-responsive adaptation financing

Climate impacts in Malawi are not gender-neutral, and neither is access to the finance that addresses them. Women make up the majority of the smallholder agricultural workforce that the priority measures target, yet face systematically weaker access to credit, land tenure, extension services and the mobile and banking channels through which finance is delivered. A financing strategy that is silent on this will, by default, direct resources along the existing channels and reproduce the existing gap. UNEP and the GCF both require a gender-responsive approach, and the following framework meets that requirement; the national specifics marked below should be completed from Malawi's own policy instruments before submission.

- **Policy anchor.** This section should be aligned to Malawi's National Gender Policy and to the gender provisions of the National Climate Change Management Policy. In practical terms this means aligning the financing measures with the national gender policy framework and with the gender provisions of the NDC and NAP, so that the Strategy's instruments are consistent with commitments the Government has already made rather than introducing a separate track.
- **Design principles.** Three principles apply across the instruments in this Strategy. Delivery channels should reach women directly — VSLAs, SACCOs and mobile money reach women more reliably than formal banking, which is relevant to the credit and micro-insurance entry points. Product design

should reflect women's risk exposure and cash-flow patterns, not a default household model. And the social protection interface in Chapter 5.3 should be used deliberately: the Social Cash Transfer Programme already reaches female-headed and labour-constrained households, making it an efficient channel for gender-responsive shock finance.

- **Indicators.** Finance indicators throughout this Strategy (including those in the Chapter 9 fact sheets) should be reported sex-disaggregated wherever the beneficiary is an individual or household: value of credit disbursed to women-led enterprises, share of insurance policies held by women, women reached through extension and awareness programming, and women in the governance of community forestry and water institutions. These should draw on the sex-disaggregated indicators in the NAP monitoring framework and align with the Belém Adaptation Indicators noted in Chapter 2.3, so that gender reporting uses the same measurements as the rest of the adaptation framework.
- **The data constraint.** The August 2025 Global Shield gap analysis found a lack of gender-disaggregated data as a specific constraint on tailoring interventions and monitoring equitable access. Closing that data gap is a precondition for the indicators above and should be included in the readiness and MRV work in Chapter 7, not treated as a reporting afterthought.

This framework is deliberately cross-cutting rather than a standalone pillar: gender belongs in the design of each instrument, not in a section that sits beside them. The placeholders should be completed by the Ministry of Gender, Community Development and Social Welfare before the Strategy is finalized.

Designing the Climate Finance Unit

The recommendation to establish a Climate Finance Unit recurs through this Strategy; this section gives it enough definition to be actionable, while leaving the decisions that belong to Government open. The design principle is to create a mandate and a small core team within an existing institution rather than a new agency, because the Global Shield gap analysis identified institutional proliferation (too many working groups without alignment) as itself a constraint.

- **Location.** The Unit should sit within the Ministry of Finance and Economic Affairs, most plausibly in or alongside the Debt and Aid Management Division, which already holds the National Designated Authority relationship with the climate funds and the aid-tracking function. In general terms, the Unit is best placed where the aid-tracking and accredited-entity relationships already sit, with a formal coordinating link to the Environmental Affairs Department rather than a duplicate function; the precise host division is for the Ministry to determine.
- **Mandate.** Four functions, matching the readiness framework in Chapter 7: maintain the finance baseline and funding-gap analysis; steward the accreditation pathway and the project-preparation pipeline; operate climate budget tagging and the link to the MTEF; and consolidate finance tracking into the national MRV system. The Unit coordinates; it does not implement projects.
- **Indicative structure.** A small core team is sufficient at the outset: a unit head, a public-finance / budget-tagging specialist, a climate-finance / accreditation specialist, an MRV and data officer, and a private-sector and blended-finance officer, supported by the wider Division. Headcount and grades should follow the Ministry's own establishment rules; the point is a small, senior, multidisciplinary team rather than a large secretariat.

