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Roadmap to Financing
**Adaptation
and Resilience**
in Developing Countries



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Executive Summary

The recently released Baku to Belem Roadmap to 1.3t (Roadmap) and the COP30 Circle of Finance Ministers lay out important pathways toward achieving the global climate finance goals.

These reports focus on all kinds of climate investments, both mitigation and adaptation. But adaptation can be particularly difficult to finance. So, to help ensure that adaptation receives sufficient and specific attention, this paper lays out actions that, taken together, can have a major impact on the amount of funds flowing to climate resilience.

Research shows that the net economic benefits of investments in adaptation and resilience outweigh the costs, in large part because such investments – in stronger infrastructure or more adaptive agriculture – not only reduce potential future losses but also often bring broader development benefits (Brandon et al. 2025). Meanwhile the cost of not investing in climate resilience is substantial. Estimates show that the world economy is already committed to an 11–29% loss of income compared to a baseline without climate changes, regardless of future emissions by 2050 (Kotz et al. 2024). Climate change has the potential to suppress gross domestic product (GDP) growth, reduce employment and income levels, and further raise the cost of borrowing (Bilal and Kanzig 2024, Wessel 2023).

This paper lays out barriers and recommendations related to five priorities set out in a report drafted by the Circle of Ministers convened by Brazil's Ministry of Finance and published in October 2025. In this report, seventeen ambition actions are structured around the five priority areas found in the Circle of Ministers report. These five areas are: concessional finance and the



climate funds, multilateral development banks (MDBs), capacity building and country platforms, the private sector, and regulatory frameworks. A summary of the ambition actions is found in Table 1. Each ambition action is, in turn, associated with 2 or 3 recommendations. A summary of these recommendations is found in Annex 1.

Table 1: Summary of ambition actions by priority areas

The five priority areas set out by the Circle of Finance Ministers				
Concessional finance	MDBs	Capacity & platforms	Private sector	Regulations
Recommit to development assistance for resilience	Go beyond current commitments by growing lending capacity	Develop country platforms to coordinate and accelerate resilience investments	Use public funds to improve incentives	Create an impactful domestic regulatory system
Make greater use of Special Drawing Rights (SDRs)	Support mainstreaming of resilience across all operations	Support project preparation, including early project selection	Structure investment opportunities around clarified adaptation benefits	Create national and international financial regulations that encourage resilience investments
Establish solidarity levies			Value the resilience benefits of natural capital	Ensure trade relationships to encourage access to markets important to resilience
Incorporate debt into trajectories and increase debt for resilience swaps			Fully engage the insurance industry	
Phase out distortive subsidies			Make credit ratings fairly reflect investment risk; reward investments in resilience	

Introduction:

The value of investing in adaptation – and urgent need

Research shows that the net benefits of investments in adaptation and resilience¹ greatly outweigh the costs. According to the Global Commission on Adaptation, investing \$1.8USD trillion globally in resiliency between 2020-2030 could generate \$7.1 trillion in total net benefits (Global Commission on Adaptation 2019). Investments in adaptation not only reduce climate-related losses but also can deliver economic, social, and environmental returns. Climate change is also driving the emergence of new markets and creating business opportunities as emerging technologies are required to adjust to the changing conditions (UNEP 2016). Studies show that resilience investments may also bring down the cost of sovereign financing for vulnerable countries (Beirne et al 2021).

The cost of inaction

The cost of not investing in climate resilience is substantial. Climate change has the potential to suppress GDP growth, reduce employment and income levels, and further raise the cost of borrowing. The V20 Group—a group of finance ministers from 68 climate-vulnerable developing countries—has estimated that the absence of climate shocks could have seen a GDP increase between 2000 and 2019 20 percent higher than they did (Boston University 2024).

Without investments in adaptation, climate change will depress growth in global agriculture yields and exacerbate food insecurity globally, with small-holder farmers in developing countries most affected. Meanwhile almost half the world's population currently faces some degree of water scarcity, a number that is set to grow (Global Commission on the Economics of Water 2024). Climate impacts will also increase migration both internal and cross border displacement (WB 2021).

Resilient development is good development (and vice versa)

Climate resilience and inclusive economic development go hand in hand. As stated in the World Bank's flagship report on adaptation *Rising to the Challenge*, "Reducing climate and disaster impacts on people, communities, and economies requires more rapid development, more resilient development, and targeted adaptation interventions" (WB 2024b).

Resilience is built by both broad-based development and targeted investment. Economic development can make a society more resilient in a broad sense, for example by improving access to literacy or communications networks that could help populations navigate disasters and by

¹ Adaptation refers to the process while resilience refers to the result. In this paper we use these terms interchangeably. See <https://www.lse.ac.uk/granthaminstitute/explainers/what-is-the-difference-between-climate-change-adaptation-and-resilience/> for further explanation.



diminishing associated migration. But a smaller portion of targeted investments are also needed in adaptation-specific activities such as early warning systems or infrastructure upgrades (and can in turn support economic development). Adaptation and resilience are not stand-alone actions but rather lenses through which every sector –whether it be infrastructure, healthcare, agriculture, or asset management – must be viewed (McKinsey n.d.).

The \$1.3 trillion target for climate adaptation and mitigation investment was set within the confines of the United Nations Framework Convention on Climate Change (UNFCCC) but achieving it will require action in arenas outside the UNFCCC process. This document reflects actions that will need to be taken by the global community of governments, financial institutions, private investors and companies, and others (UNFCCC 2025). There is no specific agreement as to how much of the \$1.3 trillion should go to adaptation. The IHLEG estimated that \$200–300 billion is needed annually by 2030 for investments in adaptation and resilience in emerging and developing economies (excluding China) increasing to \$300–400 billion per year by 2035 (IHLEG 2024). UNEP estimates that these costs will be \$215–387 billion annually by 2030 depending on method used (top-down modeling or bottom up reporting through NDCs, NAPs) (UNEP 2024).

This paper: Methodology

This paper focuses primarily on how to increase financial flows to adaptation and resilience. Given the focus on increasing finance, it places less emphasis on the equally important and related questions of finance quality, such as what adaptation solutions should be funded, what impact the projects ultimately have, or who should make these funding decisions. Following the structure of the Circle of Ministers Report, it looks at actions that, taken together, could add up to a significant and impactful shift in finance toward climate resilience in developing nations.

This paper employs qualitative, desk-based research drawing on secondary data sources to examine trends, challenges, and opportunities in adaptation finance. It synthesizes existing academic research, policy reports, and data from multilateral organizations to develop a comprehensive understanding of the landscape of adaptation financing.

The analysis proceeds in two steps. First, a systematic literature review was conducted of peer-reviewed articles. Second, the study incorporates grey literature—including reports from intergovernmental organizations (e.g., UNFCCC, Organisation for Economic Co-operation and Development, World Bank, Green Climate Fund), non-governmental organizations, and think tanks—to capture recent policy developments and financial commitments. These documents were selected based on their credibility, transparency in data collection, and relevance to adaptation finance. This approach aims to provide a comprehensive overview and identifying gaps for future research.

The information is organized following the structure of the Circle of Ministers Report. That report lays out five priorities:

- 1** Scaling up concessional finance and optimizing climate funds.
- 2** Reforming MDBs to scale up sustainable finance.
- 3** Boosting domestic capacity and investment frameworks for climate finance, including country platforms.
- 4** Developing scalable and innovative financial solutions for private capital mobilization.
- 5** Strengthening regulatory approaches for climate finance.

Finally, this paper lays out barriers and recommendations related to each of these priorities with a focus on adaptation and resilience. It outlines the key roadblocks identified through the research and makes recommendations for overcoming these roadblocks.



Priority 1:

The role of concessional
finance in financing adaptation

/ Priority 1 Roadblocks

Concessional finance under threat

Finance on concessional terms in the form of grants, loans, bonds, and equity, is critical to adaptation and resilience efforts. It provides vital resources for activities that boost resilience but do not have a financial return, without worsening debt sustainability, and can be used to help bring down the cost of capital.

