Green Indian Financial System

GIFS Initiative

HIGH-LEVEL SEMINAR BOOKLET

13th - 15th June

An Initiative By

AFD AGENCE FRANÇAISE DE DÉVELOPPEMENT | sidbi | SHAKTI SUSTAINABLE ENERGY FOUNDATION

Agence Française de Développment (AFD), Small Industries Development Bank of India (SIDBI) and Shakti Sustainable Energy have the pleasure to present a one-of-a-kind event, located in Paris, France, from June 13th-15th. Designed as a 3-day session with renowned French and European experts from the financial ecosystem and policy-making bodies, this high-level event aims at enabling knowledge exchanges between them and the high-level Indian delegation. Each session will be conducted interactively, in order to orient at best the discussions towards the Indian's delegation's expectations and India's specificities.

This booklet aims at defining the stakes of the seminar, around the greening of the financial system, and brings some technical elements to the participants. It also gathers useful information regarding the participating institutions and representatives.

Address of the venue:
217 Boulevard Saint Germain
75007 Paris

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INTRODUCTORY WORDS BY CO-ORGANIZERS

Rémy Rioux

CEO, AFD Group
President, International Development Finance Club
Chair, Finance in Common executive board

I am delighted to open this 2nd cycle of discussion under the Green Indian Financial System (GIFS) Initiative in Paris.

The GIFS initiative was co-launched by the Small Industries Bank of India (SIDBI), Shakti Sustainable Energy Foundation and the AgenceFrançaise de Développement (AFD) earlier this year, as part of the wider 'Finance in Common' movement which gathers the 530+ public development banks around the world. It aims at bringing together high-level decision-makers from the financial scene, from public and private banks and financial institutions to regulators, supervisors and policy-makers to find and finance common solutions to global challenges.

The very specificity of this GIFS Initiative is that it also promotes knowledge and experience sharing within an Indo-French and Indo-European perspective, hereby enabling a global understanding of best practices, achievements and challenges for all sides. We strongly believe that this eventwill be a valuable platform for enhancing our capacity to align the financial systems with the sustainable development goals.

The stakes of such discussions around the greening of the financial system are high, given that India's financial system is one of the largest of the Indo-Pacific region. I strongly believe that its resilience to climate change is key for ensuring a sustainable and inclusive economic growth in the region and tobetter harness together the green finance dynamics and initiatives at play.

The GIFS Initiative's conclusions and recommendations will be key to the success of the upcoming 2022 Finance in Common summit, which will take place in Abidjan on 19th-20th of October, and be dedicated to sharing strategies for greening the financial systems, towards achieving the SDGs.

With these elements in mind, I truly look forward to the discussions and use the opportunity to express my gratitude to all the co-organisers, participants and stakeholders of this event.

Sivasubramanian Ramann

Chairman and Managing Director
Small Industries Development Bank of India
(SIDBI)

India has set itself high benchmarks to join the global mission to mitigate the impact of Climate Change in line with its commitments to reduce emission intensity of GDP to 45% by 2030 to facilitate achieving net zero by 2070, etc. With the upcoming G-20 presidency, India shall have the opportunity to take forward its leadership role in the area of Climate Change. It is estimated that India needs around US$2.5 trillion to achieve its NDC targets by 2030, however, as of 2018, the climate and green investments in India represent only 13 % of the required annual investment. The challenges to achieving the enhanced target are multi-dimensional and financing to mitigate climate change impact face hurdles of scale. The policy in India and worldwide is consistent and firm thereby contributing towards goals of mid-century decarbonization narrative.

India believes that networks and partnerships shall play a crucial role in disseminating learnings and adopting good practices. The mission of climate change and green financing needs to be addressed both from demand and supply side, hard and soft infrastructure, financial and non-financial support while blending policy with action. GIFS platform is a step in that direction where AFD and Shakti Foundation are onboarding policy makers, financial institutions / banks, statutory think tanks and practitioners from India as well as globally. Endeavour shall be on twinning the national good practices with global validated models, while cherry picking the successful models and strategies. Lively interactions and brainstorming will be positioned as learning fora.

SIDBI has identified energy efficiency, climate change and green ecosystem building as thrust area. We shall keep pursuing the cluster centric approach targeted at access to extending energy efficiency and reducing excess perpetuated by inefficient energy pockets. SIDBI has customized global good practices to Indian context and financed energy efficiency loans to around 10,000 MSMEs in last five to six years. Another focus area for the country and SIDBI is green mobility. We will support development of charging infrastructure across the country.

SIDBI is committed to make the market work for greening the enterprise eco system. Besides financing schemes and tools, integrating ESG in risk assessment, hosting risk sharing facilities at sector/subsector level and maximizing its adoption by the financial system shall be our priority.

Alignment with the like minded, bridging gaps in value chains and convergence with thought leaders in the green financial eco system shall be our mainstay, all along.

Anshu Bharadwaj
Chief Executive Officer
Shakti Sustainable Energy Foundation

Recent COP26 negotiations have once again highlighted the vast requirement and urgency for climate financing. This is especially true for India which, as a growing economy, is highly vulnerable to climate change. Scaling capital flows towards transition activities and green projects would ultimately require climate considerations to be embedded within the Indian financial system. The Greening of Indian Financial System (GIFS) platform was envisioned as a multi-stakeholder platform, that brought together Indo-European network of regulators, industry participants, policymakers, and civil society organizations, to drive this objective. Through this platform, we intend to promote the discourse surrounding greening of the Indian financial ecosystem, understand key levers required to enable the same and facilitate knowledge transfer among the various stakeholders.

India's climate and developmental goals necessitate a new growth paradigm - one that must be supported by a resilient and agile financial system to materialize in a relatively short timeframe. Several measures have already been initiated with the aim of integrating climate change within financial system. These include both soft and hard directives such as consultation papers on ESG norms and guidelines, green transition risk along with mandatory reporting in accordance to India's Business Responsibility and Sustainability Reporting (BRSR) framework for top 1000 Indian listed companies. Other direct incentives such as 100% FDI for renewables sector along with various government schemes and subsidies are promoting growth of climate-positive investments in India. However, we continue to observe a prominent capital gap, where expected capital mobilization stands at less than half the required climate investment.

Increased transparency, accountability, and verifiability of 'green investments' along with mainstreaming of climate risk management would be required to further increase the scale of investment. It is also imperative to understand the implications of the upcoming transition on the financial sector and real economy, supplemented by deployment of innovative financing mechanisms. We seek to address critical questions through this platform – How can regulation help stimulate climate investments? How resilient is India's financial ecosystem in light of India's climate ambitions? What kind of tools and instruments would aid the transition? How can we better incentivize the private sector and facilitate international flow of knowledge, technology and capital? We look forward to various stakeholder perspectives on these topics, and a productive and timely collaboration through this workshop!

INTRODUCTION

The low-carbon and resilient transition, as outlined in the Paris Climate Agreement (2015), sets the ambition of a carbon-neutral society in the second half of the 21st century in order to limit the rise in global temperatures to +2°C by 2100 compared to the pre-industrial era. The immediate translation of this objective is, according to IPCC experts, the need for an annual decrease of -4% in anthropogenic greenhouse gas (GHG) emissions worldwide, requiring a global review of economic policies, industrial, commercial and major adjustments of economies and societies towards a strong carbon economy in a reduced time horizon.

As a result, the different transition scenarios carry significant risks for human societies, biodiversity, oceans and soils. They also involve economic and financial risks for States, local authorities, businesses and households, due to the potential deterioration in the financial performance of operators in many sectors as well as the sharp depreciation of GHG-emitting assets. For the players in the financial system, located at the heart of global financial flows and ensuring the efficient allocation of capital, this economic and financial transition from the climate agenda introduces major developments. On one hand, there is increasing pressure for these actors to contribute more actively to the financing of the transition, in a logic of operationalization of the financial component of the Paris Agreement. On the other hand, they must manage the financial risks brought about by this transition in order to preserve their own sustainability and ensure the stability of the financial system as a whole.

In this context, the role of financial regulation is paramount: it is not only a matter of reconciling horizons (short-term for the financial sector; medium-term for the regulator and long-termclimate change framework) but also to propose to the financial sector a framework of objectives and the necessary tools to mobilize the available climate capital and to enable a better knowledge of climate-related risks.

THE URGE FOR GREENING THE FINANCIAL SYSTEM IN INDIA

Following COP 26, India has set ambitious targets with enhanced 2030 NDCs, energy independence by 2047 along with commitment towards net zero by 2070 – requiring enormous green investments, to the tune of INR 162.5 trillion (USD 2.5 trillion) from 2015 to 2030, or roughly INR 11 trillion (USD 170 billion) per annum for climate action[1]. Further, current regulatory and supervisory frameworks do not address climate change comprehensively for now, which contributes towards information asymmetries and failure to integrate environment and climate change risks into banks' strategies and risk management systems. Yet, we observe a marked shift in global demand, where investors increasingly see Environment Social and Governance (ESG) metrics as a safeguard against risk to investment. The upscaling of climate finance, whether it is to increase the green capital flows, or to green the financial system, is a burning issue in the country, which requires the mobilization and cooperation of the financial market – domestic and international.

THE AMBITION OF GIFS INITIATIVE

In this context, Small Industries Development Bank of India (SIDBI), Agence Française de Développement (AFD), and Shakti Sustainable Energy Foundation are jointly supporting the Green Indian Financial System (GIFS) Initiative which seeks to facilitate such dialogues and discussions on greening the Indian financial system between all stakeholders, as well as to catalyze existing initiatives and identify priority areas for India's climate finance actors. GIFS has been designed as a year-long journey, punctuated by conferences, webinar and seminar destined to open the discussions and deepen knowledge exchanges.

[1] *CPI, Mobilizing Green Finance while Managing Climate Finance Risks in India, March 2022*

I

GREENING THE FINANCIAL SYSTEM

Indian, French and European perspectives

a THE INDIAN PERSPECTIVES ON GREEN FINANCE

India has started emphasizing on green finance as early as 2007. In December 2007, the RBI issued a notification on "Corporate Social Responsibility, Sustainable Development and Non Financial Reporting – Role of Banks" and mentions the importance of global warming and climate change in the context of sustainable development. In 2008, the National Action Plan on Climate Change (NAPCC) was formulated with a vision to outline the broad policy framework for mitigating the impact of climate change (Jain, 2020). The Climate Change Finance Unit (CCFU) was formed in 2011 within the Ministry of Finance as a coordinating agency for the various institutions responsible for green finance in India.

The major strategic move since 2012 included implementation of the sustainability disclosure requirements. SEBI made it mandatory for top 100 listed entities based on market capitalization at BSE and NSE to publish annual business responsibility reports since 2012 and revised it from time to time. In May 2017, SEBI issued guidelines for green bond issuance specifying the disclosure requirements. In addition, the Ministry of Corporate Affairs imposed mandatory reporting of the progress on Corporate Social Responsibilities (CSR)under the Companies Act, 2013. 9 In October 2017, Report of the Committee on Corporate Governance has proposed that the board of directors shall meet at least once a year to specifically discuss strategy, budgets, board evaluation, risk management, ESG and succession planning.

The Reserve Bank has also been taking proactive policy measures to promote and support green finance initiatives. It has included the small renewable energy sector under its Priority Sector Lending (PSL) scheme in 2015. Under this scheme, firms in renewable energy sector 13 are eligible for loans up to 30 crore(increased from ₹ 15 Crore since September 4, 2020)while the households are eligible for loans up to 10 lakh for investing into renewable energy.

In September 2019, India announced a target to reach 450 GW of renewable energy generation by 2030. The Reserve Bank has mentioned the findings of the G20 Green Finance Study Group (GFSG 14) on the need for development of local green bond markets, facilitating cross-border investments in green bonds, knowledge sharing on environmental risks, and improving overall green finance activities. The annual report further mentions the broader issues related to green finance that need future consideration. These include definition of green activities, aspects, of intellectual property rights in development and transfer of technology from developed countries and environmental risk assessment by the banks. In its Report on Trend and Progress of Banking in India (2018-19), the Reserve Bank noted the risk of a climate change on financial assets and the need to accelerate

[1]*CPI, Mobilizing Green Finance while Managing Climate Finance Risks in India, March 2022*

the green finance for environment-friendly sustainable development. It acknowledges the challenges in the development of green finance, such as "greenwashing" or false claims of environmental compliance, plurality of definitions, maturity mismatches between long-term green investment and short-term interests of investors. It further notes the need for policy action to establish a framework that promotes the green finance ecosystem in India by fostering awareness through coordinated efforts.

In the context of green financial institutions, Indian Renewable Energy Development Agency(IREDA), a government-backed agency for promoting clean energy investments, announced plans to become India's first Green bank in May 2016. India Infrastructure Finance Corporation Limited (IIFCL) also launched a dedicated scheme known as the'credit enhancement scheme' for funding viable infrastructure projects with bond tenors above five years (Jain, 2020). Considering these steps, we will assess the progress of green finance in India, including the general awareness about environmental sustainability in the next section.

According to RBI, the regulatory framework across the globe can be broadly categorized into four.

- The sustainability disclosure by financial and non-financial companies, by which the companies are asked to periodically report their exposure to the ESG related risks.
- The directed and concessional lending
- The micro and macro prudential regulations
- The establishment of green financial institutions

INDIA AND GREEN BONDS

Green bonds are being issued in India since 2015, and keep on increasing ever since. In 2021 only, the country issuances reached a peak with $6.11 billion of green bonds issued in 11 months of 2021[2] – and is expected to keep breaking records in the coming year. Though it represents only 0.7 per cent of the total bonds issued in the domestic market, India now represents the second largest issuer among emerging markets, after China.

This market has been mainly dominated by nonfinancial corporates. However, as banks receive more pressure to accelerate lending to green projects and bridge the existing green financing gap, they are also expected to activate their green bonds' issuances in the future. As to underline this trend, the Government of India has announced the issuance of the first sovereign green bonds of the country during the presentation of the 2022-2023 budget. It announced that around $3.3 billion should be issued during the fiscal year 2022, with a supposedly longer tenure to match green investment's requirements. The Government of India and the Reserve Bank of India are working jointly in bringing out a Framework for issuance of Sovereign Green Bonds.

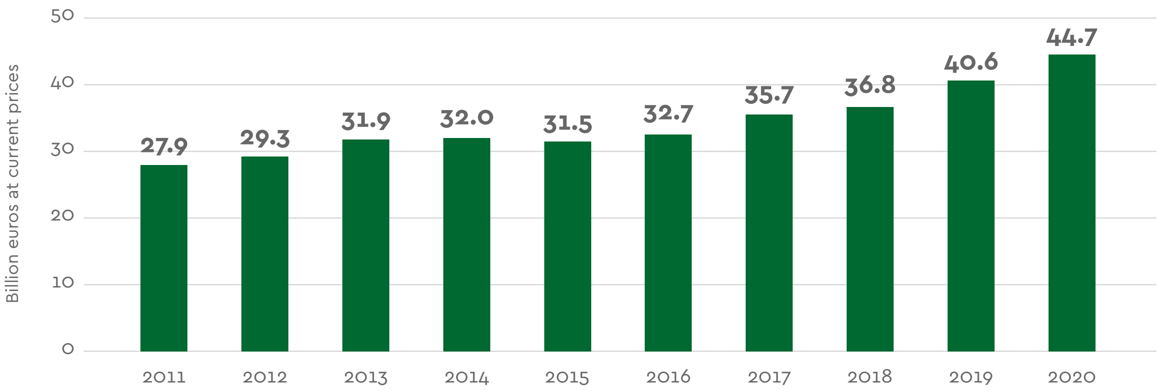
Most of the green bonds issued since 2015 had maturities of five years or above, but less than 10 years. However, some issuers such as Yes Bank Ltd. (2015),Indian Renewable Energy Development Agency Ltd.(2017, 2019), Rural Electrification Corporation Limited or REC Ltd. (2017), Power Finance Corporation Ltd.(2017), Indian Railway Finance Corporation Ltd. 2017), Adani Renewable Energy Ltd. (2019) have issued green bonds with the maturity of 10 or more years. ReNew Power Pvt. Ltd. has issued green bonds with maturity period of less than 5 years in 2019. Around 76 per cent of the green bonds issued in India since 2015 were denominated in US$.

