

Task Force 02

SUSTAINABLE CLIMATE ACTION AND INCLUSIVE JUST ENERGY TRANSITIONS

Activating Positive Financial Tipping Points for Zero-Carbon Investments in Lower-Income Countries: A Twin-Track Approach Catalysed with International Guarantees

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Abstract

This policy brief explores the possibility of employing a twin-track approach to blended finance for low-carbon investments, by combining targeted concessional finance with risk-sharing guarantees in lower-income countries. It underscores the need for international public finance to play a more catalytic role in leveraging private finance, using a menu of financial instruments to ensure capital efficiency and free up public resources to vulnerable countries and sectors.

Delivering SDGs and the Paris goals requires climate finance to turn ‘billions to trillions’. However, we highlight significant disparities in current international flows, with most public and private climate finance directed to upper-middle-income countries. Other developing countries struggle to access it due to high perceived risks and consequent lack of investment track record in zero-carbon assets, leading to a vicious circle of climate investment trap.

We propose to target positive financial tipping points that increase the probability of investments in lower-income countries, using a two-stage approach to foster the maturation of zero-carbon technology and associated financial learning. Concessional finance should target sizeable investment pipelines in the early stages of technology penetration to achieve a threshold of cumulative capacity in each country, build capabilities and identify key risks and opportunities. Beyond this, risk-sharing mechanisms, using guarantees, have large potential and high leverage factors for attracting private finance. We identified a significant gap in deploying guarantees: MDBs’ low incentives, limited financial acumen across most development agencies, and other guarantee facilities that are not targeted to the task of low-carbon development. We propose a menu of possible dedicated guarantee-providing institutions for zero-carbon investments through establishing a multilateral guarantee facility or special guarantee provider, including the potential of sovereign wealth funds.

Diagnosis of the issue

Significant inequity in access to climate finance across developing countries

The cost of capital is particularly important for climate mitigation investments, such as renewable energy and related infrastructure, with high upfront capital costs. Upper-middle-income developing countries receive the bulk of public and private finance, while lower-middle and low-income countries struggle to access finance despite their greater needs and higher exposure and vulnerabilities (OECD 2022). Yet even in middle-income countries like Brazil and South Africa, the cost of capital (CoC) is higher by 6-9% compared to developed economies (IEA 2024). High perceived risks coupled with underdeveloped financial markets mean private investors apply even higher high-risk premiums in smaller and less developed country contexts.

Prohibitively high CoC means that climate investments are often foregone in developing countries, driving a ‘climate investment trap’ of chronically insufficient funding (Ameli et al. 2021). The climate investment trap describes a set of self-reinforcing mechanisms with dynamics similar to the poverty trap. A chronic lack of climate investment leaves climate change unchecked, generating negative externalities such as low economic production and political instability, which further increases risk perceptions, driving the CoC even higher.

The climate investment trap also implies path-dependent investment flows, which can embed inequities in climate finance delivery, as investors seek technology markets with proven investment track records and technological and financial maturity (Rickman et al. 2023). This means that many lower-income countries with, e.g., nascent renewables markets, are locked out of international climate finance flows and capital markets.

