

ROAD TO INDIA'S G20 PRESIDENCY: Green Multilateralism

31 AUGUST 2022, 17:30–18:45 IST



Programme Overview

The G20 and G7 have recognised the importance of collective action to address challenges related to the environment and climate change. The G20 has acknowledged the close nexus between climate and energy, thus underlining the importance of just energy transitions, reducing global emissions, and enhancing adaptation to climate change. Similarly, the G7 has called on the global community to leverage the synergies between climate and biodiversity action, clean energy transition, and environmental protection to inform long-term transformative change. Both G20 and G7 have committed to further the achievement of the 2030 Agenda for Sustainable Development Goals, the UNFCCC, and the Paris Agreement. Furthermore, the G7 has initiated the discourse on establishing an open, cooperative international “climate club”, which is consistent with international rules.

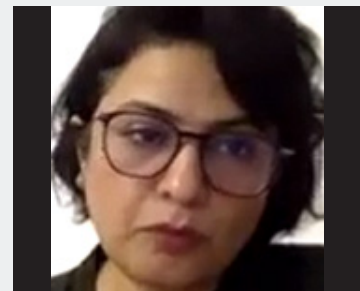
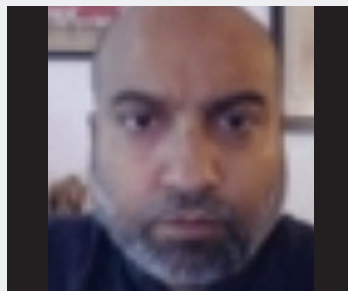
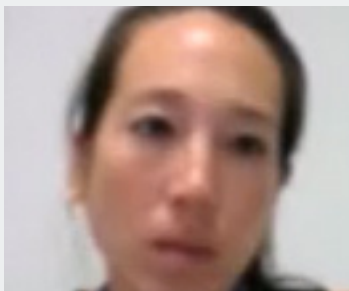
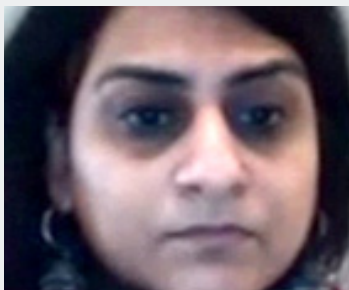
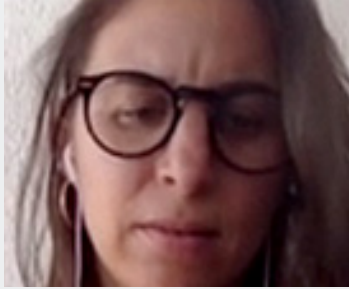
However, several challenges lie ahead of the road toward ensuring ‘green’ multilateralism. Given the intertwined nature of governance frameworks for international trade and climate change, the implementation of national policies for climate change, such as the Carbon Border Adjustment Mechanisms (CBAM), may amplify the tension with the existing trade regime. The lack of a global policy framework on carbon pricing mechanisms poses another challenge for a collective global climate action plan. Additionally, the mobilisation of large-scale finance for addressing climate change is a serious concern for emerging and developing economies.

What role can International Financial Institutions (IFIs), together with national governments and national development agencies, play in incentivising and unlocking private climate financing to facilitate an economy-wide transition in developing countries? Is the carbon pricing mechanism a feasible solution for developing countries such as India to mitigate

climate change? Should multilateral groupings such as the G20 support the development of an international carbon price floor or a similar arrangement? Can a climate club help eliminate the patchwork of national regulations and accelerate international coordination on climate change mitigation?

The Observer Research Foundation in partnership with the India Office of the Konrad-Adenauer-Stiftung (KAS) organised a closed-door roundtable titled “Road to India’s G20 Presidency: Green Multilateralism” on 31 August 2022, at 17:30 IST. This session aimed to explore the challenges and solutions towards ensuring a coordinated approach toward green multilateralism. Furthermore, it aimed to develop key recommendations for India’s G20 presidency. We hope that through these convenings, Indian policymakers and their German counterparts can identify key mechanisms that would help initiate further international cooperation, find common ground on points of contention, and work towards policies that enable green multilateralism.

