



Task Force 02

SUSTAINABLE CLIMATE ACTION AND INCLUSIVE JUST ENERGY TRANSITIONS

Designing The New Finance Architecture for Adaptation And Resilience

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Abstract

The underfinancing of climate adaptation presents systemic risks to global economic stability. Particularly the most climate-vulnerable nations could lose over 100% of their GDP from disasters in 2024 (CISL 2023). Most recent studies show that a 1-degree Celsius rise in global temperature lowers world GDP by 12% (National Bureau of Economics 2024).

Despite this urgency, less than 5% of global climate finance tracked is directed towards adaptation and resilience, highlighting a critical gap in the collective response to climate change. Of the USD 63 billion adaptation finance tracked in 2021-2022, only 2% came from the private sector, underscoring a significant untapped potential for transformative change towards climate-resilient communities, businesses, and natural ecosystems (Climate Policy Initiative 2023).

Nevertheless, the business opportunity for financing adaptation and resilience could bolster the global economy by up to USD 7 trillion by 2030 (Global Center on Adaptation 2019). However, the current adaptation finance landscape is impeded by several barriers, including a lack of collaboration among financing actors, insufficient enabling policies and regulations to incentivize private finance flows, and the absence of a climate information architecture with standardized frameworks and metrics to guide investments in climate resilience.

The G20's commitment is crucial in creating the necessary market signals to mobilize and scale finance for adaptation and resilience by facilitating an environment that encourages private sector engagement, supporting the development of innovative financial instruments, and advocating for policies that enable investment in climate

resilience, the G20 can significantly contribute to safeguarding global economic stability and ensuring a climate-resilient future.

This policy brief advocates for the G20 to spearhead a financial system transformation that caters towards the designing of the new finance architecture for adaptation and resilience.

Diagnosis of the issue

The Climate Policy Initiative's analysis indicates that developing countries need USD 212 billion per year in adaptation finance up to 2030, and USD 239 billion per year between 2031 and 2050. At the same time only USD 63 billion adaptation finance was tracked in 2021-2022 (Climate Policy Initiative 2023).

There is evidence that actual finance flows might exceed this tracking indicating that frontline communities are among the biggest investors in climate adaptation. Small farmers, especially in the Global South are investing about USD 368 billion into efforts to adapt to climate change every year (Patel and Shakya 2023). While governments and the private sector agree that financing for adaptation and resilience fall short, aligning tracking systems through a supporting climate information architecture is crucial to inform and create suitable policies.

Furthermore, a dialogue process that was led by Arsht-Rock in 2023 with banks, insurers, and investors showed that financial institutions globally develop solutions around standards, metrics, analytics and data, adaptation planning and financial instruments. The central challenge is that the existing solutions and best practices are scattered, not aligned with existing solutions, and not scaled.

During this process the following main barriers to scale existing initiatives could be identified (Adrienne Arsht-Rockefeller Foundation Resilience Center 2023)

- **Lack of adequate policy frameworks** for physical climate risk disclosure and integration of adaptation and resilience across portfolios.
- **Lack of standardization** and definitions for adaptation and resilience solutions.

- A **disconnect** between the public and private finance sector on how to address adaptation and resilience.
- **Lack of suitable blended finance mechanisms** to create sufficient incentives for adaptation and resilience investments and to create incentives to access finance for adaptation and resilience for businesses, projects and communities who need it.

Based on the above challenges, there is a need to better align the financial system with adaptation needs and the creation of the suitable policy architecture. Combined with the opportunity of an increasingly mobilizing private finance sector and the evolution of the international finance architecture, suitable market signals for adaptation and resilience can be significantly advanced in the next few years.

The financial system plays a central role in the development of a new economic order that effectively responds to adaptation needs in the real economy, allocation of resources, risk management and influence on corporate behavior to incentivize the nascent adaptation market.

International Finance Architecture reforms are currently responding to the need to align the global finance system with climate-resilient pathways. These reform efforts open a significant window of opportunity to position policies that incentivize finance for adaptation and resilience and unlock global capital markets. Simultaneously, the increasing material risks of climate change are leading banks, insurers, and investors to innovate, mobilize, and invest in adaptation and resilience.

Despite these opportunities, the narrative persists that there is no private finance for adaptation and resilience. This policy brief and recommendations are based on how

existing private sector solutions to finance adaptation and resilience, can be scaled by suitable policies.

Alignment with G20 priorities:

This policy brief provides important insights and recommendations that are aligned and supportive of various G20 priorities such as the **B20 Finance and Infrastructure Taskforce, the B20 Energy Transition and Climate Task Force and the G20 Sustainable Finance Working Group.**

Mainstreaming adaptation and resilience into financing infrastructure and especially clean energy projects will be decisive. While public support can act as a catalyst for attracting private investments, transition plans for financial institutions can define important pathways to scale investments into climate resilient countries, natural ecosystems, communities and businesses.

