

Consequences of a Hasty Transition to Renewable Energy

What is the issue?

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- Urgency to move to renewable energy (RE) in India will have drastically different consequences for different parts of the country. \n
- As hasty energy transitions can impact jobs and revenues, and create regional disparities, there is a need for gradualism. \n

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What is the current scenario?

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- While India's coal resources are concentrated in eastern and central India, solar and wind resources are concentrated in Western and Southern India. \n
- Of India's installed grid-scale RE capacity of about 60 MW, only 3% is located in the eastern and north eastern region. \n
- Notably, Geography and weather considerations prevent grid-connected RE capacity from being developed in eastern and north-eastern India. \n

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- \bullet As RE is likely to gradually substitute coal-based power, this will disadvantage coal belt states in terms of manufacturing and employment. \n
- \bullet In the long term, expansion of RE will hurt not only coal-based power generation, but also diminish the prospects of coal mining. \n
- Notably, plant load factors (ration of operational to the total capacity) have already plummeted at India's coal plants, and have created financial strain in the sector.

- Also, coal uptake from CIL has plummeted and the unprecedented situation of CIL having excess coal in its stocks and a shortage of buyers has emerged. \n

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How will this affect the economies of the coal belt?

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- Direct impact There is a broad regional divergence in income levels among States and eastern States have generally lagged behind the rest. \n
- Adoption of RE and the gradual displacement of coal is likely to accentuate this income divergence through loss employment. \n
- Also, in the past decade, there has been a sharp increase in redistributive resource transfers to laggard states, which mostly lie along the coal belt. \n
- This will now have to increase due to the lost royalties and tax revenues. $\ensuremath{\sc n}$
- Notably, coal mining and its downstream industries have been an important part of states such as Jharkhand, Odisha, West Bengal, and Chhattisgarh. \n
- Other Impacts The social multiplier of coal-related activity extends well beyond the mere employment in the industry. \n
- Private capital herds toward States with fewer governance problems, better business environments, and higher probabilities of quick returns. \n
- Hence, the PSUs have to fill the investment vacuum in States with bad business conditions as reforming governance structures is a slow process. \n
- On that note, there is already an increased focus on strengthening the power grids in eastern states and also plans for establishing a gas grid is underway. \n
- But for these schemes to succeed, over a 100 million customers will have to engage with power and gas markets, which will be slow to come up. \n

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How does the future look?

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- While RE is indeed inevitable, the move should be well planned and spaced. $\slash n$
- A balance needs to be struck between economic, political and environmental considerations in the transition towards RE. \n
- Notably, populist backlash due to hasty energy transitions have contributed to anti-incumbent electoral swings in both America's and Germany's coal belt.
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- By comparison, India's coal belt is considerably more populous and electorally relevant and the unrest could spiral to more dangerous proportions here.
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- As a gradualist approach has served India well in many other domains there is no reason to believe that energy is any different. \n

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Source: Businessline

