



Re-channeling Special Drawing Rights for a Climate Resilient and Just Transition

PROSPECTS FOR A RESILIENCE AND
SUSTAINABILITY TRUST



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Global Development Policy Center



**TASK FORCE ON CLIMATE, DEVELOPMENT
AND THE INTERNATIONAL MONETARY FUND**



About the Task Force on Climate, Development and the International Monetary Fund

The Task Force on Climate, Development and the International Monetary Fund is a consortium of experts from around the world convened to support the Intergovernmental Group of Twenty-Four and the Vulnerable Group of Twenty Ministers of Finance. The Task Force engages in and utilizes rigorous, empirical research to advance IMF policies that align international financial stability and growth with global climate goals. Core to the Task Force's mission is advancing a development-centered approach to climate change at the IMF.

MEMBER ORGANIZATIONS

1. Intergovernmental Group of Twenty-Four (G24)
2. Vulnerable Group of Twenty (V20) Ministers of Finance
3. African Economic Research Consortium
4. Boston University Global Development Policy Center
5. Centre for Social and Economic Progress
6. Financial Futures Center
7. National School of Development, Peking University
8. United Nations Economic Commission for Latin America and the Caribbean

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EXECUTIVE SUMMARY

In a historic breakthrough for the multilateral system, the International Monetary Fund (IMF) approved the global allocation of \$650 billion in Special Drawing Rights (SDRs)—the international reserve asset issued by the IMF—to support liquidity and foster the resilience of the global economy in the wake of the COVID-19 pandemic. While unprecedented in its scope, this allocation of SDRs still falls short on two main counts. First, the amount allocated pales in comparison to the resources necessary for achieving shared climate and development goals, not to mention the estimated \$2.5 trillion required by emerging market and developing countries to meet their immediate liquidity needs in the face of COVID-19 (Georgieva, 2020; UNCTAD, 2020). Second, due to quotas informing the IMF’s decision-making structure, the allocation of SDRs has, so far, been largely channeled to high and some middle-income countries that do not face the liquidity bottlenecks that other countries do, of which SDRs can uniquely address.

In June 2021, the [G7 pledged](#) to mobilize a global re-channeling of \$100 billion of SDRs for countries most in need of resources to address the COVID-19 pandemic, stabilize their economies, and mount a green and global recovery that is aligned with shared development and climate goals (G7, 2021). This is a step in the right direction; however, the scale of finance needed to decarbonize and build climate resilience suggests substantially more resources will be necessary.

This policy brief by the newly established Task Force on Climate, Development and the IMF outlines the core objectives, modalities, eligibility and scale that should form the core of the proposed Resilience and Sustainability Trust (RST). Sustained re-channeling of new SDR issuances into such a Trust could form an essential part of the climate and development finance landscape in emerging market and developing countries.

The policy brief proposes that an RST should have three overarching climate-related objectives:

- Provide capacity for countries to respond to climate shocks without significant increases in debt burdens.
- Catalyze low-cost financing and capacity building for poorer, climate vulnerable countries to build climate resilience and adaptation strategies.
- Enhance the ability of emerging market and developing countries to mobilize longer-term financing for just transitions to low-carbon growth paths.

Furthermore, opportunities for the climate-related aspects of an RST include:

- Short-term financing for responding to climate shocks.
- Longer-term financing for capacity building, resilience, adaptation and just transitions.
- Broad eligibility and sustainability of the RST.

To learn more about the Task Force on Climate, Development and the International Monetary Fund, visit [gdpcenter.org/TaskForce](https://www.gdpcenter.org/TaskForce)

INTRODUCTION

In a historic breakthrough for the multilateral system, the International Monetary Fund (IMF) approved the global allocation of \$650 billion in Special Drawing Rights (SDRs)—the international reserve asset issued by the IMF—to support liquidity and foster the resilience of the global economy in the wake of the COVID-19 pandemic. While unprecedented in its scope, this allocation of SDRs still falls short on two main counts. First, the amount allocated pales in comparison to the resources necessary for achieving shared climate and development goals, not to mention the estimated \$2.5 trillion required by emerging market and developing countries to meet their immediate liquidity needs in the face of COVID-19 (Georgieva, 2020; UNCTAD, 2020). Second, due to quotas informing the IMF’s decision-making structure, the allocation of SDRs has, so far, been largely channeled to high and some middle-income countries that do not face the liquidity bottlenecks that other countries do, of which SDRs can uniquely address.

