



# Management Development Programme on ENERGY Transition Aug 01-02, 2024, TERI SAS Campus, New Delhi

It has been estimated that over three quarters of the global greenhouse gas emissions are on account of fossil fuels. A number of countries and large companies have been working towards decarbonization by undertaking investments and innovations in alternate fuels and associated systems. This is where *Energy Transition* comes in. It involves reduction of reliance on non-renewables, with a shift to alternative sources of energy. An effective energy transition strategy involves undertaking appropriate policy initiatives and laying down procedures to address both the demand and supply side of the operations.

Energy Transition would involve significant structural, managerial and administrative transformation in the edifice of the prevailing eco-system. Stakeholders across the across value chain - energy generators, fuel suppliers, power utilities, equipment manufacturers, EPC companies, investors and consumers would get impacted.

In this context, *TERI SAS*, with support from the Indian Energy Exchange (IEX), is organizing a 2-day training programme to enhance the understanding of energy sector stakeholders and prepare them for the ensuing energy transformation.

#### **Learning Outcomes**

- Understand the imperative of energy transition
- Get an overview on evolving policies and regulations
- Appreciate the significance of renewables & climate funds
- Comprehend role of power markets and new technologies on transition

#### **Participant Profile**

 Utility managers, corporate professionals, bankers, entrepreneurs, engineers, young researchers, government/ PSU officials





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TIME	TOPIC	EXPERT	
Day 1 (Aug 01, 2024)			
9:45 am-	Registration		
10:00 am			
10:00 am-	Inaugural Ceremony	TERI SAS	
10:45 am	Keynote address	IEX	
10:45 am-	TEA BREAK		
11:00 am			
11:00 am-	Energy Transition Imperative for India	Dr Sapan Thapar	
12:00 pm		Associate Professor,	
		TERI SAS	
12:00 pm-	Role of Green Power Markets in Energy	Mr Chandan Sinha	
1:00 pm	Transition	Senior Manager,	
		Indian Energy Exchange	
1:00 pm-	LUNCH BREAK		
1:45 pm			
1:45 pm-	Facilitating Low-Cost Funds for Energy	Mr Mudit Jain	
2:45 pm	Transition	Head-Research,	
		Tata Cleantech Capital	
2:45 pm-	TEA BREAK		
3:00 pm			
3:00 pm-	Industrial Decarbonization Solutions for	Mr Parth Kumar	
4:00 pm	Hard-to-abate Sectors	Programme Manager,	
		CSE	
4:00 pm-	Learnings & Reflections /	Dr Gopal Sarangi	
4:30 pm	Open Discussions	Associate Professor,	
		TERI SAS	
		Associate Professor,	

