



Prayas (Energy Group)



2nd PEG-CPR Roundtable on

Managing a Fair Transition away from Coal in India

January 20 & 21, 2021, Online

Summary of Discussion

Prayas (Energy Group) and Centre for Policy Research

Prayas (Energy Group) and Centre for Policy Research organised the first roundtable to start the conversation around managing a fair transition away from coal in India, on 20 December 2019.¹ While the viewpoints discussed were diverse, there was consensus on the need for careful and timely management of the multiple complex issues involved with the transition that is already underway. The transition discourse has since further evolved, with key analyses from several research groups and important policy notifications from the Central and state governments. Following this, the second iteration of the roundtable took place virtually on 20 and 21 January 2021.

38 participants from various grassroots organisations, research groups, academic institutions, and consultancies attended the event. The invitation-only roundtable was held as per the Chatham House rules and featured varied and rich discussions. The full list of participants is attached as Annexure A. The two-day event was split into sessions to facilitate focused discussions and were based on the following broad themes:

- Phasing out coal-fired power
- Political economy of coal
- Communities and environment: ground-level insights

The event concluded with a session dedicated to open-ended discussions and deliberations on the way forward. A detailed agenda of the roundtable is attached as Annexure B. This document captures the summary of discussions at the roundtable, and outlines the various interconnected issues that must be addressed during the transition away from coal.

1. Phasing out coal-fired power

Addition and retirement of coal-based generation capacity

Thermal generation in the country is under scrutiny, especially in the context of current surplus capacity, stressed assets and emissions. The growing role of renewable energy in the country's generation mix at competitive prices, has put coal based capacity, especially that in the pipeline, under question. There is significant coal based capacity in early stages of construction or pre-construction, which will require investments and additional infrastructure, and thus needs to be stringently reevaluated. Given the dangers of surplus capacity, stranded investments, related resource lock-ins, and added stress in the finances of distribution companies, such capacity additions should only be undertaken contingent to detailed assessment of future demand patterns and justification of further coal-based capacity. Moreover, the economic slowdown induced by the pandemic has suppressed energy demand significantly, putting a further question mark against coal-based capacity expansion.

Phase out of existing thermal stations based on age and efficiency, and related impact on operational costs and coal savings, was also discussed as a solution to some of the issues in the power sector. This

¹ See further details on the first roundtable at <https://cprindia.org/events/8538>

topic elicited diverse opinions and robust debate about the various criteria to be considered, the potential gains or losses or considering such early phase-out and so on.

One perspective was to focus on efficiency rather than cost as a parameter. Another perspective was to primarily use age as a criterion to retire coal plants, as it could lead to savings by replacing old, costly generation with newer, potentially cheaper generation. Parameters such as efficiency and variable costs are dynamic and are influenced by factors such as the coal linkage. The operational cost of some plants maybe lower owing to the current distribution of coal linkages, making them unattractive options for retirement. But this could change on redistributing the coal linkages, accounting for efficiency. Additionally, such retirement could translate to potential benefits such as cost savings, reduced coal consumption, and improved load factors for the remaining fleet. It was suggested that these savings may also suffice to pay for the cost of such retirement. However, a third perspective claimed that the extent of savings and gains were likely to be much lower than stated, in addition to questions about their practical feasibility and other hidden costs.

Retiring older plants could also result in cost savings in the form of costs circumvented, since this capacity would not have to install emission control systems, required to adhere to environmental norms. One argument was that it would not be economical for plants with relatively short balance life to install such systems as they would not be able to recover the costs in time. However, a counter-argument was that some older capacity has already undertaken expenses toward this end, and the costs of some older plants seem to indicate that they can afford to install such systems and still be economical. Also, such retirement could affect the flexibility of the system, and have varying impacts at the state level. Rushed early retirement, along with the extant political economy in states, could lead to shortage mentality-driven capacity additions in excess of requirement with greater challenges of lock-ins and stranded investments.

Additionally, it was discussed that the benefits of retiring older plants must be weighed against the benefits of effectively utilising them, perhaps sparingly, for various services such as peak load supply and ancillary services, which become more critical with a growing role for RE. With changing load curves and supply options in the future, there is a need for non-baseload, peaking capacity. Older plants, having sub-critical technology, smaller capacity, and lower fixed costs, can potentially be used to provide such flexibility. Given their interconnected nature and far reaching implications, decisions regarding retirement of capacity should not occur in isolation, and must include considerations for flexibilization and emission control retrofits. Further, discussions around phasing out coal fired power must take cognisance of climate realities, the political economy, and the financial situation of states.

