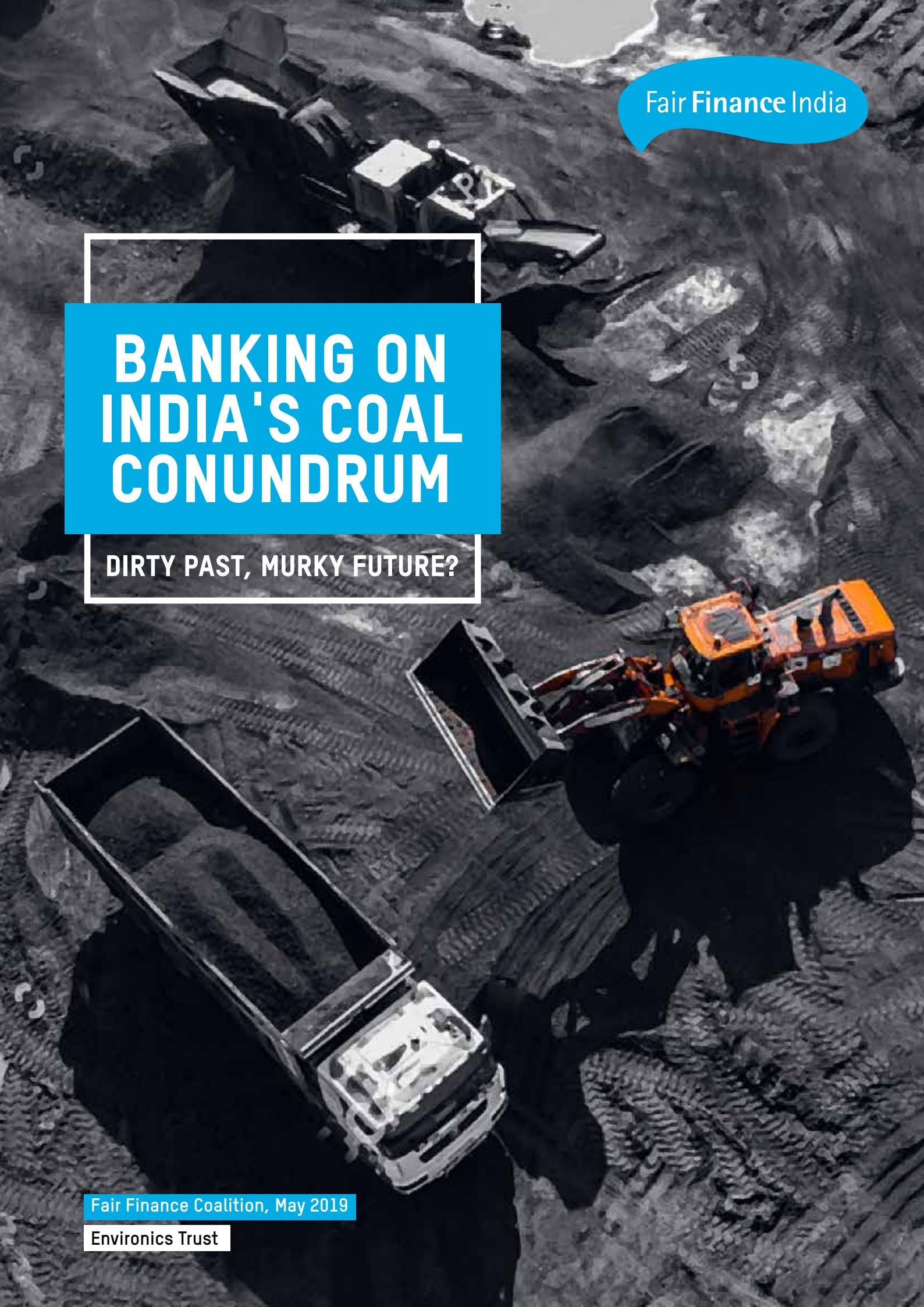


Fair Finance India

BANKING ON INDIA'S COAL CONUNDRUM

DIRTY PAST, MURKY FUTURE?

