

**PREPRINT**

# Making Transformation Happen: Climate Finance

## Policy Brief for G20

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## Preamble

Climate finance is a key instrument to enable the global response to climate change. Special financial arrangements are required to scale up investment in mitigation alongside adaptation to facilitate the transformation of global societies to a more sustainable, resilient, and equitable future. In 2022, at COP27 the third pillar, a loss and damage fund, was pledged to address the impacts of climate change that cannot be reversed through mitigation or adaptation measures. However, until now, both the quality and quantity of climate finance pledges remains inadequate to fund the required interventions.

This policy brief provides recommendations from a consultation process with a panel of experts, who addressed the challenges and opportunities associated with finding adequate climate finance in pursuit of climate progress and sustainable development. The list of members and their short bios can be found in **Annex**.

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<sup>1</sup> Authors in each category are listed in the alphabetic order.

organizations, IIASA conducts policy-oriented research into pressing concerns that affect the future of all of humanity, such as climate change, energy security, population aging, and sustainable development. A systems analysis approach, convening power, and political independence help IIASA to coordinate knowledge synthesis and co-development of policy recommendation efforts, including this policy brief.

## Context and challenges

Socio-economic impacts of climate change, caused by the rising sea levels, extreme weather events, and the loss of biodiversity, among other factors, are becoming increasingly visible and significant. These impacts disproportionately affect the world's most vulnerable populations, particularly those in low and middle-income countries. It is crucial for these countries to be able to access the resources to invest in mitigation and adaptation to the effects of climate change. This could be achieved through raising climate finance. Raising the adequate climate finance faces several challenges, most critically, finding the requisite financial resources to enable interventions that are fit for purpose.

In 2009, at COP15 developed countries committed to a collective goal of mobilizing 100 billion USD per year by 2020 for climate action in developing countries; this ambitious goal was reiterated and temporally extended to 2025 at COP21. However, according to OECD, developed countries provided and mobilized on average some 75 billion USD per year in 2016-2020 (with an increasing trend)<sup>1</sup>. To put these figures into perspective, according to UNEP adaptation needs of developing countries are estimated to necessitate annual expenditures ranging from 140 to 300 billion USD by 2030, and from 280 to 500 billion USD by 2050<sup>2</sup>. The Secretary General's SDG Stimulus to Deliver Agenda 2030 proposes that around 500 billion USD should be mobilized per year to facilitate achieving the SDGs<sup>3</sup>.

The shortfall in the committed finances hampers the ability of developing countries to implement climate change mitigation and adaptation projects. Calls were subsequently made for revisiting the 100 billion USD commitment. With the support of Article 2.1(b,c) of the Paris Agreement, this issue can now be examined from a broader perspective of a more comprehensive definition of climate finance needs, and one that includes a broader concept of climate change action.

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<sup>2</sup> The trillion-dollar climate finance challenge (and opportunity) | UN News.  
<https://news.un.org/en/story/2021/06/1094762> (2021).

<sup>3</sup> United Nations Secretary-General's SDG Stimulus to Deliver Agenda 2030. (2023).  
<https://www.un.org/sustainabledevelopment/wp-content/uploads/2023/02/SDG-Stimulus-to-Deliver-Agenda-2030.pdf>.

Beyond the mere quantity, the key challenge is to ensure an appropriate balance between mitigation and adaptation in climate finance. Much of the early literature on climate finance focused on and reflected a strong bias towards mitigation including finance provided by the mechanism of the UNFCCC and through public, multilateral, and bilateral sources. The Paris Agreement, through Article 2.1(b,c), introduced a major shift by referring to the collective effort to tackle climate change that is supportive of development and a climate resilient world. With this language, the Paris Agreement sought to rebalance the importance of both mitigation and adaptation, also pointing to the need to include all the financial resources (private, public, domestic, and international) to support these efforts.

A further challenge is the lack of coherence and coordination among climate finance providers. There are numerous institutions and mechanisms that provide climate finance, including multilateral development banks, bilateral aid agencies, and private sector actors. However, the diversity of sources and instruments used, leads to fragmentation and even duplication of efforts, making it difficult to achieve effective climate finance delivery and monitoring. Additionally, there is a lack of transparency and clarity around criteria and processes for allocating climate finance, leading to inequitable access to the available funding. There is an urgent need to ensure that climate finance reaches the most vulnerable populations and supports the development of sustainable and resilient communities. The current focus on large-scale infrastructure projects often overlooks the pressing needs of small-scale and community-led initiatives.

