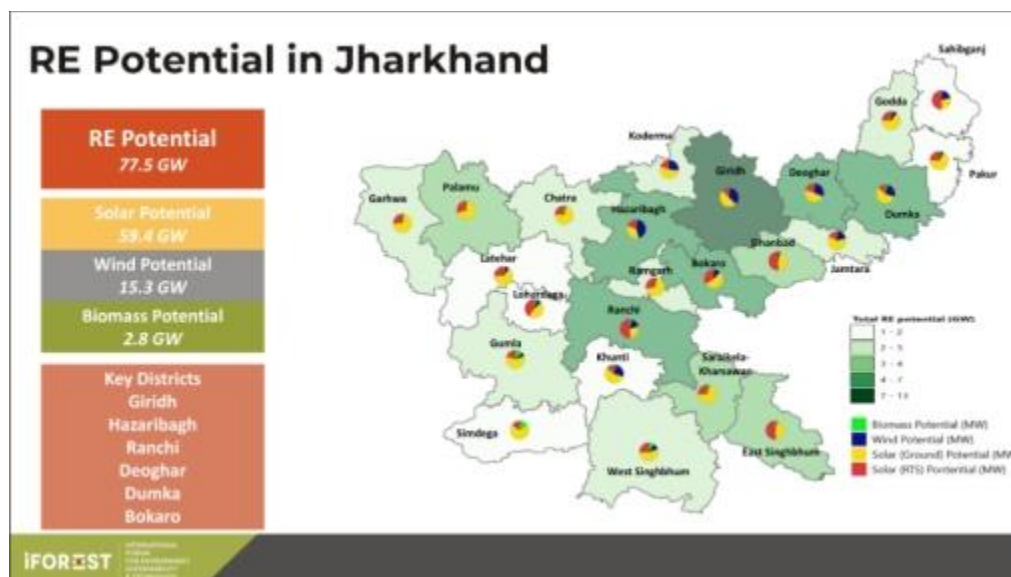


Press Release

Jharkhand holds 77.5 GW renewable energy potential; Dhanbad–Bokaro–Ramgarh's barren lands can power a Green Energy and Industrial Hub: iFOREST Research

- Dhanbad, India's coal capital, and neighboring districts Bokaro and Ramgarh are facing resource exhaustion. Only 33% of Dhanbad's mines are profitable. A just transition is crucial, finds iFOREST.
- Dhanbad-Bokaro-Ramgarh (DBR), in Jharkhand's Damodar Valley, can be transformed into the state's green energy and industrial hub in the next decade.
- About 80,000 hectares of barren land can be used to develop green industries such as green steel, green chemicals, for which the region already has a strong industrial base. Additionally, 16,000 hectares of coal mining land can be available for repurposing.
- Jharkhand can harness 59 GW of overall solar energy, 15 GW of wind and 3 GW of biomass potential.
- Giridih, Hazaribagh, Ranchi, Deoghar, Dumka and Bokaro are green energy powerhouses.



23rd August, 2025, Ranchi: Environment think tank iFOREST held a state-level conference in Ranchi titled, '*Just Transition of Dhanbad and Jharkhand's Green Energy Future*' where it released three key reports mapping the Just transition roadmap of Damodar Valley, the state's renewable energy potential and its policy ecosystem.

Jharkhand, India's traditional energy hub, is on the cusp of an energy transition. As a state which is home to India's coal capital, Dhanbad, which generates 43 million metric tonnes of coal and 25% of Jharkhand's coal, projections show that two-third of its mines are set to potentially close by 2030. Mines in adjoining districts Bokaro and Ramgarh are also experiencing a steady decline due to resource exhaustion and unprofitability. However, iFOREST studies show that this is a massive opportunity for the state to pivot from a coal-dependent economy to a green energy and industrial hub, enabling India to meet its net zero goals.

