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WEBINAR ON "ACCELERATING THE FLOW OF SUSTAINABLE FINANCE FOR INDIA'S CLEAN ENERGY TRANSITION"

23rd Oct 2020

PROCEEDINGS





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Webinar on accelerating the flow of sustainable finance for India's clean energy transition

On 23rd October 2020, the Delegation of the European Union to India organised a webinar on 'Accelerating the flow of sustainable finance for India's clean energy transition'. The webinar was organised under the EU-India Clean Energy and Climate Partnership (CECP) (www.cecp-eu.in and @EU_India_CECP). PricewaterhouseCoopers Private Limited together with the Council on Energy, Environment and Water (CEEW) were the implementing partners for this project. The webinar was attended by more than 230 participants, representing policymakers, regulators, financiers, civil society organisations, think tanks, consultants and academia.

Welcome address

H.E. Mr. Ugo Astuto, Ambassador of the European Union to India, extended a warm welcome to all participants. In his address, he highlighted the importance of mobilising private finance towards environmentally sustainable investments and its relevance amid the pandemic, referring to:

- The International Platform on Sustainable Finance (IPSF), which was launched one year ago ([IPSF Annual Report](#) and the [IPSF \(press\) Statement](#)). The platform includes the EU and 13 other member countries – including India – which together represent nearly 50% of global greenhouse gas emissions and nearly 50% of the world's GDP ([Link](#)). The ultimate objective of the platform is to scale up private capital flows for environmentally sustainable investments.
- Increasing sustainable finance flows is crucial for the clean energy transition, particularly in the wake of the COVID-19 pandemic. Recovery from the pandemic requires investments on an unprecedented scale, but this also presents an opportunity to build back better.
- The European Green Deal ([Link](#)) and the digital transformation agenda ([Link](#)) are the cornerstones of the EU recovery strategy. The European Green Deal is predicated upon a path for economic growth that is decoupled from resource use. The clean energy transition, with a focus on renewable energy and energy efficiency is a key component of this endeavour.
- Annual investments needed to make Europe the first climate neutral continent by 2050 are of the order of Euro 470 billion. Achieving such a scale of investment flows requires the mobilisation of both public and private sources of capital. The European Commission will present a renewed sustainable finance strategy by the end of 2020, as a contribution to the European Green Deal investment plan.
- At the EU-India Summit in July 2020, the commitment to cooperate in the fight against climate change was reiterated, including through the IPSF to mobilise capital towards environmentally sustainable investments ([Link](#)).
- This webinar is organised under the EU India Clean Energy and Climate Partnership (CECP), which includes activities in the area of energy efficiency, renewables, smart grid, storage, and other activities pertaining to sustainable finance.

Keynote address

Dr. C. S. Mohapatra, Additional Secretary, Department of Economic Affairs, Ministry of Finance, Government of India, delivered the keynote address:

- India places great emphasis on the achievement of its targets under the Sustainable Development Goals (SDG) 2030 agenda and its Nationally Determined Contribution (NDC) under the Paris Agreement, despite the Covid-19 pandemic adversely affecting public finances. Public finances alone would be insufficient for the achievement of these targets and the role of sustainable finance with environmental, social, and governance (ESG) aspects is essential for the mobilisation of private capital for their attainment. India, like other countries, needs sound policy frameworks and guiding principles to strengthen its sustainable finance narrative, as these give the right signals to market participants and the wider public regarding the intent of the government.