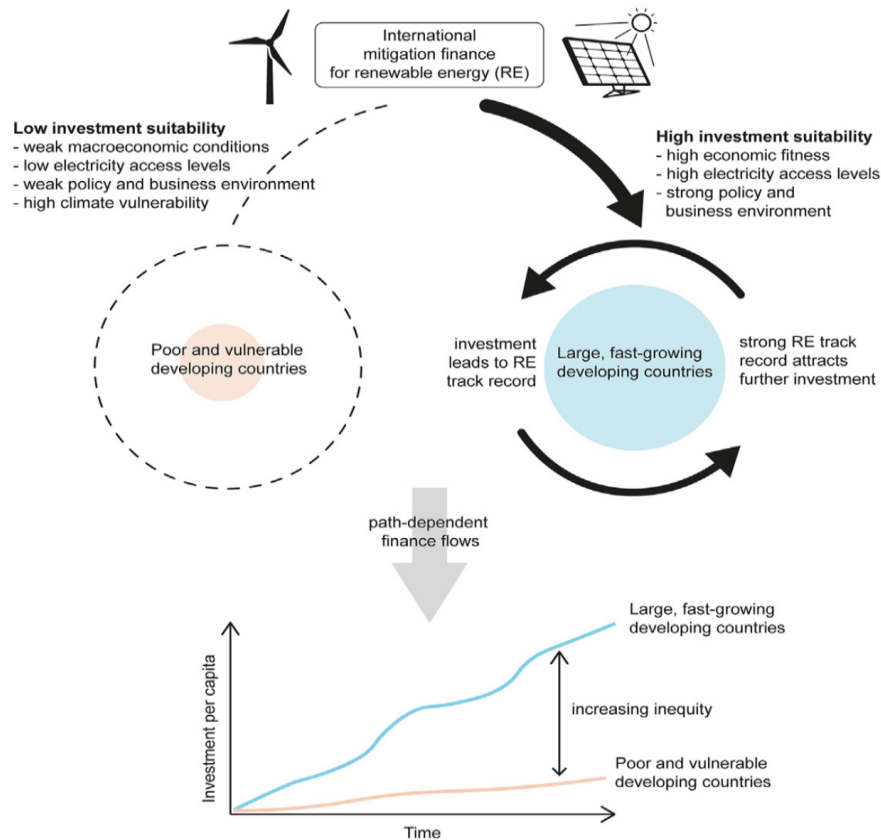


FIGURE 1. Climate investment trap and investment path-dependency.

Source: Rickman et al. (2023)

Heavy reliance on debt instruments in blended finance deployed on a project-by-project basis and underutilisation of guarantee instruments

At the outset of the commitment made by developed countries to provide \$100 bn annually to developing countries by 2020, international public finance promised to turn ‘billions into trillions’ through blended finance instruments. Blending concessional public finance with private finance aims to address a range of market failures by ‘crowding-in’ private finance and driving financial and technology learning (Canfin and Zaouati 2018). However, mobilisation of private climate finance has significantly underperformed developing countries’ expectations and failed to deliver adequate green investment

pipelines (Bhattacharya et al. 2023). The \$100 bn commitment was close to being reached only in 2023, and for every dollar of provided public finance in developed countries, less than one was mobilized from the private sector (Attridge and Engen 2019). Also, blended finance has been criticised for not providing additionality and acting as a public subsidy for commercially viable projects.

MDBs account for most of the channelled public finance to developing countries, primarily as loans, but provide relatively low leverage factors for mobilizing private capital, below 0.4 for each invested dollar in lower-income economies (Attridge and Engen 2019). Even though MDBs are intended to serve as development institutions, they are largely constrained by capital adequacy frameworks (CAFs), which incentivise them to protect their AAA ratings. That implies reliance on conventional credit rating agency methodologies for project-level risk assessments, which tend to overestimate risk and underestimate MDBs capital headroom, for example, discounting their ‘preferred creditor treatment’ (G20 IEG 2022). This drives a vicious cycle of high-risk premiums and often results in scattered availability of bankable projects and opportunistic project-by-project approach for providing lending to zero-carbon investments.

Guarantee instruments are another tool to mitigate investment risks for private actors, but they have been underused by MDBs, representing 8% of their portfolio (OECD 2023). This can be explained by performance metrics under CAFs that require the provision of guarantees in the same way as direct loans, disincentivizing the use of guarantees, even though they are rarely called (Garbacz et al. 2021). Some development aid agencies (Sida, USAID) are more successful in providing guarantees at scale but many others may be challenged by a lack of in-house expertise, as most development aid agencies operate primarily as grant-providers (CBF 2022). This creates a gap between, on the one hand,

MDBs that have in-house expertise with guarantees but lack the incentives to provide them and, on the other hand, development aid agencies that have the financial potential to provide guarantees but lack financial acumen.

Recommendations

Multilateral and domestic public finance should play a more catalytic role in mobilising private capital for climate mitigation by targeting positive financial tipping points through a mix of concessional finance and risk guarantees.

Twin-track approach to deployment of blended finance, addressing technology maturity and financial learning in a local market

Instead of going for project-by-project debt finance, a more integrated approach has the potential to **activate positive financial tipping points for investments in low-carbon development, and notably zero-carbon technologies and infrastructure**. These may include renewables, electricity grids; transport, cooling and heating, and industry. Such an approach can 1) provide a non-linear and accelerated positive impact on the deployment of such assets by identifying more effective instruments for a specific stage of deployment (Sharpe and Lenton 2021); and 2) enhance capital efficiency with growing market maturation (CBF 2022).

