

INDIA'S JUST ENERGY TRANSITION IS MORE THAN A COAL STORY

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 (Environment & Ecology)

Just Energy Transition Partnership (JET-P) is emerging as the key mechanism for multilateral financing by developed countries to support an energy transition in developing countries. This has taken on particular significance following the insertion of the phrase 'phasedown' of coal in the Glasgow Pact. After South Africa, Indonesia, and Vietnam, India is considered the next candidate for a JET Partnership. India's G20 presidency could potentially be an opportune moment to forge a deal.



However, India must develop a coherent domestic just energy transition (JET) strategy in order to negotiate a financing deal that addresses its unique set of socio economic challenges.

Issues that concern transitions

Energy transitions could give rise to intragenerational, intergenerational, and spatial equity concerns. Transitions affect nearterm fossil-dependent jobs, disrupt forms of future energy access, shrink State's capacity to spend on welfare programmes, and thus exacerbate existing economic inequities between coal and other regions.

Existing JET-P deals, pay limited attention to intergenerational inequity, such as job losses resulting from a coal phasedown. However, among the three JETP deals signed so far, only South Africa's deal mentions a 'just' component— funding reskilling and alternative employment opportunities in the coal mining regions — to be financed as part of the initial \$8.5 billion mobilization. The other two JETPs (Indonesia and Vietnam) are focused on mitigation finance for sector specific transitions.

Initial JET-P negotiations for India last year have reportedly remained stalled over whether and how India should consider coal ‘phasedown’ and how to operationalise India’s just transition. The emphasis by developed countries’ on coal phasedown, without adequate attention to country context, disregards the crucial difference in energy transition between industrialized and emerging economies. Energy transition in the industrialized world involves a natural tapering of energy consumption alongside fuel switching to clean energy sources; India’s transition requires significant simultaneous growth in energy demand. The Central Electricity Authority projects a near doubling of electricity demand by 2030. A country that is likely to multiply its energy demand requires adequate supply from a diverse mix of sources. India cannot afford to put its development on hold while decarbonising.

The path to a clean energy quest

India has signalled a commitment to clean energy with ambitious targets like 500GW of non fossil, including 450 GW renewable energy (RE) capacity addition and 43% RE purchase obligation by 2030. These targets are supported through complementary policy and legislative mandates (Energy Conservation (Amendment) Act), missions (National Green Hydrogen Mission), fiscal incentives (production linked incentives) and market mechanisms (upcoming national carbon market). These interventions show India’s serious efforts at energy transition, but additional supplementary measures are needed for a coherent JET strategy.

Here are three sets of actions that could further expedite India’s energy transition while also addressing domestic developmental priorities, and justice and equity concerns. First, acceleration in RE deployment rates to match the pace of demand growth is critical to India’s JET. While RE deployment has outpaced coal in recent years, in 2021/22, coal power served one third of the new demand.

Meeting India’s 2030 target requires accelerating non-fossil capacity addition from 16 GW a year in 2022 to 75 GW a year by 2030, a 22% year on year growth. Despite sustained efforts India missed its 2022 target for 175 GW RE capacity. The gap is largely in decentralized deployment, which is more promising for acceleration.

About Just Energy Transition Partnership (JETP)

- JETP, an initiative of the rich nations to accelerate phasing out of coal and reducing emissions.
- The JETP initiative is modeled for South Africa, to support South Africa’s decarbonisation efforts.
- It aims to reduce emissions in the energy sector and accelerate the coal phase-out process.
- JETP makes various funding options available for this purpose in identified developing countries.
- The JETP was launched at the COP26 in Glasgow with the support of the United Kingdom (UK), the United States (US), France, Germany, and the European Union (EU)
- Following that G7 has announced a similar partnership in India, Indonesia, Senegal, and Vietnam.
- India’s stand – India argues that coal cannot be singled out as a polluting fuel, and energy transition talks need to take place on equal terms.
- 'Transition' describes the gradual movement towards lower carbon technologies, while 'Just' qualifies that this transition will not negatively impact society, jobs and livelihoods.

Two complementary paths to accelerate RE deployment that can have significant developmental co-benefits.

A low hanging option is shifting energy demand patterns in ways that enable faster RE capacity addition: solarisation of agricultural electricity demand; electrification of diesel powered Micro, Small and Medium Enterprises (MSMEs); and decentralized RE for residential cooking and heating. Stimulation of energy demand through rural productivity enhancement will further aid RE acceleration as well as help to address the rural-urban economic divide, create rural jobs, and thereby address intergenerational and spatial inequities.

Second, domestic manufacturing of clean energy components is critical to sustain a JET, build energy self-sufficiency, and tap the green jobs promise of 21st century energy. While India has recognised the importance of domestic manufacturing, the challenge is in achieving cost competitiveness — Indian components are 20% costlier than Chinese components. Giving preference to domestic components without addressing cost competitiveness may slow down the pace of deployment. The way around this is to negotiate access to markets outside India as part of a JET Partnership, to reduce the cost gap through economies of scale.

On coal use

Third, there is a case for re-aligning the current use of coal resources to enhance efficiencies until the period of phasedown. One option is to optimize use of coal-fired power plants closer to where coal is mined rather than based on energy demand in States. This would enable coal to be used more efficiently because transportation of coal is more energy-intensive than transmission of electrons, and also lead to fewer emissions. It would also lead to cheaper power, as transportation accounts for one-third of the cost of coal for power plants; the resultant savings could also help finance much needed emission control retrofits. Finally, and not least, it would indirectly reduce emissions due to more efficient use of coal.

Moreover, by using coal more efficiently, this policy shift opens the door to India considering a future cap on coal-powered generation capacity. Current generation capacity plus plants in the pipeline are adequate to meet India's projected requirement in 2030. Low capacity utilization factor (58% in 2022) further allows the possibility of greater use of existing plants to match future demand. By leading to cheaper and more efficient power, the coal realignment proposed here helps address energy security concerns, making it possible to even consider a future coal-based power capacity cap.

Conclusion

These measures will not only address equity concerns across various dimensions but also create new job opportunities, achieve emissions reduction and prepare the country for deeper decarbonisation through a future coal phase-down. However, as has been stressed by many, the investment requirements for this transition are beyond the means of domestic mobilization for developing countries. Any future JETP deal must consider this broader framework for financing and supporting an energy transition. With India holding the G20 presidency, it has an opportunity at hand to negotiate a deal for itself while also shaping international cooperation on just energy transitions.

Expected Question

Que. Consider the following statements:

1. “The Climate Group” is an international non-profit organization that drives climate action by building large networks and running them.
2. The International Energy Agency in partnership with the Climate Group launched a global initiative “EP100”.
3. EP100 brings together leading companies committed to driving innovation in energy efficiency and increasing competitiveness while delivering on emission reduction goals.
4. Some Indian companies are members of EP100.
5. The International Energy Agency is the Secretariat to the “Under2 Coalition”.

Which of the statements given above are correct?

- (a) 1, 2, 4 and 5 (b) 1, 3 and 4 only
(c) 2,3 and 5 only (d) 1, 2, 3, 4 and 5

Answer : B

Mains Expected Question & Format

Que.: What is the Just Energy Transition-Partnership (JET-P)? State the objectives and importance of bringing JET-P.

Answer Format :

- ❖ Write about the Just Energy Transition-Partnership (JET-P).
- ❖ State the objectives and importance of JET-P.
- ❖ Give a balanced conclusion.

Note: - The question of the main examination given for practice is designed keeping in mind the upcoming UPSC mains examination. Therefore, to get an answer to this question, you can take the help of this source as well as other sources related to this topic.