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BACKGROUND

There are several competing priorities for appropriate re-channeling of SDRs. These include combating the COVID-19 virus that still rages across the world, addressing immediate liquidity needs, and facilitating green transitions and protecting the most vulnerable. In July of 2021, the IMF announced that it was preparing a proposal on an RST that would help the membership respond to climate shocks and finance the membership’s broader development goals of the membership (Georgieva, 2021).

As the only multilateral, rules-based institution charged with promoting the stability of the international financial and monetary system in order to enable longer-run growth, the IMF has a central role to play in the transition to a low carbon and resilient global economy. The key to such an approach at the IMF will be to focus on identifying the global and national-level macroeconomic implications of climate risks as well as the global and coordinated, national policy frameworks and financing necessary for a just transition to an aggregate, global net zero and resilient world economy by 2050. To that end, an RST is a welcome and important step for the IMF.

A well-designed and well-resourced RST could be an important way to help emerging markets and developing countries both prevent and respond to climate risks along with finance climate adaptation and just transitions to an aggregate, global net zero emissions economy by 2050. Emerging market and developing economies bear a disproportionate share of the

economic and social costs of climate change. Many poor and climate vulnerable countries need an immediate focus on adaptation and resilience. Large, carbon-emitting emerging market and developing countries are in dire need of financing to make just transitions. Yet, many emerging market and developing countries lack the necessary access to finance, as well as the fiscal and policy space for such action. While a well-designed RST will not be able to address these needs by itself, the Trust's rapid deployment will be an essential instrument for emerging market and developing countries to recover from the crisis in a green and inclusive manner.

ADDRESSING CLIMATE CHALLENGES UNDER A RESILIENCE AND SUSTAINABILITY TRUST

Developing countries face enormous resource mobilization needs for addressing COVID-19, responding to future climate and other external shocks, and mounting a recovery based on resilience, adaptation and inclusive green structural transformation. Even before the COVID-19 crisis, emerging market and developing economies were in need of at least 2 percent of GDP in additional financing toward climate goals on an annual basis through 2030 (Bhattacharya et al, 2019). Not only did the COVID-19 crisis in large part put such goals on hold, but it has also resulted in rising debt overhang and an increasing cost of capital for many emerging market and developing economies (UNDP, 2021). In this light, an RST should have three overarching climate-related objectives:

1. **Provide capacity for countries to respond to climate shocks without significant increases in debt burdens.** Climate change and climate change policy can pose physical and transition risks to economies across the world. Physical risks are shocks from the increased incidence of extreme weather events that can adversely impact a country's capital stock, balance of payments position and financial stability. In cases, such as in Small Island Developing States (SIDS), these damages have been more than 100 percent of GDP for just one climate-related weather event (Climate, Weather, and Catastrophe Insight, 2021). Transition risks can particularly affect developing countries via cross-border (or spillover) transition risk and via national transition risk. These shocks can occur when a climate policy in one country, such as a carbon tax, triggers a financial shock in another country, such as a fossil fuel exporting developing country (Gallagher et al. 2021; Monasterolo et al, 2021). Transition risks at the national level can occur from abrupt and unanticipated introduction of climate policies and regulations, or technological shocks and change in consumption preferences, that increase production costs for high carbon activities, reducing their expected future cash flows from productive assets, and triggering balance of payments problems and associated financial fragility (Battiston et al. 2017, NGFS 2019, Pointner and Ritzberger-Grünwald 2019).
2. **Catalyze low-cost financing and capacity building for poorer, climate vulnerable countries to build climate resilience and adaptation strategies.** Not only do poorer and climate vulnerable economies require major investments to address climate change, but they are also already bearing enormous costs from climate change. These countries need low-cost financing that does not exacerbate debt burdens in order to finance climate resilience and adaptation. The frequency and magnitude of climate-related natural disasters is much higher in these countries (IPCC 2014), as are the consequences in terms of economic damages and the human toll that such disasters extract (Bhattacharya et al, 2021). Affordable climate finance for adaptation and resilience is severely lacking with more than 80 percent