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- India has supported responsible business, as demonstrated by existing regulatory frameworks. The National Voluntary Guidelines on Social, Environmental & Economic Responsibilities of Business (NVG) were released in 2011 ([Link](#)). The NVGs were upgraded and updated as the National Guidelines on Responsible Business Conduct in 2019 ([Link](#)).
- Non-financial and sustainability reporting provides an opportunity to communicate in an open and transparent way with stakeholders. In this regard, the Securities and Exchange Board of India (SEBI) mandated the top 100 listed companies by market capitalisation to file Business Responsibility Reports (BRRs) on their social and environmental impacts ([Link](#)). This was extended to the top 500 companies in FY 2015-16 and to the top 1000 companies in December 2019 ([Link](#)).
- SEBI has floated a consultation paper on expanding the scope of BRRs to a new framework called Business Responsibility and Sustainability Report to encourage companies to report more extensively on their environmental and social impact and adopt responsible business practices in true letter and spirit by going beyond mere regulatory requirements ([Link](#)).
- The current and emerging challenges such as COVID-19, climate change, resource scarcity have become important and tackling these requires countries to cooperate with each other in every field. If all parties behave responsibly and are accountable to each other, these common goals can be achieved faster.
- In India, SEBI has been driving the narrative of green finance by implementing sustainability reporting and disclosure regulations and green bond regulations requirements for the issuance and listing of green debt securities ([Link](#)). Green bonds hold great promise as a means of accelerating climate action and promoting sustainable development in India across a wide range of market segments particularly renewable energy, green transport, waste management, and energy efficiency. Huge potential exists for blended finance to leverage a wider investor base as a means to mobilise sustainable finance flows.
- A founding member of the IPSF, India actively participates and contributes to deliberations on global transition to a low-carbon, more resource efficient, and sustainable economy. These deliberations on the evolution of sustainable finance have enabled India to scale up environmentally sustainable investment and learn from best practices across the globe.
- Recently, at the one-year anniversary of the IPSF (attended by Dr Mohapatra on behalf of the Finance Minister), India reaffirmed its commitment to promoting sustainable finance. The conversation around sustainable finance is not just about the quantum of finance but also the type of finance that is being deployed. Despite encouraging momentum, the deployment of private capital towards sustainable finance so far has been limited.
- The dedicated engagement and participation of regulators, policymakers, private sector, and financial institutions is essential to push the frontiers on this front. The DEA recently organised a conference on sustainable finance in August with the help of UNDP ([Link](#)). This conference was held with the purpose of broad consultations with all stakeholders in India and over 200 participants from business, industry, financial sector, academia, civil society organisations (CSOs), regulators, and government ministries were invited. Various themes under sustainable finance were discussed and a group of key stakeholders was created to take forward this work.
- There is underinvestment in the renewable energy sector. E-mobility, energy efficiency, waste management, and sustainable agriculture are other important sectors that require attention from the perspective of mobilising finance flows.
- The Covid-19 pandemic has highlighted the importance of developing more resilient and sustainable energy systems in order to avoid future shocks. Investments in clean energy are needed to develop sustainable systems, speed up the clean energy transition and reduce emissions. The IPSF can help channelise private finance in a more systemic way to where it is needed the most.

Special addresses

Ms. Caroline Wellemans, Deputy Head of Unit, **DG Financial Stability, Financial Services and Capital Markets Union (FISMA), European Commission**, delivered the first special address:



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- Accelerating the flow of sustainable finance to support the clean energy transition and building back better towards a more resilient economy in the post-Covid world is a top priority for the European Commission. Global challenges call for a global response. Global coordinated action is needed for achieving collective climate and environmental objectives, now at a much greater pace and scale than in the past.
- The debate on accelerating sustainable finance flows for India's clean energy transition needs to recognise its global dimension: the potential of the global financial markets. Financial markets are global and interconnected and can help link local financing needs with global sources of funding.
- Climate finance has grown significantly to reach a level of around USD 0.5 trillion ([Link](#)). The green bond market has also grown and is worth 250 billion a year ([Link](#)). Though these developments are encouraging, they far from sufficient for meeting Paris Agreement objectives. As per OECD estimates, to reach Paris Agreement objectives by 2030, we would need around USD 7 trillion a year in sustainable finance flows ([Link](#)).
- Scaling up sustainable finance worldwide is a challenging task, notably because of an absence of coherent definition of what is green, coherent frameworks for sustainable finance, transparency and standardisation. To attract international investors to bolster sustainable finance flows, integrated markets are essential – which requires a coordinated approach and coherent frameworks. This is particularly important for the identification of green investment opportunities.
- Taxonomy is a key tool to help investors identify which activities contribute to environmental objectives. Standards and labels provide clarity to investors in terms of what is and what is not a green investment. Disclosure is a key component of a sustainable finance framework – from financial market participants in their portfolios and from companies in terms of their activities.
- This need for a coherent framework is why the European Commission together with India and launched the International Platform on Sustainable Finance (IPSF) one year ago. The IPSF represents 14 jurisdictions accounting for 50% of global GHG emissions and GDP. Operationally, the IPSF compares initiatives and tries to identify best practices in the areas of taxonomy, disclosure, and green bond standards and labels. The IPSF is not a standard setting body but enables the sharing of experiences to facilitate advancement of sustainable finance frameworks in member countries. The work done by the IPSF will serve as a basis for setting international standards.
- The announcement of the establishment of two sub-working groups under IPSF was made at the one-year anniversary, one on taxonomy and the other on disclosure. The objective is to publish by June 2021 a Common Ground Taxonomy highlighting the commonalities between taxonomies of IPSF member jurisdictions taking part into the exercise. This will provide transparency and clarity about what is commonly green in member jurisdictions to international investment funds, lower transaction costs and facilitate cross border investments. The sub-working group on disclosure was set up to facilitate knowledge exchange at a time where many member countries with regulatory regime on disclosure are busy with reviewing while those with a voluntary system are considering a shift to hard law.
- Green taxonomy, green standards, and other sustainable finance tools are key for mobilising sustainable finance investments. Given the scale of the capital needed, only a global approach and coordinated frameworks can ensure that these tools can deliver their full potential for the most important transition of our times.