To achieve this, we propose **a two-stage framework of flexible risk-sharing instruments to target tipping points through technology and financial learning**. This will be contingent upon achieving specific domestic market technology and financial

maturity thresholds. For instance, reaching a 1-GW deployment threshold in a developing country significantly increases the probability of investments in renewables, while other markets remain even more underserved (Rickman et al. 2023). Cumulative deployment also fosters a positive impact of financial learning on developing zero-carbon investments, more accurate risk pricing, predictability of cashflows and investment patterns (Egli et al. (2019)). This may decrease risks and induce the creation of dedicated ‘green’ financing institutions. Hence, targeting technology and financial tipping points implies a two-stage approach.

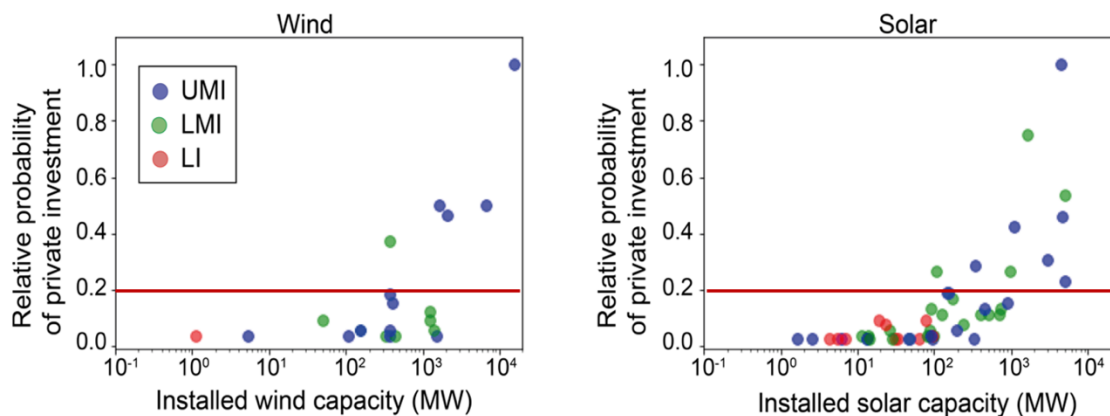


FIGURE 2. Empirical evidence of the probability of private investment in renewables.

Source: Rickman et al. (2023)

First, there is a need to deploy **flexible financial instruments to break the vicious cycle of the climate investment trap** and achieve a particular technology deployment threshold to accelerate self-reinforcing investment inflows. Because of a lack of track record in low-developed markets, there is a need for significant concessional blended public finance at the early stages, e.g. providing interest-free loans, early-stage equity, full coverage by guarantees, and subsidies to cover guarantee fees. Technical assistance

is also a crucial part of local learning across counterparties and capital providers. To achieve this, momentum should be created to boost the sector by attracting entire value chains of actors, increasing their confidence and ensuring predictability, which implies developing sizeable investment pipelines to meet the required deployment thresholds.

Once a certain threshold of market maturation is achieved, e.g. installed capacity volumes and/or the amount of capital attracted into the sector, **next-stage instruments should be deployed, such as partial guarantees**. Such an approach will serve two purposes. First, it will free up scarce public concessional finance for other exposed areas, e.g. adaptation, and more vulnerable countries. Second, it will induce financial learning and prevent the moral hazard of full risk transfer to concessional finance and associated windfall profits.

Risk-sharing mechanisms through the deployment of targeted partial guarantees, housed in a dedicated financial institution or facility for zero-carbon investments

Limited but successful experience from some development agencies (Sida, USAID) demonstrates that **guarantees can have much more significant leverage factors to mobilize private finance, and unfunded type provides the highest leverage factors** (CBF 2022). Such guarantees can be provided by donor and/or beneficiary/participating countries or by sovereign wealth funds.