of climate finance flowing toward climate change mitigation in more advanced economies (MDB, 2019). Moreover, physical climate risks are increasing the cost of capital for many vulnerable countries. Recent research reveals a direct effect of climate vulnerability on the average increase in cost of debt. Between 1991 to 2017, the average increase has been 0.63 percent and an additional impact of 0.05 percent through climate vulnerability's impact on financial leverage (Kling et al, 2021).

3. **Enhance the ability of emerging market and developing countries to mobilize longer-term financing for just transitions to low-carbon growth paths.** Some of the most systemically important countries to the climate transition face problems with market access and fiscal space to make timely, rapid transitions. These emerging market and developing countries face enormous investment needs and rising capital costs to make rapid and just transitions away from fossil fuel combustion and production dependence. As noted earlier, developing countries need to mobilize an additional two percent of GDP on an annual basis in order to finance the low carbon transitions in their economies. Private capital markets are reluctant to make such a major investment in structural transformation. Development finance institutions and national governments are required to make massive public investments that crowd in the private sector to fill the gap. What is more, public finance is needed to cover the adjustment costs of a transition so that the communities, workers and contracts behind stranded fossil fuel assets are not left behind, but can instead benefit from new engines of green and inclusive growth. Many emerging market and developing countries lack the market access, or fiscal space to deliver on this urgent climate and development action.

MODALITIES

To meet these three objectives, the RST would consist of a significant portion of the re-channeled SDRs, and hard currency would be loaned to the IMF, where the IMF would on-lend for liquidity and balance of payment support due to climate shocks and debt restructuring. The Fund would also play a role in on-lending for longer term resilience, adaptation and just transition financing. Hard currency would also need to be set aside to bear credit risk and provide concessional financing terms.

Opportunities for the climate-related aspects of an RST include:

- Short-term financing for responding to climate shocks
- Longer-term financing for capacity building, resilience, adaptation and just transitions

Short-term Financing for Responding to Climate Shocks

The IMF is in need of a facility that supports the members in preventing and mitigating macro-critical climate risks threatening balance of payments and financial stability. Such shocks come in the form of the increased incidence of extreme weather events and climate-fueled natural disasters, through spillovers from climate policy in other countries and national transition risk. A window within the RST should support countries with concessional financing for precautionary, potential and urgent liquidity and balance of payments needs due to physical and/or transition risks.

Vulnerable developing countries experience a financial protection gap of 98 percent for climate and disaster risks (Schanz, 2020). National disaster funds, contingent credit lines and

risk transfer (including insurance-linked securities such as catastrophe bonds and insurance) are three of the main sovereign disaster risk financing (DRF) instruments. Yet, many countries lack access to disaster funds, are not eligible for contingent credit lines, or purchase too little to no insurance. At the same time, climate risk is intensifying, thus adding further affordability constraints, and potentially even threatening insurability. The IMF can also contribute to an international climate disaster risk financing and insurance architecture that addresses different layers of risks. For example, incorporating fiscal buffers for climate-related risks in budget planning could assist in promoting budgetary instruments for ex ante disaster financing, including contingency lines and disaster, reserve or contingency savings funds.

Such a window would offer countries concessional rates, given the external nature of climate shocks and the need to keep debt burdens at a minimum. Climate vulnerability and income can be closely-knit, with some of the poorest countries in the world with respect to per capita income also being the most climate vulnerable. However, it is important to stress that per capita income does not provide an adequate picture of how countries may be exposed to climate risks. Despite middle-income status, nations such as Ecuador, Indonesia and Brazil can be as climate vulnerable as Somalia. Therefore, broad access to climate-contingent liabilities would help prevent future shocks from derailing longer-run climate and development strategies.