Glimpses



Introductory Remarks

Adrian Haack, Director, KAS India Office

Adrian Haack noted the urgent need to address the climate change agenda during India's G20 presidency. Dr Haack highlighted Germany's efforts to reduce carbon emissions—in August 2022, Germany launched the world's first fleet of 14 hydrogen-powered trains, which aim to save up to 4,000 tonnes of carbon emission in a year. As India's largest trade partner in Europe, Germany has a shared objective of fostering the green partnership. Recently, India and Germany signed a joint declaration of intent on Indo-German partnership for green and sustainable development. According to the declaration, Germany pledged US\$10.52 billion as support to India until 2030 to enable the country to meet its target of raising its non-fossil energy generation capacity to 500 GW. He underlined Germany's support for India's green initiatives such as 'One Sun, One World, One Grid' and Coalition for Disaster Resilient Infrastructure. Moreover, Dr Haack reiterated the importance of creating a climate club to reinforce the sense of urgency of climate change. He noted that the climate club would be critical in coordinating aspects such as technology transfer, shared regulation, and intellectual property rights.

Jayant Sinha, Member of Parliament, India

Jayant Sinha highlighted that it is crucial to unlock the surplus investment flow from Global North to Global South. He cited a recent Asia Society study, which highlighted the existing capital requirement of US\$ 5-10 trillion to drive the net-zero commitment in India by 2050. Currently, for India, the total corporate investment stands at merely US\$ 100-150 billion. Thus, Mr Sinha noted that there is an enormous gap that can be bridged to drive the decarbonisation agenda in India. He highlighted that for India, net zero is net positive, wherein decarbonisation and development are closely related. The capital investment infused into cost-effective green technologies will result in increased GDP, increased balance of payments, and improved public health and employment for India. Additionally, capital infusion into commercial sectors such as electric mobility, solar power, green cement, green steel, and green fertiliser can help the Global North earn a return for its investors.

Mr Sinha also highlighted that with India taking up the G20 presidency in December this year, it has an opportunity to go beyond the Paris Agreement and initiate a global climate alliance, which will enable capital flows from the Global North to Global South. Such a climate alliance should acknowledge the principle of Common-But-Differentiated-Responsibilities (CBDR). This will allow G7 countries to set up more ambitious targets, but at the same time, it can provide the Global South with an enabling environment to set legally binding sovereign treaties, which will help drive both—development and decarbonisation.

Naoyuki Yoshino, Professor Emeritus, Keio University, Japan; Former Dean and CEO, Asian Development Bank Institute (ADBI)

Naoyuki Yoshino highlighted that there are two kinds of green projects. The first kind is large-scale projects, such as hydro projects found in Southeast Asia, where private finance can be brought in. He noted that traditionally, electricity derived its revenue from user charges—today, electric power supply has created new businesses in the region, which leads to spill-over tax revenues. He proposes that to enhance the private sector participation, 50 percent of the spill-over tax revenues from new businesses can be returned to power operators.

The second type is community-based projects such as solar power projects found in Cambodia. In such an arrangement, the community contributes to setting up the project, which can sufficiently supply electricity to the entire village. Additionally, Dr Yoshino expressed his scepticism regarding the green credit rating agencies and green bonds. According to him, each credit agency has its own definition of 'green'. Similarly, each green bond has different yield rates, which distorts the portfolio distribution. According to him, it is necessary to ensure common definitions to avoid distortions.

Remarks

Tapan Sarker, Finance Discipline Lead, School of Business, Faculty of Business, Education, Law, and Arts, University of Southern Queensland, Australia

Tapan Sarker reiterated that it is crucial to incentivise private sector financing in developing countries. According to him, the challenges in developed and developing countries differ. For instance, while the carbon tax could be a good tool for developed countries to reduce emissions, for developing countries, it is likely to add additional costs to companies. Similarly, the political challenges are far more in developing countries. For the Global South, public finance is still the mainstream source of climate finance as the capacity of the private sector is limited. Thus, we need to forge more partnerships between the private and public sectors—with the public sector providing fiscal incentives for greater private sector participation. Dr Sarker also highlighted that developing countries are more likely to face higher institutional challenges. Therefore, for India's G20 presidency, it must direct focus on reforming its governance and institutions.

