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Policy Brief

Task Force 3: Environment, Energy and Sustainable Development

Addressing Debt Distress in Developing Countries – A Blueprint for Debt-for-Climate-Resilience Swaps

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Key Points

- Low-income countries face the dual challenge of mounting debt pressures and heightened vulnerability to climate change. Climate-related disasters force these nations to borrow at higher costs for recovery, worsening their debt situations and limiting their ability to invest in climate resilience. This "climate debt trap" exacerbates interconnected risks like food insecurity, displacement, and regional conflicts, which spill over internationally.
- The G7 could leverage its influence on international financial institutions—including the IMF, World Bank, and Paris Club—to facilitate and streamline dialogue among key stakeholders. By complementing G20 efforts on debt treatments, the G7 can support low-income countries in building economies resilient to climate change.
- Debt-for-climate-resilience swaps offer a promising solution by alleviating liquidity pressures while fostering investments in climate adaptation. International financial institutions should develop clear eligibility criteria, identify adaptation-related projects for investment and standardize climate performance targets and penalties. Additionally, a framework to secure financial guarantees would be essential for ensuring the effectiveness of such swaps.

Introduction

As the G7 celebrates its 50th anniversary, it faces rising geopolitical and geoeconomic tensions in tandem with worsening global challenges, including climate change. It is critical for the G7, and in its interest, to engage more actively with developing nations. Promoting resilient and flourishing economies both at home and abroad can prevent further fragmentation, risks, and costs. Reconciling financial and climate resilience is particularly urgent and provides a tangible path for domestic and global security. The G7 can and should play a leadership role in this area, in cooperation with the G20, multilateral institutions and emerging economies.

One critical problem faced by many developing countries, especially low-income countries (LICs), lies in the nexus between debt and climate. Climate change is an existential threat to all, but it is particularly acute for developing economies that are disproportionately impacted (IPCC 2023). At the same time, these countries have significantly less resources or fiscal space to prepare for, and respond to, the effects of climate change.

This situation creates a vicious circle, often referred to as the "climate debt trap". As climate-related disasters become more frequent and severe, developing countries are forced to borrow more—and at higher cost due to their weakened creditworthiness—to finance recovery efforts, exacerbating their already precarious debt situations. The increased debt burden further limits their ability to invest in climate resilience and low-carbon transitions, making them even more vulnerable to future climate shocks (Chamon and al. 2022).

Without the fiscal space and investment needed to transition towards a low-carbon and resilient economy, interconnected risks ranging from food insecurity, regional conflicts, displacement, and mass migration are more likely to materialize and spill over internationally; and solutions will only become more difficult to reach. An effective multilateral strategy addressing these issues is thus crucial to both developing and developed countries.

Given the heterogeneous nature and scale of debt stresses and their link to climate, coordinating and streamlining a set of targeted and effective solutions is vital. Public debt levels in LICs remain high (though comparatively lower than levels observed before the implementation of the highly indebted poor countries initiative - HIPC) and are expected to remain stable or decline. The greater challenge for LICs now stems from rising debt service burdens that squeeze available space for development spending (IMF 2025).

This policy brief seeks to address these issues by:

- assessing the current debt and climate nexus (I),
- identifying key existing debt solutions and paths to break away from the ongoing debt spiral (II), and
- recommending that G7 countries work in concert with the G20 and international institutions to encourage ambitious climate resilient investments in low-income and climate vulnerable countries by supporting, including financially, increased use of debt-for-resilience instruments. These can ease liquidity pressures by transforming expensive loans and debt servicing into investments for climate resilience (III).

By highlighting the benefits of debt-for-resilience instruments to both creditor and debtor countries, the G7 can foster trust and partnerships to scale up their use. It should do so in close coordination with international financial institutions, and forums like the G20, Global Sovereign Debt Roundtable, and V20.

The Climate-Debt Nexus: A Double Burden for Low-Income Countries

Climate Impacts

Human-induced climate change has intensified the scope and frequency of extreme weather events, with disproportionate effects on vulnerable communities (IPCC 2023). The series of floods, tropical storms, and wildfires in the past three years alone show the dangerous and disruptive future that lays ahead if prompt and urgent action is not taken.