It is of utmost importance that a facility like the RST be used by the countries that need it most. The design of the RST should avoid the onerous conditions of the analogous Poverty Reduction and Growth Trust (PRGT). The use of an RST should bolster country and investor confidence and participation, rather than act as a deterrent.

As is the case of the more traditional IMF programs, it is not inconceivable that a country may need to restructure its existing debt alongside an RST-supported IMF program in response to a climate shock, or the lack of market access and fiscal space to meet its public investment needs for adaptation, resilience, and just transitions. Indeed, since 2000, the Caribbean has faced an annual cost between 33 percent and 200 percent of GDP due to natural disasters, leaving it among the most indebted in the world (ECLAC, 2019). However, concessional finance is out of reach of these countries given that they are not 'low-income' in terms of GDP per capita. Such countries are often in need of immediate and urgent balance of payments support, as well as occasional debt restructuring. In such cases, the Fund could deploy the RST as collateral to guarantee restructured debt similar to schemes devised under the 'Brady Plan' in the 1990s (Xu and Wan, 2021; Volz et al, 2021). Such 'debt-for-climate swaps' could occur alongside investments in resilience funds analogous to the "Climate Resilience Fund" proposed by Caribbean countries and the United Nations Economic Commission for Latin America and the Caribbean (ECLAC, 2015). Debt restructurings in the midst of climate shocks should also have climate contingent liabilities, such as the natural disaster clauses in Barbados' recently restructured debt. As more financing is made available to the RST over time, the RST could have a grant-like element for debt relief analogous to the Catastrophe Containment and Relief Trust that would allow the most climate vulnerable countries to access grants for meeting balance of payments needs created by climate shocks.

Longer-term Financing for Capacity Building, Resilience, Adaptation and Just Transitions

It is also paramount to provide financing through an RST for more intermediate and longer-term financing, with maturities of at least 15 to 20 years. IMF and World Bank Group

(WBG) coordination and collaboration will be essential to leverage on the WBG's expertise and long-term development-financing. Such a window of the RST would be aimed to meet the other two objectives outlined earlier: (1) to catalyze low-cost financing and capacity building for low-income, climate vulnerable countries building climate resilience and adaptation strategies, and (2) to enhance the ability of countries to mobilize longer-term financing for just transitions to low-carbon growth paths. Country ownership of supported programs will be crucial. This aspect of the RST would need to be tailored to reflect the diversity of national circumstances and its membership.

POLICY LOANS FOR ECONOMY-WIDE GREEN STRUCTURAL TRANSFORMATION AND CAPACITY BUILDING

The RST could be used to finance new programs, or to increase the affordability of existing long-term policy loans to members. Policy loans would focus on helping countries mainstream resilience, adaptation and decarbonization into national planning and provide financing for implementation. Policy loans will also be important to support social adjustment at the economy-wide level and throughout government operations on a larger scale. Examples include the scaling up of the World Bank's Pilot Program for Climate Resilience that helps members finance the preparation of climate-resilient national development plans. Other examples would be to create economy-wide programs to shift away from fossil fuel production and consumption and to build necessary safety nets supporting investments to ensure that workers, communities and investors in fossil fuels are not left behind in the transition.

PROJECT FINANCE AT AFFORDABLE TERMS FOR SPECIFIC RESILIENCE, ADAPTATION AND DECARBONIZATION PROJECTS

The RST should be used to reduce the cost of financing for member-driven proposals to bolster resilience, climate adaptation or decarbonization. RST finances could also be deployed to crowd in other sources of public and private financing for climate action. One of the largest impediments to financing clean energy transitions in developing countries is the lack of off-taker risk (Munoz et al, 2020). RST financing could be deployed as guarantees to such projects and to provide credit enhancement that can leverage financing from outside the RST. As noted earlier, project finance is largely the purview of development banks, and if the RST is to act in this manner, it would be more appropriate to do so in partnership with the WBG or similar entities.