[2] *Climate Bonds Initiative*

b THE FRENCH PERSPECTIVES ON GREEN FINANCE

In 2020, households, companies and public administrations invested 45 billion euros in climate-friendly projects. While climate investment in France increased by 10% compared to 2019, this was not the case in all sectors. The increase has been concentrated in electric cars and plug-in hybrids, while the financing of energy-efficient housing renovation, the rail network, public transport and renewable energy production have remained stable. Thus, climate investments have held up rather well: their increase contrasts with the sharp decline in total investments in the country during 2020 (a fall of 7.8%, according to INSEE)[3].

CLIMATE INVESTMENTS IN FRANCE



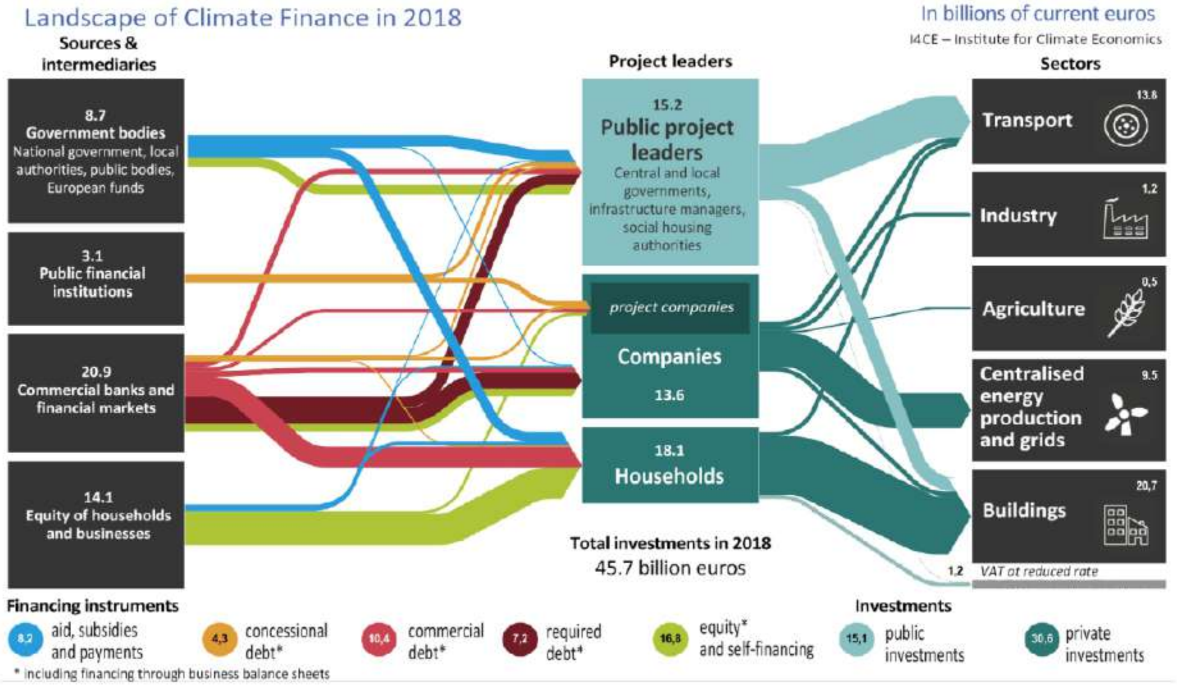
Source: I4CE, Landscape of Climate Finance in France, 2021 edition @I4CE_

To finance their investments, project developers employ four main types of instruments:

- Grants, subsidies and transfers, that include no financial obligation for the beneficiary.
- Concessional debt, in the form of loans with better interest rate, maturity or guarantees than market rate debt.
- Commercial debt, loans issued by private banks at market conditions.
- Equity, in the form of the project developer's own funds and resources, generally mobilized without an intermediary.

For companies (public or private), debt and equity are often raised at the corporate balance sheet level, while special purpose vehicles use principally non-recourse financing. Public and private project developers are typically the owners of the assets generated by the investment. Their investments are made in several sectors; each sector can include actions in one or more uses related to climate change mitigation and the energy transition, such as energy efficiency, development of renewable energies or the building of sustainable infrastructure.

[3] *https://www.i4ce.org/download/landscape-climate-finance-france-2021-edition/*



46 According to I4CE's latest Landscape of Climate Finance in France (2019 edition), https://www.i4ce.org/download/edition-2019-panorama-financements-climat/

FRANCE'S INITIATIVES

Created by the Ministry of Ecological and Solidarity Transition, the first state label dedicated to green finance, the Greenfin label[4] (formerly the "Energy and ecological transition for the climate" label) was launched at the end of 2015 at the time of COP 21.It guarantees the green quality of investment funds and is aimed at financial players who act in the service of the common good through transparent and sustainable practices. The label has the particularity of excluding funds that invest in the nuclear sector and fossil fuels.

Benefits for investors:

- Certified by experts.
- Resolutely green.
- Eligible for Pacte obligations for life insurance.
- Conforms to savers' environmental preferences.

Benefits for funds:

- Gain of visibility.
- Communication tool.
- Strong credibility.
- Future expertise.

[4] *https://www.ecologie.gouv.fr/label-greenfin*

The public authorities are the owners of the label (brand, rules of use, reference system) and approve the proposals for changing the label formulated by the Greenfin label committee. The Greenfin label committee defines the main guidelines for the management of the entire system and proposes changes to the label's specifications to the public authorities. It ensures the proper functioning of the labeling process and its development.

The ministry chairs the label committee, which is made up of representatives of all stakeholders, including representatives of consumer associations. The Label Committee and the public authorities do not issue the label themselves: that is the role of the labeller. The fund labeling audit is thus carried out by independent third-party organisations.

They examine, on the basis of the label's specifications, the application files of the funds for the labeling transmitted by the management companies and award or not the label, in complete independence. They carry out an annual assessment of the labels and suggest any technical changes to be made.

The Greenfin label reference system lists 8 categories of activities falling within the scope of energy and ecological transition and the fight against climate change ("eco-activities") and eligible for financing from the candidate fund: Energy, Building, Waste management and pollution control, Industry, Clean transportation, Information and communication technologies, Agriculture and forestry, Adaptation to climate change. As of May 2022, 85 funds have been labeled for approximately 31 billion euros.

Similarly, the launch of a sovereign green bond in January 2017, with an outstanding amount of approximately €20.7 billion, makes it possible to set high standards in the green bond market, notably through ex-post environmental impact reporting of spending.

Finally, France Transition Ecologique was announced during the first Ecological Defence Council in May 2019. This initiative aims to bring together public and private financial actors to help deploy on a large scale operational and proven solutions in favour of ecological transition. The energy renovation of buildings, agro-ecology, the electric vehicle or incentive pricing are among the themes that France Transition Ecologique could address. As of May 2022, 10 billion Euros have been engaged.

Considering the investment needs, and in line with the Paris Agreement (article 2.1), it is crucial to redirect public and private financial flows so that they can contribute to meeting Paris Agreement targets, ensuring this funding is effective and shifting financial flows away from investments that harm the climate.

This requires:

- coherent sectoral policies that encourage the financing of transition, prohibit or regulate polluting practices, etc.
- a price signal for carbon and greenhouse gases which, in a cross-cutting manner, improves the profitability of low-carbon investments, including in the long term.
- public and private financial players to take into account the risks linked to the climate (anticipate the effects of climate change or asset depreciation due to climate policies, for example a coal power station closed because the carbon price is too high) and the associated opportunities (investments becoming profitable through the strengthening of climate policies and particularly the rise in carbon prices).
- better information on the consideration of climate effects by investors and businesses.
- shared methodologies to identify investments that favor the transition to a low carbon economy and provide assurance of their effectiveness.
- research and development on these indicators and information systems.
- consideration of the greenhouse gas emissions reduction goal in the allocation of public funds;
- improved coordination at international and especially European level.

C THE EUROPEAN PERSPECTIVES ON GREEN FINANCE

In 2019, the European Commission (EC) has presented the European Green Deal, which sets out a detailed vision to make Europe climate-neutral by 2050, safeguard biodiversity, establish a circular economy and eliminate pollution. To implement this ambition, the European Commission presented in 2021 a set of legislative proposals, the so-called Fit for 55-package referring to the new EU 2030 target of a 55-percent GHG emissions reduction compared to 1990, enshrined in the Climate Law, in addition to the legally binding target of net zero greenhouse gas emissions by 2050.

To finance the Green Deal, the EC has announced a total of €1 trillion investment in the green transformation of the European economy. The funds will be generated, among others, by the Multiannual Financial Framework (MFF) 2021-2027 and the European Next Generation Fund, for a total volume of €750 billion. Following the Covid-19 pandemic, the Recovery Plan for Europe also includes the Just Transition Fund, which seeks to provide 30 percent of EU funds towards fighting climate change.

As this transformation will only take place in partnership between the public and private sectors, the European Union works to provide appropriate regulatory framework conditions and incentives to further promote environmental, social and governance (ESG) investments. As such, the European Green Deal has several principles and measures aiming to embody a new strategy of inclusive growth and sustainable finance for all types of actors. This EU strategy has significantly improved the regulatory framework for ESG financial products by establishing, for example, a precise taxonomy, which strengthens transparency for businesses and financial institutions and changes the regulation of financial markets. Other key initiatives include disclosure frameworks and financial market regulation, which raise up the environmental and climate market players ambition, as for example through the voluntary Green Bond standard. In 2022, the independent European Banking Authority (EBA) presented a report with adjustments' recommendations to this standard, analyzing the recent developments and challenges of introducing sustainability in the EU securitization market. In 2021, EBA also published the main findings of its climate risk mapping pilot exercise with 29 European banks.

The EU also implements its green deal externally by helping other countries address climate change, notably in South Asia through the Global Climate Change Alliance Plus (GCCA+) initiative. Although India is not involved in any of GCCA+ programs[5], it is central for the European Union and India to collaborate on climate change. At the 15th EU-India Summit in 2020 and EU-India leaders meeting in 2021, both parties reaffirmed their commitment to implement the Paris Agreement, to deepen the Clean Energy and Climate Partnership established in 2016 and to create a Connectivity Partnership in support to resilient and sustainable connectivity. On both sides, the energy sector is at the heart of the concerns and strategies on both sides, who wish to reduce their dependence on fossil fuels and ensure a secure energy transition. In this context, the launching of EC's Global Gateway strategy to boost smart, clean and secure links in digital, energy and transport sectors could be an opportunity. The latter aims to mobilize up to €300 billion in investments between 2021 and 2027.

The EU and India are also part of the International Platform on Sustainable Finance (IPSF), along with public authorities from 16 other countries[6], with the ultimate objective to scale up the mobilization of private capital towards environmentally sustainable investments.

[5] *Active in Bangladesh, Nepal, Myanmar, Sri Lanka and Maldives*
[6] *Argentina, Canada, Chile, China, Hong Kong Special Administrative Region, Indonesia, Japan, Kenya, Malaysia, Morocco, New Zealand, Norway, Senegal, Singapore, Switzerland and United Kingdom*

PERSPECTIVES FROM THE INDIAN FINANCIAL SECTOR

The information has been prepared by the Shakti-supported platform Indian Green Finance Leadership Collaborative (GFLC). GFLC endeavors to be a voluntary collective of committed institutions across the Indian financial and investor spectrum for advancing the efforts towards contextualizing green in relation to national priorities on low-carbon pathways; thereby enabling concrete pathways for the financial sector stakeholders.

In its initial phase, the platform seeks to advance the dialogue on financial intermediation to green sectors, share experiences, and ultimately reorient financial flows to the benefit of green sectors.

CONTEXT

Market led action is a pre-requisite for mainstreaming the green finance dialogue and to catalyze transition priorities within FIs' portfolios. For emerging economies like India, it is imperative to balance economic growth with low-carbon growth such that the two complement each other. India requires over US$ 200 billion+ annual investment through rest of this decade if it has to meet its 2030 climate goals.

Even as the current level of investment flow has picked up pace, it is evident that the gargantuan investment requirements necessitate the need for significant private sector engagement to meet the sustainable growth objectives.

Investments in national-level climate mitigation and adaptation development projects is a pre-requisite for India to drive low-carbon, 'green' growth. **This additional capital infusion, outside of budgetary support, will be driven primarily by:**

- Public/Private Banks.
- Non-banking Financial Companies (NBFCs).
- Specialised Financial Institutions.
- Institutional investors: Pension Funds, Insurance, Mutual Funds.
- Private Equity and Venture Capital players.

A Collaborative of private sector leader organizations in the financial and banking space can help intensify the dialogue and steer forward the transition. The Green Finance Leadership Collaborative (GFLC) is an attempt to formulate a Voluntary Collective across the Indian financial sector continuum.

*While the effort on this front continues to evolve, **this position paper presents the perspectives on the current landscape, emerging trends, continuing challenges and suggested interventions** that need to be addressed to develop a strong framework **for upscaling financing flows into Green / Climate Positive sectors**.*

RBI joining the NGFS seen as an inflexion point in regulatory outlook and policy formulation

RBI joining the NGFS is seen by most institutions as an advance signal of the Central Bank's outlook to evolve the India outlook and strategy for Green Finance. Post RBI's announcement in April'21, the regulator has stepped up its efforts to: (i) assess the current level of preparedness within the banking community on Climate risk;

and (ii) specific initiatives being undertaken to address transition risk.

On this front, RBI conducted a survey in Jan-Feb'22 to:

a) Assess awareness levels and extent of mapping of climate related exposure.

b) ESG frameworks implemented and extent of risk assessment undertaken on this front.

c) Understand current practices on tagging / classification and extent to which taxonomy is needed; as also facets such as priority sector targets.

Further CAFRAL[7] conducted a session on climate financing focused on growing need for evaluating climate finance portfolio.

In addition, the industry feels that with BRSR[8] coming into vogue, SEBI has also kick-started the process for mainstreaming ESG. Overall, many of the financial sector institutions are awaiting the first set of BRSR wherein the top 1000 listed companies are expected to disclose their Scope 1 and 2 emissions – seen as a major step forward since currently this data is not available readily for all companies.

Similarly, the budget announcement on Centre's intent to raise Sovereign green bonds is seen as an opportunity to galvanize pathways for higher uptake of INR denominated green / social / sustainable bonds.

INCREASED DISCLOSURE AND TRANSPARENCY FORESEEN TO EMERGE AS AN IMPACT TRIGGERED BY THE ABOVE INITIATIVES OF THE REGULATORS

- Most market players expect the disclosure and transparency on green loans portfolio of banks to be enhanced significantly.
- Further RBI is expected to steer the banking community to factor in climate scenario exercises to identify physical and transition risks in their respective portfolios
- Many also expect:

  a) Accelerated use of ESG ratings (especially climate/carbon scores) by banks in lending decisions

  b) Greater fillip on specific targets pertaining to climate finance brought in by the institutions.

[7] *https://www.cafral.org.in/*
[8] *Business Responsibility and Sustainability Report*

WITH LIMITED INSTITUTIONS HAVING CLIMATE RISK ASSESSMENT FRAMEWORKS IN PLACE, REGULATORY INTERVENTION DEEMED AS A KEY NEED EVEN AS VOLUNTARY INITIATIVE BY A FEW FINANCIAL INSTITUTIONS MAY HELP SEED INITIAL MOMENTUM

- Most FIs as also Capital market players acknowledge that not many banks have climate risk assessment frameworks and methodologies to measure portfolio carbon footprint as of now.

  - Most FIs either use their own methodology or third party ESG scores and carbon emission modelled data for scoring/rating companies under their portfolio.

  - Some of the ESG investors feel that even where some banks have formulated climate risk assessment frameworks, these are quite rudimentary and may lead to 'green washing', albeit inadvertently.

- In any case, Climate risk is essentially not getting captured separately since mainly the approach is centered on detailing ESG risk. In certain cases, the banks have undertaken an initial identification of portfolios seen to be impacted by transition risk but no specific actions have been defined as yet.

- While most banking institutions expect to enhance their current approaches significantly only after RBI's guidance document on the same is released, specialist NBFCs seem to be prioritizing efforts at evolving in-house Climate Risk Assessment Frameworks and applying those to each of the projects being assessed by them.

  - Such institutions are basing the portfolio assessment on thematic alignment and would ideally like to have regulatory guidance to future proof their portfolio risk.

WITH OUTLOOK FOR CLIMATE RISK ITSELF NASCENT, VERY FEW INSTITUTIONS FOCUSED ON BIODIVERSITY FINANCIAL RISKS

- Currently preparedness to assess Climate risk as also biodiversity related financial risks is at a nascent stage; separate disclosures pertaining to them are rarely to be seen.

  - ESG ratings provide an assessment related to companies' biodiversity initiatives, mostly for sectors where biodiversity is an identified material issue.