Suranjali Tandon, Assistant Professor, The National Institute of Public Finance and Policy, India

Suranjali Tandon highlighted the need to “marry the language” of green finance and design appropriate green financial plumbing needs—including taxonomies, creating asset classes, and addressing counterproductive regulations.

She reiterated that fiscal incentives would be useful in attracting foreign private sector investment, however, she also noted that FDI still accounts for a very small percentage of the Indian economy. According to her, designing a carbon tax would require—balancing behavioural change with equity concerns. Moreover, while the G20 has recognised carbon pricing as a potential tool for addressing climate change, the G20 members need to assess and recalibrate how cross-border carbon pricing mechanisms will reshape international trade and taxation. She also noted that it is important for G20 members to collaborate on how the carbon tax revenues could be utilised—whether they would be used to enhance social security or for new investment opportunities.

Sylvia Beyer, Senior Energy Policy Analyst, International Energy Agency

Sylvia Beyer highlighted that the developed economies' 2009 pledge to provide US\$100 billion of climate finance to developing countries every year by 2020 remains unfulfilled. The latest OECD data shows in 2020, US\$ 83.3 billion was provided and mobilised for climate, US\$ 16.7 billion short of the intended US\$ 100-billion level in the initial target year of the goal. While adaptation finance continues to grow, mitigation finance remained the core focus area.

According to her, adopting whole-of-government national energy transitions toward net-zero emissions can provide the necessary stability of the regulatory framework across a range of ministries—finance, energy, climate/environment, and industry. This alignment of pathways, policies and tracking would be critical for ensuring investment in the transition. Adopting legal net-zero targets and whole-of-government frameworks will be an important pillar of robust and stable long-term policies, strategies, and predictable investment frameworks for the private sector. She noted that economy-wide transitions can be supported by phasing in policy packages that include stable incentive frameworks for clean energy technologies, regulations and standards, alongside carbon pricing and taxes, and phasing out of fossil fuel subsidies.

Moreover, she underlined that India is now designing a national carbon pricing scheme, building on the excellent Perform Achieve Trade energy efficiency scheme. According to her, such a scheme would be helpful in India. For the design of such mechanisms in developing countries, it will be useful for India to learn from other countries that have gone through similar activities. She reiterated that India's G20 presidency should continue sharing the experiences (both best practices and lessons learned) amongst countries, maybe in the sustainable finance working group, which has now agreed to a transition finance agenda that includes carbon pricing schemes.

RR Rashmi, Distinguished Fellow and Programme Director, TERI, India

RR Rashmi highlighted that there are three main challenges for India's G20 presidency. According to him, the first challenge is enhancing the role of the private sector—the private sector must ensure the availability of more risk capital, which is consistent with the countries' national ambitions. The second challenge is addressing currency risk—Mr Rashmi proposed creating a global hedge fund that could address such a risk. The third challenge is the implementation of a nationwide carbon market. He noted that carbon pricing is a powerful policy tool to mitigate climate change, however, several challenges can impede its implementation in developing countries. In developing countries such as India, political barriers, fragmentation, and distortion of the energy sector could especially pose difficulties in the adoption of a uniform carbon pricing mechanism.

He also highlighted the importance of scaling up green technology transfers and bridging the knowledge gaps in the Global South. The Global Environment Facility (GEF) is one such initiative that aims at obtaining new technologies and project financing at a low cost. The Paris Agreement also played a key role in elaborating the provisions of technology transfer and financing, however, the implementation of such transfers still suffer a funding shortfall. According to him, the G20 members must aim at developing technology facilitation mechanisms to support the needs of the developing countries in technology development and transfer.

Delfina Lopez Freijido, Co-lead of the Finance for Nature Unit, International Union for Conservation of Nature (IUCN)

Delfina Lopez Freijido noted the importance of policy interventions by the public sector. She highlighted that the climate club could play a crucial role in reducing the distortions, especially fossil fuel subsidies. She reiterated that it is important to address risk investment to ensure sustainable and resilient infrastructure in developing economies. According to her, the international financial institutions and multilateral development banks have a crucial role to play in attracting private sector investment in green infrastructure, as they have a range of de-risking tools and approaches at their disposal.