In the coming eighteen months, there will be several opportunities to address some of these issues. This includes, among others, the forthcoming UN SDG Summit in September 2023, the forthcoming COP28 in Dubai, and most importantly, the UN Summit of the Future in 2024 approved through a resolution by the UN General Assembly (A/RES/76/307). One of the main areas of potential action highlighted by the UN Secretary General for this Summit is the area of finance and the need for its reform - "a reform to ensure it delivers more effectively and fairly for everyone and particularly the Global South, including through objectives that are aligned with the SDGs, debt sustainability, a global financial safety net, and more". The overarching challenge is to strengthen the framework of cooperation so that it can more easily and effectively catalyze the flow of climate finance to developing countries from public and private sector sources. The discussion should shift to a broader and more comprehensive conversation on climate finance. Give the major new focus provided by Article 2.1(c) of the Paris Agreement, the opportunity now is to discuss the overall financial architecture which includes, among others, governments, multilateral development banks, and private financial institutions.

Many countries, including India<sup>4</sup>, are calling for reforms which can make these institutions more climate-responsive and to make it easier for these institutions to work together toward climate and development goals (including debt) and to facilitate blended finance.

Considering the above challenges, this policy brief provides recommendations for enhancing the quantum, effectiveness, and impact of the available climate finance.

## Key recommendations

### 1. Mainstream climate action into the development agenda

According to OECD, about 28% of the available bilateral official development assistance (ODA) pursued climate objectives during 2021<sup>5</sup>. Compelling scientific evidence regarding the systemic risks posed by climate change combined with progress in the available technologies suggests that taking stronger climate action “can unleash higher growth, at least for a period in the coming two or three decades”, and improve societal well-being by boosting innovation, generating novel and new jobs, and reducing societal risks and vulnerabilities<sup>6</sup>. Mainstreaming climate action into the global development agenda could yield substantial synergies between these two areas. Key areas for action include the following:

#### 1.1 Utilize a systemic approach

Climate policies and finance are complementary because better policies attract private investment, in turn helping meet policy objectives. Thus, climate policies must be framed to include ways to reduce risk and increase incentives.

Overall, synergies between climate policies and other development goals should be strengthened. As an important example, climate finance should be strongly linked with infrastructure activities. Climate-resilient infrastructure developed with participation of citizens should be prioritized.

Furthermore, the link between climate action and nature-based solutions should be strengthened by using climate finance to co-finance also for biodiversity conservation and land restoration. Climate finance should be linked with eco-restoration, land degradation neutrality, food security, just transitions, loss and damage, building adaptation and resilience, and water security. The focus should be on maximizing co-benefits, such as

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<sup>4</sup> Economic Survey (India) 2022-23, Chapter 7 Climate Change and Environment  
<https://www.indiabudget.gov.in/economicsurvey/doc/eschapter/epreface.pdf>.

<sup>5</sup> Climate-related official development assistance in 2021: A snapshot. <https://www.oecd.org/dac/climate-related-official-development-assistance.pdf>.

<sup>6</sup> Stern, N. & Stiglitz, J. E. Climate change and growth. *Industrial and Corporate Change* 32, 277–303 (2023).

positive social impacts, e.g., new jobs and income for vulnerable groups such as farmers and rural communities.

## 1.2 Increase the role of development institutions in supporting climate action

Development funders who operate public funding including multilateral development banks (MDBs), national development banks (NDBs), and others, should increase the alignment of the funding that they provide with the climate agenda and to scale up resource allocations for climate mitigation and adaptation. High-income countries should increase the capitalization of MDBs and NDBs, to help overcome developmental setbacks incurred over recent years while advancing and fast-tracking climate action.

## 2. De-risk investment in decarbonization projects in developing countries to attract private investment

Public funding alone cannot provide the resources required to mitigate climate change. Mobilizing private funding, particularly institutional, is necessary, as most solutions for a low-carbon economy require high levels of upfront investment. In the current market conditions, accessibility of finance becomes the key factor that determines whether a particular project is going to be implemented. The significant gap – up to 8 percentage points – in country risk premiums between developed and developing countries presents a major obstacle to investment in low-carbon economy initiatives in developing countries<sup>7</sup>. This discrepancy in the cost of finance exacerbates the climate investment trap in developing economies, hindering their ability to attract capital for climate-friendly projects and worsening the existing gap in sustainable development between developed and developing nations. This is compounded by the existing heavy debt burdens of developing countries, which further diminishes the fiscal capacity of these countries, limiting their ability to finance sustainable development.

