



**THIRD G20 INTERNATIONAL  
FINANCIAL ARCHITECTURE WORKING  
GROUP MEETING  
GOA**

**Side Event: 'Towards Orderly Green  
Transition – Investment  
Requirements and Managing Risks to Capital  
Flows'**

**June 06 2023, 16:00 - 17:30 hrs (IST)**



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**ONE EARTH • ONE FAMILY**  
**ONE FUTURE**

# **Towards Orderly Green Transition – Investment Requirements and Managing Risks to Capital Flows**

**June 06 2023, 16:00 - 17:30 hrs (IST)**

## **Agenda**

- 1. Welcome Address** by **Ms. Mohua Roy** on behalf of Indian G20 Presidency
- 2. Keynote Address** by **Mr. Luiz Awazu Pereira da Silva**, Deputy General Manager, BIS; and former Deputy Governor, Central Bank of Brazil
- 3. Panel Discussion**

**Moderator – Mr. Amar Bhattacharya**, Senior Fellow, Global Economy and Development, Centre for Sustainable Development, Brookings Institution

## **Panellists**

- **Ms. Flore-Anne Messy**, OECD G20/G7/APEC Finance DD & Senior Counsellor, OECD
- **Mr. Mattia Romani**, Partner, Systemiq; and former MD, EBRD
- **Mr. Gagan Sidhu**, Director, CEEW Centre for Energy Finance

- 4. Questions & Answers**
- 5. Summary of Discussion by OECD**
- 6. Vote of Thanks** by **Mr. Marc Uzan**, Executive Director, Reinventing Bretton Woods Committee

## **Brief Profile of Speakers**



### **Luiz Awazu Pereira da Silva**

Deputy General Manager, BIS; and former Deputy Governor, Central Bank of Brazil

Luiz Awazu Pereira da Silva became Deputy General Manager of the BIS on 1 October 2015. As Deputy General Manager, he is also responsible for the Bank's risk, audit and compliance functions.

Before joining the BIS, Mr Pereira da Silva had been Deputy Governor of the Central Bank of Brazil since 2010. Prior to that, he worked in various positions for the World Bank in Washington DC, Tokyo and southern Africa. He also served as Chief Economist for the Brazilian Ministry of Budget and Planning, and as Brazil's Deputy Finance Minister in charge of international affairs.

Mr Pereira da Silva holds a doctorate in economics and MPhil from Panthéon-Sorbonne University, and graduated from the École des Hautes Etudes Commerciales (HEC) Paris and the Institut d'Études Politiques (Sciences Po) in Paris.



### **Amar Bhattacharya**

Senior Fellow, Global Economy and Development, Centre for Sustainable Development, Brookings Institution

Amar Bhattacharya is Senior Fellow at the Global Economy and Development Program at Brookings Institution and Visiting Professor in Practice at the London School of Economics. His focus areas are the global economy, sustainable finance, global governance, and the links between climate and development including on the role of sustainable infrastructure. He co-led the Independent Expert Group on Climate Finance commissioned by the UN Secretary General. He is currently serving as the Executive Secretary of the High-Level Expert Group on Climate Finance launched by the COP26

and COP27 Presidencies. From April 2007 until September 2014 he was Director of the Group of 24, an intergovernmental group of developing country Finance Ministers and Central Bank Governors. Prior to taking up his position with the G24, Mr. Bhattacharya had a long-standing career in the World Bank. His last position was Senior Advisor to the President on the Bank's international engagements and Head of the International Policy and Partnership Group. He completed his undergraduate studies at the University of Delhi and Brandeis University and his graduate education at Princeton University.



**Flore-Anne Messy**

G20 Finance DD and Senior Counsellor, Directorate for Financial and Enterprise Affairs, OECD

Flore-Anne Messy is Senior Counsellor in the OECD Directorate for Financial and Enterprise Affairs, G20/G7/APEC Finance DD and Secretary General of the International Organisation of Pension Supervisors (IOPS)

She joined the OECD in June 2000 to develop the activities of the Insurance and Private Pensions Committee. After several years working on the development of pensions, insurance and financial market policy issues, she launched and steered the OECD work on financial literacy and consumer protection (including the OECD/INFE, PISA financial literacy exercises, the G20/OECD Task Force on Financial Consumer Protection and the secretariat of FinCoNet). From 2016, she headed successively the OECD Insurance Private Pensions and Financial Market Division and the Consumer Finance, Insurance and Pensions Division.

Prior to the OECD she worked as a consultant and auditor for banks and insurance companies at Deloitte Touche Tomatsu. She graduated from the Institute of Political Studies of Paris and received her thesis in international economics from University Pantheon-Sorbonne of Paris.



