

A network of white dots connected by thin white lines on an orange background, with a grey and light blue diagonal bar on the left.

Report



Solar
Skills
COMPETITION

2018



Solar Skills COMPETITION

www.sscgj.in



Organizer

SCGJ

SKILL COUNCIL FOR GREEN JOBS

Event Venue Support



Renewable Energy India Expo

A UBM Event

Technical Support



ISO 9001:2008 Certified Company



MLUX MINDA™

GKMinda™

Prize Money Sponsor



Kanoda

The Solar Life!

Kanoda Energy Systems Pvt. Ltd.



ISO 9001:2008 Certified Company

Equipment Support



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STATCON ENERGIAA

Background

The Indian Solar Industry has witnessed a massive growth in the last 4 years by adding about 25,000 MW Solar PV capacity across the country, and it's no surprise that its offering huge opportunity to the jobs in the sector.

It is expected that about 10 lakh jobs that will be added in Renewable Energy domain by 2022. Skill Council for Green Jobs (SCGJ), under the aegis of NSDC and Ministry of Skill Development & Entrepreneurship, Government of India; has introduced a market-driven system of skilling for technicians, engineers and managers working in the Solar PV industry and has brought out various Qualification Packs / National Occupational Standards for job roles in the solar domain.

Rooftop Solar PV Installer is the most sought-after job role by the industry for achieving the Government of India target of 40 GW Rooftop Solar by 2022. SCGJ is partnering with the Industry and renowned training institutions to roll out sector specific job roles.

About Solar Skills Competition:

Skill Council for Green Jobs and UBM in association with GERMI launched the “Solar Skills Competition” in Renewable Energy India Expo on 21st September 2017. This is the Second year of Solar Skills Competition. The competition focuses on workmanship & accuracy, installation procedure, speed & timing for installation and health & safety aspects. The event marked a beginning of competitive and quality learning amongst personnel in this sector; and also exhibited industry's commitment towards “Skill India Mission” of Government of India.

Nominations Received and Shortlisting of Teams:

SCGJ received more than 40 interests for entries for the solar skill competition. These participants were individually asked to register for the Solar Skill Competition as a team of 3 members. There were participation both from Nine different states of India.



All the participating teams are the affiliated Training Partners of
Skill Council For Green Jobs

Participating Teams



Maharashtra



Pradhan Mantri
Kaushal Kendra

Delhi



Uttar Pradesh



Tamil Nadu



Uttar Pradesh



West Bengal



Andhra Pradesh



Delhi



Rajasthan

Proceedings of the Competition

The Solar Skills Competition was scheduled on 19th September 2017. All the participating teams reached the Delhi and the stage was set on 18th Only.



Dr. Praveen Saxena, CEO (Skill Council for Green Jobs) himself visited the Solar Skills Pavilion a day before the competition to ensure the proper execution of the competition, he also framed basic parameters to be followed during the competition.

The Technical support team from GERMI ensured that the smooth functioning of the event and no health hazard to occur during the competition.



The Solar Panels, Mounting Structures and the clamping arrangements were provided by Protocon. Protocon Energies private Ltd. Spared a dedicated team of experts and ground staff to execute any work for the solar skills competition. The Batteries were sponsored by JKM Minda Pvt. Ltd. & the Inverter was sponsored by Statcon India Pvt. Ltd.



lot of students, exhibitors, Visitors and equipment suppliers gathered around the solar skills pavilion to view the proper procedure to install and commission a solar skills pavilion. All the teams were at the pavilion area at 10 am and the competition started.

Following were the activities performed by the participants:

1. Receive the technical briefing from the Technical Team
2. Identify proper protective equipment's (5 mins)
3. Install the Solar Panels with the U type and L type clamps available, connect the PV , Inverter and Batteries. After completion of Installation the team had to Commission the system by Powering a Load. (25 Mins)

Results

CHAMPION 2018



Mahindra Susten's Training centre at Mumbai, Maharashtra won the champions title. They Received trophy from Mr. Sekh Fayaz Ahmed, (Secretary, Department of Science ad Technology, Jammu and Kashmir) and Dr. P R Dhar (CEO, JAKEDA). The Mahindra Susten's Team further received:

- The Solar Skills Champions Trophy
- A cash Prize of Ten Thousand Rupees from Kanoda Energy Pvt. Ltd
- Best Practices Manual from GERMI

RUNNER UP 2018



Orion Edutech's PMKK centre received the Runner UP prize for 2018. The PMKK centre had tied with the Mahindra's in the 1st round so the Judges decided to go for a tie breaker. The team received the Trophy from Dr. Chandan Banerjee, DDG, National Institute of Solar Energy. The PMKK Centre also received:

