



# WEBINAR ON IMPACT OF COVID 19 ON EU AND INDIA'S RENEWABLE ENERGY SECTOR AND HOW TO ENSURE GREEN RECOVERY

16th July 2020

## PROCEEDINGS



## Webinar on the impact of COVID 19 on the EU and India's renewable energy sector and how to ensure green recovery

On 16th July 2020, the Delegation of the European Union to India in cooperation with the Directorate-General Energy, European Commission and the Ministry of New and Renewable Energy (MNRE), organized a webinar on the 'impact of COVID 19 on the EU and India's renewable energy sector and how to ensure green recovery.' The webinar was supported by the EU-India Clean Energy and Climate Partnership (CECP) project ([www.cecp-eu.in](http://www.cecp-eu.in) and @EU\_India\_CECP) and was attended by more than **250 participants**, representing policymakers, regulators, project developers, manufacturers, energy performance contractors, think tanks, consultants and academia.

### 1.1. Inaugural Session

**Mr. Amit Kumar**, Team Leader, EU-India Clean Energy and Climate Partnership Project extended a warm welcome to all the participants and highlighted the relevance of having such a webinar in these testing times. He stressed that the long-term impact will become apparent with time, but in the short term COVID has resulted in a fall in energy demand, financial stress, delay in construction activities and a supply chain disruption. It is therefore very positive that European and Indian policy makers and stakeholders come together to discuss recovery, keeping in mind their energy commitments and climate goals.

**Shri Amitesh Kumar Sinha**, Joint Secretary, MNRE focused on a number of initiatives ([Link](#)) undertaken by the Government of India (GoI) to combat the pandemic and ensure green recovery in the sector. Some of the key measures included:

- Introduction of large scale and innovative tenders involving usage of hybrid technologies such as peak power, round the clock, etc. One such recent tender for 2000 MW solar capacities floated through SECI resulted in a tariff of Rs. 2.36/KWh (Euro cents 2.7/KWh), the lowest ever for India ([Link](#));
- Waiver of demurrage charges ([Link](#)) (no detention charges on import and export shipments for lock down period on cargo);
- Notifying 'man and material movement' for renewables as an essential service ([Link](#)) to allow for project work to continue during the lock-down period;
- Recognizing the pandemic as a 'force majeure' event ([Link](#)), giving confidence to project developers;
- Honoring 'Must Run' Status to renewables even during COVID times ([Link](#));
- Focusing on digitization and e-mode for billing of RE generators (no physical copies required);
- Granting a blanket extension equivalent to lockdown period and additional 30 days in scheduled commissioning date ([Link](#));
- Advisory to state regulators to adopt online listing and hearing of petitions so that power sale agreements and tender formalities can be concluded. A unique request for proposal ([Link](#)) for a long-term vision roadmap for 'one sun, one world and one grid' initiative was also issued on 17<sup>th</sup> May 2020 during the lockdown period;
- For pushing the 'Make in India' initiative, a project development cell ([Link](#)) has been formed in the MNRE, providing handholding support to foreign and domestic investors desirous of setting up their manufacturing plants in India.

**Mr. Hans van Steen**, Acting Director, Renewables, Research, Innovation and Energy Efficiency, Directorate-General Energy, European Commission, welcomed the successful partnership between the EU and India in the area of renewables, energy efficiency, and electricity market-design and stressed the joint objective to further strengthening the EU-India Clean Energy and Climate Partnership. He referred to the fact that the climate change and the clean energy transition were an important priority discussed at the 15<sup>th</sup> EU-India Summit ([Link](#)) held the day before. He praised India for achieving such a cost competitive energy capacity, which also witnesses increased participation from European project developers.

He emphasized the importance of the 'European Green Deal' ([Link](#) and [Link](#)), which aims to make Europe the first climate neutral continent by the middle of this century and targets an all-inclusive green economic growth. The European Green Deal also includes proposals to step up the EU target pledged under the Paris Agreement of 40% reduction in GHG emissions by 2030 to 50-55%, for which a climate law ([Link](#)) has been proposed by the European Commission. Apart from these climate targets, the green deal sets in motion a number of important initiatives on energy:

- Energy System Integration ([Link](#)): It involves dealing with the energy system in its entirety and devising means to better link parts of the economy which have not been looked at holistic and integrated fashion.
- Europe has adopted a strategy of how it perceives the transport sector, industry sector, and agriculture and specifically tapping into 'hydrogen', ([Link](#)) whereby it is trying to boost hydrogen production based essentially on renewables as part of its decarbonization efforts;
- Energy demand: It involves becoming more energy efficient with a special focus on buildings, which are responsible for 40% of energy use in the EU. Apart from this, increasing the 'rate of renovation of existing buildings' in particular (a renovation wave has been worked out in EU), is critical;
- Promoting an Offshore Renewable Energy strategy – to boost the take-up of off-shore wind and tidal energy; ([Link](#))
- Working on building integrated market in EU such as cross-border infrastructure in line with long-term decarbonization goals.