In his opening remarks, Shri Aboobacker Siddique P, IAS, Secretary, Dept. of Forest, Environment & Climate Change, Govt. of Jharkhand, said:

"Jharkhand is the first part of India that has constituted a Just Transition taskforce. We understand the urgency of Just Transition. The two words are equally important—Just and Transition. Nobody can stop the 'transition'. But 'just' means equitable, *nyay*, justice for all. Delivering that, is the challenge. It requires a participatory economy where we all act together."

Secretary, Dept. of Labour, Employment, Training and Skill Development, Govt. of Jharkhand, Jitendra Kumar Singh, IAS, said:

"This is not just an economic transition. It is a socio-economic transition. If we train our people on green skills without readying the energy ecosystem, it will cause outward migration. If we diversify our energy and train our people too late, that will lead to societal unrest too. The transition needs a multi-disciplinary approach for a holistic sustainable transition."

Smt. Mahua Maji, Hon'ble Member of Parliament, Rajya Sabha, said:

"We don't speak enough about how environmentally hazardous it is to mine for coal and burn coal. In rich forestlands such as Saranda, home to 700 hills, agriculture and ecology is affected due to the intense mining. A bad environment can ultimately affect jobs and bring societal unrest. We must shift to cleaner energy and curtail our culture of over consumption. This is the way to protect the environment."

iFOREST report highlights:

- **Coal economy:** In Dhanbad, coal mining contributes only 8% to the district's economic output. However, 1.4 Lakh formal and informal workers are dependent on coal mining and dependent industries. Besides, MSME clusters and businesses are reliant on coal.
- **Land:** Within the next decade, Dhanbad-Bokaro-Ramgarh (DBR) industrial belt of Damodar Valley can be turned into a green corridor by repurposing 80,000 hectares of barren land and 7,000 hectares of mining land. All this can be used for solar parks, green industrial parks and climate-resilient industries.
- **Water:** DBR can leverage its water resources (dams and water bodies) for green hydrogen production and manufacturing green steel, for which the region already has an industrial base and market.
- **Infrastructure:** Due to the region's existing national highways, rail networks and energy infrastructure, the region is primed for attracting green investments.
- **Solar, wind and biomass:** At a state level, Jharkhand has the potential to harness 59 GW of solar (from ground-mounting, floating and rooftop), 15 GW of wind energy (at 150m above ground level), and 3 GW from biomass. DBR alone can generate 13.5GW from solar alone.
- **Employment:** The industrial and energy investments will not only offset for potential employment loss, but will create new employment opportunities. The state will need to invest in skilling and upskilling in collaboration with industries.
- **Transition funds:** District Mineral Foundation Fund accruals worth 6,600 Cr in the DBR region (40% of Jharkhand's total), can be a seed money to support localised skilling and livelihood generation.
- **Institutional setup:** A Damodar Valley Transition Authority should be created to anchor cross-district coordination and investment promotion for the DBR green industrial corridor.

President and CEO of iFOREST, Chandra Bhushan, said, "Damodar valley has powered the country with coal in the past, it can still continue to power India with green hydrogen and solar power in the future. To achieve this, we must reimagine its potential. The Damodar Valley is known as India's Ruhr valley. Germany's Ruhr, an industrial belt, has no thermal power, no coal and enjoys

a diversified economy. They planned it over a course of 20 to 30 years. If we have to transform Damodar valley, deliberate planning has to be at the core of the process.”

The event brought together government officials, civil society, policymakers and citizens for panel discussions on Dhanbad’s just transition, Jharkhand’s renewable energy potential and the policy roadmap ahead.

About iFOREST

The International Forum for Environment, Sustainability and Technology (iFOREST) is an independent non-profit research and innovation organization working on pressing environment-development challenges in India.

We conduct independent evidence-based research, develop new knowledge and innovative solutions, convene stakeholders to increase awareness and build consensus to scale up green solutions.

Visit: <https://iforest.global/> for more information.

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