- Runners UP Trophy
- A cash Prize of Seven Thousand Rupees from Protecon Pvt. Ltd
- Best Practices Manual from GERMI

2nd RUNNER UP 2018



The Team from Dr. Mahalingam College, Tamil Nadu encompassed of only two participants, but they were highly skilled. The Team received their prizes from Mr. Gaurav Minda, MD Minda Solar. The Team received :

- 2nd Runners UP Trophy
- A cash Prize of Four Thousand Rupees from Protecon Pvt. Ltd
- Best Practices Manual from GERMI

TEAMS PARTICIPATED



TEAMS PARTICIPATED



Judges of the Solar Skills Competition 2018



Tanmay Bishnoi

- Mr. Tanmay Bishnoi provides intellectual and strategic leadership for the overall design & structure of the National skill development programmes on Green skills; organises stakeholder engagement meets for preparing industry research reports; and is responsible to develop National Qualifications for Renewable Energy, Green Construction, Green Transportation, Water and Waste Management; with additional responsibility of engagement with bilateral and multilateral agencies for strategic partnerships. He has delivered multiple Training of Master Trainer programs, and has completed the Master Trainer program on training delivery and facilitation skills, certified by IFC, World Bank Group organization.



Dr. Omkar Jani

- Dr Omkar is Director, Research & Culture at Kanoda Energy Systems Pvt Ltd. He was former Principal Research Scientist at Gujarat Energy Research & Management Institute (GERMI). He heads the renewable energy, environment and energy efficiency research wing at GERMI a world-class research institute involved in project implementation, education, research and training. Dr Omkar Jani advises various organizations of the Government of Gujarat including the Energy and Petrochemicals Department and its associated organizations/ companies on solar PV related mandates, activities and innovative projects. He has spearheaded the implementation of solar power projects in more than 10 states of India.



Arving Karandhikar

- Arvind Karandhikar is a mechanical engineer having 30 years of working experience including 20 years in Solar Energy. He is Director in Nexus Energytech Pvt. Ltd., Pune, a Consulting Company. It has successfully completed consultancy assignments in solar power generation, PV module manufacturing, tariff determination for regulatory commissions. It has also facilitated entry of private companies in the PV sector through strategic and technical consultancy.



Amit Rane

- Mr. Amit Rane is involved in global energy consulting, power plant design and planning. He has Cross cultural work experience of Asia, Europe and America. He is Lean Sigma Green belt certified business development professional with 15+ years of international experience in start-up development, green entrepreneurship strategic marketing, project financing and project management. He is Successful at developing power plant designs, pricing strategies, reducing costs through process improvements and meeting time and budgetary requirements. His Strengths include technical analysis, team and relationship building, implementing strategies, analytics, seminars and technical presentations, contract negotiations and operating in new and challenging global environments.

Judgement Criteria

S.no	Aspects	Criteria	Judge 1	Judge 2	Judge 3
1	Workmanship & Accuracy 20 Marks	Identify methods of moving tools and equipment's to work area			
		Identify and choose right equipment's for particular application			
		Proper method and procedure for using the tools			
		Proper installation procedure followed			
		Quality of installation			
		Total			
2	Installation Procedure 40 Marks	Install mounting posts, roof attachments and anchors			
		Install module support/racking frame			
		Install, secure and fasten the modules			
		Torque module fasteners			
		Terminate fine stranded cables / crimping			
		Install and connect the cables for modules			
		Dismantle safety Power Plant in accordance with sequence and remove from worksite to clear work area (additional marks)			
Total					
3	Speed & Timing For Installation Max: 20 Marks	Timing for selection of proper equipment's			
		Scheduling and sequencing of different activities during installation			
		Timing for installation / the given task			
		Team work			
		Total			
4	Health & Safety Aspects Considered While Installation Max: 20 Marks	Select the required PPE			
		Use of required PPE for working at height specially safety harness			
		Inspect/ install fall protection and perimeter protection equipment ensuring adequacy for work			
		Use Proper PPE for particular application			
		safe work environment during installation			
		Total			
		TOTAL SCORE MAX: 100			

Dismantle the solar Power Plant safely in accordance with sequence and remove from worksite to clear work area.

Judge 1 sign

Judge 2 sign

Judge 3 sign

Workman & Accuracy of the Solar Installation

Installation Procedure

Speed and Timing for Installation

Health and Safety aspects considered while installation