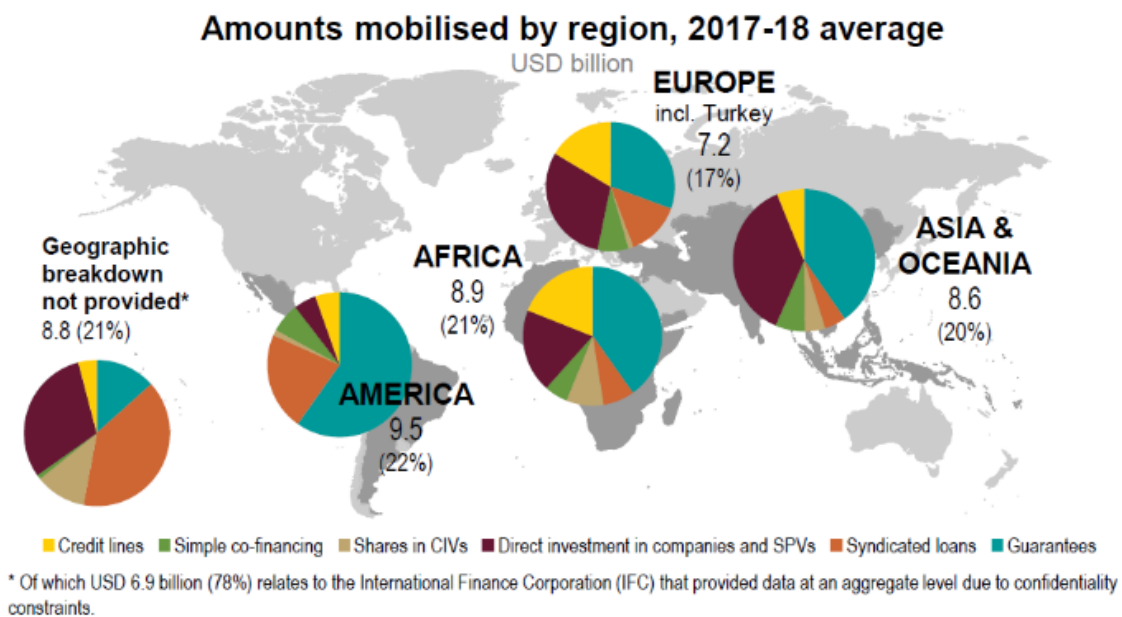


FIGURE 3. Amounts mobilised from the private sector for development.

Source: Garbacz et al. (2021)

Blended finance should seek to **develop balanced risk-sharing mechanisms between public and private capital providers**, including DFIs, to increase their lending exposure limits. Risk-sharing is also important to mitigate any windfall profits while ensuring additionality. Whereas debt and equity rates represent compound risk associated with a low-carbon investment, **guarantees are designed to address specific type(s) of project risk and, hence, are well-suited for risk-sharing:**

- Macro-level risks, e.g. political and macroeconomic risks, are the most significant and contribute substantially to the greater CoC in EMDEs (Persaud 2023). This may reflect existing micro-risk mitigation efforts i.e., support policies. Public underwriting of macro-risks can be an effective tool in lowering CoC and attracting private investment with minimal use of public resources.

- Micro-level project risks should be borne by developers and investors so that a commercial precedent is established and technological and financial learning drives market development.

Guarantees should be fit for purpose and priced using updated methodologies, as risks around developing countries, and unfamiliar technology areas, are often overestimated. This makes the provision of partial guarantees preferable to avoid the moral hazard that often appears in the case of full risk coverage.