Galit Palzur, Expert on Corporate Risk Management of Disasters, Climate Change and Extreme Events, Israel

Galit Palzur noted that the G20 must highlight the importance of improving domestic capacities in the form of building a bankable pipeline of shovel-ready projects. It emphasised the need to enhance the “country platform approach” to increase the private capital flows to developing and emerging economies. She highlighted that while many G20 members have taken several steps to align their financial systems with sustainable development and climate change risks, there is a need to create comparable standards for financial assets across nations.

Shruti Sharma, Senior Policy Advisor, IISD, India

Shruti Sharma noted that India and some other emerging economies have performed well towards reforming fossil fuel subsidies, thus, it would be a good agenda point to see in India’s upcoming G20 presidency. Another agenda point could be the climate leadership and target setting by state-owned Enterprises (PSUs/SoEs). Several PSUs in major economies (including India) have announced new clean energy partnerships and targets,

however, most have not set out clear strategies for adjusting business models to clean energy transition and net-zero. According to Ms Sharma, G20 leadership on this aspect could be useful and an easy win for consensus building.

Emre Tiflik, Director, Sustainability Research, Institute of International Finance, US

Emre Tiflik highlighted that the private sector has two major concerns. The first concern is the lack of pipeline on projects—for the private sector, there is a lack of clarity on what is investible and available. The second concern is the lack of transparency—there is information asymmetry in the market, especially in ESG-related investment opportunities. Thus, there is an urgent need for a transparent flow of information. According to him, Multilateral Development Banks (MDBs) play a crucial role in addressing the flow of capital. It is important to optimise the MDB balance sheets such that there is greater collaboration between the private sector investors and MDBs.

Neha Kumar, Programme Manager, Climate Bond Initiative, India

Neha Kumar noted that India is a member of the International Platform for Sustainable Finance—the platform is a forum for dialogue between policymakers, with the overall aim of increasing the amount of private capital being invested in environmentally sustainable investments. India's thinking is not to reinvent the wheel but to work on a regime that not only has a common language but also contributes something new that is important within its own context and that of other developing economies.

According to Ms Kumar, it is crucial to task the Ministry of Finance to develop a green taxonomy, build a sustainable finance architecture, and define the role of central banks. Moreover, she noted that India's stance is unique because

it not only focuses on mitigation and adaptation but also aspects such as just transition and employment creation. It is important to understand how much leeway the Indian presidency will have to set new rules and tweak existing rules, which can be demonstrated by domestic action. A roadmap for India's G20 presidency can include achieving low-hanging fruits such as the creation of an alliance that has political backing and addresses political economy constraints in the grand bargain. She also reinforced that transition finance and de-risking play a key role in addressing climate change.

Social Media Coverage

← Thread



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.@orfonline & @KASonline recently organised a roundtable on 'Road to India's G20 Presidency: Green Multilateralism.'

Follow this thread for the key takeaways from the discussion.

#G20 #India #multilateralism #ClimateEmergency
#climatefinance





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Replying to @orfecon

There is a need to “marry the language” of #greenfinance and design appropriate green financial plumbing needs—including taxonomies, creating asset classes and addressing counterproductive regulations.

#G20 #India



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While the #G20 has recognised #carbon pricing as a potential tool for addressing #climatechange, the members need to assess how cross-border carbon pricing mechanisms will reshape international #trade and #taxation.

#India



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Traditionally, #electricity derived its revenue from user charges—today, 50 percent of spillover #tax revenues from new businesses created through electric power supply can be returned to #power operators, which will help bring in private sector participation.

#G20 #India



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Programme

Date: 31 AUGUST 2022

Time: 17:30–18:45 IST

Programme Flow

17:20 – 17:30: Participants log-in

17:30 – 17:32: Welcome Remarks by Adrian Haack, Director of the India Office of the
Konrad-Adenauer-Stiftung (KAS)

17:32 – 17:34: Opening Intervention by Shri Jayant Sinha, Member of Parliament,
India

17:34 – 18:45: Moderated Discussion

Moderator: Mihir Sharma, Director, Centre for Economy and Growth Programme,
Observer Research Foundation (ORF)

Participant Profiles



Adrian Haack, Director, KAS India Branch Office

Dr disc. pol. Adrian Haack is the Director of the India Office of the Konrad Adenauer Foundation (KAS) in New Delhi. Dr Haack studied political science in Hanover and Warsaw and received his doctorate from the University of Göttingen. He was supported by a scholarship and published a book on the European Union. Dr Haack served in a battle tank unit in the First Division in the German Army. Years later he took the oath of duty as an officer in the Navy reserve forces. In the CDU, Dr Haack was involved at the age of seventeen. In CDU's youth branch and the party itself, he held numerous positions: He was the youngest member of the CDU executive board at the state level and election candidate in 2021. Since 2015, he worked for the parliamentary group in the field of free trade and security policy. Most recently, he headed the CDU General Secretary's Bundestag staff for three years.