LICs are disproportionately vulnerable to the effects of climate change, exacerbating existing economic challenges and threatening development gains. In coastal areas, storms and rising sea levels threaten communities and livelihoods. For example, in 2022, devastating floods in Pakistan affected 33 million people causing an estimated $15.2 billion of total economic losses

with dominant impacts on the housing, agricultural, and communication sectors (World Bank 2022).

Water and food security are also at risk. Already, agricultural productivity in regions like Sub-Saharan Africa, South Asia, and Southeast Asia is in decline, jeopardizing food security for millions. In addition, one quarter of the world's population currently faces "extremely high" levels of baseline water stress (Kuzma et al. 2023), with important implications for social stability, especially considering water deficits can be linked to 10% of the increase in migration worldwide (Zaveri et al. 2021).

Tensions on Sovereign Debt

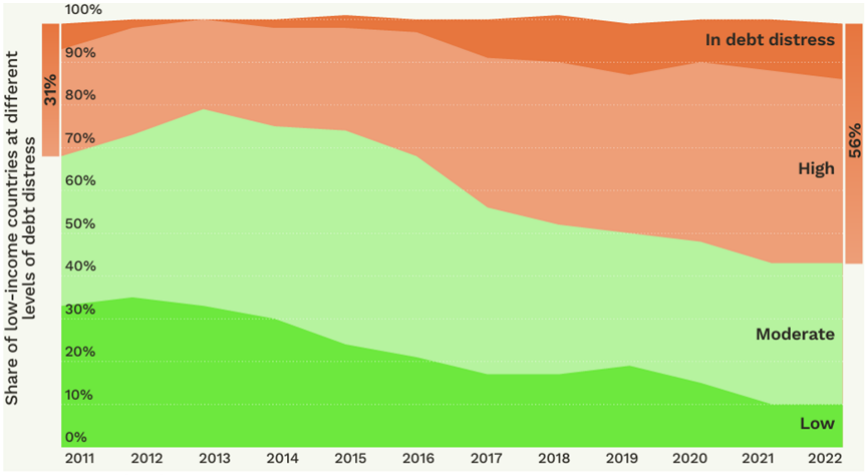
Such extreme weather events and rising risks are unfolding in already challenging financial circumstances.

On the one hand, the projected investment requirement for climate action has been estimated to be an additional US $1.9 trillion per year by 2030 in emerging markets and developing economies (EMDEs) other than China (Independent High-Level Expert Group on Climate Finance, 2024). On the other hand, a series of global shocks, especially in the past five years, have exacerbated pressure on LICs' fiscal space.

Data from the World Bank's 2024 International Debt Statistics (IDS) uncovers the following trend:

- The share of LICs experiencing debt distress or whose debt sustainability is at "high risk" has almost doubled in less than ten years. In 2015, about 30% of countries assessed by the IMF and World Bank Debt Sustainability Framework for Low-Income Countries (LIC-DSF) were found at high risk of debt distress or in debt distress. By 2022, this proportion stood at approximately 60% for LICs (see Fig. 1).

Figure 1. Risk of Debt Distress in Select LICs (2009-2022)



Data source: IMF (2022)[16]

Note: Includes countries eligible for the Debt Service Suspension Initiative with Low Income Country Debt Sustainability Analyses (LIC-DSAs).

