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Just Transition Finance

A perspective from India

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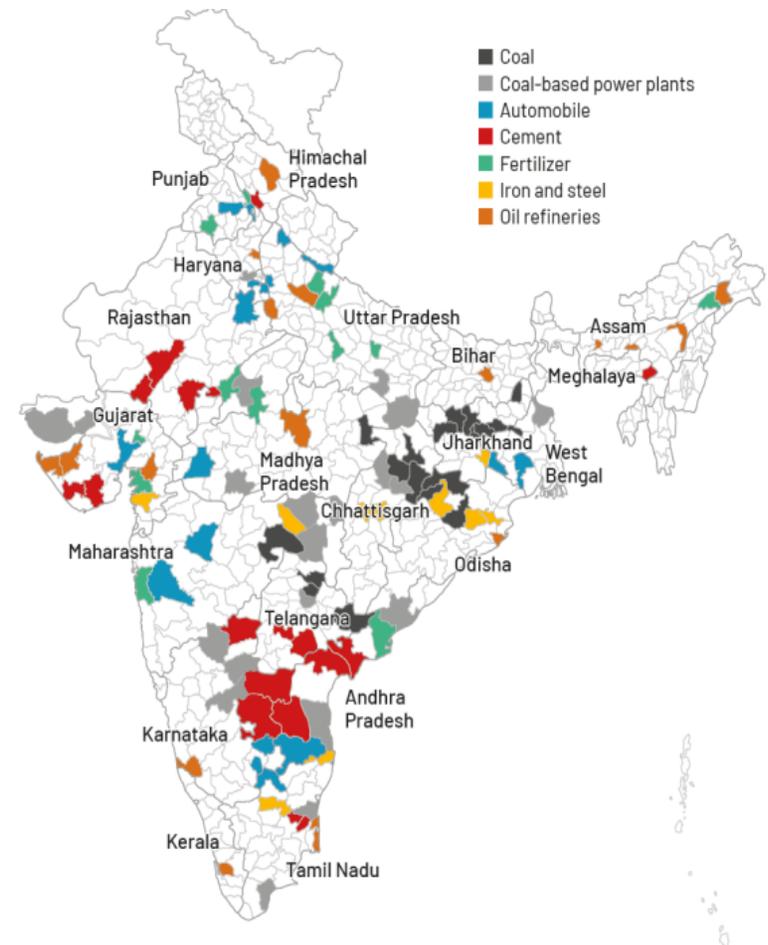
India's Energy Transition Context

At least 120 districts will be impacted by the energy transition in the next three decades.

Accounts for about 25% of India's population.

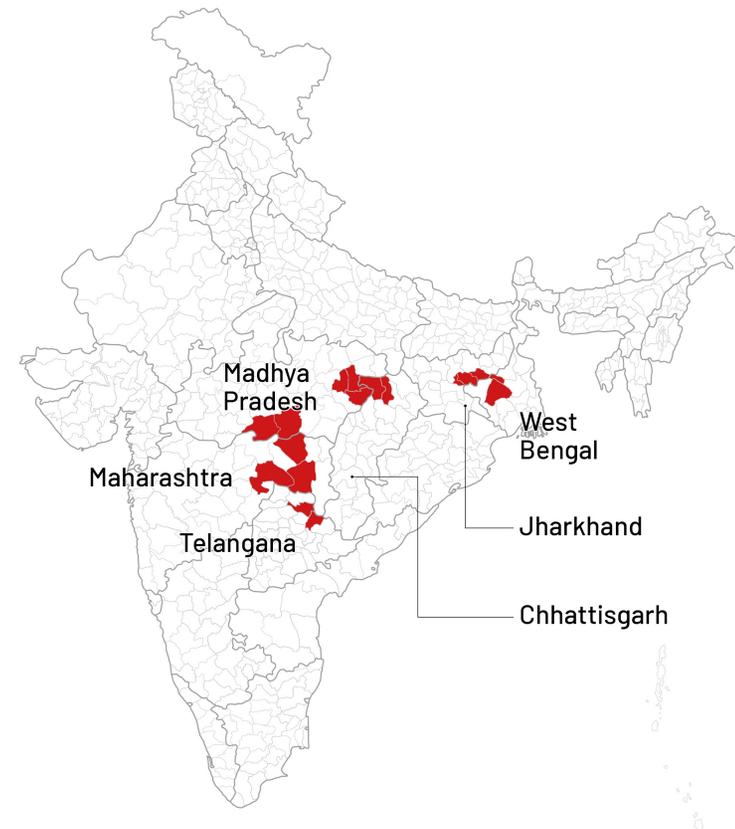
Over 20 million workers will be impacted. A large share of them are low-paid informal workers.

Many of these districts, particularly in Eastern and Central India have poor development indicators.



