YOUR PERSONAL GUIDE TO SOLAR **ROOFTOP PV** SYSTEMS



HOW TO CHOOSE THE RIGHT INSTALLER?



Good reputation, Provide quality products, Quality workmanship, Good customer reviews



Empanelled Channel Partner by your State's Nodal Agency (SNA) or the Ministry for New and Renewable Energy, Gol



Prompt customer service, Close to your place Find your Channel Partner/ PV Installers here www.ahasolar.in/



Find you SNA in the link below www.solarrooftop.gov.in/pdf/sna.pdf

Every installer should be 'Certified'. Ask Why?

WHAT TO EXPECT IN YOUR ROOFTOP PROPOSAL?



25 Years performance guarantee is an important consideration. Ask Why?

HOW DO I ENSURE BETTER PERFORMANCE OF A PV SYSTEM?

Operation & Maintenance - Includes cleaning of PV modules, Ensuring proper condition of cables, Remove dust from inverters, Tightening of fasteners, Follow standards of using and operating equipment, Real-time monitoring of generation, etc.



Performance evaluation of the PV system by calculating Performance Ratio.



HOW TO CALCULATE PERFORMANCE RATIO (PR)?

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PR =

Energy measured (kWh)

Solar Insolation (kWh/m²) x Active area of PV module (m²) x PV module efficiency*



Typically, PR should be measured over an entire one year period. *Commercially available PV module's efficiency is around 15-16%

Performance Ratio/ Quality Factor can never reach 100%. Ask Why?

HOW DOES SOLAR ROOFTOP ENSURE YOUR FINANCIAL GAINS?





FEED-IN TARIFF/ GRID TARIFF/ FUEL COST







MNRE offers 30% subsidy on capital cost for Residential, Institutional and Social sector. A whopping 70% subsidy for the states: Sikkim, Uttarakhand, Himachal Pradesh, J&K, Lakshadweep and Andaman & Nicobar Islands.

80% Accelerated Depreciation is offered as a tax benefit to commercial and industrial customers. *(40% after 1st April 2017)

.

See it for yourself HERE!



QUALITY



Higher the Quality of Equipment

COST



Higher the Capital Cost/ CAPEX



Higher Generation for 25 years



Direct monetary benefit is shown in your electricity bill. Ask How?

NATIONAL CERTIFICATION PROGRAMME FOR ROOFTOP SOLAR PV INSTALLER

Scan Me!

100 GW target by 2022

i.e. 40 GW target for Rooftop What do you need?



Become a Skilled Installer

10,000 Technicians/ year





Become a Certified Trainer

100 Training Centers

Entrepreneurship Opportunity

Installers Ready for the industry!

GERMI's Authorized Training Centers



Bergen Institute on Research for **Development of Skills** www.bergengroupindia .com



Gujarat Institute Of Solar Energy www.gise.in



Trivedi and Associates Tecknical Services Pvt. Ltd. www.trivediassociates. www.socet.edu.in co in



Silver Oak College of Engineering and Technology

And many more to add...

What are Authorized Training Centers?

Technicians under the National Certification Programme for Rooftop Solar Photovoltaic Installer are trained and certified only through Authorized Training Centres (ATC) in order to ensure overall guality of content, delivery and learning. It is through our ATCs that the vision and objectives of this overall Certification Programme can be achieved.

WHAT CAN GERMI DO FOR YOU?

GERMI is a Center of Excellence that endevours to converge all energy sectors, improve knowledge base of policy makers, technologists, scientists and provide leading innovation to the energy industry.



Our Clients

Adani Power Ltd. | Azure Power | Bergen Solar Power & Energy Ltd. | Bharat Heavy Electricals Ltd. (BHEL) | GMR Energy Ltd. | Harsha Abakus Solar Private Ltd. | IL&FS Energy Development Company | Madhav Group | Microvision Enviro Projects Pvt Ltd. | Sintex Oil and Gas limited | Studer Innotec India Pvt. Ltd. | SunEdison Energy India Pvt. Ltd. | Tata Power Solar System Ltd. | Waaree Energies Ltd. | Bangalore Electricity supply company Ltd. (BESCOM) | BSES Rajdhani Power Ltd. | BSES Yamuna Power Ltd. | Chhattisgarh State Renewable Energy Development Agency (CREDA) | Gujarat Energy Development Agency (GEDA) | Jharkhand Renewable Energy Development Agency (JREDA) | New & Renewable Energy Development Corporation of Andhra Pradesh Ltd. (NREDCAP) | Tamil Nadu Energy Development Agency (TEDA) | National Thermal Power Corporation Ltd. (NTPC) | Mundra Port Trust | Green Energy Development Corporation Of Odisha Ltd. (GEDCOL) | Gujarat State Electricity Corporation Ltd. (GSEC) | Gujarat Power Corporation Ltd. (GPCL) | Gujarat Industries Power Co. Ltd. | Gujarat Narmada Valley Fertilisers | KP group | GSPC Pipavav Power Company Ltd. (GPPC) | Ministry of New and Renewable Energy (MNRE) | Many more to add

MNRE's Best Practices Manual for Implementation of State-level Rooftop Solar Photovoltaics Programmes in India http://bit.ly/2g9Ah8P Grab your online copy NOW!

Gujarat Energy Research and Management Institute (GERMI)

1st Floor, Energy Building, Pandit Deendayal Petroleum University (PDPU) Campus, Gandhinagar, Gujarat - 382 421. INDIA www.germi.org | 079 2327 5361