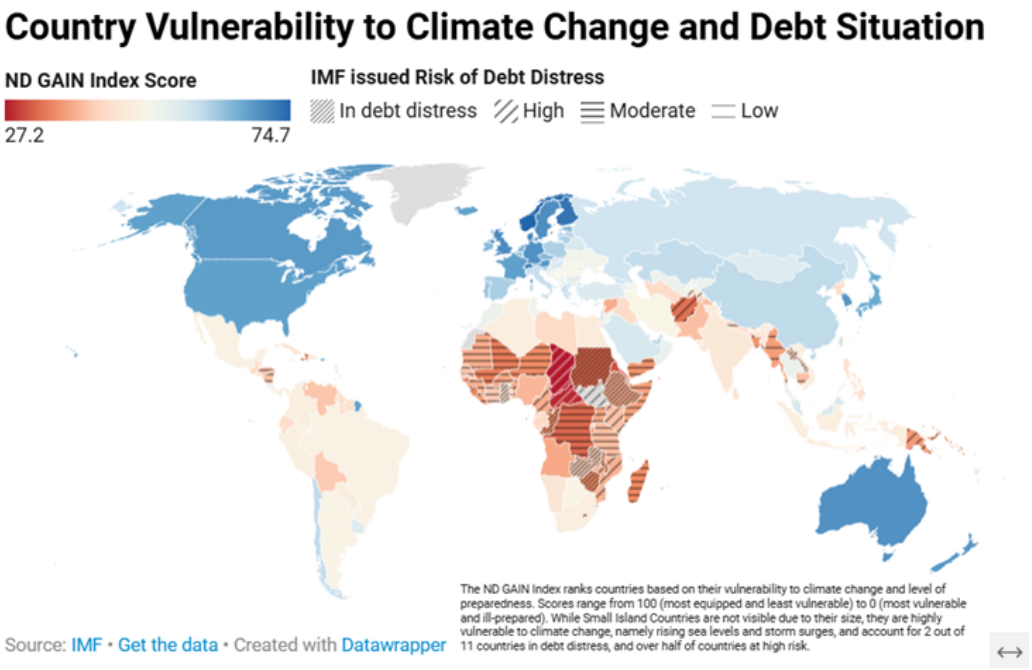
Source: Expert Review on Debt, Nature, and Climate. 2024

- At the same time, the IDS shows that after a decade of steady increase, debt stocks seem to have peaked and have been decreasing over the last three years.
- As such, for many LICs, the real source of financial stress comes from liquidity pressures, rather than their debt stock levels (IMF 2025). In particular, the ability to refinance maturing debt on reasonable (i.e. concessional) financial terms has been difficult in the aftermath of the global pandemic and war in Ukraine. The IDS shows how from 2022 to 2023, net transfers on external debt have turned from a net positive (+ $6 billion) to a net negative flow (-$7 billion) in these countries (Diwan, Harnoys-Vannier, and Kessler 2025).
- Liquidity issues from servicing debt on acceptable terms, if left unaddressed, can escalate into a solvency crisis. A targeted set of solutions is thus required to help countries meet immediate financial obligations and avoid going down an economic path characterized by austerity, compromised critical public spending, and regression on key SDG and climate goals.

The Climate-Debt Nexus

If ineffectively addressed, pressures on sovereign debt will only worsen, particularly for countries most exposed to climate change. A strong correlation exists between climate vulnerability and sovereign debt (Chamon et al. 2022). For example, Somalia and Sudan are among the eleven countries in high debt distress and simultaneously rank in the top 10 countries most vulnerable to climate change (University of Notre Dame Global Adaptation Initiative (ND-GAIN) 2024) (See Fig. 2).

Figure 2. Countries' Vulnerability to Climate Change and Debt Situation



Source: Data synthesized and graphed by authors using the IMF's DSA and ND-GAIN Index.
Note: For more detail and ability to zoom on the map, see here.

Liquidity pressures and limited fiscal space hinder LICs' ability to invest in a resilient future. The current stalemate leaves them vulnerable to more climate induced shocks; climate-vulnerable and low-income countries have already lost $525 billion due to extreme weather events in the past two decades, representing one-fifth of their collective GDP (V20 2022). When these disasters strike, damages and economic losses push countries to borrow more, and at a higher cost—by an average of 117 basis points—due to their weakened creditworthiness (Buhr and al. 2018).

Finally, as highlighted by the IMF, climate change impacts can exacerbate debt vulnerabilities by hindering countries' productive capacity and tax base, creating fiscal costs (Chamon and al. 2022). As such, LICs vulnerable to climate change face a double-edged sword: managing escalating debt pressures while simultaneously tackling climate change impacts.

Targeting the Right Tools and Leveraging the G7 to Foster Partnerships

State of Play on Debt Treatments

Extensive work has already been done to address mounting debt pressures and identify impactful solutions, with diverse tools standing out to tackle solvency or liquidity stresses, where relevant.

