

## **International climate finance: need for reforms to increase efficiency and effectiveness**

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### **1. Background**

The public hearing in the German Bundestag's Committee on Economic Cooperation and Development on October 12 has discussed the instruments of climate risk insurance (Global Climate Risk Shield, proposed by the German government) and Loss and Damage Finance Facility proposed by developing countries in the UNFCCC negotiations. In order not to repeat the comprehensive interventions of experts on these two policy instruments I focus here on increasing overall effectiveness of international public climate finance in a context of global crises.

Developing countries expect a significant increase of public international climate finance following the failure of developed countries to achieve the target of mobilising 100 billion \$ by 2020 (only about 80 billion \$ were mobilised, and even that number is contested due to reporting approaches differing widely between countries, with the robustness of information being limited). Demands for annual funding in the context of the new collective quantified goal for international climate finance after 2025 put on the table at COP26 in Glasgow range between 1 and 1.3 trillion \$.

### **2. The need for increased efficiency of public climate finance**

Given the significant pressure of the multiple global crises on public budgets due to massive expansion of public debt in the COVID-19 pandemic, the expansion of military spending due to the Ukraine war, proliferation of energy subsidies due to the energy crisis, and the increase of debt service burdens due to interest rate increases, it is unlikely that a significant increase of public international climate

finance can be achieved by 2025. A reduction in public climate finance flows is much more likely.

In order to prevent a breakdown of the UNFCCC process due to a stalemate between developed and developing countries on international climate finance, increased attention needs to be put on the efficient use of public climate finance and blending of public climate finance with revenues from international carbon markets. The successful negotiation of rules for Article 6 of the Paris Agreement at COP26 now enables the operationalization of those markets. Historically, carbon markets and climate finance have been artificially separated.

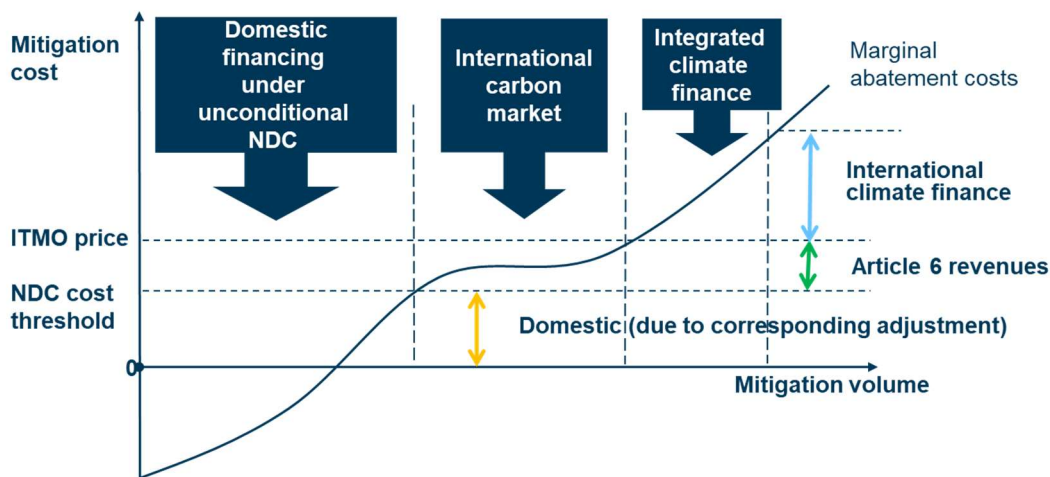
Approaches need to be differentiated between mitigation, adaptation, and loss and damage given the different characteristics of these responses to climate change.

### **3. Mitigation finance**

Given that climate change mitigation is a global public good, the location of a mitigation activity does not count, provided no negative impacts of mitigation on sustainable development indicators occur. Therefore, mitigation finance should be directed towards the most cost-effective mitigation actions. In the context of nationally determined contributions (NDC) under the Paris Agreement, a concept of integrated climate finance should be applied as shown in Figure 1 below. This concept builds on the differences in mitigation costs between mitigation technologies, shown in the figure in the form of a marginal abatement cost curve.