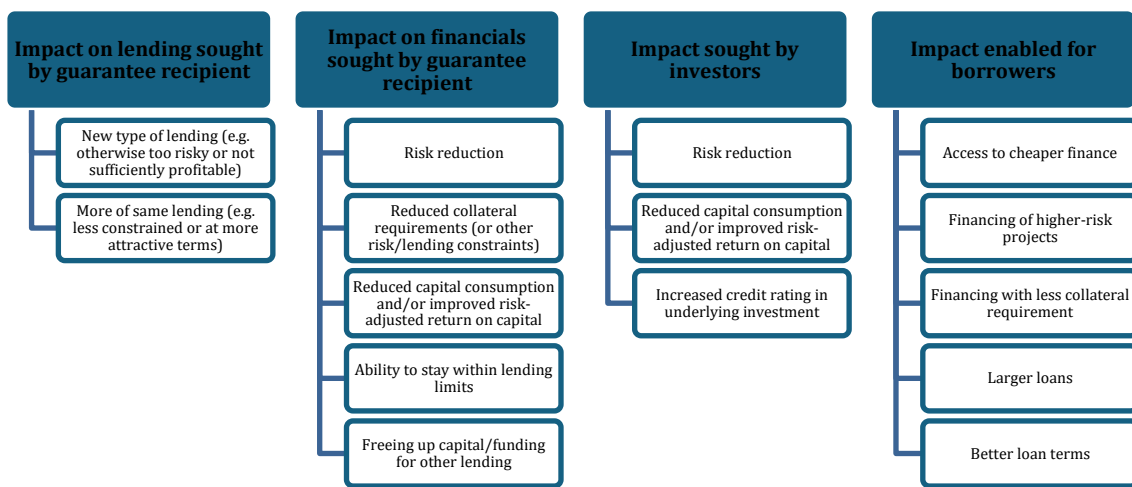


FIGURE 4. The potential impact generated by Sida guarantees.

Source: adopted from CBF (2022).

While providing guarantees is not a novel solution, its potential is far from being fully tapped. In 2012-2018, \$80.9bn or 39% of private development finance was mobilized through guarantees, more than by any other instrument (Garbacz et al. 2021). A significant share of it goes to supporting the development of local capital markets and SMEs in EMDEs, while there are limited targeted provisions towards zero-carbon investments. Almost 45% of guarantees are provided by just a few development aid agencies (ibid), and many others underuse the potential of their sovereign AAA rating to

provide guarantees. There is also a positive track record of establishing special guarantee providers, e.g. Gurantco and African Guarantee Fund, that have lower capital adequacy requirements than MDBs and can more easily adapt to local market needs and price risks more adequately. However, as discussed above, they are often too spread across many SDGs. In themselves, these efforts may do little to accelerate the energy transition (and may even exacerbate carbon lock-in, bringing additional development risks).

Hence, this presents **a case for establishing a dedicated institution, a specialised guarantee provider or a facility to serve risk-sharing for zero-carbon investments**, addressing both SDGs 13 and 17. Such an entity can make use of accumulated financial learning of zero-carbon investments and guarantee deployment experience. Previous collaboration between Sida and USAID and special guarantee providers such as Gurantco demonstrates the crucial role of mutual learning and leveraging the potential for the provision of guarantees as opposed to individual interventions (OECD 2022). A guarantee provider for zero-carbon investments can be established in different forms:

- **A multilateral funded guarantee facility for low-carbon investments** through output-based fees (e.g. \$/MWh) can provide net benefits globally, while mature markets will be net donors, potentially freeing-up up to \$1.5tn over 10 years (Matthäus and Mehling 2020). In this case, low-income countries, where investors and lenders are risk-averse, can participate with provisions of subsidies for guarantee fees from ODA.

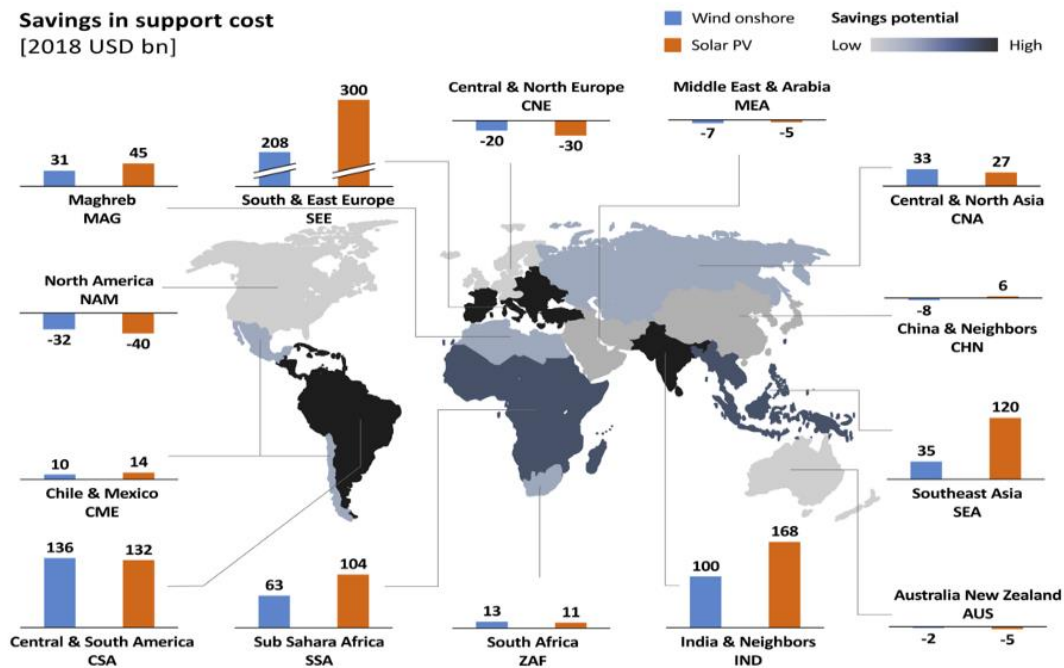


FIGURE 5. Net savings from establishing a multilateral guarantee facility for renewables.