10:00 am- 11:00 am 11:00 am 11:00 am 11:00 am 11:00 am 11:00 am 11:15 am 11:15 am 11:15 pm 12:15 pm 1:15 pm 1:	TIME	TOPIC	EXPERT
11:00 am Renewable Energy  TEA BREAK  11:15 am  Opportunities in Area of Sustainable Transportation  Transportation  Renewable Energy  TEA BREAK  11:15 am  Opportunities in Area of Sustainable Transportation  Mr Arun Krishnan Manager, Climate Policy Initiative  Mr Rajesh Kumar Senior General Manager, Power Grid  1:15 pm  Carbon Markets in facilitating Transition  Transition  TEA BREAK  3:00 pm  Transition  TEA BREAK  3:15 pm  New & Innovative Solar Technologies  Mr Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm  Vote of Thanks  TERI SAS	Day 2 (Aug 02, 2024)		
11:00 am- 11:15 am  Opportunities in Area of Sustainable Transportation  Transportation  Manager, Climate Policy Initiative  12:15 pm Enabling Energy Transition by Smart Grids  Climate Policy Initiative  Mr Rajesh Kumar Senior General Manager, Power Grid  1:15 pm- 2:00 pm  Carbon Markets in facilitating Transition  Transition  TEA BREAK  3:15 pm  New & Innovative Solar Technologies  Mr Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm- Vote of Thanks  TERI SAS	10:00 am-	Accelerating Energy Transition by	Mr Abhishek Ranjan
11:00 am- 11:15 am  Opportunities in Area of Sustainable Transportation  Transportation  Manager, Climate Policy Initiative  12:15 pm Enabling Energy Transition by Smart Grids  Senior General Manager, Power Grid  1:15 pm- 2:00 pm  Carbon Markets in facilitating Transition  Transition  Transition  TEA BREAK   Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  3:00 pm- 3:15 pm  New & Innovative Solar Technologies  Mr. Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm- Vote of Thanks  TERI SAS	11:00 am	Renewable Energy	Partner-Energy Transition,
11:15 am  11:15 am  12:15 pm Transportation  12:15 pm Enabling Energy Transition by Smart Grids  1:15 pm LUNCH BREAK 2:00 pm  2:00 pm Transition  Carbon Markets in facilitating Transition  Transition  TEA BREAK 3:15 pm New & Innovative Solar Technologies  4:15 pm Vote of Thanks  Mr Arun Krishnan Manager, Climate Policy Initiative Mr Rajesh Kumar Senior General Manager, Power Grid  Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India			EY
11:15 am- 12:15 pm Transportation  Deportunities in Area of Sustainable Transportation  Transportation  Transportation  Enabling Energy Transition by Smart Grids  Enabling Energy Transition by Smart Grids  Enabling Energy Transition by Smart Grids  Enabling Energy Transition by Smart Senior General Manager, Power Grid  LUNCH BREAK  2:00 pm  Carbon Markets in facilitating Transition  Transition  TEA BREAK 3:15 pm  New & Innovative Solar Technologies  Mr Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm  Vote of Thanks  TERI SAS	11:00 am-	TEA BREAK	
12:15 pm Transportation  Transportation  Manager, Climate Policy Initiative  12:15 pm Enabling Energy Transition by Smart Grids  Enabling Energy Transition by Smart Senior General Manager, Power Grid  1:15 pm LUNCH BREAK 2:00 pm  2:00 pm Carbon Markets in facilitating Transition  Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  3:00 pm TEA BREAK 3:15 pm New & Innovative Solar Technologies Mr. Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm Vote of Thanks  TERI SAS	11:15 am		
12:15 pm Enabling Energy Transition by Smart Mr Rajesh Kumar Senior General Manager, Power Grid  1:15 pm LUNCH BREAK 2:00 pm Carbon Markets in facilitating Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  3:00 pm TEA BREAK 3:15 pm New & Innovative Solar Technologies Mr Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm Vote of Thanks TERI SAS	11:15 am-	Opportunities in Area of Sustainable	Mr Arun Krishnan
12:15 pm- 1:15 pm Grids  Enabling Energy Transition by Smart Grids  Mr Rajesh Kumar Senior General Manager, Power Grid  LUNCH BREAK 2:00 pm  Carbon Markets in facilitating Transition  Transition  Transition  TEA BREAK 3:15 pm  3:15 pm  New & Innovative Solar Technologies  Mr Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm- Vote of Thanks  TERI SAS	12:15 pm	Transportation	Manager,
1:15 pm Grids Senior General Manager, Power Grid  1:15 pm LUNCH BREAK 2:00 pm Carbon Markets in facilitating Mr. Jatin Kapoor Transition Head-Climate Transactions, Emergent Ventures India  3:00 pm TEA BREAK 3:15 pm New & Innovative Solar Technologies Mr Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm Vote of Thanks TERI SAS			Climate Policy Initiative
Power Grid  1:15 pm- 2:00 pm  2:00 pm- 3:00 pm Transition  Transition  TEA BREAK  3:15 pm  3:15 pm  New & Innovative Solar Technologies  4:15 pm  Vote of Thanks  Power Grid  Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  TEA BREAK  Senior Energy Advisor, GiZ	12:15 pm-	Enabling Energy Transition by Smart	Mr Rajesh Kumar
1:15 pm- 2:00 pm  2:00 pm- 3:00 pm Transition  Transition  TEA BREAK 3:15 pm  New & Innovative Solar Technologies 4:15 pm- Vote of Thanks  LUNCH BREAK  Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  TEA BREAK Senior Energy Advisor, GiZ	1:15 pm	Grids	Senior General Manager,
2:00 pm  2:00 pm  3:00 pm  Transition  Transition  TEA BREAK  3:15 pm  New & Innovative Solar Technologies  4:15 pm  Vote of Thanks  TERI SAS			Power Grid
2:00 pm- 3:00 pm Transition Transition  TEA BREAK 3:15 pm New & Innovative Solar Technologies 4:15 pm Vote of Thanks  TERI SAS  Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  Mr. Jatin Kapoor Head-Climate Transactions, Emergent Ventures India  TEA BREAK Semior Energy Advisor, GiZ	1:15 pm-	LUNCH BREAK	
3:00 pm Transition  TEA BREAK 3:15 pm  New & Innovative Solar Technologies  4:15 pm Vote of Thanks  Head-Climate Transactions, Emergent Ventures India  Mr Abhinav Jain Senior Energy Advisor, GiZ	2:00 pm		
3:00 pm- 3:15 pm  New & Innovative Solar Technologies Mr Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm- Vote of Thanks TERI SAS	2:00 pm-	Carbon Markets in facilitating	Mr. Jatin Kapoor
3:00 pm- 3:15 pm  New & Innovative Solar Technologies Mr Abhinav Jain Senior Energy Advisor, GiZ  4:15 pm- Vote of Thanks TERI SAS	3:00 pm	Transition	Head-Climate Transactions,
3:15 pm  New & Innovative Solar Technologies  4:15 pm  Senior Energy Advisor,  GiZ  4:15 pm- Vote of Thanks  TERI SAS			Emergent Ventures India
3:15 pm- New & Innovative Solar Technologies Mr Abhinav Jain 4:15 pm Senior Energy Advisor, GiZ 4:15 pm- Vote of Thanks TERI SAS	3:00 pm-	TEA BREAK	
4:15 pm Senior Energy Advisor, GiZ  4:15 pm- Vote of Thanks TERI SAS	3:15 pm		
GiZ  4:15 pm- Vote of Thanks TERI SAS	3:15 pm-	New & Innovative Solar Technologies	Mr Abhinav Jain
4:15 pm- Vote of Thanks TERI SAS	4:15 pm		Senior Energy Advisor,
			GiZ
4·20 pm	4:15 pm-	Vote of Thanks	TERI SAS
1.20 pm	4:20 pm		
4:20 pm- Distribution of Certificates TERI SAS & IEX	4:20 pm-	Distribution of Certificates	TERI SAS & IEX
4:30 pm	4:30 pm		

