

# **SOLAR VISION**

With recent developments, solar energy systems are easily available for industrial and domestic use with the added advantage of minimum maintenance. Most of the developed countries are switching over to solar energy as one of the prime renewable energy sou rce. The current architectural designs make provision for photovoltaic cells and necessary circuitry while making building plans.

The National Solar Mission is a major initiative of the Government of India and State Governments to promote ecologically sustainable growth while addressing India's energy security challenge. It will also constitute a major contribution by India to the global effort to meet the challenges of climate change.

# **Objective:**

To establish India as a global leader in solar energy, by planning the SOLAR ENERGY UTILIZATION MODEL that can be proposed across various parts of the country.

Hosts of these models are always available at the global level. So, the task is to come up with an IDEA to develop a product or its prototype and present it in form of a presentation.

# **Challenge:**

- Utilization model must use Solar energy as its main energy source and can/cannot be followed by another renewable energy source.
- Use of eco-friendly materials in design, especially because it makes disposal less of an issue.
- Cost estimated or payback period of the proposed product should be comparable or less than the similar available product (if available).

#### **Rules:**

The competition will be held in 2 rounds, first for the submission of the idea for the Solar energy utilization model, and the qualifying teams will be eligible for the second round, wherein they have to present their final idea, as per the design and features already specified by the team.

**ROUND1:** Submission consisting of Idea of Design as soft copy

**ROUND2:** If the team clears round 1, they are required to present their idea of Utilization Model of their design using presentation.

#### Note:

- Final presentation can include video but video is not mandatory.
- In case any modifications/corrections are there in the Round 1 submission, the corrected files have to be resubmitted.



- The teams must adhere to the spirit of healthy competition.
- If the authenticity of the design comes into question, the organizers' decision will be final and binding.
- Organizers reserve the right to disqualify any team indulging in misbehaviour or violating any rules.
- Any team that is not ready at the specified time will be disqualified from the competition automatically.
- In case of any disputes/discrepancies, the organizers' decision will be final and binding.
- The organizers reserve the rights to change any or all of the above rules as they deem fit.
- Change in rules, if any will be highlighted on the website and notified to the registered teams.
- Note that at any point of time, the latest information will be that which his on the website.
  The information provided in the pdf downloaded earlier may not be the latest. However, the registered participants will be informed through mail about any such changes.

# **Judging Criteria:**

- Idea Innovation
- Feasibility
- Utility
- Reliability
- Efficiency
- Cost/Payback period
- Presentation

#### **Eligibility:**

All students with a valid identity card of their respective educational institutions are eligible to participate.

# **Team Specifications:**

- One team can have a maximum of 4members.
- Students from different institutes can be in the same team.

#### **Submission:**

#### **Submission for Round 1:**

- ABSTRACT containing name & idea of Utilization Model, brief of objectives and unique specifications.
- Submit the abstract by 23<sup>rd</sup> Oct 2017 at <a href="mailto:sesi.pec@gmail.com">sesi.pec@gmail.com</a> (Subject in format 'PECFEST-EVENT\_NAME: Title of Abstract'). Shortlisted teams will be notified by 24<sup>th</sup> Oct 2017.



Presentation containing Details of Utilization models, Equipments used, Circuit (if any), CAD structure (if any), Working, Application, Cost analysis, Payback period, Economic impact, Environmental impact, advantage/disadvantages and Conclusion. (Above format may be modified as per team's convenience but all the data required must be given in direct form)

After declaration of results of 1st round, the participants eligible for 2nd round can work on their idea, improve it and then make the presentation of Utilization model. However, any changes are going to be scrutinized and if they are found to be too drastic, the team can be disqualified. Team will have to include all the technical and financial aspects of their idea in a detailed manner. Participants are expected to submit the final presentation by 27<sup>th</sup> Oct'17. However, they can still do minor modifications after that as well, till 29<sup>th</sup> Oct'17. On the final day, the teams will have to submit their presentation in CD. Organizers reserve the right to decide whether any such changes have been made to the abstract. In that case, the decision made will be final and absolute.