Source: Matthäus and Mehling (2020)

- Similar to public development aid and philanthropic finance, sovereign wealth funds can also play a role in leveraging private capital. This can be done either as part of a **specialised guarantee provide/entity for low-carbon investments**, where wealth funds provide capital top-ups, e.g. similarly to GurantCo. Alternatively, **sovereign wealth funds can operate similarly to development agencies by providing unfunded guarantees**, similarly to Sida. This implies that only the expected loss from guarantee contracts is kept in reserves. Sovereign wealth funds may benefit from this by fostering low-carbon investments without directly using their capital.

Scenario of Outcomes

The two tracks of our proposal have the potential to be mutually reinforcing, but involve different characteristics, challenges, opportunities and risks.

Zero-Carbon Market Development Track

The recommendation to prioritise MDB and ODA expenditure to help build market capability – helping particularly less developed countries get to critical thresholds of deployment – is something the G20 could logically incorporate in a Communique, as giving direction and prioritisation to largely existing activities of mainstream development institutions.

The G20 could aspire to go further, for example, in terms of common guidance, with a view to giving more coherence to these activities and clarifying the expected relationship to guarantees, potentially with the Brazilian Presidency handing this agenda on for refinement under next year's South African G20 Presidency.

This effort could and should be framed in relation to joint delivery of the relevant SDGs, including energy access and climate change [SDGs 7 and 13] in addition to several complementary SDGs – wide-ranging synergies as identified in the IPCC Sixth Assessment (Mitigation) report. It could plausibly have as a minimum target to ensure that *all* developing countries with populations exceeding 1m deploy at least 1GW of renewable energy capacity well before 2030, with the country focus of supports being distributed across MDBs and ODA.

Guarantees initiative

Whilst building on many individual existing initiatives as indicated, this track would be more fundamentally innovative. In the selection of projects (and potentially, policy programmes) to guarantee there will be trade-offs between risk management and impact. Existing guarantee institutions such as MIGA have been relatively risk-averse – with limited coverage in IDA countries; only 11 claims have been made, all before 2000. As indicated, the evidence indicated is that many of the mainstream development finance institutions have not exploited the potential of guarantees, for identifiable reasons, and that guarantees have frequently not been focused on developmental or collective objectives.

Our proposition is that guarantees could be the major engine to turn the ‘billions into trillions’ in accelerating the global transition this decade, directly aligned with the Paris Agreement Article 2.1c aim of “making finance flows consistent with a pathway towards low greenhouse gas emissions”, in ways which “reflect equity and the principle of [CBDR-RC]”. This, however, requires much higher ambition, with some greater appetite for risk – acknowledging that the risks at the project/programme level are set in the context of the greater global risk of unfettered climate change.

An adequate structure for guarantees at such a scale is something which could be stimulated by, but not delivered through, the G20. As noted, one route could be to focus on the role of the MDBs and IDA, particularly around related capital adequacy rules and risk appetites. However, the opportunities are wider, potentially involving Sovereign Wealth Funds and effective leverage of potential new revenues sources for international climate finance.

At its heart, this agenda is closely tied to delivering the agreed goals of the Paris Agreement. Moreover, it could be developed alongside the processes of Nationally Determined Contributions, as an important engine for implementing more ambitious NDCs over the decade from 2025. Consequently, one scenario could be for the G20 to endorse the goal of far greater use of risk-sharing guarantees for zero carbon investments, as something for development subsequently under the broad agenda of the UNFCCC, the COPs and its associated processes. Multilateral principles, and facilities for such guarantees at scale, could then form part of the contributions by developed countries to that ‘other’ Paris financial commitment (beyond the fraught politics of the “quantified goal”), to deliver the wider ambition of Article 2.1c – aligning overall global financial flows to be consistent with the agreed Objectives.

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