To address severe distress and unsustainable debt, the G20 Common Framework has been established to coordinate all involved actors to effectively restructure a country's external debt. The Framework is a crucial tool and has improved since its creation, with ongoing efforts to further optimize its delivery of efficient and timely restructurings.

Progress for a more granular and transparent account of the IMF's LIC-DSF is also undergoing but must be further enhanced to realistically account for climate and nature risks. Indeed, "while under baseline assumptions the risk of a systemic debt crisis appears contained with 30% of high-risk ratings driven predominantly by long-term solvency breaches" (IMF 2025), there are important uncertainties around the baseline.

The IMF's reliance on historical data could seriously underestimate the scale of risks posed by climate change and its cascading effects, including successive shocks and impacts on growth. Incorporating the full effects of such risks is fundamental for policymakers to make informed decisions (Expert Review on Debt, Nature and Climate 2024).

Lastly, as previously highlighted, the IDS and IMF reflect that a time-sensitive issue lies in debt servicing pressures. As such, a combination of pre-emptive tailor-made solutions for countries that are solvent, but face liquidity issues can avoid the need for a costly restructuring of external debt. Such instruments have previously included growth-positive proposals in partnership with the IMF (see Diwan et al. 2024), or small-scale debt for nature or climate swaps, which are on the rise (Ababou 2025).

The blueprint detailed here (part III) would contribute to these efforts as a middle ground mechanism, enabling climate vulnerable low-income countries to work with international financial institutions, Paris and Non-Paris Club countries, and private creditors to ease liquidity pressures and unlock needed fiscal space for resilience projects. By acknowledging the risks of short- and long-term debt pressures and supporting such targeted measures, the G7 can tackle liquidity risks at a low cost and prevent them from inflating into debt sustainability crises.

G7's Role

The COVID 19 pandemic and war in Ukraine uncovered vulnerabilities in global health, energy systems, and supply chains. Rising living costs have spurred social unrest across continents,

with regional conflicts threatening to displace millions, impact trade, and further worsen international geopolitical and geoeconomic fragmentation. As climate change exacerbates risk for each of these issues, world leaders must see through the emerging geopolitical tension and unite to reduce these risks.

North-South diplomatic, financial, and technical collaboration can build a resilient future and safeguard international peace and security. LICs need to engage on a sustainable, growth-positive development path to diversify revenues, build resilient food systems, and promote affordable and reliable energy. Such gains would enable macroeconomic stability and deliver social goods including public health, infrastructure, and education.

While we have seen the rise of private creditors and non-G7 country creditors, with the G20 acting as the main forum for coordination on global debt issues, the G7 still has a strategic role to play. Several G7 countries could find significant interest in pooling their support to help LICs with whom they have ties and partnerships. By supporting LICs in building economies more resilient to climate change, G7 nations can help prevent potential economic crises that might otherwise require costly interventions, thus safeguarding their own financial interests, especially in a context of diminishing official development aid.

G7 members could use their influence on international financial institutions, such as the IMF, the World Bank, and Paris Club, to foster and streamline dialogue among key stakeholders and institutions, complementing G20 efforts.

In the following section, we introduce a blueprint for a debt-for-climate-resilience swap that the G7, in its Finance track, could propose to the G20 and international financial institutions to strengthen cooperation and advance a resilient future for all by addressing mounting debt pressures, while catalyzing adaptation investments.

A Blueprint to Promote Debt-for-Climate-Resilience Swaps

It would consist of a flexible and shared initiative by the G7 and the G20 to promote, scale up, and streamline debt-for-resilience swaps. Through promoted dialogue and greater clarity on eligibility criteria to receive guarantees through the World Bank and other development banks, debt-for-climate-resilience swaps can be developed as a tool, within the arsenal of existing mechanisms, to tackle liquidity issues before these devolve into a solvency crisis while supporting LICs' investment in climate adaptation.

Debt-for-climate swaps

Debt-for-climate swaps are "partial debt relief operations conditional on debtor commitments to undertake climate-related investments" (Chamon et al. 2022). By replacing old with new debt, at a lower cost and often in local currency, they expand space for climate investment and reduce debt risks, without the need for new public finance. In recent years, they have been successfully employed by the Seychelles (2015), Barbados (2020), Belize (2021), and Ecuador (2023), to name a few.