[Investments in coal power](#)

India witnessed a surge in coal power projects since 2005, owing to a favourable policy framework for private participation in power generation. This led to a significant number of projects getting approvals, which in turn led to large investments in coal-based generation predominantly from domestic non-banking financial companies and public sector banks.

This has since changed. Global investments in coal have been falling and several global financial institutions have adopted coal exclusion policies. Driven by this global shift away from coal and domestic factors, investments in coal projects in India have seen a drastic decline in the recent past. However, the point of contention is whether this slump in investments in coal projects is a temporary trend or a more permanent pattern. In the context of recent developments, like government approval of 100% foreign direct investment and statements by senior officials regarding the importance of coal in achieving India's goal of becoming a \$5 trillion economy, it is possible that this drop in coal investments is temporary. Investment patterns are also likely to change as the priorities of the government change.

It was also noted that the increased investment in the coal-fired capacities has resulted in a significant number of non-performing assets in the sector, an issue which is further compounded by the financial health of distribution companies in states. The government has been writing off the bad debts related to these assets. In order for the transition to bring about effective change, the government and banks

need to instead set up due diligence processes, accounting for financial, social, and environmental factors.

2. Political economy of coal

Systemic view of the coal transition

While some renewables bids may be cheaper than average coal power on a LCOE basis, a systemic view of coal shows a more complex picture. Coal contributes to the broader economy through cross subsidization of railways, generates government revenue through taxes, levies, etc. Moreover, the increase in coal costs in recent years is attributable to taxes and transport costs rather than mining costs. A systemic view of renewables reveals possible integration challenges and hidden cost (e.g. batteries are expensive unless there is a heavy duty cycle). A nuanced analysis would have to be based on finer understanding of fixed and variable costs of various technologies and the trends of such costs, and their ability to meet load at various times. In addition, there are also political challenges to be addressed due to regional imbalances in RE development. The counter-argument was also made that coal would keep getting expensive going forward, and that India's vulnerability to climate related costs should not be underestimated.

Given that the country has significant coal capacity that is relatively young, the focus should be on cleaning up coal rather than phasing it out. Cleaning coal, however, may be a wider challenge beyond controlling pollutants, such as the management of ash, and the costs of running coal in the meantime may fall disproportionately on vulnerable communities. At the same time, there are some units that have an unfairly and unnecessarily high return on equity, which could be re-examined.

Key actors and dynamics in the coal- based power sector

The power sector has witnessed strong consolidation in recent years, as a result of which coal demand will largely be shaped by the priorities of two key power sector actors- NTPC and the Adani Group. This consolidation is driven by their diverse portfolios and access to low cost finance (including public finance and multi-lateral finance), with tacit support from political decision-makers. These entities, therefore, have become levers for government goals, and some of their investments seem motivated by multiplicative social effects rather than profits. However, despite such commonalities, there are different dynamics at play in each case, owing to factors such as ownership, which could impact their role in the long term.

These actors, and other stakeholders in the sector, are also impacted by the functioning of the country's bankruptcy institutions and the public banking system. However, they have not been able to efficiently and economically resolve the issue of stressed assets, which points to the fact that maintaining diversity and competition in the sector has not been the top priority. In spite of this, there should be healthy scepticism to the amount of control that can be exercised by political players over such macro dynamics. The failure of the banking system could also be driven by capacity issues to comprehensively assess risks and the inherent instability in the Indian political environment. This new consolidated dynamic could be seen as an anti-thesis to the unbundling carried out in the early 2000s. It could harken a shift in the extent to which the state wants to allow markets and regulators to function independently.

Addressing the transition for CIL employees

In order to ensure that the transition addresses all stakeholders, as the country approaches peak coal, a phased plan is needed to wind down coal jobs, particularly direct jobs under CIL. One option proposed for this was through a structured golden handshake scheme. Around 195 mines generate significant losses (>INR 1000/ton each) with few prospects for a turnaround. These mines generate a small share of the coal output (~6%), but may employ a significant amount of manpower (~42%); therefore, these mines can be targeted for systematic closure in the first phase (over 15-20 years). A structured retirement scheme –that provides employees aged more than 50 years their current take home salary till retirement, combined with a scheme to retrain those under 50 years in proper mine closure, land reclamation and restoration– was suggested. This would also allow financial consolidation for the coal companies and release large tracts of land for alternate uses.

3. Communities and environment: ground level insights

Framing the transition

Many participants shared their perspectives on how to critically understand the transition away from coal in the Indian context, from the perspective of communities, and their critical role in designing a transition that is both fair and just. From the national perspective, a transition away from coal may seem 10-15 years away, but the impacts are already being felt at the sub-national and district level, necessitating urgent action and research.