## **Mattia Romani**

Partner, Systemiq Earth

Mattia Romani, a SYSTEMIQ partner, is an internationally recognised leader on sustainable finance, power system decarbonisation, and transition economics. He was previously with Autonomy Capital, where his work as Head of Sustainability ranged from sustainability investment and carbon market analysis to energy and mobility research. Before that he served as Managing Director for Economics, Policy and Governance at the European Bank for Reconstruction and Development between 2014 and 2020, and was formerly Deputy Director General and Chief Economist of the Global Green Growth Institute. He worked closely with Lord Nicholas Stern on the ground-breaking Stern Review, and was a senior expert in sustainability and resource productivity at McKinsey. He was also a member of the Shell scenario team.



## **Gagan Sidhu**

Director, CEEW Centre for Energy Finance

Gagan Sidhu is Director of the CEEW Centre for Energy Finance (CEEW-CEF) where his work is focused on advancing the energy transition in emerging economies. Gagan was previously Adviser to CEF in which capacity he provided support to the team in the areas of clean energy markets and the finance ecosystem. In parallel, he was also engaged in independently advising entrepreneurs and corporates on capital raising and deployment strategies in the renewable energy space.

Prior to joining CEEW, Gagan was CFO of GMR Renewable Energy where he held responsibility over strategic finance, project finance and accounting functional areas, including relationship management with lenders, equity co-investors & rating agencies. Gagan has also worked in the investment banking industry across multiple geographic locations (Tokyo, Singapore, London, Dubai & Delhi), where his various roles with

leading European and Asian financial institutions covered M&A, capital markets, straight & structured lending and cross-sell.

His writings on renewables finance and policy related topics have appeared in publications such as The Economic Times, Energetica, Financial Express, Infraline Plus, Renewable Energy World and Solar Quarter. Gagan holds a BA (Hons) degree in Economics from Delhi University's Shri Ram College of Commerce, and an MBA from Duke University.



## BACKGROUND NOTE

### GREEN FINANCE WILL HAVE TO FLOW TO EMs...

Emerging Market Economies (EMs) will need significant green finance in the coming years for a smooth transition to become low-emission economies and to adapt to the physical effects of climate change. EMs currently account for two-thirds of global greenhouse gas emissions, though their emissions in per capita terms, and cumulative historical emissions are lower than Advanced Economies. Nevertheless, EMs are highly vulnerable to climate hazards. Green finance is needed to transform capital-intensive sectors such as energy systems, agriculture, transport, infrastructure and water supply.

Global infrastructure (energy, transport and water) for instance is responsible for 60% of global carbon emissions and is estimated to face an investment gap of USD 6.3 trillion (tln) per year from 2016 to 2030, the majority of which is required in developing and emerging economies (OECD/World Bank/UNEP, 2018; OECD, 2020).

A recent report by the International Energy Agency (IEA) estimates that to stay on track to achieve net-zero greenhouse gas emissions by 2050, investment needs of emerging and developing economies solely in the renewable energy sector could reach USD 1 tln a year by 2030 (IEA, 2021).

EMs currently rely mainly on domestic public sector financing to fund green investment (Naran et al., 2022; IEA, 2021). However, as the already narrow fiscal space is shrinking further in both EMs and Advanced Economies (AEs), as a result of the COVID-19 crisis and other current geopolitical developments, public finance would not be sufficient. Official lending by bilateral and multilateral development agencies and banks will also be limited (OECD, 2022).

Meeting the investment requirements of IEA scenarios, including achieving net-zero, involves a dramatic shift in the types of capital providers in EMs to private sources (IEA, 2021). According to estimates by the Institute of International Finance (IIF) and McKinsey, private financial institutions could finance about 55% of net-zero investment needs in EMs (IIF/McKinsey, 2022). A similar figure corresponds to estimates provided by the Independent High-Level Expert Group on Climate Finance, according to which around 55% of the climate financing needed can be covered by private investment, 25% by Multilateral Development Banks (MDBs), and 20% by other actors using innovative instruments for low-cost financing (Songwe, Stern and Bhattacharya, 2022).

Although emerging and developing countries (even without China) account for around 40% of the global emissions reduction required to move to the sustainable development scenario (SDS) according to the IEA, these countries currently hold only 10% of global financial wealth (IEA, 2021). Foreign investors will thus be needed in the context of a small domestic investor base and limited public capacity.

Cross-border capital flows will therefore be particularly important for EMs. Attracting higher levels of debt and equity finance from private sources will require enhancing the capacity of markets to attract much higher levels of investment from international sources. The IEA estimates that around one quarter of the primary finance for energy investments in EMs has come from international sources over the period 2015-20 (IEA, 2021).