Fair Finance Coalition, May 2019

Environics Trust

ACKNOWLEDGMENTS

Environics Trust

1. Sreedhar Ramamurthy
2. Dr Arun Kumar Singh

With inputs from Fair Finance Guide India Coalition members:

- Diksha Sood, Oxfam India
- Namit Agarwal, Oxfam India
- Nirnita Talukdar, Oxfam India
- Rohan Preece, Partners in Change

TABLE OF CONTENTS

ABOUT FAIR FINANCE GUIDE

FAIR FINANCE GUIDE INTERNATIONAL

Fair Finance Guide International (FFGI) is an international civil society network initiated by Oxfam that seeks to strengthen the commitment of banks and other financial institutions to social, environmental and human rights standards.

FFGI builds on a pioneering model developed in the Netherlands in 2009, followed by a similar initiative in Brazil in 2011, both of which demonstrated leverage and potential for bringing about change in the financial sector.

FFGI is currently active in 11 countries: Belgium, Brazil, France, Germany, Indonesia, India, Japan, Netherlands, Norway, Sweden, and Thailand. In every country, a coalition of civil society groups with expertise in areas relevant for monitoring and assessing the financial sector operates under the umbrella of FFGI. FFGI coalitions often include development and human rights organizations, labour unions, environmental groups, and consumer organisations.

FAIR FINANCE INDIA

Fair Finance India is a civil society-led coalition working towards ensuring a sustainable financial sector in India. Fair Finance India stimulates greater transparency and accountability in the financial sector in India by encouraging the integration of human rights standards and environmental, social and governance (ESG) criteria in its policies.

The Fair Finance Guide (FFG) India coalition believes that transformational changes in policies and practices can end poverty and extreme inequalities. This can be achieved only with an active and engaged civil society working with multiple stakeholders. It can strengthen the financial sector in India to ensure that banks do due diligence for corporate investments and lending. It integrates and prioritises ESG factors and human rights standards in banks' policies and practices.

FFGI is currently active in 11 countries: Belgium, Brazil, France, Germany, Indonesia, India, Japan, Netherlands, Norway, Sweden, and Thailand.

INTRODUCTION

OVERVIEW OF RESPONSIBLE FINANCE

The concept of responsible finance has evolved rapidly in the last decade taking it out of the realm of being narrowly confined to the ethics and integrity of financial transactions. The initiatives taken by the United Nations[ii] and financial institutions[iii] in response to the growing importance of investments and banking has led to the consideration of various environmental, social, health, human rights, climate change and governance concerns in dealing with responsible finance. Most responsible investments now want their portfolios to be aligned with the United Nations Sustainable Development Goals (UNSDGs). The risk management framework Equator Principles[iv] for financial institutions in its forthcoming EP4 has initiated ways of aligning key issues with the UNSDGs. The Global Alliance of Banking on Values[v] seeks to ensure that value-based banking becomes culture 'among its members. The Extractive Industries Transparency Initiative[vi] has recently made contract disclosure and gender reporting mandatory. India was the first country in the world to make corporate social responsibility (CSR) mandatory for companies since then it has been making strides in incorporating it. The government's initiative mandating National Guidelines for Responsible Business Conduct[vii] is a welcome step as it seeks a comprehensive understanding and behavior by the business community to include issues of human rights, environment and equity in its practices.

NATIONAL VOLUNTARY GUIDELINES ON RESPONSIBLE FINANCE

The Indian Banking Association (IBA) brought out guidelines for responsible finance in 2016.[viii] IBA's initiative was based on its assessment that financial institutions can no longer ignore the imperatives of sustainable development as reflected in issues like climate change, water conservation, poverty reduction, energy efficiency, social inclusion and innovation as these have become increasingly central to managing competition, business continuity, customer demand, and regulatory requirements.

The guidelines are a voluntary instrument and go beyond compliance thus raising the bar of conduct. These guidelines do not lead to any legal liabilities for the adopting organizations. The benefits accruing from adopting the guidelines include proactively building a positive reputation through transparent communication with stakeholders. These guidelines are envisioned to drive organisations to longevity and sustainable value creation. However, not much progress has been made by the banks even though many of them were engaged in formulating the guidelines.