Table 30: Indicative Climate Finance Unit — functions, partners and first-year milestones²⁹

Function	Works with	First-year milestone
Baseline and gap analysis	EAD; National Statistical Office; CBA team	Second-phase CPEIR commissioned; funding gap refreshed
Accreditation and pipeline	NDA (EAD); GCF; MDB partners	Project-preparation facility established; pipeline of bankable measures assembled

²⁹ Indicative design by this Strategy. Location, headcount, grades and budget are decisions for the Ministry of Finance and Economic Affairs and are marked for confirmation.

Function	Works with	First-year milestone
Budget tagging and MTEF	MoFEA budget divisions; line ministries; World Bank	Climate budget tagging piloted on a limited set of votes
Finance tracking and MRV	EAD; DCCMS; climate finance MIS	Finance-tracking module linked to the national MRV system
Private-sector and blended finance	Reserve Bank; MCCCCI; DFIs	Shortlisted entry points (Table 19) taken to market through MCCCCI

- **Budget and timeline.** A core team of five with operating costs is a modest recurrent commitment relative to the portfolio it stewards, and much of the set-up can be met from GCF readiness funding rather than the domestic budget. As a general approach, establishment costs should be sought from GCF readiness funding and the recurrent cost absorbed into the MTEF from the second year, so that the Unit does not depend on continued external support to survive. The Unit should be established in the first year of the roadmap, since the functions in Chapters 3, 4 and 7 depend on it.

Strengthening national coordination

Government should establish or reinforce an inter-ministerial Climate Finance and Resilience Committee with a clear mandate, secretariat and work programme, bringing together the Ministry of Finance and Economic Affairs, the Ministry of Natural Resources and Climate Change, sector ministries, the Reserve Bank of Malawi and key state-owned utilities, to prioritize investments, align donor support and monitor finance flows. The lead institution is the Ministry of Finance and Economic Affairs, working with the Environmental Affairs Department; supporting institutions include the Reserve Bank of Malawi, the sector ministries and DoDMA.

Carbon pricing and market mechanisms

Malawi's forestry and land-use measures offer strong adaptation-mitigation co-benefits that can be monetized under Article 6.2 and the VCM (CBA Recommendation 4). Developing an Article 6 readiness framework (including guidance on corresponding adjustments, benefit-sharing and safeguards) would enable Malawi to generate ITMOs and VCM revenues, with a portion earmarked for resilience-building in vulnerable communities.

Green, resilience and sustainability bonds

Over the medium term, a sovereign or sub-sovereign green / resilience bond could finance priority adaptation investments in water security, resilient infrastructure and ecosystem restoration. The Government, with the Reserve Bank of Malawi and partners, should develop a green-bond framework aligned with international principles, define eligible adaptation expenditures, and build debt-management and investor-relations capacity, starting with budget tagging and small domestic issuances.

Recommendations for further work and future TORs

The following areas require further work to operationalize this Strategy:

- **Assemble the adaptation-finance baseline:** compile climate public expenditure (CPEIR / budget tagging), ODA adaptation flows and the active GCF / GEF / AF portfolio for Malawi to quantify the net funding gap on gross-tagged, executed and grant-equivalent bases.
- **Per-measure costing:** extract a full per-measure CAPEX / OPEX breakdown from the CBA cost model for the twelve measures not disaggregated in the revised CBA (the 22 priority measures less the ten shown individually in Table 10, Section 4.1), reconciled with the USD 4,582.20 million national CAPEX envelope and the USD 437 million first-year OPEX, and resolve any remaining inconsistencies between the CBA narrative and its cost tables, such as the pilot-versus-national-scale figures discussed in Section 4.1.
- **Private-sector mapping study:** map private actors by sector, assess adaptation investment appetite and identify bankable opportunities to anchor blended structures.

- **Adaptation / Resilience Facility feasibility study:** legal structure, capitalization, investment criteria and monitoring framework.
- **Article 6.2 / VCM readiness and Green Bond Framework:** carbon-market readiness for forestry and land use, and a green-bond framework aligned with ICMA principles and any national green-finance taxonomy.