**Mihir Sharma, Director, Centre for Economy and Growth Programme,
Observer Research Foundation**

Mihir Swarup Sharma was trained as an economist and political scientist in Delhi and Boston. His book, *Restart: The Last Chance for the Indian Economy*, was published in 2015; it won the Tata LitLive Best Business Book of the Year and was longlisted for the Financial Times–McKinsey Business Book of the Year. In 2019, Mihir co-edited *What the Economy Needs Now* with Abhijit Banerjee, Gita Gopinath and Raghuram Rajan. He is also the India columnist for Bloomberg Opinion, on the Editorial Board of the Business Standard newspaper in New Delhi, and an Aspen Fellow.



**Delfina Lopez Freijido, Co-lead of the Finance for Nature Unit,
International Union for Conservation of Nature (IUCN)**

Delfina Lopez Freijido joins the International Union for Conservation of Nature (IUCN) as the Co-lead of the Finance for Nature Unit. In this capacity, Delfina will seek to build the shape and content of an investment strategic solution that can provide for scale and innovation in financing for nature and support IUCN's efforts to halt and reverse the loss of biodiversity by 2030 and achieve recovery and restoration by 2050.

Formerly, she was Head of Sustainable Finance at Banco de la Nación Argentina. There she spearheaded the development of the Sustainable Finance Practice, building it as a beacon for the local market. She has also worked on projects aimed at scaling sustainable digital finance. Among these was being the Senior Consultant at Fasset, a fintech company applying blockchain technology to support scaling up finance for sustainable infrastructure. In 2018, Delfina led the sustainable finance agenda at the G20 during Argentina's presidency. Under her leadership, the G20 Sustainable Finance Study Group achieved consensus towards creating sustainable assets for the capital markets, developing sustainable PE/VC, and exploring applications of digital technologies to sustainable finance.

Previously, she acted as Manager for Investors Assistance at the Argentine Investment and International Trade Agency. At the Government of the City of Buenos Aires, she promoted sustainable finance initiatives, including the launch of the first social impact bond in the country. As a project manager, she has worked in the fields of investment, housing, energy, waste management, and the fashion industry, all through a sustainable development lens. Her entrepreneurial spirit brought her to co-found three ventures, Acrux (impact investment advisory), Reveillon (apparel renting), and DAT Group (sustainable digital finance solutions development).

Delfina holds a Bachelor's Degree in International Relations from Di Tella University and a Master's double degree in Public Administration from the Institut d'Etudes Politiques de Paris and Columbia University.



Emre Tiftik, Director, Sustainability Research, Institute of International Finance, US

Emre Tiftik is currently the Director of Sustainability Research at the Institute of International Finance. He is the creator and lead author of the IIF's Global Debt Monitor, a quarterly report focusing on the evolving dynamics of sectoral indebtedness across mature and emerging markets. Since joining the IIF in 2011, Mr Tiftik has authored and co-authored numerous publications on global capital flows, including the IIF's monthly Capital Flows Tracker and Portfolio Allocation Trends report. He is also the lead author of the IIF's quarterly flagship Capital Flows to Emerging Markets report and serves as the IIF's point of contact for inquiries about the IIF's analysis on capital flows and global debt.

Before to joining the IIF, Mr Tiftik served as a research assistant at the University of Maryland, College Park (UMD) and the Middle East Technical University (METU) in Turkey. Prior to that, he served as an analyst at the Ministry of Labour and Social Security of Turkey where he participated in the evaluation of grant projects under the Delegation of the European Union to Turkey.