According to CPI, international concessional climate finance increased by 50 percent from 2019 reaching \$81 billion in 2022, 36 percent of which went to adaptation and 22 percent to cross cutting activities (adaptation and mitigation) (CPI 2024a). Unfortunately, today we are witnessing a decrease in one of the most important sources of concessional finance, official development assistance (ODA). While ODA reached a record high in 2022, driven in part by responses to COVID-19 and the war in Ukraine (CPI 2024a, OECD 2024). In 2024, ODA dropped by around 9 percent compared to the year before, and the OECD estimates that it will decrease again by an additional 9 percent to 17 percent in 2025 (up to \$31.13 billion) (OECD 2025). This trend is likely to continue through 2026. In 2021-2022 about one third of ODA went to climate-related investments (OECD 2024).

High debt burden making concessional funds even more vital

The need for concessional funding is further exacerbated by high levels of debt held by many developing countries today. Capital flows related to lending to developing countries have reversed, meaning disbursements to developing countries are now less than the amount these countries are paying to service their external debt (UNCTAD 2025, IMF 2025). With debt service payments at an all-time high, a lack of liquidity means countries are struggling to meet their recurrent spending needs, let alone make investments in climate resilience (Expert Review on Debt, Nature and Climate 2025, Zucker-Marquez et al. 2024). If disaster hits, and national budgets are constrained, countries need to borrow to recover, leading to even higher debt levels (Alayza et al 2023).

Analysis shows that countries particularly vulnerable to climate change are also those that pay a higher rate on government-issued debt, for example, 25 climate-vulnerable developing countries (members of the V20 group) paid, on average, 1.174 percent higher interest rates on sovereign debt due to climate



vulnerability (Kling et al 2025). The 34 poorest countries in the world spend 5 times more on servicing external debt payments than on investing in climate action (UN General Assembly 2025).

Meanwhile, efforts to link debt treatment to investments in resilience through debt swaps are emerging in popularity but remain relatively small in size and number. There are several reasons for this, including the time-consuming nature of the deals) and concerns of potential negative impact on sovereignty (to choose how to spend funds) and credit ratings (if ratings agencies consider the swap a “distressed debt exchange”) (Nedopil 2025, GCF 2024). On the lender side some, creditors may also question the reliability and traceability of commitments to invest freed up funds into resilience.

Funds flowing to misaligned actions

Meanwhile, public finance continues to flow toward investments that undermine resilience efforts. This includes public subsidies for activities that counteract climate mitigation and/or adaptation goals. Some of this funding could in theory instead be invested in resilience. Estimates of how much public funding supports activities that undermine climate goals vary depending on methodology.

At the same time, agriculture and fisheries receive public subsidies that can sometimes undermine resilience ambitions. In a study of eighty-four developed and developing countries, the World Bank estimated that explicit subsidies for agriculture totaled \$635 billion per year. Around 60 percent of this was coupled with production, meaning the support went to buying specific inputs or growing specific crops, which tends to often have negative spillover effects like deforestation or overuse of fertilizers (Damania et al 2023). Some of these inputs, such as seeds are also not for example drought resistant and have the potential to be maladaptive. An earlier study from 2019 found that subsidies intended to support positive environmental outcomes account for only 5 percent of total agricultural input subsidies, and social goods and services another 17 percent (WB 2019).

/ Priority 1 Recommendations

1a. Recommit to development finance assistance for resilience

Donors globally must not lose sight of the value of investing concessional funding into climate resilience, both by mainstreaming resilience into all development financing and supporting stand-alone adaptation investments with high social and environmental value. Global stability hinges on resilient societies, and investments into resilience will shore up gains in economic development attained in recent decades and reduce potential for conflict (Systemiq 2025; Chandy 2023; Valencia 2022).

To address global adaptation finance needs, bilateral and multilateral development finance assistance will be critical. Between 2025-2026, twelve countries’ adaptation finance pledges are expiring. Such public funding provides important support for public goods that the private sector is less likely to fund and can help improve the risk/return calculation for private investors, making them more likely to invest (OECD 2024). Whilst private finance can play an important role, the public good nature and long-term payoffs of many resilience investments means concessional finance needs to play a greater role than, for example, renewable energy investments. Bilateral donors should commit to mainstreaming resilience through all of their bilateral assistance and continue working towards their UN commitment to provide 0.7% of GNI in ODA.

At COP29, countries decided to *pursue efforts* to at least *triple annual outflows* from the operating entities of the Financial Mechanism (which includes the Green Climate Fund) and the Adaptation Fund, the Least Developed Countries Fund and the Special Climate Change Fund. For concessional adaptation finance to be provided at scale, donor countries also need to ambitiously replenish the International Development Association, the African Development Fund, and the Asian Development Fund (see Pillar 2).

In this context, South-South cooperation also has the potential to complement funding towards adaptation and resilience. Although South-South climate finance cooperation represented less than two percent of total tracked flows between 2019 and 2020—approximately \$18 billion per year on average (CPI 2023)—these figures may be underestimated due to data availability as developing countries are not obligated to report this type of funding. WRI’s recent research found that between 2013 to 2023, fourteen developing countries provided and mobilized approximately \$108.95 billion in climate-related development finance to support other developing countries, an average annual of \$9.90 billion (forthcoming Liu et al 2025).

RECOMMENDATIONS:

1. Developed countries mainstream resilience throughout development financing and commit additional concessional funding towards adaptation and resilience.
2. South-South financiers’ mainstream resilience through their South-South flows for adaptation, with increasing support for, and reporting on, flows for adaptation and resilience finance.

1b. Make greater use of SDRs

In reaction to the fallout from Covid-19, the IMF allocated \$650 billion in SDRs to member countries. The G20 then committed to recycling \$100 billion of these to developing countries. Some of this funding is now available through the Poverty Reduction and Growth Trust (PRGT) and the Resilience and Sustainability Trust (RST). The latter focuses particularly on providing finance related to climate resilience. It has now approved funding to 23 countries for investment in activities related to climate resilience (IMF n.d.). But institutional and technical constraints have meant that the overall impact of SDRs remains relatively small compared to their potential.

While the IMF has received \$48.9 billion (SDR 35.8 billion) for the RST as of October 2025, it can lend around \$25 billion (SDR 17.5 billion) of this; the remainder must be kept aside for risk management and operational costs (Plant 2025a). So far the RST has approved SDR 9.1 billion (IMF n.d.). Further efforts are needed to make maximum use of the opportunity SDRs represent by unlock further funding for climate resilience. Because of the slow nature of the RST’s approval and disbursement process, experts suggest that other avenues should be explored to ramp up financial support through SDRs (Lion’s Head Global Partners 2024).

AfDB and IDB have proposed recycling SDRs through MDBs as hybrid capital, which would allow the MDBs to use the SDRs to leverage further capital for on-lending at scales significantly higher than the IMF (a leverage ratio of 2-4 compared to less than 0.7 at the IMF) (CGD 2022; Paduano 2024). The proposal maintains the ability of countries providing SDRs to continue to use them as

a reserve asset—addressing the main concern of central banks. Even so, and despite the fact that the IMF approved the proposal, it has not moved forward due to central bank reluctance, mainly due to concern about using currency reserves (Plant 2025b). But this is an opportunity that should be utilized.

RECOMMENDATIONS:

3. Central banks, including European Central Bank, approve recycling of SDRs through MDBs.
4. Governments and MDBs commit to channeling finance resulting from new recycled SDRs toward climate resilience in low-income vulnerable countries.

1c. Establish solidarity levies

Another option for raising concessional finance to invest in adaptation and resilience is through various international levies. As an example, at the fourth United Nations Financing for Development conference (Sevilla 2025), eight nations joined together to commit to introducing levies on tickets for premium air travel and travel on private jets, with the aim of raising funds for vulnerable countries (Elysee 2025, IATA 2025). Scaling efforts such as this faces political hurdles but also presents an opportunity to raise new funding that can be distributed as highly concessional or grant funding. According to a study commissioned by the Global Solidarity Levies Task Force, global implementation of a levy on premium seats could raise around \$84 billion per year, and a private jet levy a further \$8–55 billion (CE Delft 2025).