He addressed the impact of COVID on the EU energy sector and on the investments within the renewable energy space. Some of these include:

- Lower demand for electricity coupled with reduced prices, impacting the balance sheet of utilities and the energy companies and in-turn affecting their capacities to invest in clean energy;
- Job loss because of the crisis, which means increased energy poverty, affecting how people will play part in the energy transition;
- Low oil prices having a negative impact on the economic interest to invest in non-fossil energy production;
- Vulnerability in supply chains for energy equipment, particularly in wind and solar sectors, leading to delays due to interrupted supply
- Number of projects being delayed due to delays in administrative approvals and restrictions in the movement of workers, impacting mostly solar and wind sectors

He also laid out various concrete steps undertaken by the EU as part of the green recovery process that included following action points.

- In May, the commission proposed its EU-Recovery Plan, the so called 'next generation EU' ([Link](#)) ensuring that the EU moves forward on the agenda of not only the Green Deal, but also on rapid digitalization of the economies. The commission has proposed to make available EURO 500 billion in loans and EURO 250 billion in grants for a speedy green recovery.

- For clean energy, the plan foresees opening of specific tenders aimed at producing 15 GW of RE capacities in next 2 years and also separately 1 million tons of clean hydrogen. Additionally, investments in building renovation to increase efficiency into that sector is also envisaged.
- To address issues in all the parts in a fair and balanced manner, the EU has put a special fund for 'carbon intensive industries /regions' for Europe.

He further stressed that a **green recovery** is the best way to get the economy back on track while creating new jobs and paving way for sustainable modernization. EU remains supportive of cooperation in areas of offshore wind, particularly in terms of supply chain and associated infrastructure. He reaffirmed EU's support to International Solar Alliance (ISA), and appreciated the international initiative, which India launched together with France at COP21 in Paris. He believed that as strategic partners, India and EU should mobilize their international weight to ensure green recovery beyond their own borders through platforms such as the International Sustainable Finance Platform ([Link](#)). EU and India can work together in multilateral energy fora, including collaborating towards an ambitious G20 agenda to support global clean energy transition as part of worldwide recovery effort.

## 1.2. Panel Discussion

Following the inaugural session, a panel discussion on 'addressing the immediate impacts on the renewable energy sector and ways to accelerate deployment through conducive policies and facilitating investments' was held, which was moderated by **Dr. Arunabha Ghosh**, CEO, Council on Energy, Environment and Water (CEEW).

In his introductory remarks, Dr. Ghosh emphasized the importance of looking at the pandemic not only from a short-term point of view, but also at the commitments to be made as part of cooperation in the medium- and long-term. Despite the COVID crisis, there is still progress in the clean energy sector, with India recording the lowest ever solar tariff of INR 2.36/unit and a number of European players like Solarpack, ENEL, ib vogt, Eden, CDC group participating and winning the bid. India has made progressive strides in its ambitious targets of 175 GW, with under construction and commissioned capacity accounting for 122 GW already and another 41 GW already tendered.

He talked about the enormous investment opportunity of more than 3 times the current yearly average of EURO 10-10.5 billion dollar in India in the renewable energy sector. On the European side, a similar development has taken place with renewable energy accounting for as high as 46% energy share during the pandemic phase, an increase of 8% over the previous year. He emphasized on the need to build on these market signals, backed by consistent policy signals and cooperation initiatives for ensuring green recovery.

### Key messages from panelists

**Dr. Jean-Michel Glachant**, Director, Florence School of Regulation (FSR) focused on the importance of learning from good and bad experiences of earlier historical events like the current pandemic, viewpoints shared by various academia of battling such crisis, including research work undertaken by international organizations such as IRENA. Based on past academia research work and recovery measures some successful measures include investing in:

- clean R&D;
- clean physical assets generation of grid;
- building efficiency;
- training for creating skilled people;
- natural landscapes (taking care of rivers, forest).

He stressed the need to take into account the interest of utilities, which are losing billion of dollars as a result of the pandemic. If investments into the sector are hindered, then the goals of Paris Agreement will be difficult to achieve and there will be more catastrophic effects, including increased job losses.

He also talked about work undertaken by the International Energy Agency (IEA) ([Link](#)) and International Monetary Fund (IMF) model recovery tools and a multiplier effect for a speedy one for efficiency of buildings, investing into renewables (solar and wind) and for electricity grid. He suggested that 'greening' alone is not sufficient, digital transformation also need to take place simultaneously, while upholding economic sovereignty and resilience.