## **SPEAKER PROFILE** (In Alphabetical Order)

### Mr Abhinav Jain- Senior Energy Advisor, GiZ

Abhinav is working as Senior Energy Advisor under Indo German Solar Partnership project of GIZ, India. He has a bachelor's degree in Electronics and Communication and M.B.A in Energy and Environment Management. He had more than 14 years of work experience in the field of Renewable Energy. In past, Ms. Jain had worked with Ministry of New and Renewable Energy (MNRE) and The Energy and Resources Institute (TERI) in India. He is presently leading BIPV and Just Transition in coal mines regions in India.

# Mr Abhishek Ranjan- Partner, Energy Transition, EY

Abhishek is a partner with Business Consulting practice at EY Parthenon's Energy Transition and Decarbonization CoE. He is the lead Partner for Renewable Electricity & Utilities. Abhishek comes with 24+ years of experience and contribution to the Electricity sectors specifically renewable electricity and transmission and distribution. He possesses deep expertise of RE sector (including energy storage), Indian grid code and power market, RE portfolio optimization, RE scheduling and operation.

#### Mr Arun Krishnan- Manager, Climate Policy Initiative

Arun is a Manager at CPI's Delhi office, where he leads the India regional program of the Global Innovation Lab in Climate Finance. Arun also leads urban and transport initiatives at CPI India and works with the Cities for Climate Finance Leadership Alliance which is a coalition of leaders committed to deploying finance for city level climate action at scale by 2030. Arun has over 15 years of experience in deal advisory, climate/project finance, public policy, and public-private partnerships in the areas of climate change, urban infrastructure, transport, smart cities, and airports. Arun has earlier worked at McKinsey and KPMG. He is a visiting faculty at the IIM Kashipur. Arun holds an MBA from IIM Ahmedabad and BE from Anna University, Chennai.

Mr Chandan Sinha- Senior Manager, Indian Energy Exchange Limited
Chandan is a professional with more than a decade's experience in Power Trading
and Regulatory Affairs. Understanding of evolution of power market post
Electricity Act-03 with experience in Long/Medium/short term power trading,
Contract management, regulations governing power market, power portfolio
management, renewable energy market and cross border electricity trade.
Currently, associated with Indian Energy Exchange Limited as Senior Manager Business Development, he has also worked with GMR Group in the past.

