

**NEED TO ADOPTING
REFORMS IN
COAL MINES REPURPOSING
FOR ENABLING
JUST TRANSITIONS**

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INDIA's NET-ZERO POLICY

Prime Minister Modi announced the “Panchamrit” - the five-fold strategy to deal with the climate change at COP26, Glasgow 2021.

1. India will take its non-fossil energy capacity to 500 GW by 2030.
2. India will meet 50 % of its energy requirements from renewable energy by 2030.
3. India will reduce the total projected carbon emissions by one billion tonnes by 2030.
4. By 2030, India will reduce the carbon intensity of its economy by more than 45 %.
- 5. By the year 2070, India will achieve the target of Net Zero.**

INDIA'S NET-ZERO TARGETS

- To keep global warming at 1.5°C, emissions need to be reduced by 45% by 2030 and reach net zero by 2050.
- Around 145 countries had announced net zero targets.
- Most of the countries have committed to achieve Net zero by 2050.
- Though India is one of the last countries to announce a Net-Zero target, by 2070, its near-term goalposts are more realistic.

NECESSITIES ASSOCIATED WITH ACHIEVING NET-ZERO TARGET

India's strong economic growth depends on fossil fuels.

However, if India's Net Zero target is to be optimistically set to 2050, it would require a

- ✓ complete economic rethink
- ✓ India's future economy requires rapid growth in renewables, with huge investment in clean energy, about \$13 trillion
- ✓ decarbonising its industrial and infrastructure sectors,
- ✓ **maximising its human talent,**
- ✓ **not to ignore the JUST TRANSITIONS,**
- ✓ **mines repurposing.**

TRANSITIONS ENVISAGED IN COAL MINING AREAS AND NEED TO BE JUST

- **Energy Transition** – Carbon to Renewables
- **Livelihood Transition** of the Stakeholders
- **Societal Transition** – Marginalization to 'Well to do'
- **Economic Transition** – Fossil fuel driven to Green Economy
- **Environmental/ Ecological Transition** – Degradation to Restoration
- **Mine closure Transition** – Active mining to Mine reclamation
- **Climate Transition** – aligning with global climate goals

TRANSITIONS SHOULD BE NEED-BASED

EXISTING REGULATIONS/ POLICIES RELATING TO MINES REMEDIATION IN INDIA

Mines Act, 1952: regulates safety in Mines
Mines & Minerals (Development & Regulation) Act, 1957, and 2015 : Governance of mineral and mining sector
Mineral Concession Rules, 1960 (amended 2012): Prospecting licenses and mining leases. Impact on environment & restoration/ reclamation
Coal Mines (Conservation & Development) Act, 1974 : conservation of coal
Mineral Conservation & Development Rules, 1988 (amended 2011) and 2017: conservation of minerals and protection of the environment. Every holder of a mining lease shall take all possible precautions for undertaking sustainable mining. Sustainable Development Framework (SDF) that prescribes a detailed mining standards addressing social impacts of mining, adoption of scientific means of mine reclamation and closure, etc. (with progressive & final mine closure plans)
National Mineral Policy, (NMP, 1993) revised in 2008 includes encouraging private investment, importance of sustainable practices in mining with a better ecological condition after mining.
Mines & Minerals (Contribution to District Mineral Foundation) Rules, 2015: every mine lease holder to contribute 10-30% of the royalty to DMF for socio-economic development and environment protection activities in and around the mining locale.
Guidelines for preparation of Mine closure plan for coal mining operations (by Ministry of Coal dated 27-8-2009) Amended in Jan., 2012; and in Dec., 2019
OM on Guidelines for the management of Mines discontinued/ abandoned/ closed <u>before the year 2009</u> , issued by Ministry of Coal , 28-10-2022
OM on Guidelines for Preparation, Formulation, Submission, Processing, Scrutiny, Approval and Revision of Mining plan for the coal and lignite blocks 29-5-2020 issued by ministry of Coal.
Guidelines for Mining Plan (including Mine Closure) for the coal and lignite blocks 2024, Issued by Ministry of Coal in June 2024 : These guidelines have tried to extensively include many restoration and other environmental mitigation measures.