High Priority Regions

- Old coalfields - mines closing due to reserve depletion/ unprofitability.
- 17 districts, producing 20% of country's coal and lignite.
- 68% of total mines; > 60% workforce
- Large fleet of old TPPs
- ***Need to plan and implement JT now.***



Just Energy Transition Costs

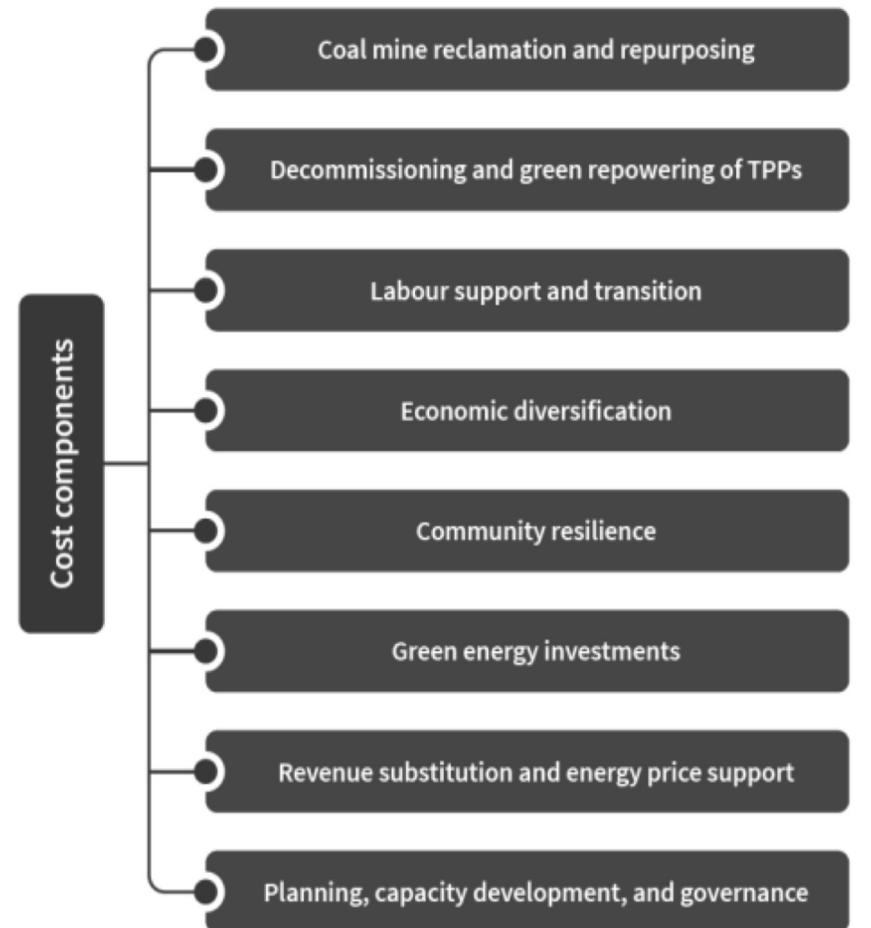
5 Step Approach



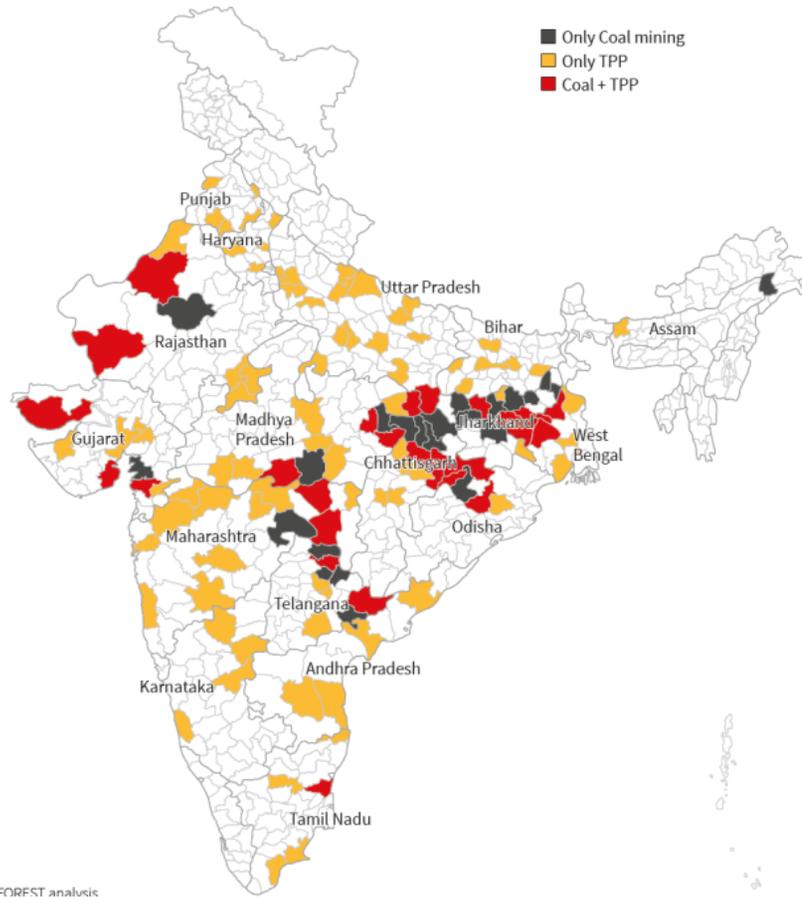
Cost Components

Basis for identifying cost components

1. **Global experience**- Just Energy Transition Investment Plan of South Africa (2023-27); Territorial Just Transition Plans of EU member states.
2. Context of **India's coal mining and TPPs sectors**
3. Nature and distribution of **workforce**
4. **Socio-economic challenges** of coal districts
5. Need for investments for creating **green jobs**, supporting **green energy development**, and substituting government revenue through **green industry development**
6. **Planning and governance** aspects for implementation

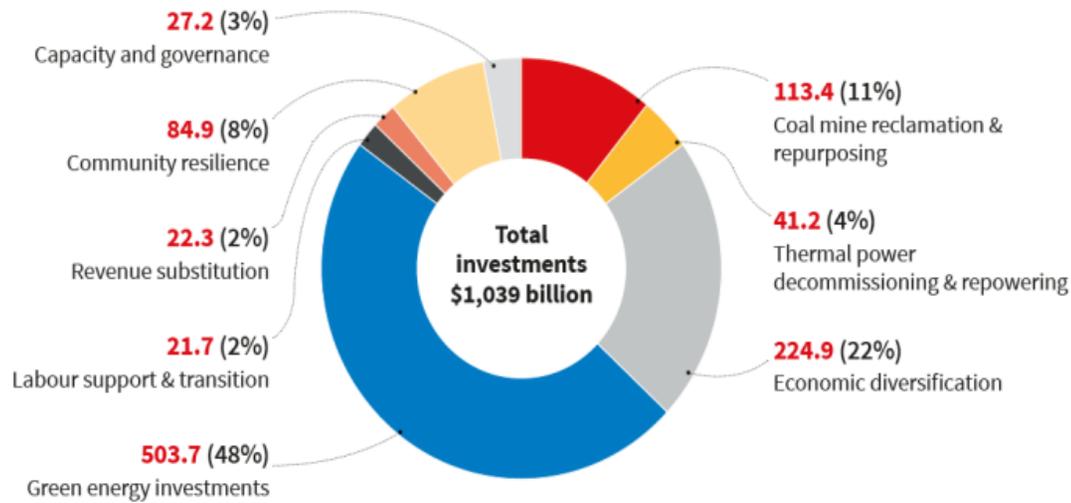


Basis of Cost Determination



1. Overall costs assumes a period of 3 decades considering a transition by 2050
2. Transition geography includes 137 districts (28 having both coal mines and TPPs, 23 having only coal mines, and 86 having only TPPs)
3. Considers the transition costs of closing coal mines with a 1,315 MTPA cumulative production capacity and phasing out 237.2 GW of coal-based power capacity.
4. Associated costs of these include rehabilitation and repurposing of 343,504 hectares of coal mining land, green repowering of 124,789 ha of land available at TPP sites, and transition support for about 5.9 million workers.

Just Transition Costs for Coal and Thermal Power in India



More than a
Trillion Dollars
required over the next
3 Decades

Support through Grants & Subsidies

Over **40% costs** require support through **grants and subsidies**

Cost components	Total cost (\$ billion)	Amount supported through grants and subsidies (\$ billion)
Green energy investments	504	50
Economic diversification	225	87
Coal mine reclamation and repurposing	113	110
Community resilience	85	85
Thermal power decommissioning and green repowering	41	16
Planning, capacity development and governance	27	27
Labour support and transition	22	22
Revenue foregone	22	22
Total	1,039	420

Key messages

1. India will require more than a trillion dollars over the next three decades to transition only the country's coal mining and thermal power sectors.
2. Additionally trillions of dollars will be required to set up new green energy plants and infrastructure to meet the country's future energy demand.
3. Grants and subsidies through domestic and international support, will be determining for implementing just transition measures.
4. Develop policies, fiscal instruments, and mobilize domestic resources through convergence to support green energy and green industry development in fossil fuel-dependent regions, create green jobs, and build community resilience.
5. International financing will need to be more ambitious, increase the scope of grants and concessional loans, create enabling environments for private investments.

Thank you...

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