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India: Clean Energy Investment and Finance

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H2020 CETEE Closing Workshop

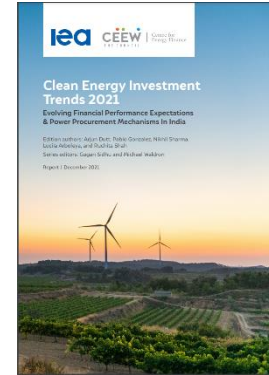
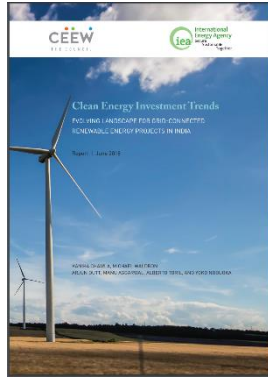
Brussels, 14 September 2022

International
Energy Agency

- Objective: work with priority countries to **assess and enhance regulatory frameworks, market design and investment and financing conditions that accelerate sustainable energy transitions in the power sector.**
 - Identify gaps and provide recommendations to optimise the design of national power markets and regional integration frameworks
 - Improve understanding of the determinants of the cost of capital, reduce risks and improve financing options for clean energy supply and demand.
- It is expected that addressing these issues would help to attract finance at scale and enhance the affordability for renewables and flexibility investment.

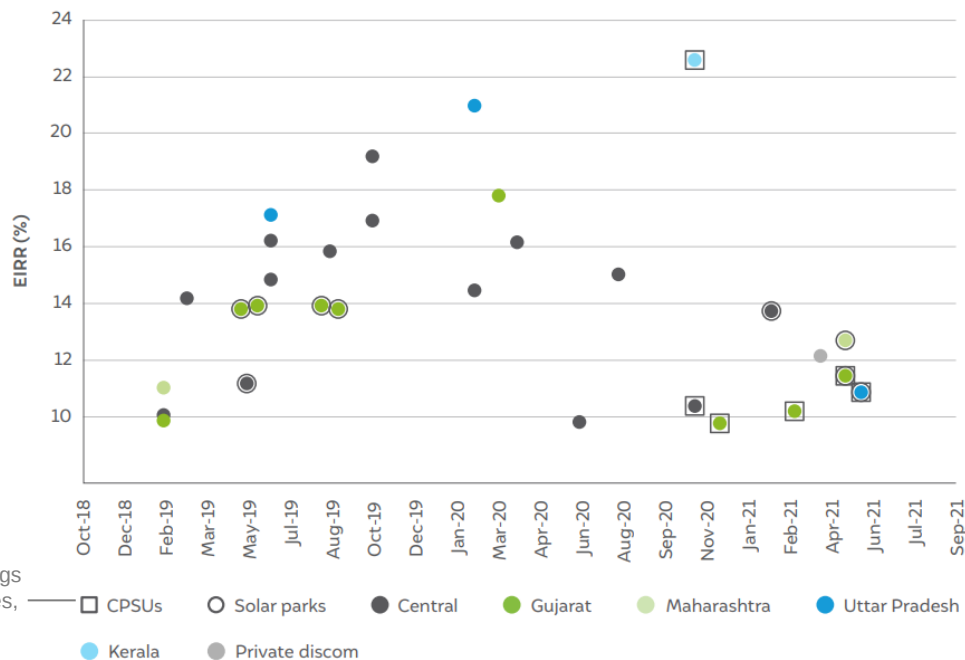
Understanding how risk and policies shape investment flows

- To achieve India's clean energy targets, India's policymakers, industry actors, and financiers must act in a coordinated manner. For investments in clean energy to grow, policy measures must address the investment risks perceived by investors, financiers and developers.
- The IEA and the Council on Energy, Environment and Water (CEEW) have been working together since 2018 on assessing clean energy investment trends in India – focused on utility-scale solar PV and wind projects – and identifying the risks that are critical to mobilise the capital needed to meet India's investment needs—under the IEA's Clean Energy Transitions Programme and multiple philanthropies that fund the CEEW Centre for Energy Finance.



Financing terms continued to improve, post uncertainties in H1 2020

Estimated equity internal rate of returns for solar PV projects, by off-taker and type of project site



Expected EIRRs fall over H2 2020 and start of 2021, given higher participation of CPSUs and new international IPPs—as with debt pricing. Discoms' desire for low tariffs amid rising costs may have put pressure on expected EIRRs too.

- The pricing of project debt finance has continued to decline
- Central entities are the ones preferred as off-takers
- Hybrid tenders: Procurement is evolving in response to the challenge of integrating larger quantities of variable RE into the grid
- We've also run sensitivity analyses, looking at how changes in different can affect the EIRRs
 - Volatility in capital costs, especially solar PV module prices, pose a significant downside risk to realised returns
- Acquisitions of renewable power companies and assets have surged in 2021, topping USD6 bn.

Arunabha Ghosh

CEO, Council on Energy, Environment and Water (CEEW)

A view on clean energy investment
in India?