Other solutions discussed in international fora and worth continued pursuit include a “wealth tax” on citizens (World Inequality Lab n.d.) and a global tax on financial transactions (Mazzucato 2023). IMO members have put on hold an agreement to implement a levy based on greenhouse gas emissions starting in 2028. They also did not agree to distribute proceeds to vulnerable countries (IMO 2025).

Once resources are raised, systems should be developed to distribute resources toward resilience in developing countries. Funds might be distributed through existing bilateral or multilateral institutions, such as the multilateral climate funds, or through bespoke new systems like the Adaptation Benefits Mechanism under Article 6.8 of the Paris Agreement.

RECOMMENDATIONS:

5. Additional governments agree to implement a levy on premium seats and private jets, a global tax on financial transactions or a similar solution.
6. Governments channel resources from global levies or taxes to climate adaptation and resilience in developing nations.



1d. Incorporate debt into trajectories and increase debt for resilience swaps

The *Expert Review on Debt, Nature and Climate* (2025) has recommended that the IMF and World Bank more systematically incorporate climate and nature-related risks and, importantly, also the benefits of efforts to enhance resilience, into the Debt Sustainability Frameworks (DSFs) through the debt sustainability analysis (Expert Review on Debt, Nature and Climate 2025; Tan 2025). Meanwhile, DSFs should encourage, not punish, long-term borrowing for important investment in climate resilience (Sachs et al. 2025, Columbia University 2025).

Second, creditor institutions should rapidly enhance the availability of debt restructuring or refinancing linked to climate and nature-related commitments (debt for resilience/climate/nature swaps). The Expert Review has called for countries undergoing debt restructuring to be given additional relief in return for binding commitments to climate (and nature) resilience, and for those with high debt levels (but not yet in crisis) to be allowed to undertake debt refinancing in exchange for climate-related investments (Expert Review on Debt, Nature and Climate 2025). An international platform to facilitate swaps could potentially help facilitate such growth by standardizing products (World Bank 2024a).

RECOMMENDATIONS:

7. World Bank and IMF incorporate climate vulnerability more systematically and transparently into debt sustainability frameworks.
8. Creditors and debtors scale up swaps and establish international standards and platforms to facilitate debt for nature/resilience solutions

1e. Phase out distortive subsidies

Subsidy reforms provide an opportunity to redirect funds from activities that are misaligned with climate ambition targets towards enhanced climate action and investments in resilience.

On an international level, some of the more concrete examples of subsidy-related commitments to date have come in the trade arena. For example, the Agreement on Climate Change, Trade and Sustainability (ACCTS) between New Zealand, Costa Rica, Fiji, Iceland, Norway, and Switzerland commits member countries to reduce their subsidies to below a maximum threshold. Additional countries could help scale up of similar agreements, with a simultaneous commitment to increasing resilience investments.

In 2021, the World Trade Organization (WTO) launched the Fossil Fuel Subsidy Reform (FFSR) initiative with the aim of supporting countries transition away from fossil fuels through elimination, phasing out, or rationalization of harmful fossil fuels, through existing or new mechanisms (WTO 2024). This initiative acknowledged the importance of subsidy reforms to free up public funding to support climate-resilient economies and identified three pillars of work to redirect flows towards resilience investments. This initiative could leverage or expand its pillars and support additional countries transition away from fossil fuels.

Similarly, in 2013 the World Bank established an Energy Subsidy Reform Facility. This Facility was developed to support countries through technical assistance and knowledge development to transition away from fossil fuels while ensuring the most vulnerable and poorer communities were secured. For the specific case of adaptation and resiliency investments and finance, the World Bank Facility could expand its scope to support the reallocation of funding from fossil fuels subsidies to resilience investments, or be used as a template for similar facilities to be established with similar purposes (ESMAP 2025).

RECOMMENDATIONS:

9. Bilateral and multilateral development finance institutions support international agreements, including trade agreements, to reduce fossil fuel subsidies and encourage redirection of resources to resilience initiatives.
10. G20 nations agree to concrete steps to implement prior commitments to phase out inefficient fossil fuel subsidies and agree to redirect a percentage of savings from subsidy reform to climate resilience in developing countries.



Priority 2:

Continuing the reform of MDBs
to scale up adaptation finance

/ Priority 2 Roadblocks

Need to further scale up MDB adaptation finance

MDBs will need to play a foundational role in radically increasing adaptation finance. Most of the MDBs already have in place policies and practices to integrate climate adaptation into their operations and have increased their adaptation investments in recent years. Significant scaling up of MDB adaptation finance will therefore require going beyond the low-hanging fruit to unlock additional opportunities to grow and improve adaptation investments. This includes dealing with the challenges associated with channeling sufficient adaptation finance to the countries with the lowest adaptive capacity. According to an analysis by Center for Global Development, these countries today receive less MDB adaptation funding per capita than countries with higher adaptive capacity (Lee 2025).

At COP29 MDBs estimated they will increase their adaptation funding from \$26.3 billion per year in 2024 to \$42 billion annually by 2030 (laDB 2024) to low- and middle-income economies. To reach the global funding goals, MDBs will need to play an even greater role beyond their current commitment, especially if we see a continued slide in bilateral ODA, putting a higher premium on optimizing, leveraging and growing MDB balance sheets., putting a higher premium on optimizing, leveraging and growing MDB balance sheets.

Challenges MDBs face in increasing finance for adaptation and resilience

MDBs face similar barriers to other investors when it comes to growing the portion of their portfolios supporting climate adaptation.

Since much adaptation investment does not result in direct financial revenue (Gopalika 2024), governments are typically left to pay MDB loans through general tax revenue. While this is not uncommon for development investments, avoided losses may also be far in the future (or perceived to be so) or the result of a chance event, which can be a disincentive for governments seeking to finance immediate concerns. Therefore, MDBs should prioritize adaptation investment that also have high development benefits, showing high estimated rates of return even if the anticipated extreme event never happens. Fortunately, many adaptation investments have this characteristic (Carter et al. 2025).

MDBs are also impacted by the political context. While MDBs are more shielded from domestic political dynamics than bilateral institutions, they are nonetheless impacted by shareholder priorities and whether or not they feature climate resilience prominently. The MDBs rely on their shareholders to replenish concessional windows (IDA and the Asia and Africa Development Funds), strengthen their balance sheets (e.g., through balance sheet optimization and hybrid capital), finance trust funds and approve eventual capital increases, without which MDB finance for adaptation will not be forthcoming.

/ Priority 2 Recommendations

2a. Go beyond current commitments by growing lending capacity

Climate resilience goes up where poverty reduction and financial inclusion improve. According to the World Bank, in 2010 two-thirds of South Asia's population was at high climate risk—the highest among all regions—but thanks to large strides in financial inclusion, electricity access, and poverty reduction, this figure had halved by 2021 (WB 2024). Growing the overall pot of development finance can therefore enhance resilience.

The Sevilla Commitment calls for MDBs to triple all MDB finance (climate and SDGs) by 2035 (UNDESA 2025). The Independent High Level Expert Group on Climate Finance (IHLEG) has suggested that a tripling of MDB finance by 2030 is necessary and, through continued capital adequacy reforms and capital increases, possible (IHLEG 2024; Sachs et al 2025). This includes continuing to implement the recommendations of the G20, including adjusted approaches to callable capital and capital increases (G20 2024). IHLEG has estimated that a tripling could bring MDB climate and nature-related finance up to around \$240 billion per year by 2030 (IHLEG 2024).

RECOMMENDATIONS:

11. MDB shareholders support implementation of CAF reforms and provide hybrid capital and capital increases so that MDB lending can at least triple by 2035.
12. Donors increase their contributions to the replenishments of AfDF, IDA, and AsDF to mainstream resilience into their results and impact frameworks with appropriate performance criteria tailored to the projects or programs.



2b. Support mainstreaming of resilience across all operations

MDBs could play a greater role in helping countries put in place the enabling systems and incentives needed to mobilize other investments, including private finance.