### **...BRINGING A NUMBER OF OPPORTUNITIES AND RISKS FOR EMs**

The fast growth of sustainable investment in the last three years and its future potential brings both opportunities and risks for EMs, which will have to be managed accordingly.

A first set of risks relates to capital flows and financial stability concerns: there could be some rebalancing of portfolios towards other greener countries implementing low-carbon strategies, entailing capital outflows, which may ultimately lead to heightened volatility.

There is also a risk related to the removal of companies, either individually or in groups of companies, from green and sustainable indices, which could imply reversal of capital flows.

In addition, investors still hold a non-trivial amount of “brown” assets, which they may need to dispose of, whether due to regulations or investors’ preferences. This presents important opportunities but also transition risks in the case of assets located in EMs.

Finally, physical and transition risks would be more prominent for countries with certain characteristics, such as significant exposure to natural disasters or lagging behind on climate goals and not being able to attract stable sources of financing by sustainable investment funds.

### **THE IMPORTANCE OF USING PRECISE AND ROBUST GREEN METRICS**

When considering these aspects and the overall green transition, it is worth keeping in mind the disconnect between the high number of sustainable flows and actual “green” flows by private investors. Recent OECD analysis (2023) suggests that the asset allocation to green investments is much smaller than large headline figures would imply, suggesting that further efforts should be taken to mitigate green-washing risks. Security-level analysis of investment funds’ holdings shows that only a very limited share of total equity and bond



investments goes to companies involved in carbon solutions and, within this share, an even smaller proportion goes to EMs.

Better data is needed to understand the actual green impact of investments. A report by the OECD (2023) to the IFA WG contributes to current efforts to understand the green finance landscape in EMs, and to existing works by other International Organisations (IOs) and players, using granular fund-level and asset-level data.

Another issue related to measurement is bottlenecks linked to ESG/green ratings and broader issues of transparency and disclosures. ESG ratings may not be measuring what they should. The ESG concept is in itself very broad, and this issue is complicated by a lack of transparency around the diverse metrics and methodologies used to assess green performance.

OECD research (OECD, 2022) finds limited correlation between greenhouse gas emissions, carbon emission intensity and high E pillar scores, with high E pillar scores positively correlated with high greenhouse gas emissions in some cases. Past efforts to reduce carbon footprint and intensity do not appear to be factored into the assessment of firms' ability to deliver on forward-looking commitments. Also, the E pillar is typically a small component of the overall ESG score.

On the other hand, E pillar scores appear to be correlated with factors that are not directly related to environmental issues. Environmental pillar scores show greater correlation with market capitalisation, for instance.

### **WHICH FACTORS ARE HELPING TO ATTRACT INVESTMENT TO EMs**

Given the multiplicity of barriers to green investment in EMs, lifting only one or two of them is unlikely to lead to significantly stronger flows. A comprehensive approach to the issue is needed, addressing the various factors that slow down green investment in EMs, taking into account the specific conditions in each particular market.

OECD analysis (2023) suggests that green finance flows in higher quantities towards EMs with deeper and more developed and open financial markets, with a large domestic investor base. More investment goes to EMs that have lower portfolio inflow restrictions, low tax burden, stronger property rights, stronger rule of law, control of corruption and regulatory quality.

The availability of profitable green projects and the competitiveness of green manufacturing supply chains in a given country are also important factors that are likely

to attract investors. Countries that are important market players in a renewable energy value chain (e.g. solar photovoltaic panels) are able to attract more green investment.

## QUESTIONS FOR DISCUSSION:

Against this context, this side event brings together policymakers, International Organisations, and the private sector to discuss the following issues:

- How can EMs be supported in attracting green capital flows?
- Which are the risks (e.g. volatility, physical, transition risks) that should be considered in relation to these green capital flows?
- How can the ESG ratings be harmonised/standardised across rating agencies, and be made to reflect the actual environmental impact of the investments?
- How can some barriers be lifted, for example, in the area of data provision and measurement and ESG ratings, and which could make EMs more attractive targets for green capital flows?
- Can lessons be learnt from EMs that have successfully attracted green capital flows?
- What could be the role of risk sharing mechanisms in facilitating stable green investment flows to the EMs?
- How can policy and regulatory constraints that impede green capital flows to EMs be overcome?

## CONTEXT

This side event provides the opportunity for an in-depth discussion on one of the topics in the agenda of the G20 International Financial Architecture (IFA) Working Group meeting on 6-7 June 2023, related to green capital flows and Emerging Markets (EMs). While the issue of climate and green finance is being discussed in a number of *fora*, this seminar would highlight an emerging risk, *viz.*, the possible impact of shift in investment preferences towards the “ESG investments” on capital flows. The objective of the seminar is to discuss this risk and suggest a way ahead for future work in this regard.

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