

FOR IMMEDIATE RELEASE

Contact: Arsheen Kaur, arsheen.kaur@ceew.in (+91 9891021997)

India's renewable energy market is concentrating and evolving, says CEEW-IEA study

New Delhi (28 June 2018) – India's renewable energy market, one of the fastest growing in the world, continues to evolve, according to a study released today by the Council on Energy, Environment and Water (CEEW) and the International Energy Agency (IEA). The top 10 developers in both solar PV and wind accounted for over 60% of sanctioned projects each year between 2014 and 2017. However, these players were not the same each year. At least half the companies among the top 10, in terms of shares of projects sanctioned, changed every year.

India's solar PV capacity has grown nearly eight-fold, from 3GW to 22 GW, in the last four years. India also has the world's fourth largest installed wind capacity of 34 GW. In 2017, investment in renewable power in India topped that for fossil fuel-based generation capacity for the first time.

Kanika Chawla, Senior Programme Lead, CEEW and a lead author of the study, said, "India's young and dynamic renewable energy market continues to offer opportunities for big gains to both domestic and international developers. Our analysis finds that industry players with access to finance on favourable terms thanks to foreign sources of capital, balance sheet strength, or by virtue of being state-owned enterprises, have been the early frontrunners in driving renewable energy deployment in India. With cost of finance accounting for over 60% of solar and wind tariffs, the eventual winners are likely to be the ones with the best access to affordable finance."

Michael Waldron, Energy Investment Analyst, IEA and another lead author, added, "Scaling up renewable energy investment in India is key to a global clean-energy transition. In the last four years, the Indian market has witnessed a multi-fold growth in project sizes due to ambitious renewable energy targets and an enabling policy environment. Lowering the cost of finance, reducing land acquisition and infrastructure risks, and addressing the factors impacting the timeliness and reliability of power purchase by offtakers will be crucial to realising India's targets by 2022."

The CEEW and IEA study further found that while solar parks made India's renewable development more accessible to investors around the world, there are persistent challenges in scaling up this unique 'plug and play' model for organising land and infrastructure. The share of solar park projects had risen from over 40% in 2015 to around 55% of total solar PV capacity tendered in 2017. However, only 16% of the 40 GW target of solar park projects by the end of FY 2019-20 had been awarded until December 2017. Challenges such as land acquisition continue to plague the pace of solar park development.

Industry experts and developers also expressed concerns regarding high upfront and recurring solar park charges. Hence, developers with access to relatively low-cost finance have tended to invest in solar parks. Over 2014-17, international independent power producers (IPPs) accounted for around 45% of the sanctioned projects in solar parks. Nevertheless, solar parks have yet to reach their potential in terms of attracting diversified finance from international sources. Around 35% of the park projects were awarded to IPPs registered in Mauritius, where companies benefit from preferential taxation.

The CEEW-IEA study also highlighted that developers and financiers preferred projects with creditworthy offtakers, offering timely and reliable payments. In recent years, a rising share of sanctioned solar and wind investments were based on power purchase agreements with central government entities such as the Solar Energy Corporation of India (SECI) and NTPC, compared to those

executed with state distribution companies (DISCOMs) alone. Among state offtakers, the preference for creditworthy DISCOMs was also clear, with those having favourable financial and operational metrics accounting for the largest share of sanctioned projects in 2014-17.

About CEEW-IEA's Clean Energy Investment Trends Project

Given the complexity and rapid evolution of the Indian market, a cross-cutting evaluation that regularly takes stock of current renewable energy financing and market trends, and that lays the ground for good policy advice is crucial for India to achieve its clean energy transition goals. In order to monitor and analyse the concerted action towards fulfilling India's RE ambitions, CEEW and IEA have undertaken a joint project to assess clean energy investment trends, with a focus on renewables and the power sector. This project seeks to provide stakeholders a practical guide for understanding the current clean energy investment environment in India and how the evolution of regulations and risks are impacting where finance is flowing (and where it is not). The results of this investigation would provide policymakers with insights to better manage risks and address regulatory challenges going forward.

Based on a granular analysis of project-level data and stakeholder consultations, the project uniquely seeks to triangulate and map the evolution of the risks and opportunities perceived by the three major actors in India's renewable energy sector that underpin all market activity:

Governments and regulators: Provide a clear, objective view of the macro drivers for investment and identify key risk areas and regulatory barriers;

Project developers and industry: Provide a succinct guide to investment flows, regulations, risks, key performance indicators and financing options at national and state level, which would aid in making investment decisions;

Financiers: Provide a unique market analysis that reduces transaction costs, facilitates due diligence and potentially expands the size of the market for both debt and equity.

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