High-level policy discourse often foregrounds the climate dilemma, with local concerns being treated as incidental to the discussion. Coal-centrism in the discourse risks sidestepping local and legacy concerns, particularly over land and its use. Due to this, proposed solutions, such as ultra-mega RE, could have negative consequences for local communities. Unless the underlying political and economic dynamic changes, local communities will be marginalized by green solutions in the same way as coal, if they are not made partners in the development planning.

While the discourse is typically concerned about the loss of coal jobs and economic impacts on coal districts, the affected districts undergo a much deeper transformation that affects public services, local environment, health, societal dynamics, etc. The transition is much broader than an “energy transition” for the coal-mining communities, and it should be seen and approached as an “economic transition”. Additionally, the semantics and framing of the transition as ‘fair’ or ‘just’ was also discussed. Usage of the apt terminology is important towards highlighting that secure livelihoods, a healthy environment, etc. are entitlements of the affected communities as citizens of the country, rather than compensation provided to them for reducing their coal dependence. In that sense, the transition away from coal can also be seen as an opportunity to address some of the historical injustices and skewed development – for which the affected communities would have to play an important role.

Ground-level insights from impacted communities

There are several different types of districts, depending on age and type of mine, state context etc., each with a different relationship with coal and facing different challenges. Mining districts could have high direct dependence on coal (e.g. Ramgarh – 10% of land area, 40% of district GDP, >25% of all households employed). A significant portion of the employment could be in the form of informal or non-contractual jobs. Further, the type of dependence on mining companies (jobs, pensions, CSR funding) could also vary significantly. Additionally, mining districts could have significant presence of many downstream industries using coal (e.g. washeries, power stations, steel plants, cement plants etc.).

Many of the older mines employing large manpower are being closed or are scheduled to close in the next 10 years. Due to the political complexity, legal and environmental requirements for proper closure, unprofitable mines are often shut down without following due process. Such unplanned closures leave the dependent districts vulnerable, and the abandoned mines are typically not restored in a manner that they can be productively used for other purposes. Coal-mining districts typically lack a diversified economy and district administration’s focus on coal diverts attention from broader governance.

This is not to say that coal has done nothing for these communities. It is arguable that the impacts of coal have been uneven, and depend on the metric used. Participants also mentioned that coal companies get blamed for the lack of strong governance and enforcement by states, and state governments would also have to share a significant portion of the blame.

Coal communities have a complex dependence on coal which goes beyond employment. For instance, in water-starved areas, the coal company supplies water to villages, leading to anxiety among communities about mine closures, which may result in them losing water supply. However, they also understand that the long term effects of coal on their local ecology and may not believe that coal has “done good” on balance.

Thinking about 'solutions'

A one-size fits all solution for coal transition is not possible, due to high district-level variability. A diversity of context-specific interventions would be needed for the successful transition of each district. These include properly funded mine closures, environmental restoration and remediation, retraining programs, kickstarting agriculture/horticulture, public investment in education, etc. The District Mineral Fund and the coal cess could be potential sources for some of the requisite investments. Regulators also need to ensure that the coal companies are held accountable for the transition and address the needs of the affected communities.

The communities themselves remain sceptical about losing their coal-dependence, and worry about being left behind. Therefore, interventions must be community-led, with deeply participatory processes that go beyond mere 'stakeholder consultations'.

The idea of a Just Transition Commission was also discussed by the group to link the community discourse with the high-level policy conversations on energy security, climate, etc. One of the key issues to be resolved at the national level is inter-state financial transfers for funding a proper transition. Some felt that a national-level commission would face challenges to understand and integrate the diversity of challenges and bring together stakeholders. Others mentioned that it may face jurisdictional issues, and it would be better to focus on aligning the ministries to the transition agenda. It was generally agreed that for this complex transition to be fair or just, various agencies – from the Central government to state governments to local authorities to communities – would have to work together effectively.

4. Conclusions

The discussions at the roundtable highlighted some broad questions and the approach needed to shape a more fruitful collective discussion on the transition going forward. These include:

- **Establishing a better baseline (accounting for community perspective):** Given the immense diversity of the transitions underway in different states and districts, and the wide variety of actors involved, the first step towards understanding the challenge is establishing a more comprehensive baseline. This involves engaging in ground-level research and multi-stakeholder conversations to better understand the transition. It is especially important to capture the perspective of the local communities who are at the centre of the transition.
- **Planning and alignment at all levels:** A successful transition would require planning at all levels, including at the national, state, and district level scale to overcome the political economy of coal dependence, and avoid undesirable lock-ins. Neither a one-size-fits-all strategy, nor location specific norm building approach would work. The institutional structure driving the transition must be coordinated at every level. Such planning processes should be driven by information flowing upwards from various coal-communities, and feeding into national and state level policy and governance mechanisms.
- **Considering multiple dimensions:** The transition agenda needs to be defined broadly and comprehensively to account for the various priorities and forces at play. For instance, the role of coal in contributing to public finance via taxes could be a key consideration for a policymaker. Similarly, the agenda must not ignore the transition for coal washeries and powerplants, not just mines. The task of framing the problem in a manner that triangulates all these forces and approaches is challenging but worth taking on as a community.
- **Need for rigorous analysis and political economy considerations:** Facilitating a just transition away from coal in India would require a coherent long-term vision and planning for the energy sector. Such an energy vision must build on rigorous analysis of alternative options, costs and opportunities associated with each, and account for political economy factors.