Galit Palzur, Expert on Corporate Risk Management of Disasters, Climate Change and Extreme Events, Israel

Galit Palzur is an economist, specializing in corporate risk management of natural disasters and extreme events, writing her PhD dissertation on the subject at the Poznań University of Economics and Business. She advises and accompanies private and public bodies in her fields of expertise and today is a member of the expert team that advises the Israeli National Security Council on the COVID-19 pandemic. Palzur has a B.A. in Economics and International Relations and an M.A. in International Relations and European Studies, both from the Hebrew University of Jerusalem. Her M.A. thesis was on the influence of terrorism on asylum policies towards Muslims.

Before pursuing her PhD, Ms Palzur served in several senior economic positions in the Israeli public sector: She was the Director of the Economics and Standards Division and Price Control Regulator at the Ministry of Environmental Protection, and the Manager of the National Budget for the fields of Agriculture, Environment and Tourism at the Budgets Division at the Ministry of Finance. She has over a decade of experience as a member of several Boards of Directors of government-

held companies, funds and statutory entities and was also Chairman of the Bureau of the OECD Working Party on Climate, Investment and Development (WPCID). She was a member of Israel's negotiating team for discussions on the United Nations Framework Convention on Climate Change (UNFCCC) and Israel's representative to the OECD's Green Investment Financing Forum and is currently considered one of Israel's leading experts on finance and climate. In 2011, Palzur was chosen by TheMarker Magazine as one of the 40 most promising professionals under the age of 40



Hana Chambers, India Programme Officer, International Energy Agency

Hana Chambers is the India Programme Officer at the International Energy Agency. Previously, she led the Energy Transition Campaign for the UK's Presidency of the UN Climate Change Conference, COP26.



Jayant Sinha, Member of Parliament, India

Jayant Sinha is the Chairperson of the Parliamentary Standing Committee for Finance and a Member of Parliament from Hazaribagh, Jharkhand. In the past, he has served as Minister of State for Finance and Civil Aviation. Prior to his career in public service, Mr Sinha was a venture capitalist. He has degrees from the Harvard Business School, University of Pennsylvania, and Indian Institute of Technology, Delhi.



Koyel Kumar Mandal, Chief of Programmes, Shakti Sustainable Energy Foundation, India

Koyel Kumar Mandal provides strategic leadership and guidance to Shakti across all programme verticals. Koyel brings to this position over 15 years of leadership experience in designing and implementing programmes in climate resilient infrastructure and international climate finance, and developing financial and policy ecosystems for decentralized renewable energy. Prior to joining Shakti in April 2021, Koyel worked with the Institute for Financial Management and Research as Head of Programmes, GIZ as Senior Advisor, and G20 Saudi Arabia as Policy Expert. Koyel holds a Master of Science degree in Environmental Science and Policy from the University of Wisconsin, USA, a Post Graduate Diploma in Natural Resource Management from the Indian Institute of Forest Management, Bhopal, and a Bachelor of Science degree in Economics from St. Xavier's College, Calcutta.



Neha Kumar, Programme Manager, Climate Bond Initiative, India

Neha Kumar joined Climate Bonds as India Programme Manager and is based in Delhi. Neha drives policy and partner programmes in the country to scale up the green bonds market and take on active advocacy with the media, issuers and investors and the government. She contributes to business development for Climate Bonds. She joined the Climate Bond Initiative on 1 July 2017.

Neha has over 14 years of experience working on public policy and industry action in India on sustainability and responsible financing. In her stint at GIZ India (German Development Agency) before she joined us, she steered projects that led to regulation on ESG disclosures by the Indian market regulator, Securities and Exchange Board of India; and the development of financial sector led Responsible Financing Guidelines. She was also responsible for conceptualising and overseeing successful Indo-German public-private alliances, EU co-financing grants and building multi-stakeholder alliances on mainstreaming sustainability practices in large and small businesses. Prior to that, she consulted national and international businesses on environmental and political risks in extractive and infrastructure sectors with operations and investments spread across India.

She has served on national and international standard-setting bodies like the Bureau of Indian Standards and Global Reporting Initiative where she vice-chaired its Stakeholder Council. She speaks frequently on sustainability, responsible financing, reporting and disclosures, and has edited and published journals and articles on these topics. Currently, she is part of a core group of policy advisors and practitioners on future of jobs and green economy hosted by Frederick Ebert Stiftung, India and an active alumna of Young Global Leaders chosen by the Bucerius-Zeit Foundation of Germany.