- Most institutions acknowledge a minimal understanding about biodiversity financial risks; in many cases, they feel their borrowers undertake biodiversity initiatives primarily as a CSR perspective, rather than assess and appropriately address the same as business impacting issues.

A COMPREHENSIVE FRAMEWORK, SENSITIZATION AND PRODUCT INNOVATION SEEN AS CRITICAL TO ADDRESSING CORE BOTTLENECKS TO GREENING THE INDIAN FINANCIAL SYSTEM

- There is a significant variance across the Indian financial institutions given the mix of state-owned, private and foreign institutions operating across the landscape. Hence, important to formulate a framework and a taxonomy adequately aligned to the Indian conditions.

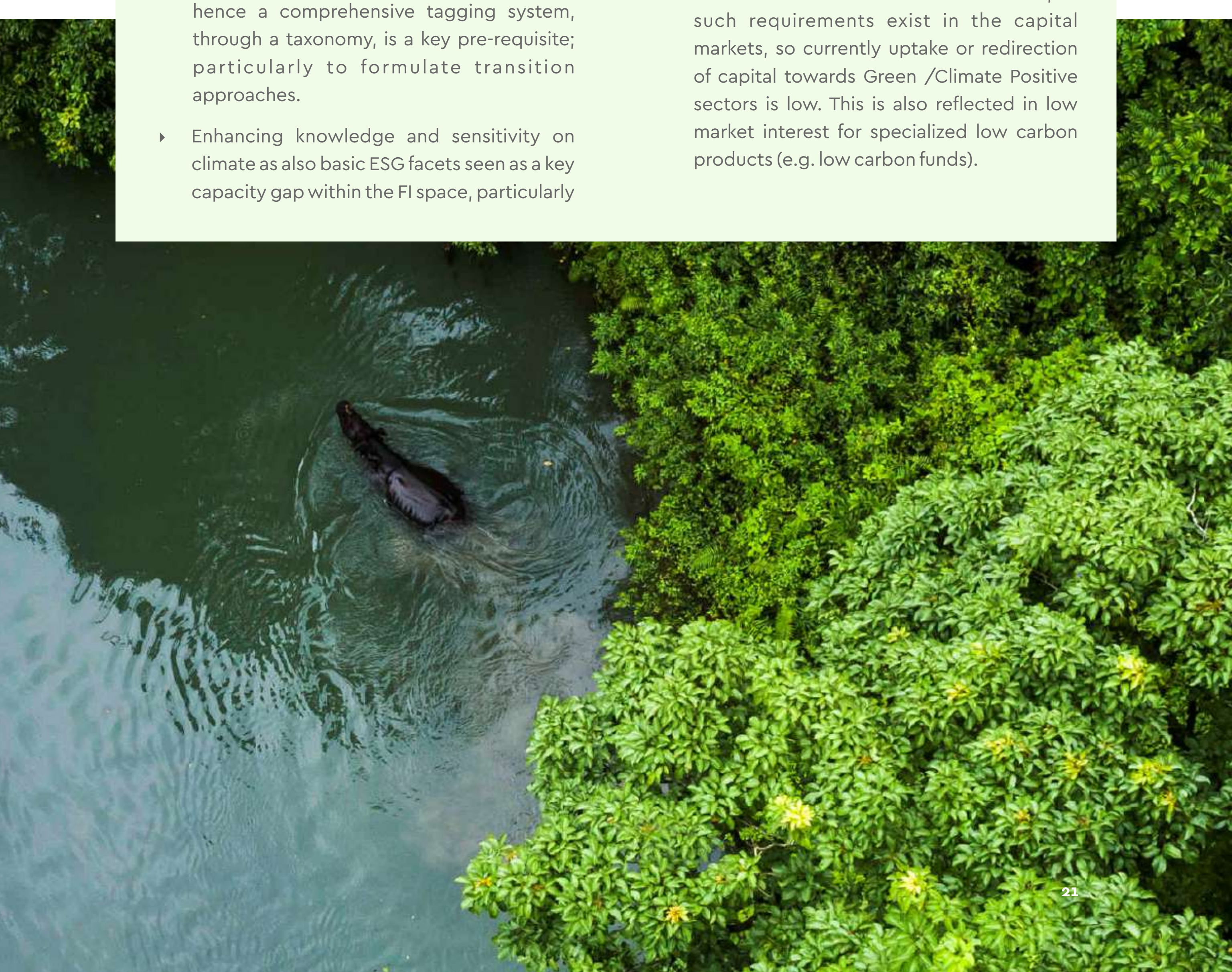
  - Most institutions feel that applying international practices in the Indian context may not fit well; and hence hope that the regulator devises an India centric framework.

  - Lack of dedicated tagging acts as a constraint to identifying 'green' sectors hence a comprehensive tagging system, through a taxonomy, is a key pre-requisite; particularly to formulate transition approaches.

- Enhancing knowledge and sensitivity on climate as also basic ESG facets seen as a key capacity gap within the FI space, particularly the PSU banks. Sensitization also needed to catalyze interest within the equity investors, particularly in the domestic landscape.

  - Operationally most institutions will seek to adhere to approaches that enable a path of least resistance hence even with a comprehensive risk assessment framework in place, appropriate application maybe missing. Sensitization on portfolio risk is critical to create requisite appreciation on the criticality and need for diligent application.

- Even as Priority sector lending norms for banks include sector such as Renewables, no such requirements exist in the capital markets, so currently uptake or redirection of capital towards Green /Climate Positive sectors is low. This is also reflected in low market interest for specialized low carbon products (e.g. low carbon funds).



KEY INTERVENTIONS DEEMED AS PRE-REQUISITE TO ADDRESS THESE BOTTLENECKS ARE REPRESENTED IN THE GRAPHIC BELOW.

REGULATORY ENHANCEMENTS

- Regulatory guidance towards climate specific disclocures
- Specific classification of sectors will enable greening of finance
- Thresholds, in the form of sub-sectoral targets, are vital in promoting green finance
- Increase the risk allocation of capital in banks; use of risk weights for negative assignment to carbon intensive sectors

AWARENESS AND SENSITIZATION EFFORTS

- Investor awareness programs for higher penetration and success of existing green finance products
- Requisite training and sensitization on ESG frameworks and ability to evolve and integrate climate risks in the same

POLICIES TO SUPPORT PRODUCT INNOVATION

- Single window clearances foreseen as a need for rapid rollout of innovative products; e.g. banks launching Green FDs
- Provide incentives to FIs for green finance instruments and products
- Enable Commercial banks to invest / sponsor Category III AIFs - seen as one way to address ALM mismatch faced in lending to long term green projects
- Enable insurance companies to invest in green finance assests - this would help create a pathway for banks to manage their liquidity

Figure:
Key interventions required for scaling of green finance

Even as the regulatory frameworks and policy dimensions evolve, a market led thrust aided by appropriate incentives can help set the pace and intensify priorities on the domestic financing spectrum.

Even as the formalization of a green taxonomy would be a multi-year effort, it is important for the private sector to proactively move in this direction – this will help coalesce initial feedback on proposed taxonomical architecture and ensure adequate preparedness and capacity to successfully navigate this transition.

A positive encouragement from policy through incentives would signal Govt.'s support for market led action for mainstreaming the green finance flows and catalyze transition priorities within FIs' portfolios.

II

PROGRAMME

DAY ONE
Monday, June 13, 2022

02.30-03.00
Opening Ceremony

Inaugural Speech and Welcoming words

Welcoming Words by co-organizers:	• **Mr. Sivasubramanian Ramann**, Chairman, Small Industries Development Bank of India • **Dr. Anshu Bharadwaj**, CEO Shakti Sustainable Energy Foundation • **Mrs. Marie Hélène Loison**, Deputy CEO, Agence Française de Développement

03.30-05.30
Panel Discussion

Scaling up the greening of the financial system: towards the G20 India's presidency

Setting the problematics

This panel will inaugurate the first day of the GIFS high-level seminar, and will bring the eminent panelists to discuss and define the stakes around one of the next Indian and International political milestones: India's first G20 presidency starting from December 1st, 2022 – in continuity with the "BRICS/emerging" or "South Global" (Indonesia, India, Brazil and South Africa) chairmanships within the G20.

In a context where for India to reach its net-zero target by 2070, an additional $10 trillion investments are required as per the Indian think-tank CEEW[9], the mobilization of climate finance is expected to be one of the key parameters of this presidency.

In view of the 2030 Agenda for Sustainable Development, India hopes to play a critical role in what it sees as a "Decade of Action". In fact, India's G20 Sherpa Piyush Goyal stated in November last year that "*[...] developed countries, which have already enjoyed the fruits of low-cost energy for several years, will have to go in for net-zero much faster and possibly even go in for net negative so that they can release policy space and some carbon space for the developing countries to pursue their development agenda*".

Which outcomes does India hope to reach in order to consider its G20 presidency as successful in regards to green finance and sustainable energy? Given the challenges India is facing such as the absence of green/sustainable taxonomy, the policy uncertainty or the viability of products in capital markets, which place do you see for research and innovation in order to scale up the greening of the financial system ?What can the European Commission do to support India in order to make sure it best leverages its G20 presidency to develop its Green Finance? What does it expect from India to best develop this collaboration? How can India leverage its G20 presidency to attract and engage with international and private investors knowing that it needs an additional 30% investment to reach net zero?

[9] *CEEW, « Investment Sizing India's 2070 Net-Zero Target », November 2021*

Technical points for the panel

Greening the Financial System: Road to G20

Climate change has been on the G20 agenda ever since its first summit in 2008 and more recently the focus has been on circular carbon economy. According to RBI[10], there are several flagship programmes that aim at increasing the awareness and promoting the funding of green initiatives across the globe. These programmes encourage financial and non-financial firms to embed environmental considerations into their financing. Major flagship programmes like Principles for Responsible Investment (PRI), Equator Principles(EP) for financial institutions, United Nation's Environment Programme (UNEP) and Statement of Commitment by financial institutions on sustainable development suggest ways for implementing green finance among the signatories. Several entities from India are part of these initiatives.

Expected regulatory changes to preserve financial stability in the face of climate financial risks

As of 2015, the G20 and the Financial Stability Board have had a series of recommendations developed by an international working group (Task Force on Climate-related Financial Disclosures - TCFD), which published from December 2016 guidelines aimed at ensuring better consideration of climate financial risks by the various economic operators and transparent communication enabling financial actors to integrate them into their decisions. The TCFD is now the latest best practice in climate reporting, supported by many OECD states and major investor and business coalitions. As of June 2020, 60% of the world's 100 largest companies committed supporting the TCFD recommendations. Starting from the TCFD, initiatives have blossomed in recent years to give regulators and financial actors the elements they need to make their practices compatible with climate objectives.

Platforming for greening the financial system: the NGFS

In particular, the creation of the Network for Greening the Financial System (NGFS) by financial regulators and supervisors recommends, among other things, integrating climate financial risks into (i) monitoring of macro-financial stability, and (ii) microprudential supervisory frameworks. With regard to monitoring macro-financial stability (I), an effective framework for monitoring systemic risks is a prerequisite. Among the instruments used for macro-prudential purposes, two seem interesting to consider in the fight against climate change:

- Stress tests across the financial sector play a key role in measuring the systemic impact of deteriorating macroeconomic conditions. The integration of climate financial risks in the models of these stress tests can be an interesting approach, which has already been experimentally implemented by some of the most pioneering regulators to test the impact of a selection of transition scenarios on the health of the financial sector.
- Introduced by Basel III to prevent new systemic crises, the counter-cyclical capital buffer allows regulators to set additional capital levels for banks when they deem it necessary for defense against systemic vulnerabilities during the contraction phase of a cycle credit. Recently used in a limited number of countries, some authors propose to use it to help financial institutions withstand the phase of expansion of the carbon-intensive credit cycle towards a low-carbon economy.

With regard to micro-prudential supervision (ii), the mobilization of pre-existing tools within the Basel framework - which today only deals with environmental risks very marginally through the credit and operational risks related to transactions - could be a relevant entry key for the banking sector:

- On the first pillar of Basel III (prudential regulation), some authors recommend using capital requirements to address climate-related risks, applying a bonus-malus on the asset risk weighting factor based on their

[10] https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/04AR_2101202185D9B6905ADD465CB7DD280B88266F77.PDF

impact on the low-carbon transition (Green Supporting Factor / Brown Penalizing Factor). Similar proposals are also made on the leverage ratio (imposing a stricter leverage ratio on carbon-intensive assets), liquidity requirements (differentiate these requirements to account for climate change in order to give preferential treatment to green assets) or prudential credit rules. Further research will be needed to assess the effectiveness of a particular instrument, which has not yet been widely translated into any jurisdiction.

- On the second pillar of Basel III (governance and capital adequacy assessment), a risk management process approach should be preferred. All significant risks to which banks are subject to be included in the assessment of the level of own funds, supervisors could consider the materiality of climate-induced risks and ask banks to take this into account in their internal risk management processes (based on known experiences, for example, in countries such as Brazil and Peru) then, in a second step, to integrate the transition scenarios in the internal models used for stress tests exercises (such as some Central Banks - the Netherlands, Great Britain, France - have begun to initiate it in recent years, despite the methodological challenges outlined above).

The importance of soft law and space mechanisms to accelerate the transition in the financial sector

The detailed challenges to which the various types of financial actors are subject in the face of the climate challenge suggest that there is a very strong degree of interaction and complementarity between the efforts of both parties within the financial ecosystem, and at the same time significant scale effects to expect from innovations developed by some pioneering actors. By way of example, the articulation between the different actors and the implementation of their respective instruments in the event of a natural disaster linked to climate change, is an interesting illustration.

At the same time, the ongoing transition process poses significant technical and cultural challenges for financial actors, without being free of any risk for the most voluntary (notably green bubble risks). Also, the integration of the climate issue by the actors of the financial system requires a concerted approach and a dynamic sharing of experiences among peers. In addition, this cooperative approach will allow financial players, in the near future, to initiate a virtuous dynamic allowing them to collectively reflect on related and nevertheless major issues such as the preservation of biodiversity.

In this context, the facilitation of platforms and forums bringing together the financial community around this issue, participating in the capacity-building process and contributing to the development of guidelines and methodological tools is thus essential. As such, it can be cited the United Nations Environment Programme Finance Initiative (UNEP-FI), the Network for Greening the Financial System (NGFS) for financial regulators and supervisors, the Sustainable Banking Network (SBN), the Climate Action in Financial Institutions (Mainstreaming) initiative, the Global Sustainable Investment Alliance (GSIA), the Net Zero Asset Owner Alliance (NZAOA), the Principles for Responsible Investment (PRI) for institutional investors and asset managers, the Principles for Sustainable Insurance (PSI) for the insurance sector and the Principles for Responsible Banking (PRB) for the banking sector or the International Development Finance Club (IDFC) for public development banks.

Panelists	• **Mr. Andreas Schaal**, Director of Global Relations and Co-operation, OECD • **Mr Rajnath Ram**, Adviser Energy, Niti Aayog • **Mr Sunil Nair**, Chief General Manager, Sustainable Finance Group, Reserve Bank of India • **Dr Anshu Bharadwaj**, Shakhti Sustainable Energy Foundation, CEO • **Mr Morgan Desprès**, Director of Strategy, Banque de France
Hosted and presided by	• **Thomas Melonio**, Chief Economist, Agence Française de Développement

DAY TWO
Tuesday, June 14, 2022

09.30-11.00
High-level discussion

Building a Climate Finance Strategy

Setting the problematics

Achieving national targets and goals of the Paris Agreement is a process that at some point, to be effective, will engage with all stakeholders of an ecosystem, requiring from them structural changes in their own objectives, investment strategy and management, monitoring and measuring systems. In the case of financial institutions, requiring them to build climate finance strategic frameworks which will enable them to mobilize "green" assets acting towards a low-carbon transition; and preserve their activities potentially threatened by risks of climate change and transition. This panel will discuss the stakes around the construction of such strategies.

The absence of comprehensive sectoral policies other than that for renewable energy and, to a certain extent, for transport and electric mobility, pose difficulties in building comprehensive climate-oriented strategies. Yet, building a strategic framework, setting ambitious and comprehensive packages of measures, and reaching climate and environmental targets for both mitigation and adaptation, are key in order to build a strong Climate Finance Strategy.

In which sectors the first Indian climate policies have been developed? How did these policies help promote climate investments in India? What can we learn from these policies? What can be used from those policies to build future green strategies? How can the banking sector support the government in building a climate finance strategy?