NATIONAL GUIDELINES ON RESPONSIBLE BUSINESS CONDUCT (NGRBC)

The Ministry of Corporate Affairs (MCA), Government of India, released a set of guidelines in 2011 called the National Voluntary Guidelines on the Social, Environmental and Economic Responsibilities of Business (NVGs). This was expected to provide guidance to businesses on what constitutes responsible business conduct. To align the NVGs with the Sustainable Development Goals (SDGs) and the 'Respect' pillar of the United Nations Guiding Principles (UNGP), the process of revising NVGs started in 2015. After careful revision, the new principles were formed the National Guidelines on Responsible Business Conduct (NGRBC). As with the NVGs, NGRBC being designed to assist businesses to perform above and beyond the requirements of regulatory compliance. NGRBC is designed for all businesses irrespective of their ownership, size, sector, structure or location. It is expected that all businesses investing or operating in India, including foreign multinational corporations (MNCs), will follow these guidelines.[ix]

COAL AND THERMAL POWER IN INDIA

Coal provides about half of India's commercial primary energy supply and is a dominant fuel for power production. India is the 3rd largest power producer and 3rd largest coal importer in the world.[x] India's current installed power capacity is nearly 350 GW. Total thermal capacity in the country stood at 222.93 GW while renewable, hydro and nuclear energy installed capacity totalled 75.06 GW, 45.40 GW, and 6.78 GW respectively in February 2019.[xi] Coal, however, is projected to remain as the mainstay of the Indian energy system at least till 2030 even though its share in power generation will fall[xii]

India has major coal deposits in the central states of Telangana, Maharashtra, Chhattisgarh, Odisha, Jharkhand, and West Bengal. The Geological Resources of Indian Coal estimated coal resources in the country at 315 billion tonnes as of April 2018.[xiii] Due to a cheap and better quality of non-coking coal, India has also been importing coal on a continuing basis[xiv] as the total imports during April 2019, non-coking coal shipments were at 15.08 million tonnes (MT) out of the total imports which were 20.72 MT[xv]

Coal India Limited (CIL) is the world's largest coal mining company which produces 84 per cent of India's thermal coal.[xvi] The central government owns a little over 75 per cent shares in CIL which provide a significant reserve to the national treasury through dividend payments and taxes on coal production. Most coal is sold to power producers, predominantly under fuel supply agreements at administered prices.[xvii]

The Ministry of Statistics and Plan Implementation (MOSPI) states, "Mining unless properly regulated, can have adverse environmental and social consequences. On the one hand, mining disturbs the soil, water, and ecological regimes and on the other hand, unless accompanied by proactive measures to promote inclusiveness through social education, health, and other interventions, it can lead to alienation of the local population and assume socially unacceptable dimensions. Issues of technology for zero waste or low waste mining, relief and rehabilitation, mine closure which otherwise leads to land degradation are important issues which require continuous attention."[xviii]

The country is witnessing a huge financial burden in the form of stressed assets leading to huge losses for national banks. Unfortunately, such situations have often been neglected because of irregularities in allocation of coal blocks corruption, lending policies and due diligence processes by financial institutions.

INDIA'S ENERGY POLICY

In 2006, the Government of India sought to have an Integrated Energy Policy[xix] for the first time with the goal of providing energy security for all. Its vision was to reliably meet the demand for energy services of all sectors including the lifeline energy needs of vulnerable households in all parts of the country with safe, clean and convenient energy at the least-cost. The policy's objective is to achieve this in a "technically efficient, economically viable and environmentally sustainable manner using different fuels and forms of energy, both conventional and non-conventional, as well as new and emerging energy sources to ensure supply at all times with a prescribed confidence level considering that shocks and disruption can be reasonably expected."

NITI Aayog published a new Draft National Energy Policy[xx] (NEP) in 2017 post the Paris Agreement with the objectives of "access at affordable prices, improved security and independence, greater sustainability and economic growth." The policy's intent is to ensure that electricity reaches every household by 2022; it also proposes to provide clean cooking fuel to all within a reasonable time.

NEP also presents a scenario in which the dependence on coal will be significant in 2047. The dependence on fossil fuels also implies that it will have adverse implication on sustainability.

The policy concedes that given the poor air quality already existing in the country and the catastrophic effects of climate change, India needs to rapidly find more efficient technologies to reduce pollution and rapidly move to renewable energy sources.

NEP envisages 333 GW of coal- based power generation in 2047 in the Business-as-usual (BAU) scenario and 459 GW in an ambitious growth pathway. This contrasts with the government's flagship company CIL whose Coal Vision 2030 states, "Technological change, change in environmental and regulatory regimes, global trade and economic ambiguity have jointly created uncertainty in the energy markets."[xxi]

The inconsistency between the NITI Aayog's Draft Energy Plan, the Central Electricity Authority's (CEA) National Electricity Plan and Coal India's Vision 2030 clearly indicates the uncertainties in future energy scenarios.

