

Focus on Renewable Energy

Why in news?

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India will host the second edition of RE-Invest, its largest investor conference for renewables soon.

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What is the objective?

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- The RE-Invest series of Investors' Meet & Expo will be hosted by the Ministry of New and Renewable Energy (MNRE).
- It showcases India's renewable energy potential and the Government's efforts to scale up capacity to meet the national energy requirement in a socially, economically and ecologically sustainable manner.
- This edition will also host the First Assembly of International Solar Alliance (ISA) and the 2nd Meeting of Indian Ocean Rim Association (IORA) Renewable Energy Ministers.

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What is the current RE status?

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• India announced a target of 175 gigawatts (GW) of renewable electricity capacity.

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• Renewable power installed capacity has already reached over 70 GW and over 40 GW renewable power capacity is under construction/tendered.

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• Globally, India stands 4th in wind power, 5th in renewable power and 6th in solar power installed capacity.

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- Trends suggest that India's target will not only be achieved but exceeded.
- \bullet Tariff based competitive bidding process has increased competition and lowered India's RE tariffs, among the lowest in the world. \n
- Yet, annual investment is just 3% of the global total which has averaged \$10 billion in the last four years.

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What should be the focus areas?

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- **Decentralisation** There is a need to increase demand for renewables not only at the central level but also at state, district and city levels.
- Demand could be aggregated at the household level so that bottom-up, demand-driven RE growth be strengthened.
- **Power purchase agreements** The rapid fall in RE tariffs has created expectations that each subsequent round of bidding will bring prices down further.

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- While the resultant cheap RE prices are advantageous for discoms, utilities get lower financial realisations than they previously received.
- But the larger concerns that affects power utilities like poor procurement practices, system-wide inefficiencies, and cross-subsidised electricity still persists.

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- This makes the utilities reluctant to sign PPA's or failing to honour the discovered prices resulting in failed contracts.
- PPA's have to be structured in a way that it balances transparent reverse auctions and the state-imposed tariff caps, so that it benefits both power producers and the consumers.
- **Risk assessment** Currently, there is no compensation for RE developers if the grid doesn't absorb variable renewable electricity.

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- Hence, to reduce curtailment risk, a 'grid integration guarantee' is being designed to apportion risk across not just developers but also grid planners/operators for transmission related issues.
- With proper risk assessment, it should eventually lead to insuring developers against the curtailed power.
- Safeguard duties SC recently lifted a stay on proposed duties of 25 per cent on solar cells and panels imported from China and Malaysia.
- On one hand, increased costs of these equipment could increase generation costs and make previously bid tariffs unviable, while on the other the government is also capping RE tariffs.
- \bullet This creates double burden on the project developers. $\ensuremath{^{\backslash n}}$
- Safeguard duties could give a temporary respite to domestic manufacturers, but cannot alone build a robust manufacturing base.
- Domestic manufacturing capacity should be boosted while reducing overdependence on cheap/subsidised imports from China.
- \bullet This needs focus on the entire manufacturing value chain, including cells, modules, wires, inverters, and balance of systems. \n

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What more could be done?

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• India's RE focus should not be restricted to solar photovoltaic and onshore wind.

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• Emerging ones like Solar thermal technologies needs to be explored which reduces the need for storage and could increase domestic manufacturing value addition.

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- \bullet Financial instruments that could de-risk projects or give easier access to credit for rooftop owners/developers should be developed. \n
- Utilities could develop new business lines to integrate RE, distributed generation and electric vehicle charging.

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- Decarbonisation of the industrial sector could be done by leveraging industrial sector to invest in renewables.
- RE-Invest is an opportunity to reaffirm our commitments to targets, respecting contracts, reducing losses, and encouraging innovation.
- \bullet This will make India as the largest clean energy market in the world to operate on market-friendly principles. \n

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Source: Business Standard

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