How were climate finance strategies developed in France and Europe? What are the learnings after several years of implementation? What can be used to support the development of such strategies in India?

Technical points for the panel

Many definitions already exists when it comes to climate finance. Most of the time, they refer to the positive or negative impact of assets on the objectives of GHG emissions' reduction, and to the adaptation of productive activities (UNFCCC, WRI, IDFC...). However, few of them define this concept from the perspectives of the financial system's stakeholders.

In this perspective, the GIFS Initiative proposes this definition: "*Integrating the climate issue means adapting their mission, strategy, organization, resources and practices in a sustainable manner to: (i) mobilize available capital for the financing of assets involved in a low-carbon transition and resilient development of economic systems, and (ii) preserve their long-term value when it comes to the risks created by climate change on the stability of the entire financial system.*"

The first concept "(I) mobilize available capital for the financing of assets involved in a low-carbon transition and resilient development of economic systems"reflects the collective action to be undertaken in order to reach the GHG emission reduction targets presented by all States in their National Determined Contributions (NDC) to achieve the low-carbon and resilient transition; and to make the parameters of our economies and societies compatible with the ambition of a +2°C trajectory as set out in the framework of the Paris Climate Agreement (COP21, December 2015). For this, financial stakeholders play their role in mobilizing available savings at the domestic and international levels, and changing their investment policies. Especially, they should promote the financing of co-beneficial assets in terms of mitigation of GHG emissions and adaptation to the effects of climate change, but also tend to discriminate against the financing of high-intensity GHG-emitting assets.

The second concept, "(ii) preserving their long-term value when it comes to the risks created by climate change on the stability of the entire financial system", refers to the adaptation strategies that can be implemented by actors in the financial system to preserve their economic value in a context of increased financial risks induced by climate change. In a world implementing at the same time a +2°C target and subject to worsened frequency and severity of extreme weather events, actors must be able to strengthen the resilience of the financial system itself. This increased resilience can be increased by financial actors when capturing available savings and in their investment practices.
This attempt to define climate finance covers different realities and challenges depending on the type of stakeholders:
- **For investors**, it comes to how they can exercise their power of influence on other's actors strategies towards more pro-climate considerations, with an increased demand for climate-friendly financial products and a call on strategy and behaviors' transparency;
- **For financial institutions (banks, insurance companies, fund management firms, ...) and their shareholders** : how they can (i) allocate necessary resources to reach national GHG emission reduction targets, increasing the mobilization of funds and using it to finance assets that contribute to the mitigation of GHG emissions and the adaptation of the economic systems; and (ii) adopt an investment strategy and resilient behaviors to preserve their economic value;
- **For regulators, supervisors or any political decision-maker which can influence behaviors on the financial system**, this means (i) ensuring the resilience of the financial system to deal with financial risks impeded by climate change and transition, by providing an analytical framework of these risks, integrating them into the management of financial stability and in the requirements for micro-prudential supervision, and (ii) mobilizing tools of financial regulation to support economic policies towards a reorientation of investments;
- **For other stakeholders in the financial system** (professional organizations, investment banks and financial advisory firms, researchers and think tanks, stock exchange companies and trading platforms), the aim is to contribute to the development of solutions and financial products supporting the transition, promoting the dissemination of knowledge on the impacts of climate change on the financial system, including participating in the development of standards to guide action to "green" the financial system.

Panelists
- **Mr Sivasubramian Ramann**, Chairman SIDBI
- **Mr Rajnath Ram**, Adviser (Energy), NITI Aayog
- **Mrs Caroline Wellemans**, Head of Unit Sustainable Finance Policy, DG INTPA, European Commission
- **Mme Karen Degouve**, Head of Sustainable Finance, Fédération Bancaire Française
- **Mrs Melissa Perez**, Head of Sales & Business Development, Carbone4 Finance
- **Mr Gonzague Monreal**, Financial Institutions & Inclusion, PROPARCO

Hosted and presided by
- **Stéphane Cieniewski**, Senior Adviser on Environment and Climate, Direction Générale du Trésor

11.30-01.00
High-level discussion

Identifying Sustainable Green Finance Projects

Setting the problematics

Against the urgency of the fight against climate change, the Paris Agreement identifies the financing of green investments as a key leverage for the low-carbon transition. It also calls on States to commit to defining and following a low-carbon trajectory, formalized in the NDCs. Financial systems naturally play a key role in this transition and are invited to contribute to re-orient financial flows towards the financing of assets compatible with this transition. This means putting in place the tools necessary to identify green investments and setting up dedicated funding. The availability of an Indian sustainable taxonomy would be one of the key tools that should be used for identification and evaluation of sustainable green projects.

How to re-orient investments towards more sustainable projects? How can the Indian Sustainable Taxonomy help identify and evaluate sustainable investments in India? How to attract Green investors?

Technical points for the panel

A necessary change in the nature of the financial flows and assets...

In the context of the Paris Agreement, alongside the renewed national commitments of most countries, the commitments of financial actors to reduce their GHG emissions have also flourished – and with them, their investment towards green and climate investments. The mere sector of climate finance covers a scope of sectors and mitigation/adaptation activities, including the more mature sectors of renewable energy and energy efficiency, but also agro-ecology, transportation, infrastructures, water or waste management. Such activities are usually included in a larger sub-set of financial activities dedicated to the environment, including for example the biodiversity or depollution sectors – which we could consider as "green" finance. Similarly,it is itself included in a diverse span of sustainable finance practices that take into account environmental, social and governance (ESG) dimensions, as well as various segments of activity (responsible investment, solidarity finance, impact investment, microfinance, etc.), which represents a global market of more than 30,000 billion USD[11], though there is no standardized definition for this.

Being "aligned" with the Paris Agreement suggests that all flows of asset financing - whether they offer climate co-benefits or not–should converge towards an objective of carbon sobriety, representing an effort to adapt economic systems. It also suggests the collective responsibility of the whole financial system, where each and every institutionhas to accelerate its own transition in order to contribute to this alignment. It means that, while they keep on financing an increasing amount of green assets, financial institutions should also reduce their exposure to assets with a negative impact on climate in the short-term (high GHG emissions), and/or whose future technological evolutions will be more and more locked because of their carbon-intensity.

...which requires structural changes in the strategic and operational processes of financial stakeholders.

[11] GSIA, 2018

Such an alignment requires a structural change in the mission, objectives and resources of the financial players. It induces new investment priorities and, consequently, a change in the strategic vision and decision-making processes of the players in the financial system; thinking beyond the "green niches" funding targets and incorporating a reflection on the financial impacts of asset greening across all economic sectors. For most willing stakeholders, it requires rethinking their mandate beyond the mere value creation, adding a climate impact objective. For the others, integrating the climate issue into their strategic and operational processes should at least allow them to preserve their value creation by limiting their exposure to the risks related to climate change.

This development requires financial players to think about their own transition, raising questions related to their strategy, their internal organization, human resources and management tools, but also their resource allocation policy by integrating to it climate impact objectives. In the past years, some of them have demonstrated an unprecedented ability to innovate in this area, with numerous initiatives designed to internalize climate issues from strategic and operational perspectives. By way of illustration, some public development banks have developed common principles for taxonomy of transition-friendly activities (MDBs/IDFC taxonomy), while investors and asset managers are gradually making progress in developing carbon accounting tools for their portfolios.

An increasing set of tools

The application of environmental and climate criteria in financing decisions and the development of internal asset rating systems are increasingly common tools that can contribute to lasting changes in the nature and characteristics of investments financed. Many sectoral initiatives now offer financial actors the opportunity to strengthen the capacities of their top management, managers and employees to help them better understand climate issues.

These initial approaches, albeit embryonic, are essential blocks for operationalizing long-term commitments. They can emerge from individual or collective initiatives – such as professional associations. Their dissemination would both improve the monitoring of the positive or negative impact of the financial activities of institutions on the GHG emission reduction trajectories, and support their decision-making processes, in order to foster the financing of economic actors contributing favorably to such trajectories. In a context of a post-Covid recovery that is gradually emerging, they can also help prevent economic and financial stimulus to be directed towards assets of high-performing sectors of today's economy, which will not be part of tomorrow's low-carbon, resilient economy. On the contrary, they can help prioritize the funding that has the most impact for a faster transition. These tools are also prerequisites for financial institutions that want to take full advantage of the opportunities offered by climate finance in both assets and liabilities by using green bond emissions.

Panelists	• **Mr. Monu Ratra**, Chief Executive Officer & Executive Director, IIFL Home Finance • **Mr. Ravinder Singh Dhillon**, Chairman, Power Finance Corporation • **Mr. Subrat Kumar**, Chief General Manager, Bank of Baroda • **Mrs. Caroline Wellemans**, Head of Unit Sustainable Finance Policy, DG INTPA, European Commission • **Mrs. Emmanuelle Riedel Drouin**, Deputy Executive Director SDD, AFD • **Mr. Alexandre Vincent**, Green Bond and ESG manager, Agence France Trésor • **Mr. Mathieu Garnero**, Project Director, ADEME • **Mrs. Cecilia Tam**, Team Leader, Clean Energy Finance and Investment Mobilization, OECD
Hosted and presided by	• **Mr Philippe Le Houérou**, President of AFD Board of Directors

03.00-04.30
High-level discussion

How managing Climate risks can increase Green Finance?

Setting the problematics

Climate change has far-reaching impacts that are not limited to a particular sector or geography; it impacts the entire financial system. Over the course of the 21st century, financial actors will face a climate-induced systemic financial risk whose nature will depend essentially on the GHG emission trajectory currently adopted by countries and economic operators. Building future-ready financial markets holds immense importance, which requires managing exposure towards climate risks within the financial system. This can be done via policy instruments such as establishing national guidelines for climate risk integration, stress testing approaches (focusing on physical climate resilience) along with building awareness and capacity to address Climate and ESG aspects. Consequent efforts have been made in recent years, in terms of transition or climate change scenarios or financial information. However, the work to integrate climate risks into existing risk analysis processes faces significant technical barriers that prevent them to be widely deployed by financial actors.

In India specifically, no standard or benchmark has been adopted in Indian markets when it comes to climate risk assessment. A report from Climate Risks Horizons points out that 34 banks among the most important ones of the country would be unprepared for climate-related risks[12], and are not yet incorporating climate-related financial risks into their day-to-day decision-making and business strategies.

What are the regulatory measures to increase green finance and/or manage climate-risks? What are the climate risk assessment frameworks existing within the Indian banking sector? How can they facilitate capital availability and deployment? In face of increasing climate risk – both physical and transition risk -what can financial sector regulators and policy makers do to ensure financial system stability? How can banks and financial institutions anticipate and integrate better climate risks?

Technical points for the panel

Climate change poses systemic risk...

According to IPCC experts, maintaining a trajectory consistent with the +2°C objective requires a global alignment of public, industrial and trade policies and major adjustments of economies. The transition scenarios, supported by more or less proactive emission control trajectories, carry in them risks for human societies and biodiversity, oceans and soils, but also involve economic and financial risks for States, local authorities, businesses, households and, a fortiori, financial actors.

To the tragedy of the commons[13], Mark Carney, the former Governor of the Bank of England and Chairman of the Financial Stability Board, added the "Tragedy of the Distant Horizons" in his speech"The Tragedy of the Horizons", in September 2015. This tragedy goes well beyond political or financial supervisors' time[14]. The mutual strengthening of the intrinsic fragilities of the financial system and the additional risks of climate change have led the regulators to identify the emergence of a systemic climate risk[15].

[12] *Climate Risks Horizons, Unprepared, March 2022*
[13] *Hardin, 1968*
[14] *Garde, 2018*
[15] *Aglietta and Espagne, 2016*

This risk is linked with the potentially brutal deterioration of financial stability through shocks provoked by the impacts of climate change and its now well-identified contagion channels. This risk directly impact and will impact the already known range of financial risks (liquidity, credit, counterparty, market and operational), on a potentially significant scale.

These climate financial risks can be divided into three categories, each of which has significant potential impacts on the real economy and on the financial system:

- o **Physical risks**, associated with the consequences of climate change on economic actors and asset portfolios, and linked to the increase in the frequency of extreme climatic hazards (hurricanes, typhoons, natural disasters, etc.) and the gradual increase in average temperatures and sea levels. The insurance sector is probably the most affected by these risks, with the cost of natural disasters and man-made disasters amounting to 137 billion USD in 2019 alone and losses borne by insurers amounting to nearly 52 billion USD[16].
- o **Transition risks**, resulting from the dynamics of transition to a low-carbon economy, supported by the implementation of public policies meant to achieve nationally determined contributions (carbon tax, sectoral regulations, technological developments, etc.). These risks are mainly driven by sectors that are too exposed to global warming or which are not viable in the context of its limitation – risking as a consequence a depreciation of the concerned assets' value.
- o **Liability risks**, also known as legal or litigation risks, i.e. the financial consequences of potential lawsuits seeking responsibilities for climate change. The materialization of this risk would lead to a request for financial compensation from parties who have suffered losses due to climate change from those they hold responsible. As an example, in January 2018, the city of New York sued five oil companies for their responsibility in climate change.

Over the course of the 21st century, financial actors will therefore face a climate-induced systemic financial risk whose nature will essentially depend on the GHG emission trajectories currently adopted by countries and economic operators[17]. **It is interesting to note that the nature of the risk (physical/transition) changes in the opposite direction depending on the scenario chosen:**

- o If particularly proactive measures against climate change are implemented in accordance with the Paris Agreement (optimistic scenario of the IPCC at +2°C by 2100 / RCP2.6), a sharp decline in the trajectory of GHG emissions is expected to materialize in the coming decades and thus induce the occurrence of a transition risk for financial players (linked to the economic, technological and societal changes agreed by States and their populations in a limited time horizon);
- o In the reverse scenario of non-adjustment of economic policies and productive systems to the new climate situation, GHG emissions will continue to rise in the coming decades and the rise in temperatures is expected to be very pronounced (IPCC pessimistic scenario at +5°C by 2100 / RCP8.5); in this case, the financial players will face a physical risk (linked to the increase in the frequency of extreme weather events and the expected significant changes in the biosphere in inestimable proportions);
- o More realistically, if a median scenario is observed, with GHG emission control measures observed but in insufficient proportions (IPCC median scenarios between 2°C and 5°C / RCP4.5 and RCP6), financial players will face both a physical and a transition risk, which will more or less severely constrain their activities and have an unequal impact on their risk profile (depending on their geographical presence, the type of assets financed, etc.).

...whose consideration by financial stakeholders is highly complex

[16] *Swiss Re, 2019*
[17] *BSI, 2018*

Despite a significant acceleration of efforts in recent years, work to integrate climate risks into existing risk analysis processes faces significant technical barriers[18]: incompatibility of time horizons (horizons considered in the usual analyses are too short compared to those of the climate scenarios), granularisation and contextualization of the data (from one company to another, for the same asset, the ability to respond to a disturbance may be more or less high), probabilisation of scenarios (climate change scenarios are not probabilizable for risk analyses traditionally established from the past / back forward because there are no statistics on the future / looking forward), difficulty in representing disruptive dynamics (current tools not designed to account for non-linear consequences that could result from structural transformations of the system), adaptation to differentiated needs (depending on the typology of the financial players and the profile of their assets), etc.

Moreover, the financial sector's need to understand the risks resulting from physical and climatic changes is a major cultural issue that must not be underestimated. In the absence of a review of standard processes, analyses are conducted for the most part business as usual, which results in an absence or, at best, a weak consideration of these risk factors[19].

Despite these many challenges, around 15 initiatives around the world have undertaken to provide financial actors with the understanding needed for this analysis, ranging from transition or climate change scenarios to financial information. These are essentially very recent tools and methodologies that have not yet been widely deployed by financial actors. Consequently, a significant effort remains to be made in the development and deployment of methodologies and tools in order to satisfactorily address the issue[20].

In addition to these efforts, the insurance sector can also play its part in reducing risks related to natural disasters by developing new market segments, notably through natural disaster insurance, which can take different forms depending on the level of maturity of the financial system and the institutional framework in place (databases, regulatory framework associated with disaster risk prevention, etc.).