She holds a Masters and M.Phil. in International Politics and Diplomacy from Jawaharlal Nehru University, New Delhi.



Naoyuki Yoshino, Professor Emeritus, Keio University, Japan; Former Dean and CEO, Asian Development Bank Institute (ADBI)

Naoyuki Yoshino is Professor Emeritus at Keio University, Tokyo, Japan and until March 2020 was Dean of the Asian Development Bank Institute (ADBI). He obtained his PhD from Johns Hopkins University (United States) in 1979 where his thesis supervisor was Sir Alan Walters, economic adviser to former British Prime Minister Margaret Thatcher. Dr Yoshino has been a visiting scholar at the Massachusetts Institute of Technology (United States) and a visiting professor at various universities including the University of New South Wales (Australia), Fondation Nationale des Sciences Politiques (France), and University of Gothenburg (Sweden). He has also been an assistant professor at the State University of New York at Buffalo and an economics professor at Keio University. Dr Yoshino's professional career includes membership in numerous government committees. He was named Director of the Japan Financial Services Agency's (FSA) Financial Research Center (FSA Institute) in 2004 and is now Chief Advisor. He was appointed as Chair of the Financial Planning Standards Board in 2007. He has served as Chairperson of the Japanese Ministry of Finance's Council on Foreign Exchange as well as its Fiscal System Council (Fiscal Investment and Loan Program Section). Additionally, he has been a Board Member of the Deposit Insurance Corporation of Japan and President of the Financial System Council of the Government of Japan.

He was nominated for inclusion in Who's Who in the World in 2009 and 2013 and was named one of the Top 100 Educators in 2009. He obtained honorary doctorates from the University of Gothenburg (Sweden) in 2004 and Martin Luther University of Halle-Wittenberg (Germany) in 2013. He also received the Fukuzawa Award in 2013 for his contribution to research on economic policy. He was serving as the T20 Japan Supporting Co-chair during Japan's Presidency of the 2019 G20 meetings. He was also the Lead Co-chair of the T20 Infrastructure and Financing Task Force and advising on the handover to Saudi Arabia's presidency.



RR Rashmi, Distinguished Fellow and Programme Director, TERI, India

Rajani Ranjan Rashmi is an officer of Indian Administrative Service (1983) batch. He retired as Chief Secretary, Government of Manipur in 2018. He was India's principal negotiator for climate change negotiations under the UN Framework Convention on Climate Change for several years and was part of climate change policy-making in India in the run-up to and after the Paris Agreement. As Special Secretary in the Ministry of Environment, Forest & Climate Change in the Government of India, he was closely associated with formulation and implementation of policies relating to Climate Change, Pollution, Montreal Protocol on ODS, and Environmental Clearances, besides being the Project Director of Green India Mission. Besides his work in the field of environment, Shri Rashmi has served as a trade negotiator and public administrator. He has served as Adviser in India's Mission to European Union in Brussels (2001-2005) and as Additional Secretary in the Ministry of Commerce & Industry from 2014-16. In the state government of Manipur, he was Finance Secretary for almost eight years in various stints. In 2008, he was awarded the Prime Minister's Award for Excellence in Public Administration for his contribution to the management of finances in the state.

Currently, he is a Distinguished Fellow in the Centre for Global Environmental Research in TERI where he works on areas relating to climate change, mitigation and adaptation strategies, carbon markets, and related issues. In 2018-19, he served on the Sub Committee of the Ministry of Finance on Climate Finance. He is a Member of the Technical Advisory Body of the International Civil Aviation Organisation (ICAO). He is associated, in an advisory capacity, with several other organisations such as the NAFCONS, the Consultancy wing of the NABARD on international climate business and the Network for Certification and Conservation of Forests (NCCF). He writes extensively on climate change issues in newspapers and journals.



Shruti Sharma, Senior Policy Advisor, IISD, India

Shruti Sharma is a Senior Policy Advisor in IISD's Energy program and the India Project Coordinator. Her experience and expertise lie in the field of environment, energy and poverty alleviation, with a focus on policy analysis, project management and evaluation. In her work with the British Council's Climate Change project, Shruti developed her skills in advocacy, program management and evaluation, and communications. Her recent work focuses on energy pricing, energy subsidies, energy efficiency and the impact of energy sector reforms on gender.



