Press Release

CSTEP'S ROOFTOP SOLAR EXPLORER FOR CHHATTISGARH LAUNCHED

Raipur, 23 October 2024: Chhattisgarh Chief Minister Shri Vishnu Deo Sai launched the Rooftop Solar Explorer (RTSE) tool for Chhattisgarh today during an event at the Chhattisgarh State Power Distribution Company. The portal, developed by research-based think tank Center for Study of Science, Technology and Policy (CSTEP), is linked to the national portal of the PM Surya Ghar Yojana and allows citizens to examine their rooftops for the best available area for setting up a rooftop solar system while helping them evaluate the technical and financial aspects.

Speaking at the event, Shri Vishnu Deo Sai remarked that as a significant contribution to addressing climate change, Chhattisgarh aims to illuminate 5,00,000 homes by 2027. Currently, green energy accounts for only 15% of the state's energy production and the state aims to increase this to 45%. The state also aims to create large-scale employment in solar panel manufacturing and supply.

He also added that the adoption of solar energy is expected to reduce pressure from traditional energy sources and promote sustainable growth. Over 1,50,000 farmers are already benefiting from solar-powered irrigation. Additionally, Chhattisgarh's efforts will play a crucial role in meeting the target of zero-carbon emissions by 2070.

The rooftop solar (RTS) segment is critical to meeting India's renewable energy targets. However, with an installed capacity of 14.3 GW, this segment is far from the 2022 target of 40 GW. Moreover, it is lagging behind the ground-mounted solar segment in India, which has an installed capacity of >70 GW at present. Thus, well-coordinated efforts are warranted to boost the RTS segment and ensure that it contributes significantly to the 300 GW solar target by 2030.

Through scientific and policy research, CSTEP has been involved in developing implementation strategies and roadmaps to aid distribution companies (DISCOMs) achieve their RTS targets in a scientific and structured manner.

CSTEP is currently working as a technical and knowledge partner for the Chhattisgarh State Power Distribution Company Limited (CSPDCL) to assist the DISCOM in achieving its 700 MW RTS target. The Chhattisgarh government's efforts to increase its rooftop solar

capacity has garnered the interest of industries who are setting up rooftop solar in many districts of the state.

To develop the RTSE tool, CSTEP conducted drone-based aerial photogrammetry to assess the potential of every rooftop in Raipur, Raigarh, Bilaspur, Durg, and Korba. The tool uses this aerial imagery to offer accurate information regarding solar generation potential, optimal system design, and economics for each consumer and provide a list of all suitable buildings with geographical coordinates and system sizes to CSPDCL.

'Mapping the rooftops and building the portal is the first phase of the project. The next step is to help citizens use the portal to meet the state's target of installing rooftop solar in 5 lakh houses. Over the next few months, we will be taking this tool to developers, vendors, and financial institutions to help them leverage it to increase the uptake of rooftop solar in Chhattisgarh', said Shantanu Roy, Policy Specialist in the Renewable Energy and Energy Efficiency team at CSTEP.

The explorer is linked to the CSPDCL website and can also be accessed here: https://rtse.cstep.in/cg/

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About CSTEP: CSTEP is a not-for-profit research organisation with a mission to enrich policymaking with innovative approaches using science and technology for a sustainable, secure, and inclusive society. Our interdisciplinary research encompasses diverse fields such as energy, urban development, climate, and air pollution.

About the Renewable Energy and Energy Efficiency team: The RE & EE team at CSTEP focusses on the greater integration of renewables and reduction of waste energy in various sectors. This includes working with utilities to improve rooftop solar penetration, mapping the potential of various renewables across the country, and analysing the energy usage of MSMEs to reduce their fossil fuel consumption.