Panelists	• **Mr. Sunil Nair**, Chief General Manager, Sustainable Finance Department, Reserve Bank of India (RBI) • **Mr. Rajiv Anand**, Deputy Managing Director, Axis Bank • **Mr. Cédric Merle**, Head of Center of Expertise & Innovation, Natixis CIB Green & Sustainable Hub • **Mr. Arthur Campredon**, Deputy Head of Office, Sustainable Finance, Direction Générale du Trésor • **Mr. Jean Guillaume Peladan**, Head of Environmental Investments & Research, Sycomore
Hosted and presided by	• **Mr Morgan Desprès**, Director, Strategy, Banque de France

[18] *I4CE, 2019* [19] *Dépoues, Bouchet, Dardina and Nicol, 2019* [20] *Bingler and Colesanti Senni, 2020*

Climate Change as a Source of Financial Risk

A Call for Action - Network for Greening the Financial System (NGFS) – April 2019

Created at the One Planet Summit in Paris in December 2017, the NGFS is a volunteer-based forum whose objective is to share best practices among peers, contribute to the development of climate and environmental risk management in the financial sector, and mobilize traditional finance to support the transition to a sustainable economy. As of April 2022, the NGFS had 114 members and 18 observers from the world's major financial centers. Its executive secretariat is maintained by the Banque de France and is located in Paris.

Published in April 2019, the six recommendations of the NGFS reflect the best practices identified so far by its members to integrate the climate issue as a risk to financial stability and facilitate the contribution of the financial sector to the achievement of the objectives of theParis Agreement.

Recommendations 1 to 4 are intended to encourage central banks and supervisors - whether or not they are members of the NGFS - to adopt these best practices as part of their mandate. Some of these recommendations may also apply to financial institutions.
Recommendations 5 and 6 do not fall directly within the competence of central banks and supervisors but refer to measures that can be taken by policy makers to facilitate the work of central banks and supervisors. Some of these recommendations may also apply to the private sector.

- **Recommendation n°1**: Integrate climate-related risks in financial stability monitoring and micro-prudential supervision
- **Recommendation n°2**: Integrate sustainable development considerations into proprietary portfolio management
- **Recommendation 3**: Address data gaps
- **Recommendation 4**: Increase awareness and build analytical capacity, encourage technical assistance and knowledge sharing
- **Recommendation 5**: Achieve publication of financial information related to climate and environmental risk on a sound and internationally homogeneous basis
- **Recommendation 6**: Promote the development of a taxonomy of economic activities

04.45-06.00
High-level discussion

Focus on Climate and Biodiversity Financial Risks

Setting the problematics

India is one of the few countries to be referred to as a "megadiverse" when it comes to biodiversity with various types of ecosystems, forest, arid and coastal. However, assessing biodiversity risks is at a nascent stage as of now, and is fairly limited in the Indian context. For the Indian financial systems, it would mean appropriating the dimensions of biodiversity as well as reinforcing the support of their partners for a transition towards an economy respectful of biodiversity, insisting on a "do no harm" policy, with a priority on an "avoid" policy.

What are avoid, reduce and compensate strategies when it comes to biodiversity? How to integrate biodiversity within the financial systems' risks assessment frameworks? How to identify priority sectors, geographies and sectors? How can nature-related risk assessment can learn lesson from the mitigation of risks of climate change?

Technical points for the panel

The Task-Force on Nature-Related Financial Disclosures (TFND) defines nature as "nature consists of stocks of environmental assets that give rise to associated flows of benefits to people and the economy, [defining] environmental assets as the naturally occurring living and non-living components of the Earth, for example, forests, wetlands, coral reefs and agricultural areas"[21]. In a report[22], the World Economic Forum (WEF) estimates that $44 trillion of economic value generation – more than half of the world's total GDP – is moderately or highly dependent on nature and its services and is therefore exposed to nature loss.

Further, we are now aware how climate change and nature loss are inextricably interlinked. For example, the destruction of mangroves, peatlands and tropical forests mostly for agriculture originate 13% of the total human CO2 emissions. One out of 20 species will be threatened in a scenario where global temperature will increase by 2°C[23]. In this scenario, the WEF[22] also points that more than 99% of coral reefs, home to more than 25% of marine fish species, will be destructed. Climate change is therefore a form of environmental degradation.

In this regard, climate-related risks are relatable to broader environmental risks, and to nature-related risk. Just like for the climate risks, the management of such risks and of the nature and biodiversity loss will have to be primarily addressed by States and regulators – through incentivized measures or subsidies for promoting nature conservation, or on the contrary with discouraging policies. But similarly, financial flows can either improve or worsen the impact on nature.

Panelists

- **Mr. P.V.S. Suryakumar**, Deputy Managing Director, NABARD
- **Mr. Sunil Mehta**, Chief Executive, Indian's Bank Association
- **Mr. Vineet Rai**, Founder & Chairman, Aavishkaar
- **Mrs. Anne Laurence Roucher**, Deputy CEO, Mirova
- **Mr. Haje Schütte**, Head, Financing for Sustainable Development Division, OECD
- **Mrs. Marguerite Culot-Horth**, Finance for Tomorrow, Head of Programmes, strategic development and institutional relationships

Hosted and presided by

- **Nathalie Borgeaud**, Lead, Task Force on Nature-related Financial Disclosures (TNFD)

[22] *World Economic Forum, Nature Risk Rising, January 2020*

[23] *G. E. Jia, et al., 2019, "Land–climate interactions", in IPCC, "Climate Change and Land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems"*

DAY THREE
Wednesday, June 15, 2022

0830-1030
Networking & B2B

Bilateral meetings & Informal mingling

Presentation of session

After a day and a half of formal exchanges, where participants from all sides would have discussed technical parameters, this moment has been designed as a more informal one around breakfast. Key representatives from institutions from Day 1 and 2, as well as fresh institutions from the ecosystem, will be present for this session.

Bilateral meetings can be arranged by the AFD organizing team. Please reach out to **porneta@afd.fr**; **dalleaum@afd.fr** and **debellevillei@afd.fr** for support.

Further, to facilitate further discussions, contacts of speakers & institution can be found in this booklet, section **III – The GIFS Network – Institution & Speakers**.

Institutions represented

- Research Panorama (AFD Research Department & GEMMES)
- Finance for Tomorrow, by Paris EUROPLACE
- Private sector (Proparco)
- TNFD
- Funds & Investors' perspectives (Mirova, Sycomore)
- Consultants: Carbon4 Finance, Natixis
- ADEME
- BPI
- OCDE
- DG INTPA
- Amundi

11.00-12.30
Closing session

Wrap up Words & Next steps

Presentation of session

Setting the stakes and discussing them has been the work of the past two days. Now is the time of drawing the key-takeaways, and prepare the next milestones of the greening of the financial system, and of the GIFS Initiative.

Institutions represented

Wrap up words and next steps and way forward by :

- **Dr. Anshu Bharadwaj**, CEO, Shakti Sustainable Energy Foundation
- **Mrs Marie Hélène Loison**, Deputy Director General, AFD
- **Mr Sivasubramian Raman**, Chairman, SIDBI

III

THE **GIFS** NETWORK

Institutions & Speakers

AAVISHKAAR GROUP

Aavishkaar is an impact investing platform focused on the Global South, aiming to reach underserved clients with an entrepreneurial approach to development. It is active in India, Indonesia, Bangladesh, Sri Lanka, and Sub-Saharan Africa. The group's ecosystems include Aavishkaar Capital, the South-focused impact fund manager; Arohan, one of India's largest and most digitally advanced microfinance institutions which targets low-income households; Ashv Finance, a physical Non-Banking Financing Company (NBFC), which offers unique cash flow-based commercial loans to micro, small and medium enterprises; IntelleCap, a global impact advisory firm that provides advisory services, investment banking and an inclusive networking platform, Sankalp, for engagement around impact investing. In India, Aavishkaar Capital has raised six funds in line with 13 out of the 17 Sustainable Development Goals. Aavishkaar focuses on investing in businesses across our 3 core sectors - Financial Inclusion, Food & Agriculture, and Essential Services.

AXIS BANK

Established in 1993, Axis Bank is the third largest private sector bank in India.Its offer covers the entire spectrum of financial services for personal, corporate and retail banking, serving clients such as MSMEs, agriculture and retail businesses, as well as the public sector. Headquartered in Mumbai, the bank has over 4,700 domestic branches and operates overseas in the UK, the EUA, Singapore and Bangladesh. Axis Bank supports the global transition towards sustainable finance, guided by the commitments under the Paris Agreement and Sustainable Development Goals Agendas. The bank has developed a Sustainable Financing Framework as well as an e Environment, Social and Governance (ESG) Policy that integrates environmental and social risk assessment into its credit appraisal mechanism. In 2020, the Bank's overall exposure to such 'sustainable' sectors including renewable energy (including large hydro), urban mass transport, and green buildings, stood to EUR 77 billion. In 2016, Axis Bank raised a 5-year green bond worth the equivalent of USD 500 million, and released a Green Bond Framework in alignment with Climate Bonds Initiative's Standard.

BANK OF BARODA

Bank of Baroda is an Indian state-owned commercial bank headquartered in Vadodara, Gujarat, India. It is the second largest public sector bank in the country with more than 8200 branches, of which 100+ overseas, spanning across Europe, the US, Africa, Asia and Australia. Bank of Baroda is also committed to reduce the impact of climate change risks and consciously works towards the sustainable development of its banking operations, and finances several project in the field of renewable energies.

IIFL& IIFL HOME FINANCE

Headquartered in Mumbai, IIFL (ex - India Infoline Limited) Group is a financial services conglomerate which was started by a group of entrepreneurs in 1995. While the public company originally specialized in research services, it is now one of India's leading integrated financial services groups with diverse operational activities. IIFL Group is active worldwide in Canada, United States, UK, Singapore, Hong Kong, Switzerland, Mauritius and UAE. Among its priorities, the group has put efforts into IIFL Home Finance Limited (a subsidiary of IIFL Finance) to provide affordable home loans, loans to SMEs and MSMEs, and loans for environmentally and socially responsible projects. For instance, the group has signed a $68 million loan with Asian Development Bank to improve financial access to affordable green housing for lower-income women borrowers in India.

INDIAN BANKS ASSOCIATION

The Indian Banks Association (IBA) brings together 235 members from public, private, foreign, cooperative and rural banks and its mission is to ensure the resilience and relevance of banking principles and practices of its members. The IBA provides training actions, collects and analyses data and regularly publishes financial publications and reports. In 2017, the IBA published National Voluntary Guidelines for Responsible Financing in collaboration with CAFRAL, a think-tank affiliated to the Reserve Bank of India, with the aim to propose a common framework for environmental, social and governance issues. In lead-up to COP26, it announced to be working on a more comprehensive framework with its members which would also integrate credit assessment and climate risk in its policy.

NABARD

The National Bank for Agriculture and Rural Development (NABARD) is the quasi-regulator of Rural Financial Institutions and are a Development Bank owned by the Government of India. NABARD promotes sustainable and equitable agriculture and rural development through participative financial and non-financial interventions. It covers a broad range of activities, such as agricultural production, agri-business logistics, rural infrastructure, irrigation and access to clean water, financial inclusion and sustainable climate finance. It set a particularly ambitious agenda to align its activities with the Sustainable Development Goals, adopting high fiduciary, legal, environmental and social standards across its portfolio. This engagement was sealed by a Green Climate Fund accreditation in 2015, which enabled it to access USD 120.7 million of concessional finance for solar rooftop installation, groundwater recharge and solar micro-irrigation projects. NABARD has worked closely with the World Bank, ADB, KfW & IFAD.

NITI AAYOG

The National Institution for Transforming India, NITI Aayog, is the public advisory body of the Government of India established in 2015. It provides directional and policy inputs, aiming to align policies with the Sustainable Development Goals (SDGs) and to enhance cooperative federalism – meaning it fosters the involvement of the Centre, States and Union Territories in the economic policy-making process using a bottom-up approach. In 2021, NITI Aayog launched the SDG Urban Index and Dashboard which became the official and principal tool for SDG monitoring at the national and sub-national level.

POWER FINANCE CORPORATION

Power Finance Corporation Ltd (PFC) is a public non-banking financial company (NBFC) dedicated to financing the power sector in India. Created by the Government of India in 1986, it became the largest lender to the Indian power sector, currently supporting about 23% of the country's installed power generation capacity. As a development finance institution committed to promoting renewable energy projects, it has supported state power utilities through various capacity building measures. PFC also established a green bond framework for all future financial instruments. In 2017, it issued a 10 years dated green bond of the value of USD 400 million to finance renewable energy (solar and wind) projects. More recently, in September 2021, the NBFC announced a seven-year bond issue worth €300 million, with which it forayed into the European markets for the first time.

RESERVE BANK OF INDIA

The Reserve Bank of India (RBI) is the central bank of India, located in Mumbai. Its main function is to manage and govern the financial system of the country. It is a statutory body established in 1935 under the Reserve Bank of India Act, 1934, entirely owned by the Indian government since its nationalization in 1949.The Reserve Bank has also been taking proactive policy measures to promote and support green finance initiatives. It has included the small renewable energy sector under its Priority Sector Lending (PSL) scheme in 2015. The RBI has joined the Network for Greening the Financial System (NGFS) in April 2021, and has set up a Sustainable Finance Group in parallel, coordinating with other national and international agencies on issues relating to climate change. The group would be instrumental in suggesting strategies and evolving a regulatory framework, including appropriate environmental, social and governance (ESG) disclosures, which could be prescribed for banks and other regulated entities (REs) to propagate sustainable practices and mitigate climate related risks in the Indian context. It will also analyze India-specific themes on the systemic stability impact of climate change and stress testing. In cooperation with the Government of India, RBI will work on the elaboration of a framework for the the issuance of Sovereign Green Bonds.

SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA

Small Industries Development Bank of India Created in 1990, Small Industries Development Bank of India (SIDBI) is a public development bank dedicated to MSMEs (micro, small and medium-sized enterprises), primarily active in the manufacturing and services sectors. SIDBI is mandated promote access to credit for MSMEs through direct and intermediated financing and to extend its support to issues of primary importance to the MSME sector. SIDBI works mainly through intermediated financing with non-banking and other financial institutions and microfinance institutions. It also supports national action plans on climate change and promotes responsible business practices, including sustainable financing, energy efficiency and cleaner production in the MSME sector. SIDBI is an accredited agency of the Green Climate Fund and is one of the 30 largest public development banks in the world. It is the only Indian organization part of the International Development Finance Club (IDFC) initiative, which brings together 26 national, regional and bilateral development bank with the common goal to fulfill the SDGs and the Paris Agreement objectives.

SHAKTI SUSTAINABLE ENERGY FOUNDATION

Shakti Sustainable Energy Foundation (Shakti) seeks to facilitate India's transition to a cleaner energy future by aiding the design and implementation of policies that promote clean power, energy efficiency, sustainable urban transport and climate action. Working collaboratively with policy makers, civil society, industry, think tanks and academia, Shakti seeks to catalyze transformative solutions to meet India's energy needs in clean and sustainable ways. Shakti specifically works in the sectors of Clean Power, Energy Efficiency, Sustainable Transport, Climate Policy, Clean Energy Finance and Electric Mobility.

262 ADVISORS

262 Advisors is an advising French, Indian and international clients on cross-border strategy and risk management.

ADEME

Agence de l'Environnement et de la Maîtrise de l'Energie (ADEME) is a public institution under the joint supervision of the Ministry of the Environment, Energy and the Sea and the Ministry of Higher Education and Research. For 30 years, it has been committed to environmental protection and energy management through technical and financial assistance to companies and local authorities. Key-player in France's energy and ecological transition, ADEME is mainly active in the sectors of waste, soil pollution, transport, air quality, noise and environmental quality. In 2015, it has published a robust study on the possibility of a 100 percent renewable electricity mix in France, which has been updated and improved since.

AGENCE FRANÇAISE DE DÉVELOPPEMENT

Agence Française de Développement (AFD) is a public financial institution that implements France's development and international solidarity policy. The group includes AFD, which finances the public sector and NGOs, as well as research and education for sustainable development; its subsidiary Proparco, dedicated to private sector financing; and Expertise France, a technical cooperation agency. The institution finances, supports and accelerates transitions towards a fairer and more resilient world: it aims to build solutions with and for its partners, through more than 4,000 projects in the field, in the French overseas departments and territories and in 115 countries. AFD thrives to protect global public goods, promoting a stable climate, biodiversity and peace, as well as gender equality, education and healthcare. In this way, it supports France's commitment to achieve the Sustainable Development Goals towards a world in common. It is in this same spirit that AFD remains committed to the Finance in Common Summit movement and chairs the International Development Finance Club, as well as participating to the building of this Green Indian Financial System Initiative.