8. Structuring the Investment Programme: Intervention Types and Financing Horizons

Pillar 2 assigns the 22 CBA measures to finance archetypes (public, private or blended) according to whether they can generate revenue. That is the right first cut, but it is not sufficient to select instruments. A flood-defence wall and a farmer advisory service are both public-good investments, yet almost nothing about how they are financed is the same: one is a large, long-lived capital asset that can carry concessional debt against a measurable service output, the other is a low-capital recurrent cost that no lender will finance. This chapter therefore adds a second cut, by type of intervention, and reads the two together.

8.1 Three intervention types

- **Hard infrastructure and capital investment** — engineered assets with a long design life: irrigation schemes, flood-management structures, water storage, resilient public buildings and transport links, and aquaculture production facilities.
- **Nature-based solutions and ecosystem-based adaptation** — measures that work through restored ecological function: catchment and watershed restoration, afforestation and reforestation, community and sustainable forest management, conservation agriculture and soil-fertility improvement, and habitat protection.
- **Soft and enabling interventions** — measures whose output is capability rather than an asset: early-warning systems, extension and advisory services, crop diversification and drought-tolerant variety programmes, social safety nets, awareness and education, and the institutional reforms in Chapter 7. The soft / enabling column of Table 31 names, for each sector, the specific CBA measures that fall into this category; it does not refer to additional measures outside the 22.

Table B4 in Annex B classifies the 22 CBA measures by intervention type.

Even without the full cost split, the shape of the portfolio is clear. Irrigation alone accounts for USD 1.76 billion, so hard infrastructure dominates the capital requirement, while the measures with the highest internal rates of return in the CBA (crop diversification at 89%, access to services at 56%, livelihood diversification at 56%) sit overwhelmingly in the soft and enabling column, where capital needs are smallest. The financing problem is not uniform across the portfolio: the largest sums and the highest returns are in different places, and a sequencing decision has to be made explicitly rather than by default.

8.2 Matching instruments to intervention types

Table B5 in Annex B maps instrument fit by intervention type.

The practical conclusion is that the three intervention types should be financed through three different channels rather than a single facility. Hard infrastructure is a candidate for concessional MDB and climate-fund investment structured project by project. Nature-based measures are the natural home for carbon and results-based finance, subject to the incentive review recommended in Chapter 4.3. Soft measures should be financed through grants during establishment and then absorbed into the MTEF, because they cannot be sustained any other way and because the CBA shows they carry the highest returns in the portfolio.

8.3 Financing horizons

Costs should be staged to match both absorption capacity and the sequencing logic above: soft and enabling measures and the highest-return agricultural measures first, since they require least capital and build the delivery capability that the larger investments depend on; catchment and forestry restoration in parallel, because ecological returns lag expenditure by years and delay is costly; and the largest hard-infrastructure commitments once the pipeline, the accreditation pathway and the disbursement record can support them.

Adaptation Financing Strategy – Revised report

The operational roadmap in Chapter 7 runs to 2030 and is aligned to the MTEF cycle. The CBA appraises a five-year investment phase followed by a 20-year operating period, which implies capital deployment continuing beyond 2030. These two horizons need to be reconciled in the final version: either the roadmap is extended to cover the full investment phase, or the roadmap is presented explicitly as the first tranche of a longer programme. This Strategy recommends the second, on the grounds that a five-year horizon aligned to the MTEF and to the NDC reporting cycle is more likely to be implemented than a ten-year plan, and that the disbursement evidence in Chapter 3.4 does not support committing to a longer schedule yet.

9. Adaptation Measure Financing Profiles

This chapter summarizes, for each of the 22 priority adaptation measures appraised in the National CBA, how the measure can be financed: its economic performance, its finance archetype and intervention type, and the principal constraint standing between an attractive appraisal and an investable project. The full financing fact sheet for every measure — candidate funders, instruments, the binding constraint and the next step to make it financeable — is provided in the companion volume, Adaptation Measure Financing Fact Sheets, so that the main Strategy stays concise while the detail remains available.

9.1 Financing implementation activities

Before the individual sheets, the table below sets out the financing activities required across the portfolio, grouped by the constraint they address rather than by sector. Each activity applies to several measures, and sequencing them by constraint avoids the duplication that arises when every measure is financed as a separate project.