Mr. Chintan Shah, Director (Technical), **IREDA**, delivered the second special address:

- India has made considerable progress on the renewables front as it works towards its targets of 175 GW capacity deployment by 2022 and 450 GW by 2030 ([Link](#)). Most of the activity in the renewables space has been in the wind and solar segments. Bid sizes of 250 MW are routinely happening in centralised tenders for wind and solar.
- The Government of India is trying to give impetus to local manufacturing in solar to create a sound manufacturing value chain within the country ([Link](#)). Programmes pushing manufacturing-linked tenders and manufacturing-linked markets are trying to create an enabling environment for local manufacturing.
- Government programmes for promoting energy access include the KUSUM scheme (which empowers farmers through energy access) and the Saubhagya scheme (for ensuring last-mile connectivity for



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unelectrified households) ([Link](#)). There is also a push towards embedded generation in the form of rooftop solar, with greater activity to be expected on this front in the coming months ([Link](#)).

- To facilitate the setting up of solar in a big way, large-scale solar parks are being set up, which mitigate the risk of land and evacuation infrastructure through a plug-and-play model. There is a push towards setting up floating solar capacity on India's hydro reservoirs.
- From the perspective of the grid-integration of renewables, there is a push towards hybrid options encompassing solar, wind, and storage to reduce the balancing requirements due to intermittency. In terms of tender design, hybrid tenders, including round-the-clock (RTC) tenders – which have requirements for dispatchable power similar to thermal generation – are being floated ([Link](#)).
- There is a massive government impetus for furthering bio-energy ([Link](#)). There is a huge amount of agri waste in India. This agri waste can be used to generate bio-gas, which can fulfil some of India's demand for natural gas. There is also a push to increase generation of bio-fuels, i.e. bio-ethanol. India is the world's second-largest producer of sugar after Brazil. Sugar, molasses, and cane juice can produce bio-ethanol which can be blended with fossil fuels for various end uses.
- Other sectors: Hydro is a sector which has its own challenges, but the government is trying to figure out ways to push hydro as well. In the future, there will be a fair amount of activity in the electric mobility segment and hydrogen energy as a storage technology for sustainable transport.
- IREDA is one of the institutions that tries to address credit gaps for the successful implementation of various policies. Broadly, in the solar and wind sectors alone, there are 30-60 GW of projects under construction. Investors hold these projects for at least 1-2 years post commissioning. Therefore, there is a requirement of USD 35-40 billion of construction capital, which does not exist in India but which exists internationally. The capital undergoes churn: after commissioning and stabilisation, the equity is sold to long-term investors and debt is re-financed on the bond markets. The freed-up capital is used to finance fresh projects. These are ways to address the credit gaps by the using term loan facilities as construction capital. Besides construction capital, there are gaps in working capital, equity, and structured debt requirements.
- Large financial institutions such as Power Finance Corporation, Rural Electrification Corporation and large nationalised banks such as the State Bank of India are providing large-scale financing to clean energy. IREDA is a specialised agency that seeks to address smaller credit gaps, particularly in the energy access market. Some private sector financial institutions are also trying to address various credit gaps.
- Overall, the clean energy market is growing in India. Large scale financing will be required but the market has already matured considerably. A number of large global funds such as Brookfield, Macquarie, Actis, and CDPQ are active in the Indian market. To finance Indian projects, both construction capital as well the creation of a robust bond market is needed.