AGENCE FRANCE TRÉSOR

Agence France Trésor (AFT) is a public agency reporting to the Ministry for the Economy, Finance and the Recovery. Its mission is to manage the State's debt and cash in the best interest of the taxpayer and in the best possible conditions of security. As such, Agence France Trésor has a strong experience in sovereign green bonds emissions. Since 2017, more than €49 billion bonds have been emitted towards investments in the energy and ecological transition. AFT launched France's third sovereign bond (OAT) in March 2022, with the particularity of being the first French sovereign green bond linked to inflation with a variable interest rate calculated according to the harmonized European consumer price index.

AMUNDI

Amundi is the largest asset manager in Europe, managing around EUR 2,021 billion and active around the world. Amundi is active in the field of climate finance – ensuring that its portfolio is aligned with a 2°C trajectory. It joined the Net Zero Asset Managers Initiative, committing to supporting the goal of net zero emissions by 2050. Amundi is also Co-founding member of the Portfolio Decarbonization Coalition, Member of the Executive Committee of The Green Bond Principles, Participant to Finance for Tomorrow's Green Finance and Just Transition taskforces It is also signatory of the Finance for Biodiversity Pledge.

BANQUE PUBLIQUE D'INVESTISSEMENT

Bpifrance is a public investment bank, a French company financing and development organisation. In particular, it is responsible for supporting small and medium-sized enterprises, medium-sized enterprises and innovative enterprises in support of State and regional public policy. Bpifrance is chaired by the Caisse des dépôts, represented by its Director General.

CARBON 4 FINANCE

Founded in 2007 by climate experts, Carbone 4 is an independent consultancy firm specializing in low-carbon strategy and adaptation to climate change. Carbone 4 bases seeks to meet French government's objective of dividing its greenhouse gas emissions by four by 2050. The firm's work has three main focuses: facilitating the understanding of ecological and climate issues, informing economic players, and providing appropriate diagnostics and operational tools.

DG INTPA

The European Commission's Directorate-General for International Partnerships (DG INTPA) is responsible for formulating the EU's international partnership and development policy, with the ultimate goal to reduce poverty, ensure sustainable development, and promote democracy, human rights, and the rule of law across the world. DG INTPA accompanies partner countries on their path towards sustainable development, continuously adapting their support to the country's evolving needs and transitioning from bilateral assistance towards more targeted support as the situation improves.

DIRECTION GÉNÉRALE DU TRÉSOR

The Directorate-General of Treasure (DGT) serves the French Ministry for the Economy, Finance and Industry, making economic policy proposals in the domestic, European and international spheres. It also regulates the finances of economy, insurance, banking and financial market institutions and supports ex). In addition to its general secretariat, DGT has thus five departments divided into the following areas: macroeconomic policies and European affairs; public policies; bilateral affairs and international business, financial sector; multilateral affairs, trade and development policies. It also the State's debt and cash position through Agence France Trésor.

FÉDÉRATION BANCAIRE FRANÇAISE

The Fédération Bancaire Française (FBF) is the professional association representing over 337 commercial, cooperative, and mutual banks operating in France and includes both French and foreign-based organizations. It promotes the banking and financial services industries in the French, European and international markets, and sets out the industry's positions and proposals to officials and regulatory authorities in the fields of business and finance. The FBF also issues professional standards, best practices and recommendations, and makes its experience available to its members. Its mission also includes keeping members among French banks informed of anything that may concern their activities. To fulfil its mandate, the FBF is structured around three departments: Banking and Financial Activities and Research, Information and External Relations, European and International Affairs.

FINANCE FOR TOMORROW BY PARIS EUROPLACE

Finance for Tomorrow is an initiative set up by Paris Europlace and led by the players of the Paris Financial Center to promote sustainable finance in France and internationally. Launched in June 2017, it brings together more than 80 members who have signed a common charter aimed at redirecting financial flows towards a low-carbon and inclusive economy, in line with the Paris Agreement and the UN's Sustainable Development Goals (SDGs).

MIROVA

Founded in 2014, Mirova is an asset management company dedicated to sustainable investing and is affiliated with Natixis Investment Managers. Mirova and its subsidiaries are located in France, the United Kingdom, Luxembourg and the United States. A mission-driven company, certified B-Corp, Mirova offers its clients investment solutions that seek to combine financial performance with environmental and social impact. It is a committed and leading player in sustainable finance: 100% of the company's funds are SRI-labelled and one of them is specifically dedicated to green bonds.

NATIXIS

Natixis is the international financial subsidiary of Group BPCE, France's second largest banking group, specializing in asset and wealth management, corporate and investment banking, insurance and financial services. Created in 2006, the bank assists its own clients in 38 countries, systematically integrating environmental and social objectives in its projects. The bank has also developed two initiatives for sustainable development: the Green Weighting Factor, an in-house innovative tool of capital allocation to help controlling climate impact of financial operations, and the Green & Sustainable Hub, a finance expert center which offers green and sustainable expertise and solutions to investors. Recent activities of Natixis include the signature of a 300 million credit line with EDF, France's main electricity supplier, which is indexed on environmental, social, and governance criteria.

ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT

The Organization for Economic Cooperation and Development (OECD) has been at the heart of international cooperation for over 60 years. The Paris-based forum enables government officials to discuss policy impacts and design at both national and international level, with the aim to improve social and economic well-being of world citizens. OECD is one of the most trusted sources of comparable statistics, data and policy analysis, which help policy-makers find evidence-based decisions. To date, the organization brings together 38 member countries, and guides over 100 countries worldwide through international standards, norms and programs.

PROPARCO

Proparco is the subsidiary of Agence Française de Développement (AFD) dedicated to the private sector. It has been working for over 40 years to promote sustainable development. Present in 80 countries worldwide, it participates in financing and supporting companies and financial institutions. Proparco's action primarily focuses on key development sectors such as infrastructure with a focus on renewable energy, agribusiness, finance, health, education and more.

SYCOMORE ASSET MANAGEMENT

Founded in 2001, Sycomore Asset Management is specialized in listed investments and entrepreneurship. Its mission is to support companies in delivering long-term returns by identifying the levers for generating sustainable value. Sycomore's expertise is based on a hands-on approach and a proprietary model of fundamental company analysis, which includes financial and non-financial criteria. Since 2015, its range of socially responsible investment (SRI) funds has been expanded to include different themes focused on sustainable development: human capital, ecological transition, social contribution, quality lifelong education, sustainable employment, responsible technology. As a mission-driven company in 2020, Sycomore aims to be a key player in responsible investment.

THE TASKFORCE ON NATURE-RELATED FINANCIAL DISCLOSURE

The Taskforce on Nature-related Financial Disclosure (TNFD) is an international working group inspired by the Task Force on Climate related Financial Disclosures (TCFD), though complementary to it. Launched in June 2021, it is developing a framework for nature-related risk management and disclosure which will be delivered in Q4 2023. The taskforce has 34 members, including Tata Steel's Executive Director and Chief Financial Officer Koushik Chatterjee, and is supported by an advisory forum of 400 institutions. Its work is built on seven principles: market usability, science-based, nature-related risks, purpose-driven, integrated and adaptive, climate-nature nexus and globally inclusive. The ultimate goal is to support a shift in global financial flows towards positive outcomes for nature. In March 2022, a first beta version of the framework was released for consultation to multiple market players and stakeholders.

SPEAKERS

Biographies of speakers appear by session order

Marie-Hélène Loison
Deputy CEO
Agence Française de Développement (AFD)

Marie-Hélène Loison is a graduate of Institut d'Etudes Politiques at SciencesPo in Paris, and the School of Advanced International Studies in Washington DC.

She began her career in 1996 at the French bank Société Générale, in export financing. She joined AFD Group in 2000, at Proparco, AFD's subsidiary in charge of private-sector financing. Marie-Hélène Loison started there as an account manager, organizing Proparco financing in the agribusiness, health, and tourism sectors. She then joined the equity team, which she headed from 2008 to consolidate and develop operations. In 2011 she became Deputy CEO of Proparco in charge of operations, heading a department of around 100 people in France and abroad and working on developing activity, revising strategy, and increasing capital by €200 million.

Marie-Hélène Loison joined AFD as Director of the Middle East and North Africa Department in 2015, supervising a network of field offices in eight countries. She initiated AFD activity in the Western Balkans, and then concentrated on the Middle East in response to the Syrian crisis.

In September 2018, Marie-Hélène Loison was appointed Deputy to the Executive Director of Operations, a division of 1,500 people carrying out approximately €10 billion in financing per year. One of her main tasks was the creation of 17 Regional Divisions to decentralize division operations.

She took up her position as Deputy CEO on July 8, 2021.

Mr. Sivasubramian Ramann
Chairman SIDBI

Mr. Sivasubramanian Ramann has taken charge in April 2021 as the Chairman and Managing Director of SIDBI, the principal financial institution engaged in the promotion, financing and development of Micro, Small & Medium Enterprises. Before this, Ramann was serving as the Managing Director & Chief Executive Officer of National E-Governance Services Ltd. (NeSL), India's first information utility. Shri Ramann is an Indian Audit & Accounts Service (IA&AS) officer of 1991 batch. Prior to joining NeSL, Ramann was the Principal Accountant General of State of Jharkhand from 2015 - 2016. He has also held the position of Executive Director with Securities and Exchange Board of India (SEBI), while he was on deputation from the Government of India from 2006 to 2013. Ramann has a BA in Economics and MBA from Delhi University. He also holds professional qualifications from the London School of Economics, from the Institute of Internal Auditors (IIA) and a post-graduate Diploma in Securities Law.

Anshu Bharadwaj
CEO
Shakti Sustainable Energy Foundation

Dr Anshu Bharadwaj was a member of the Indian Administrative Services (IAS, 1992 batch, Karnataka cadre). He worked in the state government in various capacities. In 2007, he joined as Executive Director of Centre of Study of Science, Technology and Policy (CSTEP) and helped establish CSTEP as a leading technology policy Think Tank. He functioned as ED of CSTEP till 2020. He has expertise in technology and policy aspects of energy and environmental sectors. He is a member of several government committees in these areas. He holds a PhD from the Departments of Engineering and Public Policy and Mechanical Engineering, Carnegie Mellon University, Piittsburgh, USA. He also has a B.Tech. in Mechanical Engineering from Indian Institute of Technology, Kanpur and PGDM from Indian Institute of Management, Kolkata.

DAY ONE

Scaling up the greening of the financial system and international networks: towards the G20 India's presidency

Thomas Melonio
Chief Economist,
Agence Française de Développement

Thomas Mélonio has been managing AFD's Innovation, Research and Knowledge Department since September 2018.

This department's mission is to find solutions to the complex challenges of sustainable development. It produces research that consistently contributes to promoting dialog and improving the advice given to AFD's partner countries.

With this goal in mind, the department assesses the impact of projects already implemented, and finances innovative projects in the environmental sector (via the French Global Environment Facility, or the FGEF). It is also involved in sharing its knowledge and tools, both within AFD Group and with developing countries (via the organization of international conferences and AFD Campus).

An economist by training, (HEC, PhD from the IEP in Paris), Thomas Mélonio joined AFD in 2005 and quickly moved to the Research Department. His work then focused on methods for human capital development, the financing of education and higher education, and international migration. From 2012 to 2017, he was deputy adviser and then adviser to the French President on Africa. He returned to AFD in 2017 to head the Partnerships Department and then became Executive Director for Innovation, Research and Knowledge in 2018.

Andreas Schaal
Director of
Global Relations
and Co-operation,
OECD

Mr. Andreas Schaal is the OECD's Director of Global Relations. He is responsible for the OECD's relations with Brazil, China, India, Indonesia and South Africa, as well as with emerging regions such as Southeast Asia, Latin America and the Caribbean, Southeast Europe, Eurasia and the MENA region.

Between 2013 and 2016, he served the Organization as Head of Office for the Sherpa and the OECD Global Governance Unit, and served as G20 Sub-Sherpa from 2013 to 2018. He worked with the OECD Chief of Staff and Sherpa to maximize OECD contributions to key pillars of the global governance architecture, such as the G20, G7, APEC and the Deauville Partnership for Countries in Transition in the MENA region.

Prior to joining the OECD, Mr. Schaal held various positions in the service of the German Federal Government, including Deputy Director of the G8 Summit and the German Sherpa Bureau at the Federal Ministry of Economic Affairs and Technology; Economic Adviser, within the Permanent Delegation of Germany to the OECD; Vice-President (elected from 2005 to 2006) of the OECD's Economic Affairs and Development Review Committee (EDRC), and Political Adviser and Chief of Staff to Parliamentary Secretary of State Siegmar Mosdorf, Member of Parliament, Federal Ministry of Economic Affairs and Technology.

Dr. Schaal is a non-resident principal investigator at the Chongyang Institute of Financial Studies at Renmin University of China (RDCY). Mr. Schaal, of German nationality, holds a Master's degree in Public Policy and Public Management from the University of Constance, Germany.

Rajnath Ram
Adviser Energy,
Niti Aayog

Rajnath Ram is currently the Adviser (Energy) at NITI Aayog, Government of India. He has been working on Government policy and program formulation related to Oil and Natural Gas, Renewable Energy, Power, and Coal. He is also leading the initiative of Energy Data Management to create a robust energy data management system of international repute and is in charge of the initiative to set up an Energy Modelling Unit within the NITI Aayog. He has published various articles on the Shale gas, PMUY, and Energy Data Management. Mr. Ram has also worked as Joint Adviser (Infrastructure) in the Petroleum and Natural Gas Regulatory Board, heading the technical standard division wherein he was associated with the formulation of technical standards and specification including safety standards pipelines of petroleum and natural gas, city gas distribution networks and of

Emergency Response and Disaster Management Plans (ERDMP) of Indian Oil & Gas Sectors and Onsite verification of ERDMP. In addition, he looked after the overseas engagements – India-US Energy Dialogue, India-China Strategic Economic Dialogue, NITI Aayog – DRC, PRC Dialogue, and the Twinning program with Australia.

Mr. Ram is a B.Tech in Petroleum Engineering from IIT (ISM) Dhanbad and an MBA from Faculty of Management Studies (FMS), Delhi.

Sunil Nair
Chief General Manager
Sustainable Finance Group,
Reserve Bank of India

Mr. Sunil Nair is a Chief General Manager in the Department of Regulation at the Reserve Bank of India, Central Office, Mumbai. He has previously served as the Banking Ombudsman at RBI, Ahmedabad.

Mr. Nair is a career Central Banker with wide experience in Policy and Regulation and more than three decades of distinguished service in the Reserve Bank of India in its Central Office at Mumbai and Regional Office at New Delhi.

His academic qualifications include B.Sc., LL.B., CAIIB and PG in Management. He has attended training programmes in India and abroad and has also served on important Committees and Working Groups in the Reserve Bank of India.

Morgan Després
Director, Strategy,
Banque de France

Morgan Després is currently Director of Strategy for Banque de France. Morgan Després was previously Deputy Head of the Financial Stability Department at the Banque de France and also served as the Head of the Network for Greening the Financial System (NGFS) Secretariat. He joined the Banque de France in 2005 and served in the Payment and Settlement Systems Department and as Deputy Head of the Macroprudential Division. Other professional experience includes a secondment as Deputy Head of the Financial Stability Unit within the French Treasury Department and technical assistance missions for the IMF.

Mr. Després holds an MBA from ESSEC business school, graduated from the Institut d'Etudes Politiques de Paris, and studied at the Harvard Extension School.

DAY TWO

Session 1
Building a Climate Finance Strategy

Mr Stephane Cieniewski
Senior Adviser on Environment and Climate, Direction Generale du Tresor

Stéphane Cieniewski was appointed as a high-level expert, delegate to the French Director General of the Treasury on climate and environmental issues in September 2020. He was posted abroad for about fifteen years in the international network of the Directorate-General of the Treasury (financial advisor in China, Japan, head of the economic service Hong Kong & Macao), and he was also Head of the Africa office at the French Treasury. In September 2016, Stéphane Cieniewski was appointed adviser for bilateral financial affairs and development in the cabinet of the Economy and Finance Minister. Before taking up his current position at the French Treasury, he was Head of the Economic Service of the French Representation to the Organisation for Economic Co-operation and Development (OECD).A former student of the École Polytechnique, Stéphane Cieniewski graduated from the École nationale de la Statistique et de l'Administration économique (ENSAE).