Table B6 in Annex B lists financing implementation activities across the 22 measures.

The 22 priority measures and their key financing characteristics are summarized below. A full financing fact sheet for each measure — candidate funders, instruments, the principal constraint and the next step to make it financeable — is provided in the companion volume, Adaptation Measure Financing Fact Sheets.

Table 34: Summary of the 22 priority measures and their financing profile

#	Sector	Measure	IRR (RCP 4.5)	Type	Principal financing constraint
1	Agriculture	Crop diversification	89.19%	Soft	Input credit via MFIs/SACCOs; no direct revenue
2	Agriculture	Climate-smart agriculture	40.97%	Soft	Recurrent advisory cost; carbon unproven
3	Agriculture	Drought-tolerant crops	32.54%	Soft	Seed-multiplier working capital
4	Agriculture	Improve soil fertility	30.96%	NbS	Multi-season payback; public financing
5	Agriculture	Irrigation schemes	27.70%	Hard	USD 1.76bn CAPEX; debt headroom; O&M
6	Agriculture	Rainwater harvesting	22.32%	Hard	Small-ticket; aggregate at district scale
7	Agriculture	Afforestation & reforestation	19.12%	NbS/carbon	Carbon fiscal treatment; tenure
8	Agriculture	Conservation agriculture	18.53%	NbS	Transition-period yield gap
9	Social	Access to services	56.20%	Soft	No revenue; recurrent MTEF line
10	Social	Livelihood diversification	55.95%	Soft	Capitalize VSLA/MFI channel
11	Social	Social safety nets	49.98%	Soft	Rising recurrent cost; link to ARC
12	Social	Awareness & education	30.49%	Soft	Smallest CAPEX; fund as its own line
13	Infrastructure/DRR	Flood management	48.25%	Hard	High CAPEX; package with DRF

Adaptation Financing Strategy – Revised report

#	Sector	Measure	IRR (RCP 4.5)	Type	Principal financing constraint
14	Infrastructure/DRR	Resilient infrastructure	44.86%	Hard	Price resilience into building codes
15	Infrastructure/DRR	Early warning systems	35.66%	Soft	Recurrent O&M; cuts basis risk
16	Forestry	Community forest management	43.86%	NbS/carbon	Benefit-sharing; tenure; carbon fiscal
17	Forestry	Sustainable forest management	43.13%	NbS/carbon	Long rotation; revenue lags
18	Forestry	Fire management	35.97%	Soft	Protection overhead; no revenue
19	Forestry	Reforestation	17.09%	NbS/carbon	Lowest IRR; carbon fiscal treatment
20	Fisheries	Sustainable fishing	46.56%	Soft	Public management + SACCO gear finance
21	Fisheries	Aquaculture development	28.44%	Hard	Only private-led; first-loss facility
22	Fisheries	Habitat protection & restoration	24.62%	NbS	Public good; blue-bond candidate

Source: National CBA (IRR under RCP 4.5) and this Strategy (intervention type and financing constraint). Full detail per measure is in the companion fact-sheet volume.

10. References and Data Sources

This Strategy draws on the following primary sources. Web addresses were current at the date of drafting; users should verify against the issuing institution.

National documents

Government of Malawi, Malawi's First Biennial Transparency Report to the UNFCCC, chapter on financial, technology transfer and capacity building support needed and received, 2025.

Government of Malawi, Updated Nationally Determined Contribution, submitted 30 July 2021.

Government of Malawi, NDC Implementation Plan 2021–2025, launched August 2022.

Government of Malawi, NDC Resource Mobilization Strategy, May 2022.

Government of Malawi, National Climate Change Management Policy, 2016.

Government of Malawi, National Climate Change Investment Plan, 2013.

Government of Malawi, Malawi 2063 and the First 10-Year Implementation Plan (MIP-1), 2021.

Government of Malawi, National Framework for Water and Climate Services, 2024–2029.

Mokoro and Climate Scrutiny for UNDP and the Ministry of Natural Resources, Energy and Mining, Malawi First Phase Climate Public Expenditure and Institutional Review, Final Report, 31 December 2018.