See also ([Link](#)) on impacts in Europe and ([Link](#)) on impacts in India.

**Mr. P. K. Das**, Chairman & Managing Director, Indian Renewable Energy Development Agency (IREDA) enumerated the numerous challenges which the Indian renewable energy sector is facing, including. Interruptions in the business flow of renewable energy projects;

- Liquidity crisis;
- Disruption in supply chain-labor, machinery and imports;
- Power demand reduction;
- Delays in project commissioning.

He also pointed out some of the clear-cut measures undertaken by the Government of India, such as RBI's policy on moratorium extension, considering COVID as a force majeure event, acknowledging the must run status for RE projects and Ministry of Power announcing INR 90,000 crore to Discoms for clearing generation dues including to RE based generation. Specifically, IREDA has also undertaken several steps in alignment with the Government's agenda of green recovery, which include:

- Introducing a modified top up scheme ([Link](#)) allowing for a maximum 10% of the sanctioned amount to the borrower to ease liquidity requirements;
- Easing out of both loan disbursement process and the sanction process;
- Ensuring money market activity is on during COVID times as well, by raising debt;
- Promoting online/e-mode for applications;
- Promoting Drone or videography-based site visits for due-diligence;

He also laid special emphasis on the ongoing line of credit of EURO 370 million from various European agencies and is expecting more areas of collaboration with EU, involving:

- Development of offshore wind power, bio energy products, bio-CNG, briquettes, pellets and waste to energy;
- Investment in IREDA's Alternative investment fund (AIF) ([Link](#));
- Sharing of best practices and capacity building efforts.

**Mr. Giles Dickson**, CEO, WindEurope appreciated India's global leadership on solar-wind hybrid, recognizing that this is one of the areas where the EU needs to learn. With respect to the impacts of COVID and possible recovery measures in wind industry in Europe, he enumerated the following developments and messages.

- 19 factories (mainly in Spain and Italy) have been closed, but gradually reopened, presently working with safe distancing measures;
- Free movement: O&M of existing projects was defined as essential services which allowed the movement of workers across national borders. There is however the need to go further with the

scope of essential services and apply the same to the development of 'new RE projects' and not just the existing ones;

- Sharing of development risks by financial institutions: Wind and solar technologies are capital intensive and lot of financial investments in wind projects have been delayed, because of the uncertainty surrounding the ability of entire supply chain to perform. Public financial institutions like ADB, IFCAI, EIB need to come in and share the risk and unlock the financial investment decision;
- Wind auction design: Price expectations need to be realistic and one should resist the temptation based on previous auction results, and factor in issues such as power grid, land and other prevailing conditions. India's decision on commissioning deadlines for wind farms that have won previous auctions was a key decision;
- Government needs to provide visibility on the pipeline of auctions, simple permitting rules and procedures, and improved clarity and solutions on grid connection and land use.

**Mr. Donal Cannon**, Head of Regional Representation for South Asia, European Investment Bank (EIB) defined COVID as a sharp turning point and emphasized that although the grid load fell by 10% over the last 3 months, the proportion of renewable energy actually jumped by 48% during the pandemic. At EIB, investment during COVID has dropped, by 30% in the last 3 months as a result of the scarcity of supply chain. There is however momentum for investments in renewables to increase in the future, considering the 'negligible incremental cost of drawing power from renewable energy' as compared to coal and gas. He further identified three main drivers for facilitating increased investments into clean energy as part of battling the COVID crisis:

- Supply chain need to shorten and diversify i.e. manufacturing will shift from China to other countries. India will have an opportunity to compete at global scale in areas of solar panels, storage and Information Technology (IT);
- Digitalization will be accelerated: Demand for commercial space will fall, buildings will be predominantly domestic, and homes will become vastly more sophisticated. Behind the meter applications will make a large difference and will be largely based on renewables;
- Geopolitical realities: Perspective towards China involving trade systems and trade disputes, conflicts, including shift in manufacturing will play a major role;
- Tapping into opportunity on hydrogen, which is currently a level playing field needs to be looked upon more seriously by India and the EU.

The EIB strategic priority areas for investments include energy efficiency, decarbonization of energy, green hydrogen, geothermal, biomass and innovation (smart meters, smart grids).

**Mr. Balram Mehta**, President, Renew Power stated that the sector is not that much affected as far as operations are concerned. COVID has however impacted the manufacturing and construction activities. Importantly, India managed to ensure 70 GW of RE power running even during the pandemic phase, with support from the Government of India. He also complimented MNRE and SECI on the proactiveness in tendering activities (2-3 GW on a monthly basis) involving participation from both Indian and foreign investors and project developers. He highlighted a pressing issue on the receivables front, considering the condition of distribution utilities, which are facing lower power demand (particularly from industries which were temporarily shut down) and collection issues.