Environment related:

Rules and notifications have been adopted under the Environment Protection Act (EPA) 1986 such as

- E-Waste (Management) Rules 2016, as amended in 2018 (E-Waste Rules);
- Bio-Medical Waste Management Rules 2016;
- Plastic Waste Management Rules 2016;
- Solid Waste Management Rules, 2016;
- Construction and Demolition Waste Management Rules 2016;
- Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016, as amended in 2019 (HW Rules);
- Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 (MSIHC Rules);
- Coastal Regulation Zone Notification 2019; and
- Environment Impact Assessment Notification 2006.
- Wild Life (Protection) Act 1972.
- Forest (Conservation) Act 1980.
- The Forest Rights Act (FRA), 2006
- Public Liability Insurance Act 1991.
- Biological Diversity Act 2002.
- National Green Tribunal Act 2010
- Compliance of EC Conditions by Regional offices of MoEFCC
- Compliance of Forest clearance Conditions by DFO
- Consent to Establish and Consent to operate Mines and Compliance of conditions by SPCBs
- CGWA's guidelines

Rehabilitation & Resettlement related :

- National R&R Policy, 2007
- Coal India Ltd. R&R Policy, 2012
- Jharkhand R&R Policy, 2008
- Orissa R&R Policy, 2006
- Master plan for dealing with fire, subsidence and rehabilitation in the leasehold of BCCL (Jharia Coal mines), 2008

Corporate Social Responsibility related :

- The Corporate Social Responsibility Policy Rules, 2014 (CRS Rules) in Section 135 of India's Companies Act make it mandatory for companies of a certain turnover and profitability to spend 2% of their net profit on CSR. One of the important obligation under this rule is ensuring environmental sustainability & ecological balance.
- Coal India Ltd. CSR policy.

Sustainable Development Policy of Coal India Ltd., 2013

Corporate Environment Responsibility (CER) mandated by MoEFCC

Corporate Environment Policy of Coal India Ltd

REGULATORY LIMITATIONS/ ISSUES

- Do these regulations/ policies/ guidelines cater to meaningful mine repurposing??
- Most of the Mine related Acts/Rules deal with mining methods etc. rather than Post-Mine repurposing.
- Mine closure need to be delinked from Mining Plan related.
- Guide lines related to Mine closure are mandated by the concerned Ministry. The legal sanctity of these guidelines is questionable – They should have legal status. Accountability of non-compliance is questionable.

REGULATORY LIMITATIONS/ ISSUES

- Are the present Mine closure guidelines implementation satisfactory??
- MoC's Mine closure guidelines does not match Global benchmarks and does not cater to Climate Change; including Just Transitions.
- Public consultation & participation is required.
- There are no MC performance standards; Reclamation standards should be clearly defined - Activities are measurable against which standards ? MC performance is approved by auditors.

REGULATORY LIMITATIONS/ ISSUES

- Mine closure costs are inadequate; Some Mining costs have been considered under the MC costs; funds disbursement questionable (eg. DMF irregularities).
- Escrow fund reimbursement upto 50% - does not appear to be diligent. Can be treated as PM/ Repurposing Bond.
- There is no provision penalties/ punishment for compliance violation. Public participation to be involved in Escrow Fund release.

REGULATORY LIMITATIONS/ ISSUES

- Can we explore a third-party to do the reclamation work and supervised by the administrative authority.
- The size of Escrow amount/ reclamation bonds should be set at the level of a third-party reclamation cost to ensure sufficient funding for the administrative authority to complete reclamation and to encourage reclamation and closure by the mining company.
- Rights on post-closure land - silent

REGULATORY LIMITATIONS/ ISSUES

- CMPDI prepares MCPs and is also the auditor – conflict of interest ?
- Mine closure watch dog – CCO again from MoC/CIL - conflict of interest ?
- Nominated 3rd party Mine closure auditors – conflict of interest ?
- Why not bring them under National Accreditation Board for Education and Training (NABET)
- **It can be concluded that there are no dedicated Acts and Rules for Mine repurposing to address the above issues.**

NEED TO REVISIT THE EXISTING ACTS AND INTRODUCE NEW REGULATIONS

Necessary Acts that are not there in India

- Mine closure
- Post-Mining Land-use
- Mine Reclamation
- Mine Abandonment (for eg. Mines closed/ discontinued before 2009)
- R&R and Livelihoods regulation for Mining induced Displaced persons
- Just Transitions
- Ecological security/ Restoration
- Climate Change - aligning with global climate goals
- Sustainable Development
- Regulation for provision of adequate Funds for Mine repurposing

MINE REPURPOSING – FOCUS AREAS

- Base line survey of socio-environmental setup; Stake holders & skills mapping; in-depth research
- Socio-environmental impact assessment
- Stake holder communication and participation
- Mine closure/ abandonment and Physical Reclamation
- Ecological restoration
- Alternate Post–mining land-use models planning and execution
- Therefore formulate a Road Map & Action Plans.

MINE REPURPOSING – FOCUS AREAS

- Resource and business diversification strategies
- Rehabilitation and Livelihood provisioning
- Stranded assets repurposing
- New technologies induction
- Financial provisioning
- Monitoring, Accountability and Benefit analysis
- Compliance and enforcement
- Capacity building

THANK YOU

The views and facts presented here are of the author's own experience.