Rajnath Ram
Adviser Energy, Niti Aayog

Rajnath Ram is currently the Adviser (Energy) at NITI Aayog, Government of India. He has been working on Government policy and program formulation related to Oil and Natural Gas, Renewable Energy, Power, and Coal. He is also leading the initiative of Energy Data Management to create a robust energy data management system of international repute and is in charge of the initiative to set up an Energy Modelling Unit within the NITI Aayog. He has published various articles on the Shale gas, PMUY, and Energy Data Management. Mr. Ram has also worked as Joint Adviser (Infrastructure) in the Petroleum and Natural Gas Regulatory Board, heading the technical standard division wherein he was associated with the formulation of technical standards and specification including safety standards pipelines of petroleum and natural gas, city gas distribution networks and of Emergency Response and Disaster Management Plans (ERDMP) of Indian Oil & Gas Sectors and Onsite verification of ERDMP. In addition, he looked after the overseas engagements – India-US Energy Dialogue, India-China Strategic Economic Dialogue, NITI Aayog – DRC, PRC Dialogue, and the Twinning program with Australia.

Mr. Ram is a B.Tech in Petroleum Engineering from IIT (ISM) Dhanbad and an MBA from Faculty of Management Studies (FMS), Delhi.

Mrs. Melissa Perez
Head of Sales &
Business Development,
Carbone4 Finance

Melissa Perez joined Carbon4 Finance in 2021 as Head of Sales and Business Development. She has a solid background in the financial industry, having worked for renowned banks such as Bank of France, Credit Mutuel Arkea, Société Générale, Morgan Stanley, and BNP Paribas. In her last role in BNPP, she was in charge of developing the sustainability loan offer in the Emerging Markets. Aside from her professional life, Melissa is a board member of The Shifters, an association gathering more than 12 000 volunteers in Europe which support the Shift Project, a think tank whose mission is to decarbonize the economy. As Head of the Project Department, she creates and coordinates an infrastructure to support hundreds of projects from the volunteers. Additionally, Melissa is a board member of Orano's Stakeholder Panel, where she provides corporate management with insights on the social, societal, and environmental responsibility of the Group.

Mrs Caroline Wellemans
Head of Unit
Sustainable Finance Policy,
DG INTPA,
European Commission

Caroline Wellemans is deputy head of the financial technology and sustainable finance unit of the Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG FISMA). Caroline is notably responsible for formulating and developing new policies in the field of Sustainable Finance within the European Union and for coordinating with international partners approaches to mobilise private investors towards green investments across the globe.

Mr Gonzague Monreal
Head of Latin America
and Asia,
Financial Institutions
& Inclusion,
PROPARCO

Gonzague Monreal heads the Latin America & Asia team within Proparco's Financial Institutions group. He oversees the execution of transactions with bank and non-bank financial institutions in these two regions and the monitoring of a diverse portfolio of clients. He joined Proparco in 2012 as an investment officer in the Financial Institutions team, having previously worked in financial planning at a commercial bank. He graduated from Sciences Po Paris with a master's degree in finance.

Mrs Karen Degouve
Climate Director,
French Banking
Federation

Karen Degouve joined the FBF on 3 January 2022 as Climate Director. Karen has over 15 years of experience in sustainable finance. She was previously Head of Sustainable Business Development at Natixis, a subsidiary of Groupe BPCE focused on Asset & Wealth Management and Corporate & Investment Banking, where she led several key initiatives in the field of environmental and social responsibility, including the Green Weighting Factor scheme. A graduate of HEC Paris, Karen Degouve joined Natixis in 2005 as manager of the European Carbon Fund, a climate investment fund dedicated to clean energy and infrastructure projects aimed at reducing greenhouse gas emissions in emerging markets. She headed the climate finance team of asset manager Natixis Environnement & Infrastructures (now Mirova) and was a board member of the International Emissions Trading Association (IETA) until 2012.Before joining Natixis, Karen was a project finance manager at ABB, covering France, the Middle East and Africa. She also worked in emerging capital markets for UBS and Nomura Group.

DAY TWO

Session 2
Identifying Sustainable Green Finance Projects

Mr Philippe Le Houérou
President of AFD
Board of Directors

Philippe Le Houérou is President of AFD Board of Directors. He was previouslyChief Executive Officer of IFC from March 2016 to September 2020. His career includes leadership positions at the World Bank and the European Bank for Reconstruction and Development, where he developed and implemented business strategies, helped increase lending and spearheaded new partnerships.

Prior to his arrival at IFC, Mr. Le Houérou was Vice President for Policy & Partnerships at the EBRD. Before joining the EBRD in 2015, Mr. Le Houérou was the World Bank's Regional Vice President for the South Asia Region. Earlier in his career, Mr. Le Houérou held a number of other key positions at the World Bank, including Vice President of Concessional Finance and Global Partnerships; Acting Vice President and Chief Information Officer; Director of Finance and Resource Mobilisation; Macro-Fiscal Sector Manager; and Resident Representative in Madagascar.

Le Houérou began his career in banking in the private sector, and initially joined the World Bank Group as a Young Professional, which included work in IFC investment operations in East Asia.

Born in Montpellier, France, Mr. Le Houérou grew up in North Africa and Italy and went on to attend the Institut d'Etudes Politiques de Paris. He holds an MBA from Columbia University and a Ph.D in Economics from the Institut d'Etudes Politiques de Paris.

Mr. Ravinder Singh Dhillon
Chairman and Managing Director
Power Finance Corporation Limited

Mr. Ravinder Singh Dhillon is the Chairman and Managing Director (CMD) of Power Finance Corporation Limited (PFC). He has over 37 years of varied experience, of which more than 28 years has been in the financial sector. He has worked across the value chain of project financing and is presently heading India's largest Government owned Non-Banking Finance Company and playing a crucial role in implementation of key power sector initiatives of Government of India. Prior to PFC, he worked with Bharat Heavy Electricals Ltd. (BHEL), designing power generating equipment and with Central Electricity Authority (CEA), planning power systems.

Some of his recent achievements include PFC obtaining the coveted 'Maharatna' status, the highest recognition by Govt. of India for any Govt. Company, successful implementation of about US$ 13 billion Liquidity Infusion Scheme (LIS) to avert power sector liquidity crisis amid COVID and rollout of the Revamped Distribution Sector Scheme (RDSS) for improving the financial viability of power distribution sector.

Under his leadership, PFC saw record loan sanctions of US$ 28 billion in just 2 years, highest ever profit of about US$ 1.3 billion during FY 2022 and net worth of US$ 7.6 billion with lowest NPAs in last 5 years.

Under his guidance, PFC is leading India's green energy transition, with its renewable portfolio growing at more than 30% per annum during the last 5 years. He has also led PFC's diversification into funding of e-mobility projects, Pumped Storage projects, water treatment plants etc. He is presently exploring a key role for PFC in India's sovereign green bond scheme and in the process of setting up a foreign subsidiary to channelize foreign investments to the Indian green energy sector. Under his leadership, PFC intends to play a major role in India achieving net zero by 2070 to address challenges related to climate change.

Mr. Dhillon is an Electrical Engineer and holds a Master's Degree in Power Systems from Indian Institute of Technology (IIT), Delhi.

Mr. Subrat Kumar
Chief General Manager,
Bank of Baroda

Mr. Subrat Kumar has been working at Bank of Baroda as Chief General Manager in Bank of Baroda since 2020. He is a Management Graduate and has experience of 27 years in Banking/Mutual Funds/ Corporate Finance etc. He is having a vast experience in banking and has worked as Chief Risk Officer, Chief Financial Officer, Head-Treasury, Head - Corporate Banking and Head - Trade & Fx etc Presently he is heading Mid Corporate and State PSU Segment of the bank.

Mr. Monu Ratra
CEO & ED
IIFL Home Finance

Mr. Monu Ratra has been ED & CEO of IIFL Home Finance since 2014. Before this, he was the National Business Manager at the Mortgage & Propery Services department, for Indiabulls ; and also worked at ICICI Bank.

He is graduated from the Lal Bahadur Shastri Institute of Management New Delhi and from the Guru Nanak Dev University.

Mrs. Cecilia Tam
Team Leader,
Clean Energy Finance and
Investment Mobilisation, OECD

Cecilia Tam leads the Organisation for Economic Cooperation and Development (OECD) Clean Energy Finance and Investment Mobilisation Programme. Prior to taking up this role, she held a number of leadership positions at the International Energy Agency (IEA) including Acting Head of the Energy Technology Policy Division and Special Advisor to the Executive Director since first joining the agency in 2006. Cecilia is an expert in clean energy finance, energy technology deployment and innovation.

Mr. Alexandre Vincent
Green Bond and ESG manager,
Agence France Trésor

Mr Alexandre Vincent has been in charge of the sovereign green bond programme at Agence France Trésor since 2019. He started his career at the French Treasury, as a social policy analyst, in 2003. From 2006 to 2016 he worked with BNP Paribas as a senior economist, in the country risk and then in the industry research teams. From 2016 to 2018 he worked at the think tank Rexecode, doing structural studies as well as economic forecasts. He graduated from Ecole Normale Supérieure, Sciences Po Paris, EHESS and Sorbonne University.

Mathieu Garnero
Director of Finance
ClimAct project, ADEME

A statistician by training, Mathieu Garnero joined Société Générale in 2004, where he first developed an expertise in modeling and risk management for credit activities, before becoming deputy head of the internal models teams for market operations in 2011 (counterparty and market risk). He then went through a career change and completed a university degree focusing on sociological and economic issues related to the environment. He joined the ADEME research and prospective department in 2019 where he first worked on the inclusion of financing issues in the ThreeME macroeconomic model before taking the lead of a European project (LIFE) on sustainable finance working through a consortium of French actors.

Emmanuelle Riedel Drouin
Deputy Executive Director,
Solutions for Sustainable
Development (SDD),
Agence Française de
Développement (AFD)

Prior to her current functions, Emmanuelle Riedel Drouin has headed the Economic and Financial Transition department at Agence Française de Développement and worked with public economic and financial actors on the path toward more inclusive, resource-efficient and resilient ways of producing and financing. She focused on financial systems (public development banks, financial inclusion, regulators) as well as productive systems (SOEs, entrepreneurial ecosystem, PPP). Emmanuelle was previously working for Proparco, AFD's subsidiary focused on the private sector, heading the South Asia office based in Delhi before joining AFD in Paris. Prior to joining Proparco, Emmanuelle worked in the banking industry. Amongst her roles, she was Vice President at LCM Asset Management NY, and worked for CA-CIB and BNP Paribas. She holds an MBA from Baruch College USA and a graduate degree in Economics and Finance from University Paris IX.

Mrs Caroline Wellemans
Head of Unit Sustainable Finance Policy,
DG INTPA, European Commission

Caroline Wellemans is deputy head of the financial technology and sustainable finance unit of the Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG FISMA). Caroline is notably responsible for formulating and developing new policies in the field of Sustainable Finance within the European Union and for coordinating with international partners approaches to mobilise private investors towards green investments across the globe.

DAY TWO

Session 3

How managing climate risks can increase Green Finance

Morgan Després
Director, Strategy,
Banque de France

Morgan Després is currently Director of Strategy for Banque de France. Morgan Després was previously Deputy Head of the Financial Stability Department at the Banque de France and also served as the Head of the Network for Greening the Financial System (NGFS) Secretariat. He joined the Banque de France in 2005 and served in the Payment and Settlement Systems Department and as Deputy Head of the Macroprudential Division. Other professional experience includes a secondment as Deputy Head of the Financial Stability Unit within the French Treasury Department and technical assistance missions for the IMF. Mr. Després holds an MBA from ESSEC business school, graduated from the Institut d'Etudes Politiques de Paris, and studied at the Harvard Extension School.

Sunil Nair
Chief General Manager
Sustainable Finance Group,
Reserve Bank of India

Mr. Sunil Nair is a Chief General Manager in the Department of Regulation at the Reserve Bank of India, Central Office, Mumbai. He has previously served as the Banking Ombudsman at RBI, Ahmedabad.

Mr. Nair is a career Central Banker with wide experience in Policy and Regulation and more than three decades of distinguished service in the Reserve Bank of India in its Central Office at Mumbai and Regional Office at New Delhi.

His academic qualifications include B.Sc., LL.B., CAIIB and PG in Management. He has attended training programmes in India and abroad and has also served on important Committees and Working Groups in the Reserve Bank of India.

Rajiv Anand
Deputy Managing Director,
Axis Bank

Rajiv Anand, 56 years, with an illustrious career spanning more than 30 years has focused on various facets of the financial services industry. Having held key management positions at leading global financial institutions, he is widely recognized for his strengths in capital markets and for successfully building new businesses to scale.
Rajiv joined Axis AMC in 2009 and was the founding Managing Director & CEO of Axis Asset Management Co. Ltd. He was appointed as the President (Retail Banking) of Axis Bank in May 2013, to spearhead the business with his sharp acumen which led to the achievement of several key milestones. Subsequently, he was inducted onto the Board of the Bank in May 2016. He took over as the Head – Wholesale Banking in 2018 to steer the business ahead, ensuring both growth and sustainability. He is now the Deputy Managing Director of the Bank, w.e.f 27th December 2021, leading some of the most critical functions, including Wholesale Banking and Digital Banking, along with support functions like Marketing and Corporate Communications. He is a Member of the Corporate Social Responsibility Committee and the Committee of Whole Time Directors of the Bank. He is the Co-Chair of the Banking Taskforce at CII - Western region, a member of the National Committee on Banking at CII and holds several key positions in other committees and industry bodies. Rajiv Anand is a Commerce graduate and a Chartered Accountant by qualification.

Cédric Merle
Head of Center of Expertise
& Innovation, Natixis CIB
Green & Sustainable Hub

Cédric Merle began working at Natixis CIB's Green & Sustainable Hub in 2017 as a Socially Responsible Investment (SRI) sell-side analyst. In 2018, he joined the transactions side of the Hub. He is currently Head of the Center of Expertise & Innovation, the content creation team in charge of guaranteeing the integrity and scientific relevance of the range of ESG products & services. Prior to Natixis, Cedric Merle served as "Deputy Head of international Financial System and Summits Preparation Office" (G20, G7, OECD) at the French Treasury (Ministry for the Economy and Finance). He was member of the inter-ministerial taskforce on the 2030 Agenda.

Jean Guillaume Peladan
Head of Environmental Investments & Research, Sycomore

Jean-Guillaume joined Sycomore AM in 2015 to develop its environmental strategy. He launched the listed equity fund Sycomore Eco Solutions, the first financial product to obtain the Greenfin label from the French government in 2016. In 2017, his work led to the development of an advanced metric, the Net Environmental Contribution (NEC), which measures the degree of alignment of business models with environmental transition and climate objectives. Earlier, he worked at the Boston Consulting Group (BCG) and at the Agence de Transition Ecologique (ADEME) to build and lead the department dedicated to the financing of green innovation, the Programme des Investissements d'Avenir.

Jean-Guillaume Péladan is a polytechnicien and engineer from the Paristech Mines.

Arthur Campredon
Deputy Head of the Sustainable Finance Office at the French Treasury

Arthur is Deputy Head of the Sustainable Finance Office at the French Treasury. He is responsible for negotiating directives and regulations on sustainable finance at the EU level (Taxonomy, SFDR, Green Bonds Standard, Ecolabel, etc.). He is the representative of the French Treasury in the Member States Expert Group on sustainable finance. He is also in charge of drafting national regulations, especially on investor reporting (art. 29 LEC, etc.). Finally, he is responsible for the development of ESG minimum standards, climate risks and a better consideration of biodiversity. In his role, he is a member of the French negotiating team for COP 15 and is partially seconded to TNFD secretariat.

DAY TWO

Session 4
Focus on Climate and Biodiversity Financial Risks

Nathalie Borgeaud
Lead, Financial Markets Stakeholder Engagement, Task Force on Nature-related Financial Disclosures (TNFD)

Nathalie Borgeaud has more than 30 years of experience from the financial industry, with a longstanding focus on sustainability. Prior to joining TNFD in February 2022, Nathalie worked for a start-up promoting data on physical climate risk and nature loss among European financial institutions. Before that, she worked as senior co-director for CSR at BNP Paribas CIB. She designed and implemented a sustainable development strategy, which included monitoring Environmental, Social and Governance (ESG) risks and developing green financial product offerings. She built her finance career negotiating large complex financings for corporate clients with BNP Paribas and JPMorgan Chase for about 12 years. Initially based in New York with Citi, she originated project finance, bonds and equity issues for large industrial projects key to the development of emerging countries.