Compared to alternative fiscal support instruments, debt-for-climate swaps provide a particular benefit for countries where debt is not yet unsustainable but where debt vulnerability is exacerbated by climate change and bears a high fiscal risk. As highlighted by Chamon et al. in a 2022 IMF Working Paper, "when climate change is a contributing cause of unsustainable debt, linking debt relief to adaptation actions is essential".

If debt swaps are known instruments that can ease a relevant issue at a low cost, why are they not more heavily used? The set of diverse actors involved, the complexity of certain swap operations, and the narrow scope of projects are entry barriers for climate vulnerable countries and/or LIC that are already struggling to address domestic challenges in a tightened international fiscal space.

Main features of the blueprint for debt- for-climate-resilience swaps

Debt-for-climate-resilience swaps will have to gain acceptance from, and be co-created with, key stakeholders convened by the G7 together with the G20, the IMF, and the World Bank.

Defining Scope

1. **Developing common eligibility criteria. The IMF could leverage its expertise and existing work** (e.g. its debt sustainability analysis) to develop these criteria based on countries' debt sustainability and climate risk exposure. Other indexes also exist, such as the ND-GAIN that assess climate risk exposure and readiness could be harnessed towards this. (Fig. 2) (Annex I)

2. **Identifying adaptation-related projects for investment.** The identification of adaptation-related projects that could absorb the financing made available by the swap operation needs to be led by the country benefiting from the swap, but the assessment of its quality and key features could be done by the World Bank, in concert with regional development banks. A database could be created and issued by the World Bank and the IMF providing an indicative list of past activities and projects that have benefited from such swap operations. This evolving digital repository could help countries identify adequate projects.

3. **Standardizing climate performance targets and penalties.** KPIs can be mandated for the projects, ensuring measurable impacts. In line with recommendations from the IMF, project-based swaps could also be scaled by packaging related projects (see Barbados 2024 debt-for-climate-resilience swap) and possibly linking them with relevant policy reforms. If targets are not met, financial penalties could be redirected into a country-specific climate resilience fund (similar to Barbados' model). Aligned monitoring frameworks can be developed by the World Bank and the IMF with inputs from the G20 and G7.

Enhancing Value Addition for Debtor Countries and Creditors

4. **Securing systematic financial guarantees for debt-for-climate-resilience swap arrangements**. Private creditors' participation is critical in negotiating debt swaps. Guarantees from the World Bank and other multilateral development banks could reduce their financial risk and incentivize engagement[1], and G7 countries themselves could also consider pooling financial support to credit enhancement tools and promoting their standardization. Sovereign sustainability-linked loans (SSLLs) tied to climate goals could also supplement this effort but measuring needs and weighting benefits would need to be done in discussions with the G20 and other platforms.

5. **Encouraging private sector participation.** The blueprint has the scope to leverage blended finance models and mobilize additional financing to fill gaps in swap arrangements, where necessary. Private banks can be incentivized to offer favorable loan terms for debt conversion deals. Civil society actors, e.g. philanthropies and other stakeholders, in a tripartite arrangement, could engage in risk-sharing mechanisms by buying out a portion of the debt in a swap arrangement. Potential of linking reinvestments of freed up capital with carbon credits, revolving funds and other innovative mechanisms may be possible but needs to be explored in detail.