Suranjali Tandon, Assistant Professor, The National Institute of Public Finance and Policy, India

Suranjali Tandon is assistant the professor at New Delhi-based think tank- National Institute of Public Finance and Policy. She writes extensively on corporate taxation. She was awarded PhD in Economics from Jawaharlal Nehru University.



Swati Dsouza, Lead Country Analyst and Coordinator, Institute for Energy Economics and Financial Analysis (IEEFA), India

Swati Dsouza is an energy analyst having over 8 years of energy sector experience focused on challenges to the fossil fuel transition in emerging economies. She is also associated with the IEA as the India lead analyst and coordinator. Her research lies at the intersection of energy transition and climate policy. Previously, Swati created and led the climate programme at National Foundation for India (NFI) with a focus on rural and marginalized communities. She led a study that examined the extent of coal dependency across coal mining, transport, power, iron and steel, and brick sectors, at the national level and in the states of Jharkhand, Chhattisgarh, and Odisha.

Prior to NFI, Swati led the research on oil and gas at Brookings India (now CSEP), where she managed and co-edited the book “The Next Stop: Natural gas and India’s journey to a clean energy future” which puts together a roadmap to increase gas consumption in India. Swati was previously associated with The Energy and Resources Institute (TERI) where she led the research on fossil fuels and transitions in India’s electricity sector to renewable energy. Swati has a postgraduate degree in International Studies and Diplomacy from the School of Oriental and African Studies (SOAS). She has also served as a producer and reporter for a reputed business news channel.



Sylvia Beyer, Senior Energy Policy Analyst, International Energy Agency

Sylvia Elisabeth Beyer, a German national, is a senior energy policy analyst in the IEA Energy Policy and Security Division. Since June 2012, she has been managing the country reviews and bilateral collaboration with IEA member, partner and accession countries, including Lithuania. She is also the coordinator of the IEA multilateral collaboration with the G20 and G7.

Prior to the IEA, she served as a policy officer at the European Commission DG Energy with a focus on gas security, energy infrastructure, EU budget and the Connecting Europe Facility. She was strongly involved in the development of a genuine EU energy policy. During 2006-2009, Sylvia worked as a consultant, advising telecoms and energy network operators at APCO Worldwide and project assistant at the Union of Electricity Industry (Eurelectric) in Brussels in the project 'Role of Electricity'. Sylvia holds a diploma in economics, a diploma in culture and business administration (Diplom-Kulturwirtin, Diplom-Volkswirtin) from Passau University in Germany and a postgraduate master's in European Studies from the College of Europe.



Tapan Sarker, Finance Discipline Lead, School of Business, Faculty of Business, Education, Law, and Arts, University of Southern Queensland, Australia

Tapan Sarker has more than 20 years of teaching and training, research, administrative and consulting experience. Within the industry, he has been a consultant for leading MNCs such as BHP Billiton, Rio Tinto, and Mahindra & Mahindra Ltd India. His interdisciplinary research expertise is in the areas of sustainable and green finance, public financial management, financing for the SDGs, business responses to climate change, and circular economy. His research has been published in leading journals including Finance Research Letters, International Review of Economics & Finance, Australian Tax Forum, Global Finance Journal, and Economic Modelling, among others.

His research has been cited by various government and international organisations including the Australian Senate, NSW parliamentary committee, the Asian Development Bank, G20, and the UN ESCAP. His most recent co-edited book “Pathways to a Sustainable Economy: Bridging the gap between COP21 commitments and 2030 targets of emission control”, Springer (2018) has been ranked among the top used publications on SpringerLink that concern one or more SDGs.

He has been a Chief Investigator of a range of interdisciplinary projects supported by competitive/external funding (Cat 1 and Cat 2) over \$2.5 million (over \$1m as Principal Investigator) through the National Climate Change Adaptation Research Facility (NCCARF), the Department of Foreign Affairs and Trade (DFAT), the Australian Council for International Agricultural Research (ACIAR), the Asian Development Bank (ADB) and the World Bank. Tapan holds a PhD in Commerce from the Australian National University, a Master of Arts in Business and Commerce from Keio University, Japan, and a Bachelor of Science with Hons (First Class) from Chittagong University, Bangladesh.