Countries should mobilize all mitigation measures that are profitable (= have negative mitigation costs) domestically, as well as those measures whose costs lie below a threshold deemed necessary to achieve the unconditional NDC target. This threshold will differ from country to country. For measures whose mitigation cost is above the threshold but below the market price for the emissions credits under Article 6, the so-called Internationally Transferred Mitigation Outcomes (ITMOs), the international carbon markets can be used for financing. Measures whose cost exceeds the ITMO price need a combination of various sources of finance. Here, a blending of carbon market revenues with international public climate finance would be envisaged. Such an approach would ensure that the lowest cost measures are mobilised first. It would require that public climate finance institutions like the Green Climate Fund apply the same approaches to baseline setting and calculation of mitigation as the international carbon markets. To date, the methodologies of public climate finance institutions have been internally inconsistent and not robust.

Figure 1: Integrated climate finance



Notes: ITMOs: emission credits from Article 6 that trade globally

#### 4. Adaptation finance

Adaptation has so far suffered from a lack of a universally agreed metric. Moreover, adaptation benefits rarely take the form of being a global public good. More often, they are club goods accruing in specific geographical areas. There is a significant risk of maladaptation as climate change progresses: projects that have been able to prevent climate impacts for a certain period may become unable to prevent impacts beyond a certain threshold value. This applies for example for dykes against storm surges or irrigation systems based on glacial melt. Given these challenges, it is no surprise that only a small share of international climate finance has been allocated to adaptation given that results are difficult to assess.

A way forward for adaptation finance may be to apply a novel concept of metrics that differentiates adaptation benefits into “saved wealth” and “saved health”, compared to a baseline driven by climate change. The latter would apply the concept of disability adjusted life years (DALYs) saved by an intervention. Here, interventions addressing vulnerable populations would be prioritised. The former would assess the value of resources whose destruction is prevented by the intervention. Finance providers could call for reverse auctions of adaptation benefits. Blending of different funding sources could be made possible by policy instruments that would for example mandate adaptation contributions proportional to emission levels of entities. In such a situation, adaptation service providers could emerge that sell adaptation benefit units to the entities that are subject to adaptation contribution targets.

## 5. Loss and damage funding

A critical challenge regarding loss and damage finance is the attribution of a specific meteorological extreme event to climate change. Given that attribution science has made great strides, one can increasingly calculate probabilities of climate change triggering the event. Applying these probabilities to the volume of wealth and health losses, one could derive the loss and damage linked to a particular event, and then pay out damages accordingly.

A major challenge is the moral hazard linked to loss and damage payments. If such a payment can be expected for the full damage, the willingness to engage in precautionary adaptation measures may be jeopardised. As a minimum, a deductible would have to be required. Generally, insurance solutions should be prioritised compared to ex-post compensation of damages. Public finance could cover part of the premiums for insurance.

## 6. Recommendations for COP27

Germany should support developing country calls for a loss and damage financing facility, following the recent precedents of Danish loss and damage finance and damage awards to Torres Straits islanders by the UN Human Rights Council from the Australian government. This facility should primarily set up insurance solutions, as discussed by experts Souvignet and Zwick in the 12 October hearing. Critical items to be assessed would be the level of public support of insurance premiums.

The guidance to the financial mechanisms of the UNFCCC should specifically aim at blending of public climate finance with international carbon market revenues. Governments should be encouraged to apply integrated climate finance concepts for their NDC implementation. Governments should increase demand for ITMOs, following the examples of Switzerland, Nordic countries and Japan.

The Global Goal of Adaptation should be based on the “saved wealth- saved health” metric. Private adaptation financing should be harnessed through mandatory adaptation contributions of private entities proportional to their emissions level. Research on developing robust climate change baselines and preventing maladaptation should be supported.

**Key references:**

Michaelowa, Axel; Sacherer, Anne Kathrin (2022): Handbook of international climate finance, Edward Elgar, Cheltenham (<https://www.e-elgar.com/shop/gbp/handbook-of-international-climate-finance-9781784715649.html>)

Michaelowa, Axel; Stadelmann, Martin (2018): Development of universal metrics for adaptation effectiveness, in: Christiansen, Lars; Martinez, Gerardo; Naswa, Prakriti (eds.): Adaptation metrics: perspectives on measuring, aggregating and comparing adaptation results, UNEP DTU Partnership, Copenhagen, p. 63-72

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