Mr. Sunil Mehta
Chief Executive,
Indian's Bank Association

Mr. Sunil Mehta is the Chief Executive of Indian Banks' Association. Prior to this Mr. Sunil Mehta served as the MD & CEO of Punjab National Bank. He is a seasoned banker with over 37 years of rich experience. He started his banking career as an Agriculture Field Officer at Allahabad Bank in 1982. Prior to assuming the position of MD & CEO, PNB, he was Executive Director of Corporation Bank. During the course of his career, he held various important positions in view of his expertise in agriculture, retail, credit and planning and development.

P.V.S. Suryakumar
Deputy Managing Director,
NABARD

Mr. P.V.S. Suryakumar joined NABARD in 1986 and has handled a variety of functions; appraisal, funding & monitoring of projects, training & capacity building, implemented various programs, policy & advocacy, and communications. He worked across India. He is a graduate from the Indian Agricultural Research Institute, New Delhi and the Staffordshire University, Stroke-on-Trent, Great Brittan. He is a Commonwealth Scholar. He is an Associate of the Indian Institute of Banking & Finance. He is an author of two books, Cases and Sustainable Agriculture. He regularly contributes to business newspapers on policy issues.

Mr. Vineet Rai
Founder,
Aavishkaar Intellecap Group

Vineet Rai is the founder of Aavishkaar Group and he also chairs its Group Executive Council. Considered as a pioneer in the Impact investment space, Vineet received several awards for his work and engagement towards the Sustainable Development Goals, including Impact Investor of the Year by News Corp for 2016 and the Porter Prize for Strategic Leadership in the Social Space in 2016. He is an Ashoka Fellow and Honorary Member of XLRI Alumni Association, and also serves as Commissioner at the Business Commission for Sustainable Development, as Senior Advisor to Blended Finance Working Group at OECD and as an Advisor to United Nations Economic and Social Commission for Asia and the Pacific Science Technology and Innovation Advisory Board.

Anne-Laurence Roucher
Deputy CEO, Head of
Development, Finance and
Corporate secretariat, Mirova

Anne-Laurence began her career in 1999 as a project manager in an integration company for people far from employment in the restaurant sector, with the aim of reconciling economic and social performance. Anne-Laurence joined the consulting firm AT Kearney in 2000 as a business analyst, then moved on to a senior associate position with financial institutions. She then joined Natixis in 2005, before taking over the management of Natixis Asset Management's strategy in 2007. It is in this context that Anne-Laurence will have a structuring role in highlighting the inescapable nature of responsible finance. This strategic priority will result in the creation within Natixis Asset Management of a business unit dedicated to responsible investment, which will become Mirova. Anne-Laurence Roucher is a graduate of ESCP Europe and Harvard Business School.

Marguerite Culot-Horth
Finance for Tomorrow,
Head of Programmes,
Strategic Development and
Institutional Relationships

Marguerite Culot studied international law and the political economy of sustainable development in Belgium. Marguerite began her career working for the World Bank in DC and UNESCO in Paris on climate and local governance projects, especially in the small islands or in West Africa before joining the National Assembly as a Sustainable Development Advisor of a parliamentary group. It covered, in this context, the finance topics of the law for green growth (art 173) and biodiversity compensation in the law of the same name of 2016. She led the IUCN World Conservation Congress's Nature Generation Spaces and spearheaded one of the OFB's Nature Pledge Program initiatives over the past three years before joining Finance for Tomorrow in October 2021 as Director of programs, development and institutional relations.

Mr. Haje Schütte
Head, Financing for
Sustainable Development
Division, OECD

Mr. Haje Schütte is Senior Counsellor and Head of the Financing for Sustainable Development Division of the OECD Development Co-operation Directorate. His work focuses on how to address key strategic challenges at the core of the 2030 Agenda, i.e. mobilising additional financial resources for sustainable development, directing all finance and investments to support sustainable development, and increasing the economic, social and environmental impact of investments in people's lives. As Senior Counsellor, he is the focal point for the Directorate's G7 and G20 contributions and its work on private sector engagement. A development banker and policy maker with 25 years' experience in investment operations and policy, from 1999 to 2015 he held management positions at the German KfW Group before joining the OECD. He has also worked with the International Labour Organisation. Mr. Schütte, a German national, holds an Executive Masters from HEC Paris / Saïd Business School Oxford and graduate degrees in economics from the London School of Economics and Political Science, and the Freie Universität Berlin, as well as in development studies from the German Development Institute.

DAY THREE

Wrap Up Words and Next Steps and Way Forward

Marie-Hélène Loison
Deputy CEO
Agence Française de
Développement (AFD)

Marie-Hélène Loison is a graduate of Institut d'Etudes Politiques at SciencesPo in Paris, and the School of Advanced International Studies in Washington DC.

She began her career in 1996 at the French bank Société Générale, in export financing. She joined AFD Group in 2000, at Proparco, AFD's subsidiary in charge of private-sector financing. Marie-Hélène Loison started there as an account manager, organizing Proparco financing in the agribusiness, health, and tourism sectors. She then joined the equity team, which she headed from 2008 to consolidate and develop operations. In 2011 she became Deputy CEO of Proparco in charge of operations, heading a department of around 100 people in France and abroad and working on developing activity, revising strategy, and increasing capital by €200 million.

Marie-Hélène Loison joined AFD as Director of the Middle East and North Africa Department in 2015, supervising a network of field offices in eight countries. She initiated AFD activity in the Western Balkans, and then concentrated on the Middle East in response to the Syrian crisis.

In September 2018, Marie-Hélène Loison was appointed Deputy to the Executive Director of Operations, a division of 1,500 people carrying out approximately €10 billion in financing per year. One of her main tasks was the creation of 17 Regional Divisions to decentralize division operations.

She took up her position as Deputy CEO on July 8, 2021.

Mr. Sivasubramian Ramann
Chairman SIDBI

Mr. Sivasubramanian Ramann has taken charge in April 2021 as the Chairman and Managing Director of SIDBI, the principal financial institution engaged in the promotion, financing and development of Micro, Small & Medium Enterprises. Before this, Ramann was serving as the Managing Director & Chief Executive Officer of National E-Governance Services Ltd. (NeSL), India's first information utility. Shri Ramann is an Indian Audit & Accounts Service (IA&AS) officer of 1991 batch. Prior to joining NeSL, Ramann was the Principal Accountant General of State of Jharkhand from 2015 - 2016. He has also held the position of Executive Director with Securities and Exchange Board of India (SEBI), while he was on deputation from the Government of India from 2006 to 2013. Ramann has a BA in Economics and MBA from Delhi University. He also holds professional qualifications from the London School of Economics, from the Institute of Internal Auditors (IIA) and a post-graduate Diploma in Securities Law.

Anshu Bharadwaj
CEO
Shakti Sustainable Energy Foundation

Dr Anshu Bharadwaj was a member of the Indian Administrative Services (IAS, 1992 batch, Karnataka cadre). He worked in the state government in various capacities. In 2007, he joined as Executive Director of Centre of Study of Science, Technology and Policy (CSTEP) and helped establish CSTEP as a leading technology policy Think Tank. He functioned as ED of CSTEP till 2020. He has expertise in technology and policy aspects of energy and environmental sectors. He is a member of several government committees in these areas. He holds a PhD from the Departments of Engineering and Public Policy and Mechanical Engineering, Carnegie Mellon University, Piittsburgh, USA. He also has a B.Tech. in Mechanical Engineering from Indian Institute of Technology, Kanpur and PGDM from Indian Institute of Management, Kolkata.

Jérémie Pellet
Chief Executive Officer
of Expertise France

Jérémie Pellet joined Expertise France in December 2018. He was previously Deputy Director General of the Agence Française de Développement (AFD), in charge of the agency's activities with local authorities, public companies, the private sector and NGOs, and coordinating strategy, communication, partnerships, research and innovation. He was Vice-Chairman of the Board of Directors of Proparco, the AFD Group's private sector subsidiary, and Chairman of its Investment Committee. He was also a member of the Board of Directors of Expertise France and BPI France Financement.

Graduate from the Institute of Political Studies in Strasbourg, he began his career at the Ministry of Foreign Affairs, before entering the National School of Administration (graduated from Leopold Sédar Senghor). Upon graduation, he joined the Ministry of Economy and Finance.

Mr Philippe Le Houérou
President of AFD
Board of Directors

Philippe Le Houérou is President of AFD Board of Directors. He was previouslyChief Executive Officer of IFC from March 2016 to September 2020. His career includes leadership positions at the World Bank and the European Bank for Reconstruction and Development, where he developed and implemented business strategies, helped increase lending and spearheaded new partnerships.

Prior to his arrival at IFC, Mr. Le Houérou was Vice President for Policy & Partnerships at the EBRD. Before joining the EBRD in 2015, Mr. Le Houérou was the World Bank's Regional Vice President for the South Asia Region. Earlier in his career, Mr. Le Houérou held a number of other key positions at the World Bank, including Vice President of Concessional Finance and Global Partnerships; Acting Vice President and Chief Information Officer; Director of Finance and Resource Mobilisation; Macro-Fiscal Sector Manager; and Resident Representative in Madagascar.

Le Houérou began his career in banking in the private sector, and initially joined the World Bank Group as a Young Professional, which included work in IFC investment operations in East Asia.

Born in Montpellier, France, Mr. Le Houérou grew up in North Africa and Italy and went on to attend the Institut d'Etudes Politiques de Paris. He holds an MBA from Columbia University and a Ph.D in Economics from the Institut d'Etudes Politiques de Paris.

ORGANISERS
OF THE GIFS SEMINAR in Paris

Melissa Dalleau
Country Desk Officer
for India.
AFD Headquarters.

Melissa joined the Agence Française de Développement in 2016. After 3 years as Country officer for Vietnam, she is now in charge of managing all AFD's activities in India from AFD's headquarters in Paris and in liaison with the agency based in New Delhi.

Mélissa Dalleau has been working on development policies for more than 12 years. Prior to AFD, she spent four years at the French Ministry of Europe and Foreign Affairs as a trade/development policy advisor in the Enterprise and International Economy Directorate. Mélissa holds a double degree from Sciences Po Paris and the London School of Economics in International Economic Policy.

Alisée Pornet
Head of Division,
Energy and Climate Finance
AFD New Delhi

Alisée Pornet joined the Agence Française de Développement (AFD) in 2017 in the Strategic and Research Department for Asia and Middle East. She is now based in New Delhi as the Head of Energy and Climate Finance department of AFD India. She used to work in the French Prime Minister cabinet and in the External Affairs ministry, in the COP21 preparatory and negotiation team.

Mrs Pornet is graduated from Ecole Normale Supérieure (Lyon) in Geographics and from Sciences Po Paris in Public Affairs.

Isaure de Belleville
Sector Portfolio Manager,
Energy and Climate Finance
AFD New Delhi

Isaure joined the Agence Française de Développement (AFD) in September 2020 in New Delhi, and is in charge of the Green and Climate Finance portfolio dealing with major Indian public financial institutions to implement projects in the green housing, energy efficiency and renewable energy sectors. She used to work in Investment and Corporate Banking in France, and supported the expansion of Jumia, a major e-commerce platform in Côte d'Ivoire.

She holds a Master's degree in corporate finance from ESCP Business School (France) and was a visiting PGP student from the Indian Institute of Management Bangalore.

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BIBLIOGRAPHY

Organisation des Nations Unies (2015), Accord de Paris sur le climat
https://unfccc.int/sites/default/files/english_paris_agreement.pdf

FMI (septembre 2019), Macroeconomic and Financial Policies for Climate Change Mitigation: A Review of the Literature, Working Paper No. 19/185

GIEC (septembre 2019), Rapport sur le changement climatique et les terres émergées
https://www.ipcc.ch/site/assets/uploads/2019/08/2019-PRESS-IPCC-50th-IPCC-Session_fr.pdf

Organisation des Nations-Unies (2015), Addis Ababa Action Agenda of the Third International Conference on Financing for Development
https://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf

Institut Louis Bachelier, MOOC, Le climat, un défi pour la finance
https://www.institutlouisbachelier.org/mooc/climat-un-defi-pour-la-finance/

Global Commission on the Economy and Climate (2018), New climate economy report
https://newclimateeconomy.report/2018

Médiapart (5 février 2020), Les mirages de la finance

The Energy Gang (janvier 2020), The World's Biggest Capitalist says Climate is "Reshaping Finance"
https://www.stitcher.com/podcast/the-energy-gang/e/66645562

Group of MDBs (2018), The MDBs' Alignment Approach to the Objectives of the Paris Agreement: Working Together to Catalyse Low-Emissions and Climate-Resilient Development'. Joint Statement. Group of Multilateral Development Banks

http://pubdocs.worldbank.org/en/784141543806348331/Joint-Declaration-MDBsAlignment-Approach-to-Paris-Agreement-COP24-Final.Pdf

IDFC (2018), Aligning with the Paris Agreement, Position Paper. International Development Finance Club
https://www.idfc.org/wp-content/uploads/2018/12/idfc_alignment-with-paris-agreement_positionpaper_12_2018.pdf

Institut Louis Bachelier (juin 2020), The alignment cookbook, a technical review of methodologies assessing a portfolio's alignment with low carbon trajectories or temperature goal
https://www.louisbachelier.org/rapport-lalignement-des-portefeuilles-dinvestissement-avec-laccord-de-paris-sur-le-climat/

World Resources Institute (2018), Toward Paris Alignment: How the Multilateral Development Banks Can Better Support the Paris Agreement'. New Climate Institute, GermanWatch
https://germanwatch.org/en/16085

Climate Policy Initiative (novembre 2019), Global Landscape of Climate Finance 2019
https://climatepolicyinitiative.org/wp-content/uploads/2019/11/GLCF-2019.pdf

Climate Policy Initiative (septembre 2019), Implementing Alignment: Recommendations for the International Development Finance Club
https://climatepolicyinitiative.org/publication/implementing-alignment-recommendations-for-the-international-development-finance-club/

UNFCCC (2019), Climate Action Support Trends 2019
https://unfccc.int/sites/default/files/resource/Climate_ Action_Support_Trends_2019.pdf

Raphaël Jachnik & Mariana Mirabile & Alexander Dobrinevski (2019), Tracking finance flows towards assessing their consistency with climate objectives, OECD Environment Working Papers 146, OECD Publishing
https://ideas.repec.org/p/oec/envaaa/146-en.html

2 Degrees Investing Initiative, PACTA Transition Monitor
https://2degrees-investing.org/resource/pacta - https://www.transitionmonitor.com

EU Taxonomy Technical Report (juin 2019)
https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/190618-sustainable-finance-teg-report-taxonomy_en.pdf

EU Climate Initiative (EUKI - Gouvernement allemand), 29 août 2019, How to Assess Investment Needs and Gaps in Relation to National Climate and Energy Policy Targets?
https://www.euki.de/en/euki-publications/investment-gaps-cic/

L'infodurable.fr, tribune de Coline Pavot, Responsable de la recherche

ODI (janvier 2020), Securing climate finance through national development banks
https://odi.org/en/publications/securing-climate-finance-through-national-development-banks/

Climate Policy Initiative (2020), Mapping climate finance to influence policy, plan investments, and measure progress
https://climatepolicyinitiative.org/2020/02/13/mapping-climate-finance-to-influence-policy-plan-investments-and-measure-progress/

Swiss Re (2020) - Sigma / Natural catastrophes in times of economic accumulation and climate change
https://www.swissre.com/dam/jcr:85598d6e-b5b5-4d4b-971e-5fc9eee143fb/sigma%202%202020%20_EN.pdf

Insuresilience (2019) - Insurance for climate adaptation : Opportunities and Limitations
https://www.insuresilience.org/wp-content/uploads/2019/08/Insurance-for-climate-adaptation_Opportunities-and-Limitations_Web.pdf

Center for Disaster Protection (2019), Beyond Banking : crisis risk financing and development insurance
https://static1.squarespace.com/static/5c9d3c35ab1a62515124d7e9/t/5ca60aef9140b78e63fa4521/1554385656425/Paper_4_Beyond_Banking.pdf

NGFS report
https://www.ngfs.net/sites/default/files/medias/documents/ngfs_first-comprehensive-report_en.pdf

I4CE (novembre 2019), Finance fit for Paris - Évaluation de la réglementation financière en France et en Europe
https://www.i4ce.org/download/finance-fit-for-paris-3fp-resultats-et-notes-de-la-france/

I4CE (juin 2020), Quel rôle pour la réglementation financière dans la transition bas-carbone ?
https://www.i4ce.org/wp-core/wp-content/uploads/2020/06/RegulationBasCarbone-Rapport_VF.pdf

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