

## Day One: Tuesday 21 April 2020

0800-0900 Registration & refreshments

0900-0915 Conference welcome & event scope/outline

0915-1100 Morning Session I: **The opportunity for domestic manufacturing & overseas suppliers within India's mid-term 100GW PV targets**

*India's PV demand targets remain driven by government targets out to 2022 and 2030, within overall renewable energy capacity additions. While the targets remain ambitious and challenging to reach, the landscape is still one of low-risk with annual deployment levels still among some of the largest globally over the next 10 years.*

*This session will examine in detail what PV additions will look like in the near to mid-term across ground-mount and rooftop segments, and from floating solar sites, defining the opportunity for both domestic and overseas suppliers and how new manufacturing plants within India can best serve future demand; what will be the role of tenders going forward in terms of driving new technology choices?*

- Speakers in this session will include government agencies, market research organizations and consultancy firms key to understanding growth trends and opportunities.

1100-1130 Coffee & networking

1130-1300 Morning Session II: **State-of-the-art technologies & costs for PV modules, inverters & balance-of-systems components**

*The global PV industry continues to see massive advances in terms of module performance and overall blended production costs. The introduction of bifacial modules on tracking systems is redefining the bill-of-materials for utility-scale solar farms. The market-share growth of mono-based modules is now making this technology the mainstream type used, with 400W-plus panels now commonplace.*

*This session will outline the current state-of-the-art metrics for module and site balance-of-systems components, how this is likely to trend in the next 3-5 years, and what impact this will have on new installations within India across each of ground-mount, rooftop and floating solar segments.*

- Speakers in this session will include PV-Tech researchers tracking global technology trends, and leading players supplying the Indian solar segment today with modules, inverters and other key balance-of-systems components.

1300-1400 Lunch & networking

1400-1600    **Afternoon Session I: Utility sector supply & the role of domestic manufacturing-driven government tenders**

*The desire for India to have domestic produced cells and modules remains central to the long-term solar goals from government agencies. Until now, the efforts to enable this have been linked mainly to large-scale ground-mount utility-based tendering.*

*How successful has this route been to date? How will this change the domestic-produced share of utility-scale module supply out to 2022? Is a different approach required specific to utility-scale sites?*

*This session will look at the requirements of utility-scale developers, EPCs and asset owners, in terms of maximizing site yield and minimizing module supplier risk through optimizing quality; including the role of bankability across local and overseas module suppliers. Talks will also feature from overseas and domestic GW-scale module suppliers, and how these companies are integral to satisfy the dual goals of end-market deployment targets and increased domestic supply for utility projects across India out to 2030; and the scope for partnership between domestic and overseas companies for Make-in-India.*

- Speakers in this session will include leading players developing, building and supplying modules to the Indian solar segment today, in particular domestic cell and module manufacturers.

1600-1630    **Coffee & networking**

1630-1745    **Afternoon Session II: Multi-GW rooftop demand as a driver for high-efficiency n-type modules & locally-produced inverters**

*The rooftop segment within India grown rapidly in the past couple of years and is now of the few global multi-GW specific demand sectors globally. Growth here is now coming from the commercial-and-industrial sector, in addition to public-owned and residential users.*

*Rooftop optimization remains fundamentally different to ground-mounted sites (including floating solar) and has seen major changes in the past 12-18 months from a module-supplier and module-technology standpoint.*

*This session will review global drivers for rooftop solar optimization, including the opportunities coming from very high-efficiency n-type modules that are now seeing strong investments within China and across Southeast Asia.*

*With India inclined to ring-fence rooftop solar (in particular public sector owned) for domestic manufacturers, understanding the benchmarks here for module efficiency and price/cost will be key to driving future investments into local manufacturers.*

- Speakers in this session will include leading rooftop installers across different states within India, including component suppliers targeting the unique requirements of rooftop solar.

1800-2000    **Evening event [sponsor hosted]**

*Use the evening event to network with the event organizers from PV-Tech, overseas attendees staying on-site, and key suppliers and customers involved at PV IndiaTech 2020.*

## Day Two: Wednesday 22 April 2020

0800-0900 Refreshments

0900-1030 Morning Session I: **Technology-transfer options to stimulate performance-leading Make-in-India PV cells & modules**

*The move from p-type multi cells and module to mono-based PERC and n-type manufacturing, over the past two years, has been heavily influenced by global research institutes, and technology transfer activities.*

*This session will examine some of the research being undertaken at leading research labs – including domestic Indian institutes – that is set to impact cell and module efficiencies and powers going forward.*

- Speakers in this session will include domestic and internationally-recognized research institutes driving technology-transfer from lab-to-fab.

1030-1100 Coffee & networking

1100-1200 Morning Session II: **Floating solar at the GW-plus annual level within India: new supply-chains & design requirements**

*Floating solar has become an integral part of large-scale utility-solar deployment during the past 3-5 years, with GW-plus deployment in select end-markets.*

*Several GW's of floating solar is sought within India over the next few years, forming a significant part of government's mid-term deployment, and with some of the largest domestic project developers lined up to play in this emerging market segment.*

*This session will explain the key operating characteristics of large-scale floating solar, who are the leading component suppliers, and how to ensure costs are kept to a minimum and build-out is done on time.*

- Speakers in this session will include floating solar developers and EPCs, in addition to site-specific component and mounting supply-chains.

1200-1300 Morning Session III: **Driving quality through the value-chain for rooftop, floating & ground-mount utility deployment**

*Assessing quality in component supplier selection, technologies adopted and site design/operations remains a key issue within the solar sector within India.*

*Improving quality of build today is compounded by new companies in the supply-chain, the transition to new module technologies and plant design changes using bifacial modules and for floating solar sites.*

*This session will explain the checks and balances in place to allow investors to minimize risk in supplier/technology selection and site design/operations.*

- Speakers in this session will include test and inspection services and equipment suppliers, certification labs, reliability testing laboratories, and factor auditors.

1300-1400 Lunch & networking

1400-1500 Afternoon Session I: **Redesigning utility-solar plants through bifacial modules & trackers**

*Over the past 12 months, utility-scale solar globally has been adapting to the availability of bifacial PV modules, now available in multi-GW volumes from most of the leading module suppliers.*

*While bifacial modules have a number of inherent benefits, optimizing site builds and understanding yields over 20-30 years remain challenging questions for developers and asset owners.*

*This session will discuss learnings from early-mover countries into bifacial site design, the importance of tracker supplier choice, and supply-chains within India set to benefit in the future.*

- Speakers in this session will include developers and EPCs within India that are the early-movers in the bifacial space, in addition to leading bifacial module and tracker mounting suppliers.

1500-1530 Coffee & networking

1530-1700 Afternoon Session II: **The role of energy storage solutions & how this impacts on PV deployment within India to 2030**

*Energy storage solutions (ESS) form an integral part of solar additions globally, used in the right context and with known revenue streams in place. ESS development in India is still a work-in-progress as the country determines how to grow this segment.*

- Speakers in this session will include third-party organizations and government agencies, outlining demand opportunities and challenges, in addition to ESS battery suppliers including leading global ESS manufacturers experience in combining solar and ESS to maximize site returns.

1700 Close of event, with informal networking