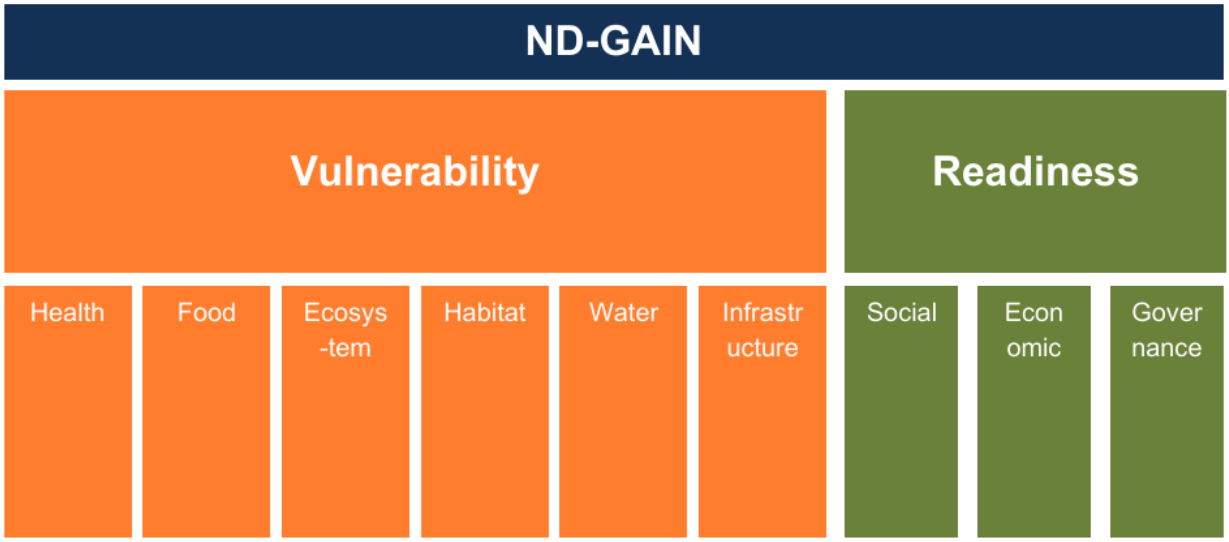
[1] In December of 2024, Barbados was the first country to use a debt-for-resilience operation. Its success provides a unique case study to learn from. Notably, its US$125 million in fiscal savings which will be channeled into new resilience investments was arranged by the CIBC Caribbean, successfully closing the Sustainability Linked Loan transaction and securing US$300 million in guarantees - US$150 million each from the Inter-American Development Bank (IDB) and the European Investment Bank (EIB).
See more at https://www.cibcfcib.com/binaries/content/assets/news-releases/news-releases-2024/pr-debt-for-climate-conversion-barbados-v2.pdf

The G20 South Africa 2025 presidency provides a ripe ground for the G7 to propose such a discussion, particularly with its International Finance Architecture Working Group. The G7 can also leverage its voice to floor the blueprint for discussions under the Global Sovereign Debt Roundtable, in close coordination with the IMF and World Bank.

It would also be fruitful to discuss the blueprint in other venues where developing countries' representation is stronger (e.g., the V20 or the Coalition of Finance Ministers for Climate Action) to ensure LICs' voices are heard and reflected.

ANNEXE I: Choice of ND-GAIN Index to Inform Adaptation Needs

Figure 3: Summary of ND-GAIN Vulnerability and Readiness Indicators



Source: Notre Dame Global Adaptation Initiative, 2024.

Note: Vulnerability is composed of 36 indicators, crossed in 6 sectors. Readiness is composed of 9 indicators.

The Notre Dame Global Adaptation Initiative's (ND-GAIN) Country Index is a widely recognized source that shows a country's current vulnerability to climate disruptions (University of Notre Dame 2024). Its design, features, and longevity provide a robust foundation to inform a DCRI for the following reasons:

- **Relevance**: By assessing two key dimensions, vulnerability and readiness to climate change, the ND-GAIN Index provides a comprehensive assessment of countries' adaptation needs. The score it generates is particularly useful for decision makers to determine where efforts could be targeted and inform regions where initiatives like the DCRI can provide particular support.

- **Multifaceted Scope:** The ND-GAIN Index provides a comprehensive assessment of factors that affect a country' macroeconomic stability by considering six life-supporting sectors for vulnerability–food, water, health, ecosystem service, human habitat, and infrastructure–and three key components to measure readiness–economic readiness, governance readiness and social readiness (Fig. 8).
- **Comprehensive Methodology**: The Index brings an incomparable pool of consistent data, with half a million data points spanning across thirty years. Indeed, the Index builds off forty-five indicators from seventy-four data sources of 182 UN countries from 1995 to the present (ten countries only have readiness scores).
- **Transparency:** The ND GAIN Index is a free and open source resource. Its data can be downloaded by any user to help inform decision making.