In making their investment decisions, private funders rely on their assessment of risk-adjusted returns. De-risking, i.e., reducing the actual and perceived risks of investing in projects in developing countries, which will also decouple economic growth from greenhouse gas emissions, is therefore key to redirecting investors towards such projects in the developing world. For that to happen, public finances should be deployed strategically. Key recommendations in this regard include the following:

### 2.1 Involve and support local investors

Local investors can be expected to have more realistic perceptions of risks in their domestic environment, and this may not necessarily be reflected in national credit ratings.

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<sup>7</sup> Higher cost of finance exacerbates a climate investment trap in developing economies | Nature Communications. <https://www.nature.com/articles/s41467-021-24305-3>.

Using the local currency is also an advantage. Incentives should therefore be created for investors from developing countries to invest in projects in their own countries. Raising awareness about existing opportunities and sharing track records of technology investments between similar countries would also facilitate private domestic investment.

## 2.2 Strengthen regulatory frameworks

To accelerate the deployment of funds towards climate finance projects and facilitate the achievement of climate targets, expediting licensing processes is crucial. This can be achieved through streamlined regulatory procedures, increased transparency and accountability, technical assistance to project developers, strengthening local capacities, and close collaboration with international partners.

## 2.3 Invest public finance in feasibility studies and pilot projects

Perceptions about risks for investors from developed countries for local investment can be reduced if proposed projects are accompanied by high quality feasibility studies. More large-scale projects can be initiated through pilot projects which also informs risk assessments. Public finances could be more frequently used to fund feasibility studies and pilot activities.

## 2.4 Scale up blended finance

Where financial risks are considered high, lowering these risks can be achieved through various forms of blended finance. This includes guarantees, insurance, concessional loans, and other mechanisms provided through the deployment of public funds. Blended finance should be executed via appropriate development banks and scaled up.

## **3. Following a disaster ensure that we are “building back better”, and not worse**

Damages to the built environment caused by natural or anthropogenic disasters should be used as an opportunity to invest into more sustainable and resilient buildings and infrastructure. New buildings and infrastructure should be able to withstand future disasters and contribute to climate action through, for example, innovative and sustainable building materials and designs that are energy-efficient and minimize the use of carbon-intensive materials.

Evidence exists that disasters often turn out to be missed opportunities in this regard. Strong pressure on public finances, the need to respond rapidly, and increased risk perceptions in the aftermath of a disaster<sup>8</sup> are factors which often cause building-back initiatives to rely on the cheapest and most readily available materials and technologies.

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<sup>8</sup> Koks, E. E. et al. A global multi-hazard risk analysis of road and railway infrastructure assets. *Nature Communication*, 10, 2677 (2019).

These are often not favorably aligned with the climate agenda or can even be regressive. To overcome these barriers, the following is recommended:

### 3.1 Enhance preparedness for disasters

To reduce risk, land-use planning and zoning regulations should be strengthened across the world and especially in developing countries to prevent development in high-risk areas and promote relocation of vulnerable communities to safer locations that are climate aligned.

To prepare for disasters, more detailed risk analyses and emergency reconstruction plans should be developed in advance to prepare for potential disaster scenarios. These plans should provide clear frameworks for building back better efficiently and rapidly.

### 3.2 Enhance international cooperation on disasters

International capacity for emergency assistance from which regions can draw on when they are affected by a disaster should be enhanced. This should include the necessary expertise and finances to build back better.

## 4. Optimize the use of blended and concessional finance to support high-impact adaptation projects

It is becoming increasingly clear that the Earth will see warming of at least 1.5°C or, likely, 2°C<sup>8</sup>. Financing adaptation measures should be scaled up accordingly. Blended finance, which combines concessional public finance (i.e., finance at the cost that is below the market rate) with non-concessional private finance (i.e., finance at the cost equal to the market rate) and expertise from the public and private sector is considered a powerful catalyst to scale up efforts to achieve the SDGs, including dealing with climate change. Current blended finance flows average around 9 billion USD per annum over the past five years. This is orders of magnitude too low to provide sufficient resources to achieve the climate change agenda<sup>9</sup>. The following recommendations aim to scale up the quantity and increase the quality of blended finance available for climate action:

### 4.1 Scale up blended finance

A strategy to attract private donors should be an essential pillar of any blended finance arrangement.