ELIGIBILITY AND SUSTAINABILITY

The traditional eligibility criteria for accessing concessional finance at the IMF will need to be adjusted for a Trust that focuses on climate resilience and sustainability. The current climate crisis warrants access for all climate-vulnerable countries. While an initial SDR allocation coupled with a rechanneling effort will be an important stimulus to make up for lost time in mobilizing climate and development finance, it will not be sufficient. The RST should be designed to receive regular replenishment through subsequent SDR allocations and other sources of funding.

The RST should, in principle, be eligible to all emerging market and developing countries that experience or perceive a particular climate-related financing need with the circumstances of each country proposal determining access to the RST. It is also paramount that RST financing be affordable, so as not to stress a member's debt burden. Finally, it would not be appropriate for an RST to have onerous conditionalities. The proper design of an RST within this context will need careful study and engagement with the full IMF membership and relevant stakeholders.

CONCLUSION

The establishment of the RST through a re-channeling of the recent SDR allocation is of seminal importance. To play a key role in global climate action, an RST will need to be scaled up over time through additional SDR issuances and re-channeling efforts, with replenishment and expansion through hard currency contributions. The scale of the RST needs to be proportionate to the response required by the climate crisis.

The RST can play a critical role in ensuring that countries facing short-term economic and financial instabilities due to climate risks have the necessary resources to mount a successful recovery. It will also be vital for the RST to offer medium and longer-term investments so that countries can build resilience to withstand climate impacts and undergo a just transition, in a timely and coordinated manner.

As the IMF starts to incorporate climate change into its work, the RST will be an important part of the overall package. The RST would help to bolster the IMF's role in global policy coordination on climate change, particularly by helping countries manage and address a range of climate risks, including cross-border spillovers.

More broadly, the RST would fill an important gap in the climate finance landscape that is not currently equipped, at the global level, to help countries overcome economic instability created by climate change. Its resources would also bring the world economy one step closer to the resources needed to help countries adapt and respond to climate change in a just and development-centered manner.

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REFERENCES

Battiston, S., Mandel, A., Monasterolo, I., Schütze, F., & Visentin, G. 2017. "A climate stress-test of the financial system." *Nature Climate Change* 7: 283-288.

Bhattacharya, A., Gallagher, K.P., Muñoz Cabré, M., Jeong, M., & Ma, X. 2019. "Aligning G20 Infrastructure Investment with Climate Goals and the 2030 Agenda." Foundations 20 Platform, a report to the G20. https://www.foundations-20.org/wp-content/uploads/2019/06/F20-report-to-the-G20-2019_Infrastrucutre-Investment.pdf.

Bhattacharya, A., Ivanyina, M., Oman, W., & Stern, N. 2021. "Climate Action to Unlock the Inclusive Growth Story of the 21st Century." IMF Working Paper WP/21/147.

Bhattacharya, A. & Stern, N. 2021. Financing a Big Investment Push in Emerging Markets and Developing Countries for Sustainable, Resilient, and Inclusive Recovery and Growth, Brookings Institution, London School of Economics.

Climate, Weather, and Catastrophe Insight. 2021. "Annual Report 2020." <http://thoughtleadership.aon.com/Documents/20210125-if-annual-cat-report.pdf>

ECLAC. 2015. ECLAC Proposes Debt Relief for Caribbean Countries and the Creation of a Sub-regional Fund, 2015: <https://www.cepal.org/en/pressreleases/eclac-proposes-debt-relief-caribbean-countries-and-creation-subregional-fund>

ECLAC. 2019. Alicia Bárcena Reviewed with Caribbean Authorities Progress on the Debt for Climate Adaptation Swap Initiative, Including the Creation of a Resilience Fund, ECLAC: <https://www.cepal.org/en/news/alicia-barcelona-reviewed-caribbean-authorities-progress-debt-climate-adaptation-swap-initiative>

G7. 2021. Carbis Bay G7 Summit Communiqué. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1001128/Carbis_Bay_G7_Summit_Communique__PDF__430KB__25_pages_.pdf

Gallagher, K.P., Ramos, L., Stephenson, C., & Monasterolo, I. 2021. "Climate Risk and IMF Surveillance Policy: A Baseline Analysis. Boston: Global Development Policy Center Working Paper.