While development helps resilience, not all development is automatically resilient. Where and how new infrastructure—including roads, schools, and hospitals—is built could either magnify or reduce vulnerability. Investment is also necessary in adaptation-specific activities, including physical assets like early warning systems or natural sea walls, or technical assistance to help governments effectively identify and implement priorities in the face of changing climate patterns (WB 2024a).

All MDBs need to proactively ensure that knowledge, resources, policies, and incentives are in place to empower clients and MDB staff to integrate climate hazards, vulnerabilities, and solutions into all financing decisions, including in countries with the least adaptive capacity.

MDBs could work with government authorities to ramp up efforts to create enabling environments that shift incentives for companies and financial institutions to integrate adaptation considerations into their investments or the resilience of their physical assets, through policies such as building codes. Through scaled up technical assistance programs and policy-based finance, MDBs can have an important impact on the ability of governments to identify and act on priority initiatives. Vital steps include helping countries build sufficient data to enable investors to analyze credit quality of investments and assess environmental and social impacts, etc. (Risk Control 2025), and to put in place fiscal and regulatory policies that create supportive incentives (priority 5 provides greater detail on the role of regulatory frameworks).

The MDBs also have many tools available to them to help make individual adaptation investments more attractive, including loan guarantees and political risk insurance to reduce real and perceived risk. While derisking instruments like guarantees are not a solution for all adaptation investment needs, in cases with sufficient return for private investments to be viable they can be usefully deployed to help reduce real and perceived risk (Bamba Fall 2023). Private financial actors work to define replicable and scalable structures and instruments for adaptation and resilience, including direct investment (public-private partnerships, outcome-based finance, resilience bonds), intermediated investments (infrastructure funds, sector-based funds, securitizations), guarantee companies, insurance and carbon and nature-based transactions.

RECOMMENDATIONS:

13. MDBs double down on efforts to mainstream climate adaptation throughout their operations, including through project development and due diligence, making sure local actors are engaged in decision making.
14. MDBs ramp up technical assistance and policy-based finance to governments focused on building fiscal and regulatory frameworks (including data systems, stakeholder engagement processes, and policy incentives) that shift public and private finance toward adaptation.
15. MDBs increasingly use derisking instruments to make adaptation and resilience focused investments more attractive to private financiers, including through programmatic approaches.



Priority 3:

Boosting domestic capacity
to attract adaptation finance,
including through country platforms

/ Priority 3 Roadblocks

Under-resourced public institutions

The ability of a country to attract and coordinate international resources for climate resilience is contingent upon the country's capacity to create a favorable environment for investments that incorporate climate adaptation into their design and execution. This process takes a significant government commitment and capacity.

While each country faces different barriers and advantages when it comes to implementing steps that will lead toward investments that support climate resilience, all require some form of political support and guidance, relevant technical expertise, and enough people to get the job done. In many developing countries, especially the most vulnerable, public institutions are overstretched and under-resourced and thus unable to effectively implement tasks necessary to effectively prioritize, channel, and coordinate finance for resilience. As an example of these tasks, many countries today integrate climate risks into national planning documents at a high level, and additionally publish NDCs, NAPs, and similar climate-focused national plans.

Some countries have begun to identify overall climate finance needs, though data on adaptation needs lags behind data for mitigation-related finance needs. For example, looking at the latest round of countries' nationally determined contributions (NDCs) 74 countries have reported finance data on mitigation, accounting to \$ 3.4 trillion finance needs while 65 countries have included data on adaptation accounting to a total of \$1.4 trillion (ClimateWatch 2025). Furthermore, developing a sense of the scale of need is not sufficient to identify priorities with the granularity necessary to guide investment planning. Further analysis of climate data, socioeconomic factors, and financing options is usually necessary before projects can be developed and prepared for investment. Greater integration of resilience and development is needed to ensure adaptation is not being treated in a silo.

Governments, together with project developers, must identify resources to both 1) support the design and structuring of adaptation-focused investments, and 2) integrate climate risks into the broader landscape of investment projects. Project preparation costs around 5-12 percent of the total size of the investment (Global Infrastructure Hub 2019), with adaptation projects often landing on the higher end given the need for a high degree of location-relevant climate data, analysis, and stakeholder engagement. Identifying sufficient finance up front to cover these costs can be quite difficult.



Fragmented landscape of financiers

The complex landscape of public and private investors—and their associated interests, priorities and policies—adds to the strain on government institutions and their ability to strategically access and channel international financial resources. This is no less true when it comes to investors in adaptation and resilience, particularly given the broad landscape of investment types involved in adaptation – from large-scale infrastructure public-private partnerships to local community development grant programs. Numerous bilateral and multilateral climate finance funds and facilities now exist. In addition, public and private investors not focused exclusively on climate are increasingly engaged in financing elements of resilience. Climate and development finance still operate too much in separate silos.

The result of the diverse landscape of potential funders is that government institutions and others are left with a task of working with investors with various capacities, interests, and policies. This requires significant time and resources to understand funder interests and priorities, negotiate contractual and financial arrangements, and implement and report against different standards and metrics.

Lack of useful data on climate impacts and adaptation options

While high-level data on climate trends is often available today—and even integrated into national planning—bespoke, localized climate data often remains difficult to come by, either because it does not exist or because it is cumbersome and costly to access. Public institutions need decision-ready information to make informed choices on where to prioritize regulatory action and financial resources, including how to make tradeoffs (Plan Adapt 2024).

This data, including climate risk data to inform public and private investment decisions can come from a variety of sources. These include national strategic planning documents—such as climate finance strategies or development plans—as well as technical tools like risk maps, satellite and other geospatial datasets. Together, these sources can help build a more comprehensive understanding of climate risks and guide cost-effective, resilient investment decisions.

In many geographies, determining investment priorities is made more complex and costly by a lack of non-climate data relevant to resilience, including detailed demographic information, data on the informal economy, or information on land tenure and use. Meanwhile private actors look to data to make investment decisions, including publicly generated data such as meteorological or water resource data, or forward insurance curves. The more data investors have, the more confident they can be that they have priced risk and return accurately. If data is lacking risks to the investor are higher, and thus the cost of capital goes up (Economist 2024).

/ Priority 3 Recommendations

3a. Develop country platforms to coordinate and accelerate resilience investments

Country platforms are a way for governments to align public and private, national and international finance at scale behind country-led plans and policy reforms to deliver climate, nature, and development goals. While initially focused primarily on climate mitigation, several countries have since launched platforms with a focus on adaptation (Robinson and Larsen 2025). Country platforms can be built or rely on existing efforts such as the Integrated National Financing Framework, through which governments develop country-led strategies to mobilize and align financing with the sustainable development goals (INFF 2025).

Country platforms require flexibility and careful sequencing of policy reform, project pipeline development, and funding flows as well as strong political leadership (Gul et al. 2025, Robinson and Larsen 2025) and integrated policy and investment planning focused on resolving choices and trade-offs at whole-of-economy, -government, and -society levels (Mazzucato and Songwe 2024). Early funding for technical assistance can assist governments with the often complex task of assessing, prioritizing, and coordinating financing options to enhance resilience (Robins and Rydger 2019).

RECOMMENDATIONS:

16. Governments consider implementing effective country-led platforms or similar arrangements, enabling programmatic use of domestic and international, public and private finance at scale, to support country-led resilient development priorities and policy reforms.
17. International public and private investors engage with country platforms to support the development of enabling policy environments and investible pipelines and align finance for adaptation and resilience behind country-led development and climate priorities and processes.
18. International partners (bilaterals, readiness funds, philanthropists) provide increased and more coordinated long-term, flexible technical assistance and capacity building, including for improved data, to support the establishment of country-led platforms, put in place the foundations (coordination and inclusive dialogue, identifying investment priorities, building enabling policy and regulatory environments, developing investible pipelines) and structure investments.

