

# Informing the Indo-German Solar Partnership

## Insights from five solar energy stakeholder consultations across India

### Policy Recommendations

India's ambitious solar power target of 100 gigawatt (GW) by 2022 needs a supportive policy environment that is constantly adjusted to the needs of the hour. Centre for Environment Education (CEE) approached a diverse group of stakeholders including farmers and salt pan workers, household consumers, manufacturers and service providers, consultants, government officials, scientist as well as representatives from think tanks and NGOs to share their perspectives on solar energy utilization and policy in five consultation events. The five stakeholder consultations were held in Dhundi /Anand and Halvad (both in rural Gujarat), Ahmedabad, Bengaluru and Delhi from December 2016 to March 2017.

The stakeholders articulated the interlinkages between sound solar technology and meaningful financial support which both could be fostered by capacity building. In fact, reinforced capacity building for a large range of stakeholders was expressed as most urgent solar policy improvement at this state of the solar power energy developments in India. The distinct call for more relevant subsidies through simpler and standardized administrative processes was unmistakable. The vehemently suggested policy focus for a successful solar boom in India lies on solar rooftop support.

The five solar energy stakeholder consultations resulted in numerous suggestions towards solar policy improvement. The following list condenses the plenty expressed recommendations in thematic clusters according to the priority in which they were articulated. These recommendations are relevant for the National Solar Mission as well as for bi- and multi-lateral cooperation such as the Indo-German Environment Partnership Programme and the Indo-German Solar Energy Partnership or the International Solar Alliance.

### Political recommendations

#### Information Sharing and Capacity Building

1. Fostering a **supportive mindset**, political will and mainstreaming solar energy generation as “the new normal” among the involved stakeholders from politicians, private sector actors and DISCOMs, bankers, scientists, technicians and consumers by keeping continued priority on solar energy policy in general and solar rooftop policies in particular
2. **Institution building** for expert knowledge and skilled workforce and to set standards for solar certificates for consultants, installers, manufacturers, and many other drivers of solar energy boom
3. Creation of **quality-controlled information sharing platforms** (i) for solar stakeholders' knowledge exchange and (ii) for customers' step-by-step guidance for solar energy utilisation and their guidance in choosing service providers and solar products

#### Solution-Oriented Processes

4. Establishment of closer **cooperation between central and state policy development** for coherent targets and accelerated implementation through appropriate support for each state
5. Creation of **guidelines and standards for solar implementation**, particular for procedures between local DISCOMs and costumers with own solar rooftops for smooth and transparent billing systems

6. Regular pre-studies for the selection of **appropriate (financial) incentives and other motivations** for specific target groups. Feed-in tariffs have not always proven to be consumers' first choice. Many feel rather motivated to quickly meet the energy requirements of their households in a cost-effective manner
7. Initiation of a comprehensive **database on solar energy generation**, local solar potentials, subsidy provision and other useful information for public access
8. Setting a **distinct focus on solar rooftop policy** by e.g. **de-risking financial investment** in solar rooftop installations of different sizes and by different stakeholders (private companies to private persons) or development of business models for rooftop solar which also keep the utilities' interests in mind.

### Solar Technology Improvement

9. **Manufacturing guidelines for quality improvement and quality control processes** like ISO certification as well as **quality guaranteeing incentives** for manufacturers like top-runner approaches
10. Fostering **innovation for a broader range of solar products** through competitions, international technology exchanges, enhanced R&D on Indian needs, among others. This includes creative approaches for mainstreaming appropriate and flexible net metering options
11. Improving **research on storage** in regard of storage capacity, reduced battery prices, increased environmental performance including reuse and recycling of batteries and their components
12. **Grid expansion and grid improvement for Variable Renewable Energies**, for example via continued Indo-German cooperation on Green Corridors
13. Initiating a **star rating for solar products** to foster high quality products and guide the purchase decisions of the consumers
14. Decentralized solutions, especially mini-grids, need more attention in solar policy in order to achieve the energy for all goal

### Subsidies and Other Financial Mechanisms

15. **Introduction of real prices** (including subsidies, environmental and health costs) for conventional and renewable energy and the according design of tariffs -systems of day and night tariff and variations between commercial and private rural and urban customers
16. **Simplification of subsidy application processes** for faster approvals with greater flexibilities for a wider range of technologies and applicants to be supported and easier payment methods by direct bank transfer and increased transparency
17. Policy adjustments for **making subsidies available where they are required**, e.g. for small-scale rooftop systems. Preparations for a solar subsidy phase-out in the long run, when no longer required
18. Stronger **diversification of sources for solar subsidies**, considering multi-lateral funds, bilateral cooperation, national and private funds
19. **Creation of second-hand markets for solar technology** to especially supply the rural areas or to meet smaller requirements that otherwise hardly meet the requirements of existing subsidy schemes

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