

Questions and Responses - Financing India's Clean Energy Potential (18 March, 2016)

Given below are questions that were addressed to the speakers during the event. Speakers Mr Srinath Komarina (Yes Bank) and Mr Jeffrey Schub (Coalition for Green Capital) have shared their responses.

Question 1 : *In most green finance conversations, I have usually found talk of changing technology landscape missing. How much does emerging technology feature in planning and models? On the same note, how does the financial sector keep tabs on emerging RE technologies? As a follow up, would it help if FIs supported research and development in RE as well?*

Jeffrey Schub: It is critical that governments and financial institutions pay attention to the full clean energy technology development lifecycle. This includes early stage R&D, commercialization and deployment. Green Banks typically focus on deployment of commercially viable technologies that are unable to access financing. In some cases this means mature technologies, like solar PV, that cannot get deployed in certain hard-to-reach markets. Or it may also mean financing the deployment of newer technologies. For instance, the Connecticut Green Bank in the U.S. has financed the deployment of a new type of run-of-the-river hydro technology. In my view, the focus should be on cost and scale – both government and financial institutions should focus on developing and deploying the best technologies that have the lowest cost to the end-user and can most easily deploy at scale in a rapid time frame (time is of the essence!). FI' certainly may want to invest in R&D, but given the high risk and the long-term horizon for any returns, I don't know that the investment requirements will always be in line with the return expectations. This seems like an optimal place for government investment and/or VC (though VC often finds cleantech takes too long to pay off)

Srinath Komarina: FIs across the globe are focusing to renew the entire energy systems of the world with innovative investment models and technology plays a very important role in investment decision and project planning phase. FIs are investing on emerging technologies on large scale solar power generation with automation and robotics, advancement in storage technologies, energy efficient smart grids to micro grids and even space solar generation. Energy research is a new field of green investment and global Investor led platforms like Breakthrough Energy Coalition would play an important role in defining the energy future of the world. For FIs, it makes sense to stay ahead of the curve and make informed decisions while infusing capital into the RE space. YES BANK for example follows the knowledge banking approach and actively engages with MNRE and other relevant stakeholders. We have also come out with knowledge reports on scaling up off-grid renewable energy and increasing renewable energy investments in India

Question 2 : *How do you see the learning of global green banks to be strengthening the operationalization of National Clean Energy Fund in India? What learning can be replicated under the fund? Do you feel that NCEF can in a way assume the role of Green Bank?*

Jeffrey Schub: The NCEF seems like it could be a great mechanism to implement Green Bank practices. At present, the NCEF collects the coal cess, and then distributes funds to projects in the form of loans or subsidies, up to 40% of the total project cost. I think there are a great number of lessons to be drawn from Green Banks and other financing mechanisms around the world that could allow the public dollars in the NCEF to go farther, deploy more clean energy, and leverage more private investment. Rather than only offer direct loans, funds could be used to provide credit enhancements, subordinated debt or

other mechanisms that can reduce risk and leverage private investment. The NCEF could also remove the 40% cap and offer up to 100% of project financing, as this would eliminate all upfront cost of adoption and greatly speed up the process of closing deals. Then, if the NCEF has the authority to issue bonds, the loans made by the NCEF could be sold to recapitalize the fund and make more loans. This structure would greatly accelerate the velocity of lending and multiply the total lending power of the coal cess funds.

Question 3 : *Currently, there has been a lot of investment in solar PV sector. It is envisaged that GST would be passed by Parliament in mid June 2016. It is concluded by MNRE that this could raise the solar project cost and tariff by 12-20%. Do you think this could hamper the solar projects implementation and financing?*

Jeffrey Schub: I'll preface this by saying I don't know all the particulars of the specific India policies mentioned, but just intuitively if you make a commodity (electricity) from one supplier (solar PV) more expensive, then it will be harder to sell it when a customer can buy that identical commodity more cheaply from another supplier (coal). Anything that raises the price of solar electricity makes it less competitive, meaning fewer deals will 'pencil out' without a government guarantee of purchase or some other form of subsidy. So broadly speaking, any policy that raises the price of solar for the end-user will certainly hamper deployment and financing for projects.

Srinath Komarina: GST is 'the Most' important step in the present investment scenarios in India. Indian Tax system yield revenue only 9-10% of the GDP, which in developed countries is over 30 % of GDP on average. GST will help to realise more taxes upto 20% at least from the all sources as revenue for the government and channelize maximum fund for achieving mammoth renewable energy installation targets and other rapid infrastructure development projects. Initially the solar project cost may look little higher as solar supply chain would be under GST, however with more fund in the kitty, Govt. of India would be able to take bold policies, increase subsidies and incentives that will pave the path of green investment in India

Questions 4: *You talked about the Global Green Bank Network which was announced at Paris. What are your views on the preparedness/readiness of the Indian Banking sector to become part of this global network? What concrete steps must be taken at the policy or institutional level to strengthen this.*

Jeffrey Schub: India's private banking sector has already taken great strides to invest more in clean energy – the presentation by Yes Bank was incredibly impressive on this front. We very much India to establish one or more public or quasi-public green banks that can join the Green Bank Network, and in turn work with private capital providers in India to use innovative new financing tools. Broadly speaking India's network of public and domestically-focused development banks are investing in clean energy, but I think there are even more tools and practices that can be taken from Green Banks around the world to accelerate investment.

Questions 5: *Are the green bond issues process comply with voluntary standards or principles such as Green Bond Principles or Climate Bond Standard? Do issuers have any advantage of complying with voluntary standards?*

Srinath Komarina: The labelled green bond market has witnessed a significant rise with record issuance of \$41.8bn in 2015 out of \$597.7bn total green bond issuance in 2015. Green Bond principles or Climate Bond Standards have certainly helped the issuer to establish a more credible 3rd party checked management system for tracking the

investments into the right impactful project and completion to generate sustained ROI for the investors. In India, SEBI has come out with concept paper for issuance of green bonds based on Green Bond Principles to designate an issue of corporate bond as a green bond. Presently with the surge in investments, all Investors are looking for a transparent and robust mechanism to track down all green bond investments, which certainly the green bond principle or climate bond certification can offer thereby providing access to specific global pool of capital earmarked towards green ventures. With the development of sector specific green bond standards (like, Municipal bond for mainly low carbon transport development or climate bond water standard for issuance of Blue bonds) the advantage lies in reducing the maximum risk of the green investment projects