3b. Support project preparation, including early project selection

Support for project preparation has been increasing, but more is needed. In 2024, the Cities Climate Finance Leadership Alliance (CCFLA), managed by CPI, identified sixty-seven project preparation facilities (PPFs) globally. Thirty-three had a focus specifically on adaptation and resilience (CCFLA 2024). While this is an impressive number of facilities, the services they provide are not yet sufficient, since channeling much larger amounts of finance toward adaptation and resilience means a much larger number of investment projects need to be developed.



Project preparation support should emphasize early-stage project selection and development and alignment with late-stage support. The CCFLA analysis found that today most PPFs tend to provide support at later stages in the project development process, leaving a need for further funding in the critical early stage (CCFLA 2024). This lack of early support causes many governments to struggle to undertake early technical assessments and initial stakeholder outreach necessary to identify and choose between options and tradeoffs. Alignment between early and late-stage support is also necessary.

Going forward, the proliferation of vehicles for financing project preparation also means a concerted effort is required to align standards and reduce burdensome and bespoke funding application processes. There is no need to start from scratch when improving alignment across PPFs. Existing efforts, such as the Cities Climate Finance Leadership Alliance (CCFLA)'s Harmonized PPF Application Form and the PPF Connector, offer replicable models for streamlining processes, reducing administrative burdens and enhancing coordination among providers (CCFLA n.d.-a; CCFLA n.d.-b). These tools have helped cities and project developers navigate the fragmented PPF landscape more efficiently, improving access to climate finance and technical assistance.

RECOMMENDATIONS:

19. Public and private development partners and investors rapidly ramp up funding for the development and structuring of investible adaptation and resilience projects, programs, and investment instruments, with an emphasis on support for early-stage project selection and due diligence, including engagement with potentially impacted groups.
20. Project preparation facilities should align their guidelines to reduce administrative burdens and be more cost-effective.



Priority 4:

Developing innovative financial instruments for private capital mobilization

/ Priority 4 Roadblocks

Limited data on private financial flows – but we know there is not enough

The private sector interacts with resilience in many different ways. Beyond protecting their own assets from climate risk, private investors can invest in goods and services that boost resilience, in the form of direct debt or equity investments, or through engagement in the capital markets (e.g. through purchase of listed equities or bonds focused on resilience). Governments also collect private funds, such as via fees or taxes that are earmarked for building resilience (like property tax surcharges). These different means of engagement allow for various opportunities to shift private flows. Interventions to increase private finance investments in adaptation need to be designed to target ways in which private finance interacts with climate adaptation and resilience. See Table 2 for a non-exhaustive list of examples of what private investors, private investments, and public institutions can do to support scaled-up action.

Available data shows very low levels of private investment in resilience in developing countries. CPI approximates that such finance makes up around \$4.7 billion, or only 7 percent of total tracked adaptation finance in 2021-2022 on annual average (CPI 2024b). This data is incomplete (CPI 2024b), but exactly how incomplete is difficult to determine. We do know, for example, that private companies are beginning to make investments to ensure the resilience of their own assets, and those costs are not known. For example, they are starting to invest in irrigation systems, relocation of facilities, and infrastructure upgrades (Brandon et al. 2025).

According to CDP, in 2019 over 200 of the world's largest corporations reported \$1 trillion in estimated financial risk from climate change. Many of these companies are incorporating risk assessments into their business planning and risk management (CDP 2019). LSEG reports that 34 percent of companies in the FTSE All World Index disclose some reference to adaptation activities they are undertaking (LSEG 2025). And it is not just large firms that are investing: Researchers found that in 14 developing countries, SMEs were investing more in research and development in the face of climate impacts (Alam et al 2022). Private investments from large and small companies alike are not generally publicly reported, or the reporting is spotty, resulting in an investment landscape that is not well-known.



What we do know, though, is that present levels of investments are insufficient. We need to shift incentives so private investments support resilience solutions that not only help the company's own bottom line but also positively contribute to avoided losses in human quality of life and productivity.

Table 2: Examples of private sector investment in resilience and options for public support

Type of private sector actor	Examples of investor/actors	Example investment in adaptation
Private institutions providing finance to other private sector companies	International or local commercial bank	Provide loans to strengthen homes or businesses against climate hazards
Companies offering goods and services that assist in adaptation or mitigation	Manufacturers, retailers	Develop and market resilience goods and services (e.g., data services, drought resistant crops); issue resilience bonds
Investors in securities that provide adaptation benefits	Private equity, venture capital, pension funds, insurance companies	Invest in resilience bonds; invest in public companies that provide resilience solutions
Companies investing in their own adaptation ambitions	Consumer goods companies	Invest in adaptation of their own facilities and supply chains
Insurance and re-insurance providers	International and domestic insurance companies	Insure commercial property; provide inclusive parametric insurance; insure risk of private sector investors; institutional investors in adaptation investments.
Individual citizens/ households	Individuals or households	Invest in resilience of own homes. Contribute to public financing of resilience investments via tax. Pay special levies (e.g. tourist/ aviation) aimed at raising funds for resilience investments.
MSMEs	Formal and informal sector business	Invest in resilience in own companies in face of more frequent flooding and storms etc. Innovative start-ups create resilience technologies.
Philanthropies	Private family foundations	Provide grant and investment capital to enhance resilience (including at the community level).

Insufficient or uncertain financial return on investments

Although studies show that many adaptation investments provide benefits to all stakeholders over and above their initial cost, stumbling blocks remain in turning this into investment opportunities for the private sector. The primary hurdle is identifying sufficient financial return. Investment results such as improved development outcomes frequently accrue to the broader community rather than an individual investor (UNEP 2016). Monetizing these public goods in ways that are investable by the financial sector can be challenging (Puri and Chowdhury 2022, Gautam et al 2024).

In addition, while mitigation efforts are measured based on units of greenhouse gas reductions, comparable units of adaptation are more difficult to identify. A lack of standardized taxonomies and measures of adaptation benefits make it difficult to evaluate and compare impact across investments (ICC 2025), which in turn can make defining, pricing, and scaling potential investment opportunities difficult (Gautam et al 2024). On top of this, many adaptation investments are in sectors that suffer from potential instability of returns and repayment issues etc. (e.g. for agriculture products) (CPI 2024c). Finally, a lack of exit strategies can further dissuade investors (NGFS 2023).

While the use of derisking instruments and blended finance has received much attention, adaptation finance has yet to see a major uptick in the use of derisked transactions. Convergence has recorded thirty-two adaptation blended finance transactions between 2021 and 2023, with a total value of \$3.5 billion and a median transaction size of \$32.5 million. Comparable numbers for mitigation are 132 blended finance transactions with a total value of \$26 billion and a median transaction size of \$86 million (Convergence 2024).

Lack of insurance options

Since not all risk can be predicted and avoided, pre-arranged disaster risk finance is also a vital element of the resilience equation. Many developing countries have a significant deficit in climate-related insurance at the sovereign, company and household level. The reasons for this are several. A lack of data, small deals or risk pools, and high costs relative to benefit for the insured all hinder the availability and uptake of insurance solutions for governments, companies and individuals (Ciullo et al. 2023, ClimateWise 2010; FSD 2021). In addition, reinsurance markets have become reluctant to take on climate-related risks, further putting pressure on an already strained market (Mohr et al 2025).

International development financing for pre-arranged finance (e.g. insurance) is concentrated in middle-income countries, with just 3.7 percent (\$200 million) reaching low-income countries between 2017 and 2021 (Plichta and Poole 2023).

A lack of insurance has several negative impacts. It makes households and businesses more vulnerable when disaster strikes and can have a dampening effect on private financing for things like housing or infrastructure, which must typically be insured before investors will agree to provide financing (Howden 2025, IDF 2025).

Credit rating and access to capital markets

Nations with higher climate vulnerability, and companies from those nations, typically have lower credit ratings than those with less vulnerability, stemming from the higher risk and volatility they face due to climate-related uncertainties (Beirne et al. 2021, Nguyen et al. 2025). Research indicates that climate change vulnerability's reflection in ratings has a significant impact on the cost of sovereign debt for governments and of corporate bank loans (Beirne et al. 2021.; Nguyen et al. 2025; Buhr 2018). In essence, countries that are particularly climate vulnerable end up having to pay a higher cost of capital when investing in their own resilience than do other countries. This places many developing countries in a difficult situation where climate vulnerabilities result in a need for additional investments, while also making these investments more costly. Presently credit rating agencies do not give clear indicators to governments on which measures have the potential to positively impact their borrowing costs and offset the costs of projects.