Recommendations for G20

Underlying considerations:

In the context of this policy brief, it's important to emphasize the following key priorities set by the G20 Sustainable Finance Working Group as underlying considerations for recommendations of this policy brief (G20 Sustainable Finance Working Group Presidency and Co-chairs Note on Agenda 2024):

- **Optimizing the operations of the International Environmental and Climate Funds to deliver sustainable finance:** Affordable access to climate adaptation finance has to be a priority of this agenda. The authors of this policy brief furthermore suggest that private finance institutions are closely involved in this process to identify risks and opportunities.
- **Advancing credible, robust and just transition plans:** Defining suitable metrics and processes to make adaptation planning an integral part of transition planning is an opportunity for more robust and impactful plans.
- **Financing Nature-Based Solutions:** Financing Nature-based Solutions are a cost-effective way to create adaptation benefits, alongside further social and economic priorities (van Raalte and Ranger 2023).

Policy recommendations:

I. **Incentivize policy frameworks and create concrete pathways for (private) adaptation and resilience finance**

Apart from mobilizing additional private capital in general, it is important to note that adaptation and resilience considerations have to be integrated in every financial decision-

making process. Since financial institutions are already working on **transition plans**, it is recommendable to place adaptation and resilience metrics into these plans.

In addition, it is recommended to create practical pathways for governments, International Finance Institutions and Multilateral Development Banks on how to engage with private finance institutions and leverage existing public finance instruments for adaptation and resilience. Public capital can be used to create innovative financing mechanisms such as viability gap funding, guarantees, first-loss tranches or junior capital to help mitigate financing risk, thereby mobilizing private investment.

Case Study:

The Catalyst Fund is a leading impact fund and accelerator supporting pre-seed tech startups building a climate-resilient future in Africa. The fund's mission is to build the resilience of climate-vulnerable communities in Africa by investing in and supporting early-stage entrepreneurs building tech-enabled adaptation and resilience solutions. The fund blends capital from concessional and commercial equity investors to invest USD 200,000 in selected pre-seed portfolio companies. The fund combines capital and venture building support and will have significant reserves to make follow-on investments at Seed and Series A in selected portfolio companies. In October 2023, the fund reached its first close, raising \$8.6 million of the \$40 million it aims to secure.

Means of Implementation:

- This recommendation will be most efficient if driven forward by the **G20 Ministries of Finance, central banks, and regulators**. By mapping each of these actors' capabilities, needs and barriers to advance frameworks for adaptation and

resilience, a better understanding can be created in how the global, regional, and national financial landscape can advance, lead and standardize this recommendation.

- Under the leadership of the above-mentioned actors and together with private finance actors, philanthropies and civil society organizations the G20 can spearhead the development, testing and piloting of a variety of **financial instruments and policy incentives** such as concessional finance, tax credits, subsidy reforms, grants, climate debt pause clauses, debt for adaptation swaps, governance structures for sovereign debt.
- Within this pathway, build a dialogue around risk profiles and return expectations for adaptation investments across contexts, including strategies to price climate resilience benefits and to monetize avoided losses. Further, structure discussions around **cost of capital** in varied markets to build the groundwork for necessary action to address the cost of capital, especially for the Global South.
- The creation of a **global adaptation and resilience finance database for catalyzing private sector engagement** can be a helpful tool to showcase leadership and inspire action. By providing reliable and timely data on responsible climate and infrastructure projects at regional or local level, such databases can help raise awareness among private investors by helping them understand the economics of climate related projects and help to connect with different types of financiers having different risk and return objectives (Climate Finance Lab 2017).

II. Support and develop the climate information architecture for adaptation and resilience finance

While private finance institutions are increasingly creating their own standards and taxonomies, the fragmentation could potentially create misalignment. The authors of this policy paper hence recommend centralizing the creation of such architecture through the G20.

Apart from the need to create a climate information architecture with metrics, standards, data and tools that support the scale and speed of private investments into adaptation and resilience, it is crucial to institutionalize them in the form of suitable policies and regulations. (e.g., EU taxonomy as a regulatory standard.)

An important early component of this effort will be to align on a working definition on what adaptation and resilience finance is and to move towards a harmonized approach a global standard for an adaptation and resilience finance taxonomy that can be broken down into national and regional taxonomies with applications in different contexts for various contexts such as post-hoc finance tracking, for financial structuring, and for real economy implementation.

Case study:

The *Sustainable finance taxonomy Mexico* provides a clear and standardized framework for sustainable finance, covering climate change mitigation, adaptation, and gender equality. By offering transparency, reliable information, and alignment with international best practices, it can attract private investments into adaptation and resilience by reducing uncertainty and increasing investor confidence in sustainable

projects. In addition, levies and incentives are important to ensure the adoption of the taxonomy.