#### Mr Jatin Kapoor - Head, Climate Transactions, Emergent Ventures (India)

Jatin is currently is leading EVI's Climate Transaction Business, managing a team of originators, consultants, and project managers. Jatin works with project developers and buyers across the globe, to identify, develop and market different environmental attributes. His current focus is to develop a portfolio of nature and community-based programs in India, Southeast Asia and Africa, for long-term sustainable supply of high-quality offsets. Jatin has been instrumental in helping governments to device clean energy and climate policies across India, Thailand, Malaysia and Laos. He has been delivering sustainability and climate solutions to clients ranging from manufacturing, renewable generation, and services sectors. Jatin has developed and led consulting business in India and Southeast Asia with expertise in carbon markets, climate policy, renewable energy, and corporate sustainability. He brings over 19 years of experience in setting-up and managing operations, developing relationships with key partners and leading business development efforts. He has studied Chemical Engineering, completed his MBA and is a Certified Expert in Climate and Renewable Energy Finance.

# Dr Gopal Sarangi - Associate Professor, TERI School of Advanced Studies

Gopal has more than 24 years of research and consulting experience on energy market and regulation, green finance, sustainable development, carbon market, industrial decarbonisation and ESG issues, geopolitics of energy transition, energy modelling and forecasting, and impact assessment of energy and environmental interventions. He has contributed to collaborative projects funded by DFID, EPSRC, World Bank, British Academy, UNDP, Prosper.Net, ICIMOD, Norwegian Research Council (NRC) and Government of India (GoI) and various state governments in India. Gopal has contributed to policy making as a nominated member by the Ministry of Rural Development (MoRD) in selection of villages for their performance in renewable energy domain and carbon neutrality. He has been chosen as an Independent Director of UGVCL, a distribution utility. He has published several papers and has been invited to deliver talks in national and international forums.

#### Mr Mudit Jain- Head Research, Tata Capital Cleantech Finance

Mudit has worked on various segments in the Indian cleantech sector. The journey started with Solar PV and diversified into wind, storage, Electric Vehicles, Energy Efficiency, Green Buildings and now Green Hydrogen. Having developed in-depth knowledge in the cleantech, he is committed to doing his bit in the global fight and particularly Indian fight against climate change. Mudit's expertise include sector deep dive, identifying investment opportunities in cleantech segments, market potential analysis, financial and business modelling, credit appraisal, risk assessment and market strategy formulation. Previously Mudit was associated with Bridge To India, Price Water House Coopers, J P Morgan and Adani Solar. I am a member of Task Force for 'Finance towards decarbonization of Steel Sector', formed by Ministry of Steel. He has been a visiting faculty at IIM Lucknow, TERI SAS and IMT Ghaziabad and took sessions on financing of Indian cleantech space.

Mr. Parth Kumar- Programme Manager, Centre for Science and Environment Parth holds a Master's in Architecture and Planning from Hafencity University, Hamburg, Germany. In the past he has worked with organisations like Statista in Germany, Eawag in Switzerland and Tata Institute of Social Sciences in India. He has been with CSE since 2019 and has worked extensively on industrial air pollution and decarbonization. Recently Parth authored CSE's reports on Decarbonizing India's Iron and Steel and Cement sector and is currently working on the power sector and the upcoming carbon markets in India. He has been part of CSE's delegation to COP27 in Egypt and COP28 in Dubai and is also representing CSE at the Ministry of Steel Task Force to define green steel in India.

#### Mr Rajesh Kumar- Senior General Manager, Central Transmission Utility of India

Rajesh is currently working as Senior General Manager at CTUIL (Wholly Owned Subsidiary of POWERGRID), looking after the Transmission network planning of Easter/North Eastern and Cross-Border Regions. He is also part of Task Force on One-Sun, One-World, One-Grid. Rajesh has 27 years of work experience in the power system, including Smart Grid, Energy Storage, System Operation, SCADA/EMS, DTS. He is member of various professional bodies such as IEEE, CIGRE and IEI. He has published several technical papers and co-authored a book on Smart grid. Rajesh is an Electrical Engineer from NIT-Rourkela and completed MTech in Energy & Environment from IIT Delhi.

#### Dr Sapan Thapar- Associate Professor, TERI School of Advanced Studies

Sapan completed his doctoral research as well as Masters, both in the field of energy, from the prestigious Indian Institute of Technology, Delhi. He has over two-decade long experience in the energy sector, with expertise in energy policy, green finance and energy efficiency. He has been involved in teaching and research since the past decade and has several research publications to his credit including a textbook. Sapan is a certified Energy Manager and had been associated with IREDA, TERI and Tata Consultancy Services (Energy Division).