/ Priority 4 Recommendations

4a. Using public funds to improve incentives

A central pathway for shifting private finance is changing the risk/return profile of investments to better favor financing resilience. One way to do so is to implement real world and financial regulatory frameworks that encourage incentivize adaptation investments. Section 5 of this paper covers this approach in greater detail.

Another important option is to invest public funds in such a way that they make private investments in resilience more financially attractive. While investments of public funding to attract private finance – also known as blended finance – is not a magic solution for rapidly increasing private investments, especially in the adaptation space where financial return is less forthcoming (McKinsey n.d.), it remains an important tool. Given the still nascent nature of markets for adaptation solutions, making investments more attractive through use of well-established financial instruments like first-loss capital, loan guarantees, insurance or similar mechanisms can be a valuable way for governments to partner with private investors. Such financial arrangements should enable private finance investments in adaptation solutions, provide examples of success, and increase data on investment risks and opportunities to help build broader investor confidence.

Amongst the tools available to help incentivize public investments in adaptation, guarantees are showing promise. As an example, guaranteeing resilience bond issuances has been shown as a way to bring such issuances to a larger set of countries, including those with lower credit ratings, granting them greater access to capital markets (Garbacz et al. 2021). The World Bank Guarantees Platform, which streamlines the World Bank Group's guarantees offerings, is a step in the right direction toward making guarantees easier to access. Continued defragmentation of the guarantees market, alignment of requirements, and reduction of costs would further strengthen the ability of guarantees to enable adaptation investments (Lindner et al. 2025). Care should also be taken that MDBs do not over-subsidize or crowd out private investors.

RECOMMENDATIONS:

21. Providers of loan guarantees, insurance, first loss capital, and similar de-risking mechanisms should continue efforts to reduce market fragmentation, align eligibility requirements, and reduce costs.
22. Together with private investors, providers of derisking/blended finance instruments should strengthen their understanding of the conditions under which de-risking strategies effectively attract private investment in adaptation and resilience, while avoiding over-subsidization.

4b. Structure investment opportunities around clarified adaptation benefits

Shared taxonomies or methodologies for measurement are critical aids to defining, pricing, and scaling investments, especially through capital markets. Different types of methodologies for measuring adaptation have emerged in recent years, with different focus areas. GARI's Climate Resilience Investments in Solutions Principles (CRISP), for example, attempts to identify businesses providing adaptation and resilience products and services for those seeking to invest in such companies (GARI 2024). AfDB has been working since 2019 to develop and pilot an Adaptation Benefits Mechanism (ABM) and has developed a methodology and typology for defining and quantifying adaptation benefits (AfDB 2025). While the ABM has been piloted in a limited number of countries to date (Murphy et al. 2025), it became the first non-market approach registered on the United Nations Framework Convention on Climate Change's Non-Market Approaches Platform (AfDB 2024).

The Climate Bonds Initiative's efforts to produce a Resilience Classification Framework and resilience taxonomy also provide a basis for the issuance of certified resilience bonds that could result in a scaling up of such investment products (CBI 2022; BNP Paribas 2023). Bonds have proven themselves a way to raise finance from the private sector for climate activities. While bonds to finance resilience investments have lagged far behind those focused on mitigation, they hold promise, particularly when structured as sustainability-linked bonds. Through the financial relationship, the bond issuer becomes contractually obliged to implement the promised resilience activity. A recent study by Resendiz, Ranger, and Mahul found untapped potential for corporate sustainability-linked bonds to support adaptation and resilience (Resendiz et al 2025).



Standard setters, governments, investors, and companies should build on these efforts to continue to create the infrastructure that will allow public and private investors to better understand and price the impact of an investment on resilience.

RECOMMENDATIONS:

23. Standard-setting institutions work with stakeholders to develop and strengthen standards and data that enable the measurement, structuring and marketing of resilience investments (e.g. bonds, listed equities).
24. Governments and companies ramp up the issuance of resilience bonds and sustainability linked bonds with verifiable resilience benefits.
25. Public and private investors increase investments in securities (bonds, listed equities) that are certified as prioritizing climate resilience.

4c. Value the resilience benefits of natural capital

One example of where more accurate valuation is needed is in the context of ecosystem services and natural capital that contribute to climate resilience (Ding and McLaren 2025; Czebiniak 2025). Improved valuation of the resilience benefits of nature could allow for the creation of standardized investment products focused on the benefits nature provides (beyond greenhouse gas emissions). According to UNEP, in 2022 the private sector invested at least \$5 trillion in activities that directly harm nature. This was 140 times more than it spent on nature-positive activities (UNEP 2023b).

Standardizing taxonomies and methods for evaluating natural capital could help enable comparison of impact across investments and the structuring of relevant financial products. “Investors, insurers and bankers, should reflect the status of natural capital in cost of capital, asset valuation, risk assessment, underwriting, pricing, and coverage exclusions. This will enable new debt products, securitization instruments, credit and risk transfer structures, and project and infrastructure finance vehicles” (Capitals Coalition 2025).

Data on nature-related risks may become more sophisticated in the years to come as companies increase disclosures based on frameworks such as the Taskforce on Nature-related Financial Disclosures and as technology to access asset-level data becomes more widely available (TNFD 2025, SBTi n.d.). Given that there is not a single metric to measure all aspects of nature-related risks, data will require a nuanced and industry-specific approach.

RECOMMENDATIONS:

26. Standard setters and other stakeholders improve and standardize valuation of the resilience benefits provided by natural capital/ecosystem services.
27. Companies integrate resilience benefits provided by ecosystems onto their balance sheets.
28. Financial institutions and governments develop instruments and regulatory frameworks that value and reward investments in resilience benefits.



4d. Fully engage the insurance industry

Insurance companies, governments, and development partners must work together to rapidly ramp up access to pre-arranged disaster risk finance for governments, the private sector, and households. Insurance is not the full solution, but it is important to the resilience equation and work particularly well in cases of rapid onset impacts (IDF 2025; Adam et al 2025; Mustapha and Benson 2024).

While the insurance industry's primary role is to underwrite risks to enable faster recovery, insurance companies can also a) provide improved risk information and modeling and b) grow investments into climate-related activities by deploying their capital in this direction, c) incentivizing asset reinforcement that results in greater resilience (IDF 2025).

Public institutions remain vital in the context of insurance, with development assistance needed in many cases to improve insurance affordability, alongside technical assistance and capacity building (Adam et al. 2025). Governments can support the insurance sector by a) investing in reliable risk data, both historic and forward-looking, to enable proper analysis and b) implementing risk reduction measures (e.g. regulations) to bring down risks and therefore costs. Partnerships between development finance institutions and private insurance companies have also seen some success in bringing inclusive insurance products to those most vulnerable (e.g. in the informal sector) and should be scaled up (UNCDF 2023; Baram 2025). Combining climate insurance with existing or new social safety net programs can increase efficiency by using existing data collection and delivery mechanisms, and enhance effectiveness by provide a system that responds to various types of climate impacts, both sudden and slow-onset (Vaananen et al 2019).

In general, moving more funding for disaster response into pre-arranged financing arrangements can improve outcomes by ensuring that countries, companies, and individuals have swift and predictable access to finance when a disaster strikes – rather than having to find funds after the fact (Meenan 2024).

RECOMMENDATIONS:

29. Insurance industry partners with public institutions to improve and make more transparent risk modeling, resilience planning, and insurance coverage.
30. Insurance companies, governments, and development partners increase support (in the form of technical assistance, premium subsidies etc.) for inclusive insurance solutions (e.g. microinsurance, parametric insurance) aimed at the poorest and most vulnerable countries and communities.