There was consensus among the participants on the importance of framing the full complexity of the problem at an early stage to prevent the risk of narrowly defined policy goals. To this end, a set of briefs are being drafted to showcase the research presented in the roundtable to the broader public.

Annexure A: List of Participants

	Name	Organisation
1	Abhinav Sengupta	PwC
2	Aditya Chunekar	Prayas (Energy Group)
3	Ajit Pandit	Idam Infrastructure Advisory
4	Anish De	KPMG
5	Arunesh Karkan	Centre for Policy Research
6	Ashish Fernandes	Climate Risk Horizons
7	Ashok Sreenivas	Prayas (Energy Group)
8	Ashwini Swain	Centre for Policy Research
9	Chandra Bhushan	iForest
10	Daljit Singh	Centre for Social and Economic Progress
11	Danwant N	The Council on Energy, Environment and Water
12	Deepak Krishan	World Resources Institute, India
13	Gareth Edwards	University of East Anglia
14	Harshit Sharma	Climate Risk Horizons
15	Jai Asundi	Center for Study of Science, Technology and Policy
16	Joe Athialay	Centre for Financial Accountability
17	Karthik Ganesan	The Council on Energy, Environment and Water
18	Maria Chirayil	Prayas (Energy Group)
19	Nandikesh Sivalingam	GreenpeaceCREA
20	Navroz Dubash	Centre for Policy Research
21	Nityanand Jayaraman	Chennai Solidarity Group
22	Parth Bhatia	Centre for Policy Research
23	Partha Bhattacharya	Coal India Limited (ex)
24	Priyavrat Bhati	Center for Study of Science, Technology and Policy
25	Rahul Tongia	Centre for Social and Economic Progress
26	Rohit Chandra	IIT Delhi/Centre for Policy Research
27	Sandeep Pai	University of British Columbia
28	Sandhya Sundararagavan	World Resources Institute, India
29	Sarada Das	Centre for Policy Research
30	Shantanu Dixit	Prayas (Energy Group)
31	Sharon Matthew	Centre for Policy Research
32	Shripad Dharmadhikary	Manthan
33	Shweta Narayan	Healthy Energy Initiative (India)
34	Srestha Banerjee	iForest
35	Srivatsan Anand	The Council on Energy, Environment and Water
36	Swati Mitchell Dsouza	National Foundation of India
37	Thomas Spencer	The Energy and Resources Institute
38	Vinuta Gopal	ASAR

Annexure B: Agenda

2nd PEG-CPR Roundtable on

Managing a Fair Transition Away from Coal India's Approach, Opportunities and Challenges

January 20 & 21, 2021 | Online Meeting

Agenda

Day 1: January 20, 2021 (Wednesday)

10:30 – 10:40

Intro & Welcome by PEG & CPR

10:40 – 12:30

Session 1: Phasing Out Coal-Fired Power

Chair: Thomas Spencer, TERI

Presentations:

Ashish Fernandes & Harshit Sharma, Climate Risk Horizons

Joe Athialy, Centre for Financial Accountability

Maria Chirayil & Ashok Sreenivas, Prayas (Energy Group)

Karthik Ganesan, Council on Energy, Environment and Water

Discussion

12:30 – 13:45

Session 2: Coal Political Economy

Chair: Partha Bhattacharyya, Ex-CMD, CIL

Presentations:

Rahul Tongia, Centre for Social and Economic Progress

Rohit Chandra, Indian Institute of Technology- Delhi

Discussion

Day 2: January 21, 2021 (Thursday)

10:30 – 12:00

Session 3: Communities & Environment: Ground-level Insights

Chair: Shripad Dharmadhikary, Manthan Adhyayan Kendra

Presentations:

Chandra Bhushan & Srestha Banerjee, iFOREST

Nityanand Jayaraman, Chennai Solidarity Group

Shweta Narayan, Healthy Energy Initiative (India)

Discussion

12:00 – 13:00

Session 4: Open Discussion and Way Forward

Moderated by: Ashwini Swain, Centre for Policy Research