Coal India Limited (CIL) is the world's largest coal mining company which produces 84 per cent of India's thermal coal.

FINANCING THE COAL AND THERMAL POWER SECTOR

In the past, state and multilateral development banks made significant investments needed in the power sector. Owing to risks involved in financing conventional power projects and increasing pressure on the impact of coal and thermal power primarily linked to climate, most multilateral development banks are restricting or divesting coal (see Table 1).[xxi]

TABLE 1 - MULTILATERAL DEVELOPMENT BANKS RESTRICTING INVESTMENTS IN COAL

S N	Multilateral Development Banks	First Restriction	Latest Restriction
1	World Bank	2013	Oct 2018
2	European Investment Banks		July 2013
3	Asia Infrastructure and Investment Bank		Jan 2017
4	New Development Bank (BRICS Bank)		July 2018
5	International Finance Corporation (part of the World Bank)		Oct 2018
6	Asian Development Bank		Oct 2018
7	European Bank for Reconstruction and Development		Dec 2018

Source: Over 100 Global Financial Institutions Are Exiting Coal, IEEFA Report, 2019

A 2018 analysis[xxiii] by the Centre for Financial Accountability showed that 12 coal-fired generation projects with a combined capacity of 17 GW obtained loans of INR 607.67 billion. In 2017, the top ten project finance lenders to coal-fired power plants in India were government-owned banks and financial institutions that collectively gave over INR 300 billion primarily as re-financing of existing debt (Table 2).[xxiv]

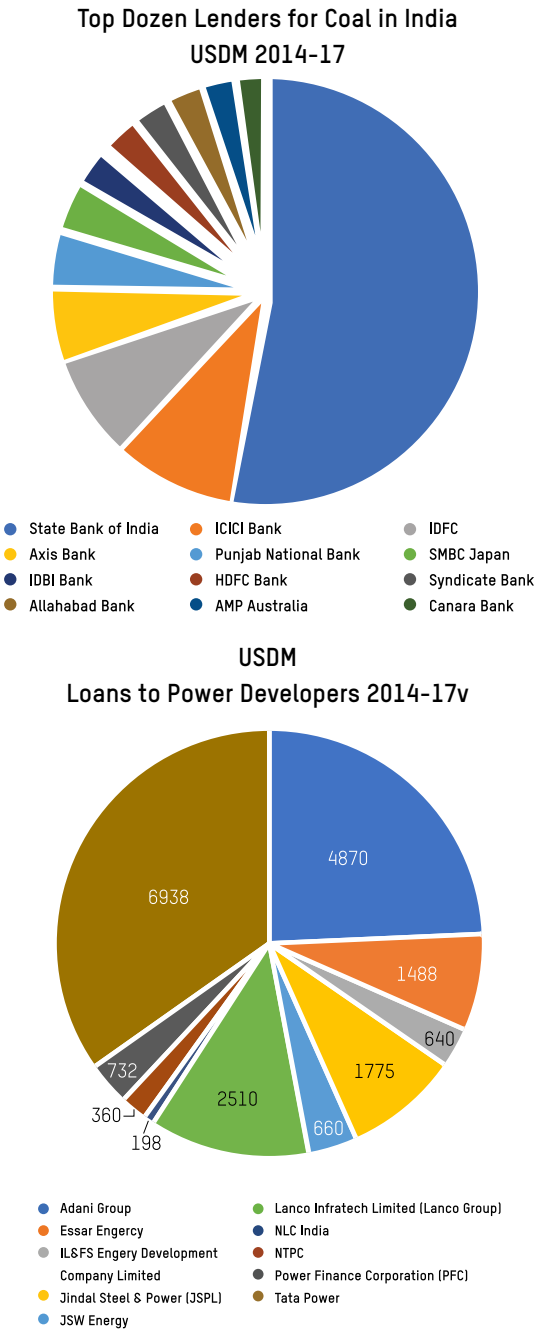
TABLE 2: COAL EXIT LIST OF INDIAN BANKS

S N	Lenders	US $ (Million)
1.	State Bank of India	7,231
2.	ICICI Bank	1,264
3.	IDFC	1,153
4.	Axis Bank	759
5.	Punjab National Bank	592
6.	SMBC	498
7.	IDBI Bank	460
8.	HDFC Bank	399
9.	Syndicate Bank	397
10.	Allahabad Bank	382
11.	AMP Australia	335
12.	Canara Bank	333
13.	Punjab National Bank	592
14.	SMBC	498