4e. Improve how credit ratings agencies address resilience

Rating agencies should positively reflect investments that reduce risk by enhancing resilience (Ranger 2024). While integrating investment benefits will be a departure from the usually risk-focused approach of rating agencies (Nguyen et al. 2025), doing so could present a more holistic understanding of climate risk and help encourage resilience investments.

Other general improvements in ratings processes that could have a positive spillover effect include not punishing countries solely for a low GDP per capita, and instead recognizing the growth potential in EMDEs compared to most high-income countries (Sachs et al 2025; Toledano et al 2025).

RECOMMENDATIONS:

31. Credit rating agencies increase transparency as to the impact of climate risks on a country's credit rating.
32. Credit rating agencies reward investments in enhanced climate resilience, at both the enterprise and sovereign levels.



Priority 5:

Strengthening national and international regulatory approaches for adaptation and resilience

/ Priority 5 Roadblocks

Regulations lag behind increasing climate risks

In most countries, government regulations still do not reflect known climate risks. This includes laws affecting the real economy like zoning regulations, building codes, or regulations regarding the use of resources like water (Tall 2021). As a result, many investments in agriculture, infrastructure, or housing continue without consideration of scientific evidence of predicted climatic changes, and with little government guidance to do things differently.

Even where codes are on the books, many countries suffer from ineffective implementation due to a variety of factors including the cost of implementation (for both the government and those who the laws apply to), political dynamics, and elite capture (UNEP 2023a). Money that could have supported greater resilience is thus going to business-as-usual, often maladaptive, investments.

Financial regulations not supportive of resilience investments

While many financial sector regulators consider climate change an important financial risk, this is not yet consistently reflected in regulations (AfDB 2021). In some countries, though, the practice of integrating climate risk into macro- and micro-prudential policy is starting to emerge. The Asia Pacific region has, for example, seen an uptick in the integration of climate-related risks in banking regulatory frameworks (UNEP FI 2025). Even where regulations exist, data and modeling gaps hinder central banks' ability to assess and integrate climate risks effectively (NGFS 2021; Alonso Robisco et al 2024).

Global regulations in the form of Basel III (and Solvency II for the insurance sector) are giving rise to concerns that investors are being further disincentivized to invest in geographies, sectors, or industries considered risky (Fisera et al. 2025). This may further negatively impact the ability of international financial institutions to invest in climate resilience in developing and emerging economies.

International trade has become unpredictable

Countries have more frequently employed unilateral trade policies, industrial policies, and protectionism in recent years. The global supply chains that make up the global trade landscape are complex, and so too are their relationship to climate impacts. Tariff and non-tariff trade barriers can though restrict access to export markets for products from vulnerable nations; limit the distribution of resilience technologies (like new irrigation technologies); and contribute to food insecurity by limiting the importation of food products in times of climate-induced agricultural losses (Gouel and Laborde 2021; WTO 2022a).

Trade rules generally provide greater access to finance for highly vulnerable countries like LDCs (WTO 2022b), but many LDCs are currently unable to take advantage of the duty-free treatment already available to them, in part because complying with the rules (e.g. rules of origin), can be costly and time consuming (UNCTAD 2025 ; Dekens et al. 2021). Studies show that non-tariff barriers like requirements on production processes (sanitary and phytosanitary measures) have an even bigger impact on vulnerable countries like LDCs than do tariffs (Mabunda et al 2025).

/ Priority 5 Recommendations

5a. Create impactful domestic regulatory system

To help ensure that all finance sufficiently considers climate risks and resilience, countries should integrate climate data into rules that guide physical investments. This includes those laying out where and how factories, homes, agricultural facilities, or similar infrastructure can be built and how construction should take place (WB 2023; Rangwala 2024). Private sector firms can be useful partners in developing effective standards, together with a broad set of other non-governmental actors (Tall et al. 2021).

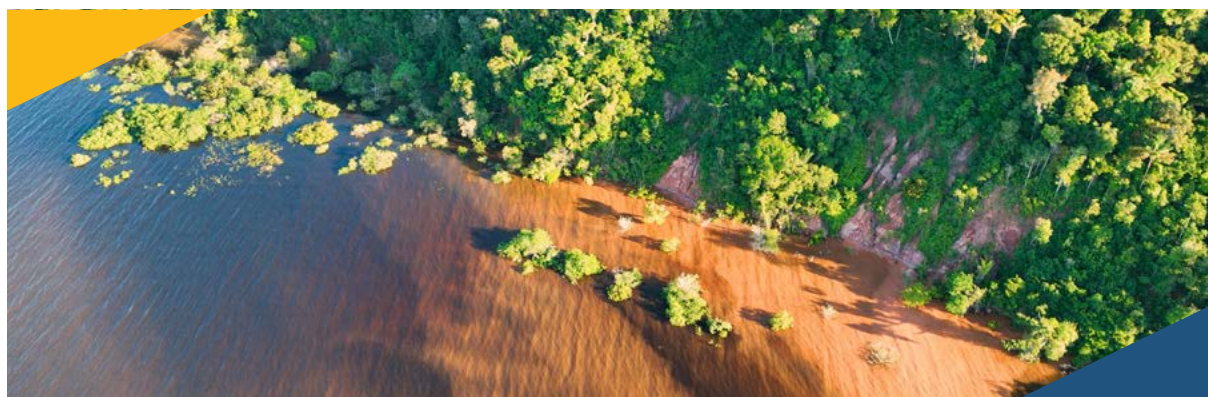
Successful implementation of regulations also entails investing in the elements needed to help ensure adherence to the rules. Implementation support can come in the form of enforcement, like increased inspections and stricter permitting, or in the form of positive incentives, like financial incentives to help pay for implementation costs (e.g. tax breaks, loans or grants for required products).

RECOMMENDATIONS:

33. Governments integrate climate adaptation into relevant regulatory frameworks such as zoning regulations, building codes, and other laws as relevant to their economy and geography.
34. Governments and development partners provide financial support to help with implementation of regulatory frameworks, focused on both reducing costs for those impacted and improving enforcement.

5b. Create national and international financial regulations that encourage resilience investments

To improve financial regulation, governments in both developed and developing countries should more effectively integrate resilience into the stated mandates of central banks and into macroprudential regulation, using comprehensive scenario analysis that covers physical climate risk in both short-term and long-term horizons across multiple financial sectors. No country, to date has implemented all of these measures, though many are starting to implement pieces, with



over 149 members across 91 countries in the Network for Greening the Financial system a group of central banks and prudential supervisory authorities (NGFS 2025). Regulatory authorities in developed and emerging economies should require minimum disclosure of physical climate risks from the financial and non-financial sector, and implement regulations and guidelines to encourage considerations of climate risk in investment decisions (AfDB 2021; Demekas and Grippa 2021).

At the international level, interpretation of prudential rules outlined in Basel III should account for the reduced risk associated with the use of guarantees, subordinated tranches, political risk insurance, etc. (Toledano et al 2025; Demekas and Grippa 2021). Longer term, Basil III could be revisited to assess whether updates are viable that encourage rather than dissuade investments in resilience in vulnerable nations, as recommended by IHLEG among others (Mazzucato and Songwe 2024).

RECOMMENDATIONS:

35. Governments integrate climate resilience into central bank mandates and macroprudential regulation, using comprehensive scenario analysis.
36. Regulatory authorities require minimum disclosure of physical climate risks from the financial and non-financial sector and implement regulations and guidelines to encourage considerations of climate risk in investment decisions.
37. Basel III is interpreted to avoid negative effects on investments in resilience in vulnerable nations, including by recognizing the risk reduction associated derisking instruments.

5c. Ensure trade relationships to encourage access to markets important to resilience

Trade policy should support rather than undermine efforts to enhance resilience. The relationship between trade and climate adaptation is not entirely straightforward, particularly as agricultural zones and shift over time (Bilal and Kanzig 2024). But generally, a more open flow of goods for EMDEs can help enable these actors to build up export markets for sectors that support the country's resilience (e.g. sustainable agriculture) and also allow access to goods in times of need (WTO 2022a).