Panel discussion

Following the addresses by key government representatives from the EU and India, Dr. Arunabha Ghosh, CEO, Council on Energy, Environment and Water (CEEW) moderated a panel discussion. In his opening remarks Dr. Ghosh, thanked HE Mr. Ugo Astuto for his welcome address, Dr Mohapatra for his keynote address, and also to Ms. Wellemans and Mr. Shah for helping to connect developments in the EU and India to the broader ambition of getting more money at the right cost into the right sectors especially as we try to build back better.

Dr. Ghosh to Ms. Sinha: Drawing on the study published by CPI recently on green finance flows, could you explain why the domestic bond market for renewable energy financing has remained limited in India?

Ms. Sinha:

- The report on 'Landscape of Green Finance in India' was a first step towards gauging whether India is on track to achieve its climate goals. Secondly, any effective and nationwide reporting of green finance flows goes a long way towards building trust with national and international investors, helping with resource mobilisation, and identifying new avenues and priority areas.
- Total finance flows, though calculated retrospectively for 2016 and 2018 with were only 10-15% of the total requirement as mentioned in India's NDC.



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- While many financing challenges exist, during this exercise the lack of consistency on availability of information on disbursements was duly noted. Consistent data on disbursement has been lacking across international public finance actors though these funds are available in national budgets. For many companies, the climate aligned investments are reported as BAU or normal expenditure.
- Therefore, the first step towards tracking investment flows is to define what green is – it cannot be measured unless it is defined. However, taxonomy cannot be binary especially in emerging economies like India where significant public and private financing needs to be directed to transition sectors.

Dr. Ghosh to Mr. Shah: A potential enabler for enhanced bond market flows is credit enhancement. Limited capital deployment can potentially free up USD 10 billion for fresh lending to the RE sector through bond market refinancing ([Link](#)). Mr Shah, as IREDA is one of the two major financial institutions offering credit enhancement for renewables issuances in India, to what do you attribute the high cost of credit enhancement?

Mr. Shah:

- The partial credit enhancement product was launched by IREDA and IIFCL was for the market when it was in its nascency and the bond market did not have much confidence in RE portfolios ([Link](#)).
- Today, the market accepts renewable energy projects as standard projects and the large IPPs may be able to raise bonds without partial credit enhancement, for tenures in the range of 3-6 years.
- However, RE projects have lives of 25 years. The challenge is to create a viable bond market in the tenure of 10-15 years and RE issuances - which have stable revenues and are also backed by large companies - are well suited. Credit enhancement can be used to help create a long-term viable bond market for renewables. This is the right time for a new product. It is needed to churn construction capital tied up in primary debt and release it for fresh lending.
- Other Innovations could also help mobilise construction capital totalling USD 30 billion. Besides credit enhancement, a domestic financial institution (FI) catering to renewable energy can help refinance capital tied up in primary debt and release this capital for fresh lending.

Dr. Ghosh to Ms. George: Mr Shah mentioned that the time is right for a credit enhancement product and also mentioned that a dedicated FI for renewable energy could also help mobilise flows. Can a subsidised credit enhancement help generate the initial track record that unlocks the bond market? What should come first?

Ms. George:

- Domestic pension and insurance funds represent a huge pool of untapped capital that is ideally suited to long-term infrastructure financing. These funds have assets under management of more than USD 500 bn that could go in trillions soon as India has a very young population that is accumulating and the payout is much smaller in comparison as India has only a small elderly population.
- Financing takes off in specific sectors when the fundamentals are okay. India has done a lot in making renewable energy feasible due to policy measures creating an enabling environment in the country. India has brought in competition (competitive auctions for power procurement) and credible entities like SECI and NTPC to address the payment risk issues that affects the power sector as a whole. So, addressing the fundamentals is certainly important to make finance flow.
- On credit enhancement - it is all about pricing. If the cost of the credit enhancement makes sense for the borrower, i.e., if bank loans are more expensive than credit-enhanced bond issuance or non-credit enhanced bonds are more expensive, then credit enhancement can be useful as an enabler of bond market flows.