He pointed out several potential areas for increased EU-India collaboration in the area of green recovery:

- Availability of skilled labor in wind industry;
- Retiring of old thermal plants, giving increased opportunities for more RE to be pumped into the grid;

- Innovative bid/auction structures such as peak power and round the clock power tenders;
- Perceiving digital and analytics as a direct addition to the bottom-line;
- Provision of independent service providers in India;
- Measures to ensure survival of Original Equipment Manufacturers (OEMs) for the survival of Independent Power Producers (IPPs).

**Ms. Aurélie Beauvais**, Interim CEO and Policy Director, SolarPower Europe reinstated the point that renewables are a perfect fit for green recovery, not only because they are clean but also because they provide many jobs. It is critical to focus on all the aspects of value chain, including manufacturing. She articulated the following key points for a green recovery.

- The EU should work with other countries for sharing and learning best practices. She referred to the example of Malaysia is aggressively going for more and more tendering / bidding activities to accelerate deployment of solar capacities;
- Importance of permitting, simplifying administrative procedures, providing a decent pipeline of renewable energy projects for new developers, providing access to land and a well-functioning grid;
- Credit guarantees for corporate PPAs, where there are nice synergies to cooperate at global level, particularly in the area of solar rooftop, which is very job intensive;
- A holistic industrial strategy supporting manufacturing is critical;
- Skill development is crucial for the implementation.

She welcomed the EU-India Clean Energy and Climate Partnership project and also referred to the cooperation between SolarPower Europe and the National Solar Industry Federation of India (NSEFI) and the EU-India technical cooperation ([Link](#)), developing programme on waste management model (recycling), working on solar rooftop business models under the CECF project and O&M skill development with the National Solar Energy Federation of India (NSEFI) ([Link](#)) with the support of the Indo-German Energy Forum (IGEF-SO). She also identified development of innovative business models, particularly in 'Agri-PV' as an emerging area.

**Ms. Paramita Sahoo**, Head- Policy Advocacy, Tata Power stressed the importance of renewable energy grid integration, for which more investments are needed, including in the area of pump storage, utility scale storage solutions, and new thermal capacities to replace ones which lack ramping up capacities. She pointed to the electricity bill amendment act ([Link](#)) allowing distribution sub-licensees under franchise, as a very important measure that can bring in efficiency and modernization through digitization. For boosting manufacturing, she enumerated the following key suggestions:

- Presence of a clear long-term consistent policy to provide visibility to investors;
- Demand creation measures to boost manufacturing;
- Strengthening the Central Public Sector Enterprises (CPSE) scheme: CPSEs include players like Railways and players like Bharat Electronics Limited (BEL), Bharat Heavy Electrical Limited (BHEL), Central Electronics Limited (CEL) which can be roped in for initial manufacturing efforts on polysilicon;
- International cooperation for technical know-how needs to be strengthened;
- Leveraging international relations for export: targeting ISA countries for selling domestic products;
- Focusing on the development of a domestic solar inverter market;

- Expansion of manufacturing coinciding with expansion of manufacturing planned capacities in next phase (260 GW from FY 2022-2030) so that domestic developers have domestic manufacturers to rely on;
- Technical know-how on waste to energy plants from EU, particularly from Scandinavian countries;
- Accessibility of performance data on various technologies and their overall viability based on climatic conditions;
- Skill and capability development in emerging areas of RE integration, asset management, hydrogen fuel, energy storage and carbon capture;

### 1.3. Closing remarks

**Sh. Dinesh Jagdale**, Joint Secretary, MNRE, welcomed all ideas and information and thanked the panelists and moderators for the very rich discussion. He stressed the importance of the India-EU summit and the ongoing India-EU Clean Energy and Climate Partnership initiative for cooperation in areas of offshore wind, rooftop solar business models, waste-to-energy and cofiring of biomass. He also suggested that a 'combination of technologies' will be needed to make renewable energy round the clock and he duly recognized the importance of hydrogen technology to penetrate into Indian energy systems and other industries wherever decarbonization needs to take place.

**Mr. Matthieu Craye**, International Relations Officer at DG Energy, European Commission, thanked the organizers, speakers and participants and welcomed all the concrete ideas shared in the webinar. They will feed the new 'work programme' that will be discussed in the EU-India Energy panel (September end), which will consist of high level representatives of Directorate-Energy European Commission and the different Indian Energy Ministries. A follow up webinar could then be organized later this year.