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<sup>9</sup> UN. Addis Ababa Action Agenda of the Third International Conference on Financing for Development. [https://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA\\_Outcome.pdf](https://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf) (2015).

The amount of concessional finance available to low-income countries should increase<sup>10</sup>. As one source, philanthropies could be attracted to provide concessional finance to blended finance arrangements.

An investment vehicle for green bonds (to finance environmentally sustainable projects), blue bonds (to finance projects focusing on marine and ocean conservation), and resilience bonds (to finance projects aimed at building resilience to climate change and natural disasters) should be established for Africa.

#### 4.2 Open data

The area of blended finance suffers from poor information about evidence on how this instrument can facilitate development. Blended finance data at the transaction level should be made publicly available, including financial performance and ex-post impact assessment. This will help in risk assessments of future (replicate) projects<sup>11</sup>.

#### 4.3 Enhance the capacity of intermediaries

More intermediaries that can operate blended finance projects effectively are required. Hence this capacity should be developed globally<sup>12</sup>.

### 5. Scale up available carbon markets

#### 5.1 Promote carbon pricing

Carefully designed frameworks for carbon pricing should be further implemented across the world to provide incentives for investors to channel more funds into climate-beneficial projects.

#### 5.2 Scale up carbon trading

Voluntary carbon markets (VCMs) informed by the best available scientific knowledge and aligned with international requirements need to be promoted. Mechanisms to support the participation of small-scale carbon credit issuers and buyers in VCMs should be developed and implemented. An internationally recognized, unified framework should be designed to guide the international operations of VCMs.

### 6. Strengthen transparency in climate finance

#### 6.1 Establish a common definition of climate finance

The UNFCCC suggests that “climate finance refers to local, national or transnational financing, drawn from public, private and alternative sources of financing that seeks to

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<sup>10</sup> <https://www.worldbank.org/en/news/feature/2021/09/16/what-you-need-to-know-about-concessional-finance-for-climate-action>.

<sup>11</sup> The State of Blended Finance 2021 (Convergence Finance).



support mitigation and adaptation actions that will address climate change<sup>12</sup>. However, proposals have been made that the definition of climate finance should be broadened to include climate co-benefits such as land-use and restoration issues should be established. An agreement on the definition is important for transparency as to what and where it is being invested; for accountability to measure real values of commitments and compliance; and for measuring additionality. Adoption of a common definition of climate finance thus will help to address current controversies and criticisms by developing countries regarding the commitments made by developed countries and their fulfilment.

On the basis of a common definition, standardization and transparency of climate finance data should be enhanced to track progress and compare different types of efforts.

## 6.2 Collect and share data

A public data hub that brings together data from different countries should be created to better understand their needs and foster more transparency. This will help to reframe the discussion on climate finance, to include both quantitative and qualitative perspectives. The quality aspect should emphasize impact and effectiveness.

## 7. Strengthen capacity of investors

Capacity building programs for investors to raise their awareness about climate finance sources, risk assessment, and cope-up mechanisms should be enhanced.

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<sup>12</sup> Introduction to Climate Finance | UNFCCC. <https://unfccc.int/topics/introduction-to-climate-finance>.

## Annex

Participants of the consultation that informed this brief:

**Barbara Buchner** is Global Managing Director of Climate Policy Initiative, and Executive Director of its widely renowned Climate Finance program. Named one of the 20 most influential women in climate change and one of the 100 most influential people in climate policy, she advises leaders on climate, energy, and land use investments around the world.

**Yannick Glemarec** is Executive Director of the Green Climate Fund. He was appointed by the GCF Board at its 22nd meeting and took office on 3 April 2019. Glemarec has 30 years of international experience in climate change, development and finance, and their interrelationships.

**Saleemul Huq** is Director of the International Center for Climate Change and Development (ICCCAD) and Professor at the Independent University Bangladesh (IUB) as well as Associate of the International Institute on Environment and Development (IIED) in the United Kingdom. He is an expert in adaptation to climate change in the most vulnerable developing countries and has been a lead author of the third, fourth and fifth assessment reports of the Intergovernmental Panel on Climate Change (IPCC) and he also advises the Least Developed Countries (LDC) group in the United Nations Framework Convention on Climate Change (UNFCCC). In addition, Huq is affiliated with the UN Food System Summit for 2021 as co-chair of the Action Track 5 on Building Resilience to Vulnerabilities, Shocks & Stress.

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