Dr. Ghosh to Mr. Cannon: The year 2020 follows on from a financial crisis, just as the year 2010 when India's National Solar Mission was launched. However, the time that remains for saving the planet now is much lesser than in 2010. Given the greater urgency, catalytic finance measures such as credit enhancement could help open up the market. The EIB has expertise in catalytic finance. Would the EIB consider capitalising catalytic finance institutions in India?

Mr. Cannon:



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- Sustainable Finance is about financing the best projects but there is also a role for different approaches around sustainable finance. Sustainable finance is not about putting grants to support projects. It's a pool of money that is coming out of traditional sectors like oil & gas. People are now beginning to see the whole set of risks associated with it and are looking for new sources of money. It is a pool of money being invested for very specific purposes. Sustainable finance is mix of various terms - including ESG, green, climate, and SDG. Sustainable investors are likely to take slightly higher level of risk for better returns.
- Sustainable finance is just not a pool of money, but it is a process based on new set of emerging standards. The process is most easily described in terms of the green bond/sustainable bond principles developed by International Capital Markets Association (ICMA). These principles are as follows:
 - First, define the target outcome
 - Second, put in place a mechanism to verify the outcomes – ideally an independent mechanism
 - Third, report on the mechanisms
- Two levels of reporting are happening at the moment – fund level and/or at portfolio level – on the risk aspects. While corporate reporting is typically around ESG aspects, portfolios and funds have to report on all the risks on those portfolios/funds such as climate risks. A third level of reporting is being required by multilateral institutions at the project level – in terms of the outcomes of projects, that could be defined in terms of SDGs, access to energy, economic development and so on. Mechanisms for reporting on these aspects vary enormously due to different standards followed by different countries.
- A good analogy is how companies report their financial statements. The taxonomy for financial reporting is extremely well developed, along with the accompanying standards and frameworks. There are individual country GAAP standards, IFRS etc. but specific aspects of financial statements such as the profit across various jurisdictions and these are comparable. This is what needs to be developed for sustainable finance. In addition, specific skill sets, such as auditors, accountants, regulators – and for the development of markets is needed for greater flows of sustainable finance.
- It is essential to ensure the existence of a marketplace with benchmark issuances - both in bond market or equity market - with tier 1 promoters in tier 1 markets. Markets such as the Bombay Stock Exchange can become tier 1 sustainable finance/green bond markets.
- It is important to mobilise retail savings in India and elsewhere in the world which can only be done if there are good funds that are well defined using international standards.
- It is important to mobilise sustainable finance not just for renewables (solar and wind) but also for storage and the electrification of transport and freight.

Dr. Ghosh to Ms. Kumar: India's energy transition has seen some strong renewables projects and policy signals, but this needs to be complemented by a good architecture for attracting sustainable finance flows. How can the EU's experience in framing its sustainable finance governance help India frame its own sustainable finance architecture? Would that help the flow of green bonds?

Ms. Kumar:

- India's energy transition and renewable energy revolution has been powered by private capital and the annual investment required needs to treble from present levels for India to achieve its RE targets. Financial bottlenecks are still slowing down the journey towards achieving this target.
- Taxonomy is only one part of the sustainable finance architecture, but there also needs to be much more accountability, transparency and inclusion, integration, and assessing of climate risks.
- Taxonomy is different from ESG reporting or BRR, as ESG is a framework of reporting what has happened, and sustainable investment talks about the risks to the portfolio going forward.
- In India, many things have happened in different pockets in terms of sustainable business architecture. Mr Mohapatra talked about sustainability reporting. Indian Banks' Association (IBA) came up with responsible finance guidelines. However, with Paris Agreement and SDG targets looming, more needs to be done to review, take stock, and put in place a framework that helps us achieve what is required of India.
- The work done by the EU on taxonomy can help India identify segments where the opportunities lie and use its conceptual framework as a ready reference. A taxonomy is the most scientific and credible way to identify opportunities (beyond RE) which would need financing, which can then be made financeable and investable.



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A science-based classification of economic activities is the need of the hour which should be based on technical robustness and industry application.

- Out of green bonds issued in India, which is now close to USD 11.4 bn since 2015, half of them are certified by Climate Bond Standards (based on CBI taxonomy). Thus, we know that a science-based taxonomy has a market uptake.
- There is conversation happening internationally that post the pandemic, environmental, social, and economic aspects cannot be assessed in isolation and the net outcome of the transition should be net positive economically and socially and that aspect of resilience should be included in sustainable taxonomy.