Means of implementation:

- **Defining metrics** for central banks around adaptation and resilience could set an important precedent and orientation for the private sector on how to integrate and account for it.
- Creating **more evidence** for adaptation and resilience is a driver of the climate information architecture. By understanding how adaptation and resilience solutions interact with various factors such as gender, nature, health, and sustainable development financial institutions can better identify and leverage co-benefits in their investment strategies, making climate finance more effective and impactful.
- To create more alignment on standards, the authors suggest the **G20 to centralize and lead on the creation of a standard for a global taxonomy** that can be adopted by governments and adjusted towards the regional and national context.

III. Create a support system for the Global South for better access to affordable finance for adaptation and resilience

While the above-mentioned recommendations can lead to an increase of affordable climate finance, additional support to make countries ready for adaptation and resilience investments are crucial. Therefore, Multilateral Development Banks, International Finance Institutions and governments have to increase access to concessional funding for adaptation and resilience in addition to a support system that ensures an efficient use of

funding. This support system should enable countries to have better access to physical climate risk, adaptation and resilience data, project preparation facilities and capacity building especially for micro-small- and medium enterprises.

Case Study:

While climate funds offer a range of de-risking instruments for adaptation and resilience to attract private sector investments, the *Adaptation Fund* stands out with a focus on grant-based financing for projects. Since the cost of capital and access to finance are the underlying barriers for countries to implement adaptation and resilience, full-cost financed projects play an important role in creating the necessary conditions for more domestic and international private sector engagements. Interventions such as capacity building, acceleration of local adaptation measures, community engagement and the establishment of processes are key for country preparedness. Considering this outstanding role, the authors recommend to strengthen and the Adaptation Fund and position it as a central mechanism equipped with the billions necessary to build resilience in developing countries.

Means of Implementation:

- Support **project preparation facilities** to get adaptation projects to the market. Such facilities could provide services such as strategy, financing options, legal, technical, and procurement assistance to make projects ready for private investment as well as reduce the transaction costs that private investors incur in direct investments.

- Integrate strategies for climate adaptation finance project preparation facilities into International Finance Institutions' climate strategies.
- Establish the creation of a **Chief Resilience Officer** Program within ministries of finance that appoints a function that is responsible for financing adaptation and resilience in the respective country.
- **Building capacities** and encouraging the adoption of tools and cutting-edge technology is a necessary condition for access to high-quality data that helps identify investment needs and opportunities, allowing for a more targeted and efficient allocation of finance towards areas where it is most needed.

As an underlying point across these recommendations the authors encourage G20 to become an important leader on financing adaptation and resilience that helps convene key actors in the financial system. Therefore, the authors ask the G20 to support the creation of a **high-level leadership group** of private finance and public sector individuals that place financing adaptation and resilience at the heart of ongoing global policy processes. The aim of this leadership group is to create a new transformational narrative to finance adaptation and resilience and to showcase exceptional leadership, especially on financing Nature-based Solutions for Adaptation and Resilience.

Scenario of outcomes

Implementing these recommendations could have a transformative potential to scale finance for climate resilience. However, this also presents complex scenarios and potential trade-offs. This scenario explores the outcomes, both positive and negative, that could arise from the full adoption and implementation of these recommendations.

Positive Outcomes and benefits (Adrienne Arsht-Rockefeller Foundation Resilience Center 2023):

- The suggested recommendations can cater towards a better enabling environment for adaptation and resilience solutions. Government support for research and development, subsidies, tax incentives or procurement policies, among others, encourage innovation and scalability of adaptation and resilience solution from the private sector leading to the development of new technologies and approaches that can be applied on a larger scale, ultimately enhancing the resilience of communities, businesses, infrastructure and natural systems.
- **Knowledge and expertise** sharing between the public and private sectors is a crucial component in building a mutual understanding of adaptation and resilience both in the public and private sectors.
- **The development and testing of new financial instruments** can unlock the vast resources of capital markets towards adaptation and resilience. If designed according to local financing needs, dedicated instruments for small- and medium enterprises can have an immense positive impact due to their outstanding role in their domestic economies.

- Improved standards and definitions alongside access to high-quality data will increase **transparency in markets for adaptation**, and the ability for local governments and investors to hold companies to account for their actions on adaptation and to incentivize solutions that cater towards climate resilience.

Challenges and Trade-offs:

- **Efficiently and equitably allocating adaptation finance** is crucial to address both the imperative of reducing inequality and the risk of exacerbating disparities. Deliberate policies and mechanisms are necessary to prevent funds from being disproportionately directed towards economically attractive projects or regions, neglecting those most in need but less financially appealing. Therefore, it is crucial to have a precise understanding of capabilities and risk-return appetite of key actors across the financial ecosystem.
- **Effective governance structures** are crucial to manage the complex interplay between public and private interests in adaptation finance. Ensuring coherence and coordination among a multitude of actors, including governments, financial institutions, NGOs, and local communities, is essential but fraught with challenges.

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