

TERI DEVELOPS FIRST OF ITS KIND TOOL FOR ESTIMATING ROOFTOP SOLAR POWER POTENTIAL FOR INDIAN CITIES

Chandigarh, December 23rd2013: The Energy and Resources Institute (TERI) is currently developing the first-of-kind cloud based open-source Web-GIS Tool for estimating Rooftop Solar Power potential for Indian cities. The main objective of this exercise is to develop a high performing and flexible Web-GIS tool to estimate the rooftop solar power potential for Chandigarh area.

This is considered as an important step to promote solar rooftop photovoltaic (PV) systems in Indian cities. There is a need for a tool to showcase solar resource potential in a user-friendly format so that users can investigate their locations of interest and perform pre-processed analysis. Geographic Information System (GIS) is the obvious tool to achieve this because it provides visual reference – a map of the entire city showing the buildings those have solar PV installation potential.

The tool was demonstrated during the workshop entitled "Promoting Rooftop Solar Photovoltaic Systems in India" organized by TERI today.

Delivering the inaugural address, HE Shivraj V. Patil, the Governor of Punjab and The Administrator, UT, Chandigarh, emphasized on the fact that nature has the enormous resource for energy, food and water at large. Especially in the context of energy, he mentioned about the energy from SUN which is unlimited and un-exhaustive, which needs to be tapped through various technological solution and in this regard industries have to come forward for promoting the accelerated deployment of such system.

Mr. K.K. Sharma (IAS), Advisor to Administrator, UT, Chandigarh emphasized on the need of the reduction of the cost of SPV system, and enhanced indigenous manufacturing of such rooftop SPV systems.

Mr. Amit Kumar, Director, Energy Environment Technology Development said "TERI started working on development of this tool realizing the felt need for the same, especially given the ambitious programmes on solar rooftop systems under Jawaharlal Nehru National Solar Mission as well as under States' policies. While similar tools were available in countries like Germany and USA, nothing of sort was available in India. Going further, TERI aimed at a tool that can be used by anyone rather than only those having access to proprietary software".

The proposed Rooftop Web-GIS Tool for India will be an ideal medium to showcase investors the logistics of rooftop solar energy investment. This tool will have the following benefits:

It will enable user to estimate the rooftop solar power potential of selected area or, buildings for a particular location w.r.t. various SPV technologies such as, crystalline, thin-film etc.

- Will act as a Decision Support System (DSS) to carry out the pre-feasibility assessment of putting rooftop PV system for a particular location;
- > Will help users to estimate potential GHG mitigation through solar rooftop route for a given location/building;
- Assess the viability of any rooftop projects based on possible business models and financial schemes available.

Mr. Deepak Gupta, Senior Programme Manager, Shakti Sustainable Energy Foundation said that the tool will help users to find out the rooftop solar power potential in Chandigarh and calculate the potential sizing of rooftop solar photo voltaic systems that can be installed in their rooftop.

After successful demonstration of this Rooftop Solar Web-GIS tool on a pilot-basis, the quantifiable and tangible benefits can be showcased for other cities too. This tool can work as a base platform, which can be replicated for other cities by creating the GIS data layers for the target city and integrating those with the existing tool, without having any additional development efforts.

This initiative has been supported by Shakti Sustainable Energy Foundation (SSEF), and the strategic support is being provided by Chandigarh Renewable Energy, Science and Technology Promotion Society (CREST) and Ministry of New and Renewable Energy (MNRE).

ABOUT TERI:

The Energy and Resources Institute (TERI) is an independent, not-for-profit research organization deeply committed to every aspect of energy, environment, and sustainable development. From providing environment-friendly solutions to rural energy problems, to helping shape the development of the Indian oil and gas sector; from tackling global climate change issues across many continents to enhancing forest conservation efforts among local communities; from advancing solutions to growing urban transportation and air pollution problems to promoting energy efficiency in Indian industries, the emphasis has always been on finding innovative solutions to make the world a better place to live in. All activities at TERI move from formulating local and national—level strategies to suggesting global solutions tackling critical energy and environment related issues.

Headed by Dr. R.K. Pachauri, also the chairperson of the Nobel Peace Prize winning climate change body, IPCC, TERI has emerged as an institution of excellence for its path-breaking research, and is a global brand widely respected by political leaders, policy makers, corporate entities as well as the civil society at large.

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