Georgieva, K. 2020. Transcript of a Press Briefing by Kristalina Georgieva following a Conference Call of the International Monetary Fund. <https://www.imf.org/en/News/Articles/2020/03/27/tr032720-transcript-press-briefing-kristalina-georgieva-following-imf-conference-call>

Georgieva, K. 2021. Remarks by IMF Managing Director on Global Policies and Climate Change, Washington, International Monetary Fund: <https://www.imf.org/en/News/Articles/2021/07/11/sp071121-md-on-global-policies-and-climate-change>

Intergovernmental Panel on Climate Change (IPCC). 2014. *Climate Change 2014: Synthesis Report*. Contributions of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC, Geneva.

Kling, G., Volz, U., Murinde V. & Ayas S. 2021. "The Impact of Climate Vulnerability on Firms' Cost of Capital and Access to Finance." *World Development* 137, 105131.

Monasterolo, I., Gourdes, R., & Gallagher, K.P. 2021. "Modeling the Impacts of Climate Change Induced Transition Spillovers in Developing Countries: a Macro-financial Approach." mimeo. Boston: Global Development Policy Center Working Paper.

Multilateral Development Banks (MDB). 2018 Joint Report on Multilateral Development Banks' Climate Finance. 2019. Available online: www.ebrd.com/2018-joint-report-on-mdbs-climate-finance

Munoz, M., Ndhlukula, K., Musasike, T., Bradlow, D., Pillay, K., Gallagher, K.P., Chen, Y., Loots, J, & Ma, X. 2020. *Expanding Renewable Energy for Access and Development: the Role of Development Finance Institutions in Southern Africa*, Boston University, Global Development Policy Center.

Network for Greening the Financial System (NGFS). 2020. "Guide to climate scenario analysis for central banks and supervisors." Central Banks and Supervisors Network for Greening the Financial System, Paris. <https://bit.ly/3cXhBUP>

Pointner, W. & Ritzberger-Grünwald, D. 2019. "Climate change as a risk to financial stability," Financial Stability Report, Oesterreichische Nationalbank (Austrian Central Bank), issue 38, pages 30-45.

Schanz, K.-U. 2020. "The role of insurance in mitigating social inequality." Geneva Association. https://www.genevaassociation.org/sites/default/files/research-topics-document-type/pdf_public/social_inequality_report_web_final.pdf

United Nations Development Program. 2021. "Sovereign Debt Vulnerabilities in Developing Economies." New York, UNDP.

UNCTAD. 2020. "From the Great Lockdown to the Great Meltdown: Developing Country Debt in the Time of Covid-19." Trade and Development Report 2020 Update. UNCTAD/GDS/INF/2020/3 https://unctad.org/system/files/official-document/gdsinf2020d3_en.pdf

Xu, Q, Wan, T., Xiong, A., Xiong, W., & Sun, J. 2021. "Preliminary Thoughts on Innovative Program for Enhancing IMF's Capacity to Assist Member States' Anti-Covid Efforts" (in Chinese), Policy Brief, 2021.006. Research Center for International Finance, Chinese Academy of Social Sciences, May, 2021.

Volz, U., Akhtar, S., Gallagher, K.P., Griffith-Jones, S., Haas, J., & Kramer, M. 2021. "Debt Relief for a Green and Inclusive Recovery: Securing Private-Sector Participation and Creating Policy Space for Sustainable Development." Berlin, London, and Boston, MA: Heinrich-Böll Stiftung; SOAS, University of London; and Boston University.