National Economic Appraisal and Cost–Benefit Analysis of priority NAP adaptation measures for Malawi, revised version, July 2026.

Consultations report, Activity 2.2 private-sector sensitization workshops, Lilongwe and Blantyre, 14 July 2026.

International sources

International Monetary Fund, 2025 Article IV Consultation with Malawi, Press Release 25/261 and Country Report 25/226, July 2025.

UNFCCC, decisions on the New Collective Quantified Goal on Climate Finance, COP29, Baku, 2024.

UNFCCC, COP30 Belém political package (Mutirão decision) and associated decisions on the Global Goal on Adaptation, National Adaptation Plans and climate finance, Belém, November 2025.

UNFCCC, Baku to Belém Roadmap to USD 1.3 trillion, prepared by the COP29 and COP30 Presidencies, 2025.

Green Climate Fund and FAO, approval of the Ecosystems-based Adaptation for Resilient Watersheds and Communities in Malawi project, B.39, July 2024.

Save the Children, climate-resilient health and well-being for rural communities in southern Malawi, GCF approval, October 2024.

UNDP Malawi, TRANSFORM project, GEF approval, June 2023.

Atteridge, A., Savvidou, G., Sadowski, S., Gortana, F., Meintrup, L., and Dzebo, A. (2019). Aid Atlas, Stockholm Environment Institute. Profile: Climate Adaptation during 2002–2021, All Donors to Malawi, commitments basis.

Government of Malawi, Ministry of Finance and Economic Affairs, Gap Analysis Report: Climate and Disaster Risk Finance in Malawi — Contribution to the In-Country Process of the Global Shield against Climate Risks, August 2025.

Global Shield against Climate Risks, national workshop, Lilongwe, 29–30 April 2025.

African Risk Capacity Group, Government of Malawi receives an insurance payout from ARC Group following the 2024 drought, press release, 25 July 2025, arc.int.

African Development Bank Group, African Development Bank Group and African Risk Capacity Group issue USD 11.2 million insurance payout to the Government of Malawi, press release, August 2024, afdb.org.

UNDP Insurance and Risk Finance Facility and Generali, Parametric Insurance to Build Financial Resilience, 2024.

World Bank Group, Malawi Country Climate and Development Report, October 2022. [Figures not yet reconciled with the CBA damage estimates used in this Strategy.]

Data sources for the finance baseline

These databases should be interrogated at finalization and at each subsequent update of this Strategy, since all are updated continuously:

- **Green Climate Fund funded activities in Malawi:** Humanitarian Data Exchange, data.humdata.org/dataset/malawi-gcf-funded-activities
- **GEF projects database:** thegef.org/projects
- **Climate Funds Update:** climatefundsupdate.org — flows through the GEF, CIF and Adaptation Fund
- **OECD Creditor Reporting System:** stats.oecd.org, dataset CRS1 — climate-tagged ODA and the Rio markers for adaptation
- **IATI Registry:** iatiregistry.org — donor project-level reporting
- **Aid Atlas:** aid-atlas.org — Stockholm Environment Institute visualization of OECD CRS flows; the Malawi climate-adaptation profile presents the long-run series from 2002 and is useful for trend context that a two-year extract cannot provide
- **AidFlows:** aidflows.org — OECD and World Bank aid flow data
- **UNFCCC Climate Finance Knowledge Hub:** climatefinanceknowledgehub.org

Adaptation Financing Strategy – Revised report

- **NDC Partnership Malawi country page:** ndcpartnership.org/countries/malawi
- **Infrastructure Transparency Initiative (CoST IPPI):** infrastructuretransparency.org/ippi
- **Malawi climate finance management information system:** ccfinancemw.com — the national platform for tracking climate resource inflows

The national Aid Management Platform and the Approved Financial Statement remain the authoritative domestic sources and should be used in preference to international aggregators for expenditure recorded in the Malawi budget.



sustainable development
on our finite planet



Carrer Can Verí, 1 · 07001 · Palma de Mallorca · Spain



+34 971 72 56 66



administration@oikologica.com



www.oikologica.com