About the Authors

Claire Peraldi Decitre joined E3G's Global Macro & Finance Resilience Team in January of 2025, focusing on tackling sovereign debt and scaling up innovative fiscal instruments to deliver climate-aligned development.

She recently graduated Magna Cum Laude from the University of California, Berkeley, with a Bachelor of Science in Society and Environment and Bachelor of Arts in Politics from Sciences Po Paris. Despite an early graduation, Claire received the highest distinction for her independent Honors Thesis that evaluated gaps in British climate policy and mapped the political economy of emergent public order laws that narrow civil liberties.

Sima Kammourieh is the Executive Director for Climate of the Finance for Development Lab.

Before joining the Lab, Sima worked at E3G, leading a program of work on global macroeconomics and finance resilience for climate. She was previously a Director on BNP Paribas's public policy and regulatory affairs team in New York, and served as Economic Advisor in the cabinet of two Ministers from 2013 to 2016 at the French Foreign Affairs Ministry (Quai d'Orsay). She started her career as an economist at the French Treasury. She has published on financial regulation in the age of climate change, as well as on the G7 and G20.

She holds a Master of Science in Economics from HEC Paris, and a Master of Research in Comparative Politics and Middle Eastern Studies from Sciences Po Paris.

Saundharaya Khanna is an economist by training with six years of experience working on just economic transition, inclusive and solidarity-based enterprises, resource efficiency and circular economy, localised climate action, financing for MSMEs and other sustainable solutions. In her various roles in development sector, Saundharaya has developed alternative investment frameworks for rural enterprise clusters led a multi-sector contextual financial analysis for local green enterprises in collaboration with the Green Economy Coalition (GEC)

and documented unique business models for the Doughnut Economics Action Lab (DEAL), among other initiatives.

She has also been actively representing young voices in the T20 Engagement Group under the G20 Presidencies. This year, T20 Brasil published two of her policy briefs on 'Promoting Women Enterprise Clusters as Agents of Change in a Just Green Transition of G20 Economies' and 'Enhancing Role of Young Girls and Women in Climate Action through Fair and Equitable Access to Technology'. Her other policy piece on 'Assessing Return of Investment in Nature through an SDG-Aligned Global Monitoring, Evaluation and Learning Framework', developed in collaboration with co-authors from the Green Economy Coalition (GEC) and Development Alternatives, was published by T20 under the G20 India Presidency in 2023.

Amaan Habibulla is a senior at Middlebury College, majoring in Economics with a focus on Climate Finance and Sustainable Development. He is currently a research assistant at Beyond Bretton Woods, a think tank dedicated to reimagining the international financial architecture for a regenerative and equitable future. With a strong commitment to advancing a just transition, Amaan's academic and professional pursuits center on innovating financial tools and policy solutions to address global environmental and economic challenges.

Amaan has contributed to a study for the International Resource Panel by developing case studies on resource efficiency and authoring policy-focused analysis. Amaan is intrigued by the intersection between sustainability, finance, and equitable development and hopes to focus his professional pursuits in this space. In January 2025, Amaan will begin his senior thesis on the climate-debt trap facing vulnerable nations, a topic that resonates deeply with his passion for equitable climate solutions. Through this research, he aims to propose innovative strategies for breaking the climate-debt spiral and enabling sustainable resilience in the most affected regions.

Salvatore Serravalle joined E3G in October 2024, where he leads initiatives to enhance financial systems and macro-budgetary policies, aiming to accelerate the global transition to a low-carbon future.

With over 20 years of experience as an economist, he has held several roles at the French Treasury in fiscal policy, labor market, and European affairs departments. His responsibilities included designing public policies and preparing EU policy briefings for the Finance Minister. He also served as Deputy Secretary General for EU Affairs in the Prime Minister's office and headed the Green Economy Department at the Ministry of Environment. Before joining E3G, Salvatore worked at Bank of America, overseeing public policy for France and the EU.

He holds a master's degree from Ensae Paris in applied mathematics, statistics, and economic analysis.

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