To support capacity on trade and resilience, climate adaptation should be included in existing trade-related ODA, and systematically integrated into analyses like Diagnostic Trade Integration Studies (DTIS), conducted under the Enhanced Integrity Framework, a partnership aimed at helping LDCs use trade as an engine for growth (EIF n.d.; Dekens et al 2021; Ancharaz and Sultan 2025).

RECOMMENDATIONS:

38. Trade agreements ensure that developing countries have access to products necessary for investment in climate adaptation and resilience and can build and maintain export markets that support their resilience (e.g. of sustainable products).
39. Development partners provide technical and financial support to help strengthen export capacity in sectors important to the resilience of developing countries and thus support the insertion of sustainably produced goods and services from LICs into global value chains.

To COP30 and beyond:

a diversified, all-hands-on-deck approach

The growing scale and urgency of climate impacts make it clear that adaptation finance is no longer a peripheral issue but central to global stability and prosperity.

Communities in every region are experiencing increasingly frequent and severe climate shocks, with the poorest and most vulnerable countries and communities worst affected, yet the gap between available resources and adaptation needs continues to widen as pressure from eroding fiscal space grows. While greatly expanding investments in adaptation and resilience will not come easily, particularly to solutions for those with the fewest resources to protect themselves, many opportunities exist to raise and shift finance. Together, these opportunities, if thoroughly implemented, can bring us far along the way to meeting the need. Going forward, the Circle of Ministers Report, Baku to Belem Roadmap to \$1.3 trillion (and perhaps this paper) help provide a path toward system-wide change.

Collaboration is indispensable. Governments, multilateral financial institutions, the private sector, and civil society each hold unique capabilities that, when combined, can accelerate progress far beyond what any actor could achieve alone. Ultimately, adaptation finance is not just about funding infrastructure or technologies; it is about building knowledge and collective capacity and commitment to face a changing climate.



Annex A:

Recommendations List

Concessional Finance	
Recommit to development assistance for resilience	1. Developed countries mainstream resilience throughout development financing and commit additional concessional funding towards adaptation and resilience. 2. South-South financiers' mainstream resilience through their South-South flows for adaptation, with increasing support for, and reporting on, flows for adaptation and resilience finance.
Make greater use of Special Drawing Rights (SDRs)	3. Central banks, including European Central Bank, approve recycling of SDRs through MDBs. 4. Governments and MDBs commit to channeling finance resulting from new recycled SDRs toward climate resilience in low-income vulnerable countries.
Establish solidarity levies	5. Additional governments agree to implement a levy on premium seats and private jets, such as a global tax on financial transactions. 6. Governments channel resources from global levies or taxes to climate adaptation and resilience in developing nations.
Incorporate debt into trajectories and increase debt for resilience swaps	7. World Bank and IMF incorporate climate vulnerability more systematically and transparently into debt sustainability frameworks. 8. Creditors and debtors scale up swaps and establish international standards and platforms to facilitate debt for nature/resilience solutions.
Phase out distortive subsidies	9. Bilateral and multilateral development finance institutions support international agreements, including trade agreements, to reduce fossil fuel subsidies and encourage redirection of resources to resilience initiatives. 10. G20 nations agree to concrete steps to implement prior commitments to phase out inefficient fossil fuel subsidies and agree to redirect a percentage of savings from subsidy reform to climate resilience in developing countries.

MDB

Go beyond current commitments by growing lending capacity

11. MDB shareholders support implementation of CAF reforms and provide hybrid capital and capital increases so that MDB lending can at least triple by 2035.
12. Donors increase their contributions to the replenishments of AfDF, IDA, and AsDF and seek to mainstream resilience into their results and impact frameworks with appropriate performance criteria tailored to the projects or programs.

Support mainstreaming of resilience across all operations

13. MDBs double down on efforts to mainstream climate adaptation throughout their operations, including through project selection and due diligence processes, making sure to engage local actors in decision making.
14. MDBs ramp up technical assistance and policy-based finance to governments focused on building fiscal and regulatory frameworks (including data systems, stakeholder engagement processes) that shift public and private finance toward adaptation.
15. MDBs increasingly use of derisking instruments to make adaptation and resilience focused investments more attractive to private financiers, including through programmatic approaches.

Capacity & Platforms

Develop country platforms to coordinate and accelerate resilience investments

16. Governments implement effective country platforms, enabling programmatic use of domestic and international, public and private finance at scale, to support country-led resilient development priorities and policy reforms.
17. International public and private investors engage with country platforms to align finance for adaptation and resilience behind country-led development and climate priorities.
18. International partners (bilaterals, readiness funds, philanthropists) provide and coordinate long-term technical assistance and capacity building, including for improved data, to support the establishment of country platforms, including inclusive dialogues, pipeline development, and investment structuring.

Support project preparation, including early project selection

19. Public and private development partners and investors rapidly ramp up funding for the development and structuring of investible adaptation and resilience projects, programs, and investment instruments, with an emphasis on support for early-stage project selection and due diligence, including engagement with potentially impacted groups.
20. Project preparation facilities should align their guidelines to reduce administrative burdens and be more cost-effective

Private Sector

Use public funds to improve incentives

21. Providers of loan guarantees, insurance, first loss capital, and similar de-risking mechanisms should continue efforts to reduce market fragmentation, align eligibility requirements, and reduce costs.
22. Together with private investors, providers of derisking/blended finance instruments should strengthen their understanding of the conditions under which de-risking strategies effectively attract private investment in adaptation and resilience, while avoiding over-subsidization.

Structure investment opportunities around clarified adaptation benefits

23. Standard-setting institutions work with stakeholders to develop and strengthen standards and data that enable the measurement, structuring and marketing of resilience investments (e.g. bonds, listed equities).
24. Governments and companies ramp up the issuance of resilience bonds and sustainability linked bonds with verifiable resilience benefits.
25. Public and private investors increase investments in securities (bonds, listed equities) that are certified as prioritizing climate resilience.

Value the resilience benefits of natural capital

26. Standard setters and other stakeholders improve and standardize valuation of the resilience benefits provided by natural capital/ ecosystem services.
27. Companies integrate resilience benefits provided by ecosystems onto their balance sheets.
28. Financial institutions and governments develop instruments and regulatory frameworks that value and reward investments in resilience benefits.

Fully engage the insurance industry

29. Insurance industry partners with public institutions to improve risk modeling, resilience planning, risk management, and investment.
30. Insurance companies, governments, and development partners increase support (in the form of technical assistance, premium subsidies etc.) for inclusive insurance solutions (e.g. microinsurance, parametric insurance) aimed at the poorest and most vulnerable countries and communities.

Improve how credit ratings agencies address resilience

31. Credit rating agencies increase transparency as to the impact of climate risks on a country's credit rating.
32. Credit rating agencies reward investments in enhanced climate resilience, at both the enterprise and sovereign levels.

Regulations	
Create impactful domestic regulatory system	33. Governments integrate climate adaptation into relevant regulatory frameworks such as zoning regulations, building codes, and other laws as relevant to their economy and geography. 34. Governments and development partners provide financial support to help with implementation of regulatory frameworks, focused on both reducing costs for those impacted and improving enforcement.
Create national and international financial regulations that encourage resilience investments	35. Governments integrate climate resilience into central bank mandates and macroprudential regulation, using comprehensive scenario analysis. 36. Regulatory authorities require minimum disclosure of physical climate risks from the financial and non-financial sector and implement regulations and guidelines to encourage considerations of climate risk in investment decisions. 37. Governments revisit Basel III to avoid negative effects on investments in resilience in vulnerable nations, including through recognition of risk reductions associated investments in adaptation solutions.
Ensure trade relationships to encourage access to markets important to resilience	38. Trade agreements ensure that developing countries have access to products necessary for investment in climate adaptation and resilience and can build and maintain export markets that support their resilience (e.g. of sustainable products). 39. Development partners provide technical and financial support to help strengthen export capacity in sectors important to the resilience of developing countries and thus support the insertion of sustainably produced goods and services from LICs into global value chains.

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