Dr. Ghosh to Mr. Shah and Ms. George: From a market, especially investor perspective, what should be the best way to develop this taxonomy. The EU had a Technical Expert Group on sustainable finance, which included financiers, civil society organisations and so on. What approach should India take to develop a robust and coherent taxonomy.

Mr. Shah:

- One of the methods that IREDA is planning is the launch of green asset-based securities (ABS) - offloading part of IREDA's balance sheet to the market through tradeable certificates called PTCs.
- The second thing that IREDA has almost finalised its Alternative Investment Fund (AIF). This can be a platform to kick start any bond market in India; it is tax agnostic so both international and domestic investors can participate. SEBI also has more relaxed regulations for AIFs (as compared to other structures). IREDA is reaching out to various DFIs to co-sponsor the AIF with IREDA so the credibility of AIF can go up and perhaps it can also be labelled as green.
- Any relaxation in regulation is also welcome, as it enhances subscription for green bonds.

Ms. George:

- Ms George expressed her view from the perspective of what India needs to attract the pools of capital that already exist for green and sustainable projects. The international pool of capital is around USD 140 trillion in size and out of that USD 32 trillion is marked exclusively for ESG projects. Among domestic pools of capital, though India has traditionally has been dependent on banks from which 70% of renewables financing came, the Indian RE sector is slowly but surely tapping both the domestic and international bond markets.
- In terms of taxonomy, India should take the best from existing frameworks. At the same time there is an opportunity for India: developing a taxonomy within the country can be a means to make the whole market and ecosystem understand what taxonomy means. It can also help create a common frame of reference in terms of definitions of green. The regulators: RBI, SEBI, as well as the pension and insurance fund regulators should be included in this process for development of a taxonomy so that the whole market is on the same page about definitions of securities such as green bonds or sustainable bonds.
- Important thing is to have a mapping to the global taxonomies that already exist like the EU taxonomy. As an analogy, for financial reporting there is the Indian GAAP, US GAAP, IFRS. For enabling international investments, companies have to restate their accounts in US GAAP or IFRS terms. While designing an Indian sustainable finance taxonomy, India should map the EU taxonomy or the taxonomies of other jurisdictions from which Indian aims to mobilise capital.

Dr. Ghosh to Mr. Cannon and Ms. Kumar: Is this realistic to have a fit-for-purpose taxonomy that works for India but which also harmonises with international standards? And a second question is, are there some sectors to which the taxonomy can be applied first?

Mr. Cannon:

- It is not only possible but desirable that India takes a strong position on taxonomy. India has a mechanism through the IPSF to drive and set its own view on an international stage. In the ideal situation, there would be no gap between the Indian and international taxonomy/standards since India would be helping set the international standards.



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- The way to develop the taxonomy is to involve the stock exchanges, regulators, different classes of investors: Indian pension funds, insurance players and so on. These are the right participants to drive India's view on the taxonomy.
- India is far ahead of most countries in the world in terms of the deployment of renewable energy. A lot of the innovation has come because of the market dynamics – such as the auctions process. A lot of the recent innovation is around storage – such as the round-the-clock tenders.
- Prudent to look at activity in these sectors in developing the taxonomy, to assess what is blocking renewables deployment now. It could extend to the biomass, waste management, water, and circular economy.

Dr. Ghosh to Ms. Kumar: Mr. Cannon has already talked about some sectors that the taxonomy should include. What other sectors should this extend to and what are the practical ways in which a home-grown world-class standard can emerge?

Ms. Kumar:

- Understanding the purpose of a sustainable finance taxonomy is an important first step before determining the sectors which it should cover. A taxonomy provides a credible means to help attract international capital. It helps to align the domestic investor base towards sustainable development. A taxonomy can help cater to need of Indian business that cannot attract large international capital but require smaller pools of capital. A taxonomy can facilitate the process of institutional investors making preferential lending/investment decision towards green investments from both domestic and international investors.
- While green is the starting point, the taxonomy should cover other aspects of the whole economy transiting to a sustainable pathway. Several heavy industries do not have zero emissions solutions today but need to transition. The Indian taxonomy should also be able to look at this transition bucket that is slightly different from green – brown and dirty industries trying to clean themselves.
- The aspect of social and economic resilience is also very important. The transition should give more economic empowerment to people, increase their life chances and choices. The transition needs to be a just transition as well.
- The base for the taxonomy is provided by the EU and CBI. India's efforts on ESG concepts and reporting can feed into a forward-looking taxonomic thinking as well.
- Internationally, Japan has declared that it would be carbon neutral by 2050, China by 2060. These objectives guide their current state of play and determine sector selection. It is time for India to be bold and decisive in talking about growth, investment and employment and how sustainable these can be.
- These considerations are important for sector selection. Sectors need to be prioritised based on certain criteria like environment impact, contribution to GDP, contribution to job and livelihood creation, the extent of capital flows required versus those coming in, what is the exposure of FIs to those sectors. If these criteria are understood and clarified, the right sectors can easily be identified.
- In terms of sectors, it would be better to take a phased approach and look at certain priority sectors in the first phase since developing a taxonomy is an intensive, technical, consultative, industry-led process.

Dr. Ghosh to Ms. Sinha:

Any approach to building back better is incomplete without considering jobs creation, vulnerable sectors of the economy and vulnerable segments of society. Can a taxonomy that draws its ambit beyond just green to the greening of brown sectors can help do that? And which sectors should be selected first in this respect?

Ms. Sinha:

- It is extremely desirable to finance the transition as well and dirty industries cannot entirely be done away with.
- Significant investment has been driven towards construction of metros – these are using electricity that is not necessarily renewable but at the same time is reducing the usage of other fossil fuel based public transport.
- In taxonomy as whole, transition capital should be included, especially in transport sector. Further, around 70% of RE finance comes from domestic banks. These banks are already stretched in terms of their lending



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capacity as a result of exposure limits and non-performing assets. To resolve this issue capital raising should move away from banks towards capital markets (bonds) by either raising capital directly from bond markets, securitising loan portfolios, or creating risk transfer mechanism (credit enhancement).

Dr. Ghosh: Quick poll among all the panellists – credit enhancement, taxonomy and new financial architecture, and potential for new financial institutions – what is your desired prioritisation and what you think will be the likely outcome in terms of actual implementation?

Ms. Kumar:

Desired: 1 Taxonomy 2 credit enhancement

Mr. Cannon:

Desired: Taxonomy

Likely: Domestic capital markets/green bonds (through credit enhancement)

Ms. Sinha:

Desired: Taxonomy and a dedicated FI that acts as a coordinator of investments into green sectors in India

Ms. George:

Desired: 1 Fundamentals - clear predictable policies, honouring contracts, rule of law 2 Taxonomy

Mr. Shah:

Desired: 1 Taxonomy 2 Credit enhancement 3 Dedicated FI for renewables

Dr. Ghosh: The preference of the panellists is very clear on the need for the EU and India to work closely on building a taxonomy that is both fit-for-purpose for India but is also harmonised with global markets. This taxonomy can be applied to a few priority sectors in the initial stages. Since the time is shrinking to correct for the market failures that are constraining the flow of capital – credit enhancement in the right context could also be an enabler of capital flows.

Closing Remarks

Mr. Matthieu Craye, International Relations Officer, Directorate-General for Energy, European Commission:

- There is a need to look at investment from an energy system perspective. Investments in wind and solar generation capacity are important. With the ambitious scale of deployment envisioned in both India and the EU, cost-effective and reliable integration of this generation capacity is crucial. Storage and active demand are areas that would need attention and investments.
- The challenge is to make the value chains and associated risks with system integration visible and understandable as these are often less straightforward than in renewable energy generation projects. System integration projects are sometimes beneficial to specific actors in the value chain and sometimes have value from an overall system perspective. In that case the challenge becomes identifying who should invest in such projects.
- Based on the discussion, there is the availability of financial volumes for sustainable finance available in pension funds and insurance companies.
- With the announcements to be carbon neutral by various major economies – the EU by 2050, Japan by 2050, China by 2060 – there is perhaps scope for enhanced messaging regarding risks of investments in current portfolio of oil and gas and other fossil fuel assets. This can have a mobilising effect on the flow of sustainable finance.
- There is scope for further EU-India work under the CECP on sustainable finance, including taxonomy. Analysis on whether and to what extent EU green bond standards can be applied in the Indian context could also be considered.
- Given the challenges of financing existing projects, credit enhancement is also something that requires deeper analysis as an enabler of capital market flows.