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Press Release

"Households owning rooftop solar systems can save up to 95% on their electricity bills": CEEW Study

BYPL – CEEW partnership designs three innovative utility led models for rooftop solar

Households owning rooftop solar systems could save up to 95% on their electricity bills, according to an independent study released at the CEEW Renewable Energy Dialogue 2018 by the Council on Energy, Environment and Water (CEEW). Residents buying power from a community rooftop solar PV plant, via a subscription plan, could also save up to 35% on their electricity bills. These savings have been estimated over the 25-year lifetime of these systems.

Solar system costs have declined by 27%, year-on-year, over the last three years, making rooftop solar a lucrative investment for commercial and industrial consumers. However, despite a 30% government subsidy, households have installed only about 400 MW of rooftop solar across the country (and 60 MW in Delhi). Key challenges for residential consumers include high capital cost, lack of access to finance, lack of consumer awareness, issues with roof ownership and access, and a roof lock-in period of 25 years.

The study was undertaken by CEEW in collaboration with BYPL in the discom's area of East and Central Delhi. The Council's study found that involving electricity distribution companies, designing innovative business models, and introducing financial incentives are a key to scaling up rooftop solar in the residential sector.

Hence, the BSES Yamuna Power Limited (BYPL) and The Council's collaboration resulted in the design of three innovative utility-led models – community solar model, on-bill financing model, and a solar partner's model. These models target diverse residential consumers ranging from those living in gated communities to low-income consumers receiving electricity subsidies.

At the CEEW RE Dialogue, Shri Praveen Kumar, Additional Secretary, MNRE, said, "Every Indian citizen has an opportunity to participate in India's clean energy transition by adopting rooftop solar to meet their rising energy needs. Scaling-up rooftop solar is a major part of India's renewable energy ambitions. Understanding and resolving the challenges faced by households, developers, DISCOMs, and financiers will be crucial to speeding up residential adoption of rooftop solar. The government's proposed scheme SRISTI will provide much-needed impetus to the sector. I congratulate CEEW for conceptualising three utility-led business models to overcome prevailing market challenges and provide a conducive environment for households to embrace rooftop solar."

Mr P.R. Kumar, CEO, BYPL, said, "BYPL is not only committed to promoting rooftop solar, but is also at the forefront of championing its beneficial impact on the environment and on electricity bills. This association with CEEW is yet another testimonial to these efforts and promises to further accelerate them. Adoption of rooftop solar will also help us to manage the peak demand and fulfil our renewable purchase obligation (RPO).





"A large portion of our BYPL consumers are in the residential segment. Through the CEEW-BYPL collaboration, we are happy to have created 'fit-for-purpose' business models that will help to lower electricity bills in this segment. For these models to realise their true potential, regulatory support would be crucial," added Mr Kumar

Dr Arunabha Ghosh, CEO, CEEW, said, "Rooftop solar is not only crucial to meeting India's renewable energy targets but will also facilitate a civil society movement to support the energy transition. However, conventional rooftop business offerings have failed to spur household demand or incentivise solar developers to focus on residential consumers. Ensuring greater DISCOM participation and adopting innovative business models is key to scaling up rooftop solar for households. The recently proposed SRISTI scheme encourages DISCOMs to facilitate faster adoption of rooftop solar systems by providing financial incentives. DISCOMs could aggregate consumer demand, partner with financial institutions, facilitate bulk procurement of rooftop systems, oversee project deployment, and ensure timely payments by consumers."

The proposed business models could extend the rooftop solar market to all residential consumer segments across India. The models highlight options to spur demand for rooftop solar among residential consumers including easy financing and solar subscription plans of varying durations. The on-bill financing model allows consumers to pay the cost of the rooftop solar system through savings on electricity bill over a duration of 7-8 years.

Scaling rooftop solar for households would create hundreds of new clean energy jobs. Rooftop solar employs seven times more people than utility-scale solar for every megawatt installed. In 2017-18, rooftop solar created nearly 14,000 jobs for about 1 GW capacity compared to nearly 15,000 jobs created for about 8.5 GW of utility solar. Overall, over 300,000 new workers could join India's solar sector by 2022.

About BYPL

BSES Yamuna Power Limited (BYPL) is a joint venture between Reliance Infrastructure Limited and Govt of NCT of Delhi with a 51%:49% shareholding. It supplies electricity to nearly 1.6 million, customer density of 7,950 per square kilometer, in East and Central Delhi.

About CEEW

The Council on Energy, Environment and Water (http://ceew.in/) is one of South Asia's leading not-for-profit policy research institutions. The Council uses data, integrated analysis, and strategic outreach to explain -- and change -- the use, reuse, and misuse of resources. It prides itself on the independence of its high-quality research, develops partnerships with public and private institutions, and engages with the wider public. In 2018, CEEW has once again been featured across nine categories in the '2017 Global Go To Think Tank Index Report'. It has also been consistently ranked among the world's top climate change think tanks. For the latest updates, follow us on Twitter: @CEEWIndia

BRPL & BYPL are premier distribution companies and Joint Ventures between Reliance Infrastructure Limited and GoNCTD.





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