Source: Coal Vs. Renewables Finance Analysis. Centre for Financial Accountability, 2017

Based on an analysis of publicly available databases the 12 biggest lenders to the coal sector in India for 2014-17 are given in Figure 1. State Bank of India (SBI) was the biggest lender and had exposure to the coal sector that was equal to 11 other lenders combined. Among the international lenders, the prominent ones were Sumitomo Mitsui Banking Corporation of Japan and AMP Capital of Australia.

FIGURE 1: TOP DOZEN LENDERS FOR COAL IN INDIA AND TO POWER DEVELOPERS



Nearly 80 unique lenders have an exposure of nearly 20 billion USD in coal projects in India

Source: Institute for Energy Economics and Financial Analysis

> ***In 2018, 34 coal based thermal power plants were categorised as financially stressed with a cumulative outstanding debt of INR 1744.68 billion.***

STRANDED ASSETS

In 2018, 34 coal based thermal power plants were categorised as financially stressed with a cumulative outstanding debt of INR 1744.68 billion.[xxv] Projects with capacity of 15 GW out of the total stressed capacity of 40 GW are under construction (Table 3).

TABLE 3 – DETAILS OF FINANCIALLY STRESSED THERMAL POWER PLANTS

Total Number of Projects	34
Commissioned Capacity	24,405 MW
Under Construction Capacity	15,725 MW
Total Stressed Capacity	40,130 MW
Total Outstanding Debt (INR)	**1,74,468 Crores (1744 billion)**

Source: Report of 46 Standing Committee on Coal and Steel 16 Lok Sabha (2017-18)

The reasons for these stressed assets are – non-availability of fuel, lack of power purchase agreements, inability of promoters to infuse capital, contractual/tariff related disputes, issues related to banks/financial institutions and delay in project implementation leading to cost over-run. The reasons for shortfall of coal supply, as per the report of 46 Standing Committee on Coal and Steel (2017-18) were due to delay in environment and forest clearances, land acquisition, law and order and evacuation problems[xxvi].

IMPACT AND RISKS

CLIMATE AND ENVIRONMENT

Coal has manifold devastating impacts on the environment. Its long-term impacts include massive deforestation, loss of flora-fauna and enshrined genetic resources/biodiversity, soil degradation, contamination of water sources, loss of livelihood of dependent communities, increased wasteland, and air pollution leading to severe consequences for public health. According to the Health Effects Institute (2018)[xxvii] it is one of the largest sources of fine particulate matter (PM2.5) in India today because of its poor quality and because it contains high quantities of ash and heavy metal and traces of radioactive elements. The generation of power and the corresponding emissions as estimated by the Central Electricity Authority[xxviii] for its baseline report indicates that in 2017-18 the electricity sector alone resulted in emissions of nearly a billion tonnes of CO2 into the atmosphere.

GREENHOUSE GAS EMISSIONS

The standards that India follows for pollution and resource use are far behind global norms. However, its power plants fail to meet even such relaxed standards as they lack the basic technologies needed for controlling pollution.[xxix] Coal based thermal power plants emit CO2 and are undoubtedly the biggest emitters of greenhouse gases (GHGs).[xxx] An increase in GHGs is directly related to global warming, where India will see an estimated 1.3 per cent drop in its real GDP for every 1oC increase in temperature.[xxi]

The Intergovernmental Panel on Climate Change's (IPCC) special report (2018)[xxxii] clearly warns of a runaway climate change leading to a global crisis. Energy systems contribute to a large proportion of power generation and among these sources coal is undoubtedly the most important. It is, therefore, an urgent necessity to transition from coal to renewable energy. The huge chasm between the promise and the performance needs a Herculean effort to reverse the mindset of the State and regulatory agencies if we are to become serious about the looming climate crisis and even our Nationally Determined Commitments.[xxiii]

AIR POLLUTION

Coal fired power plants make up 60 per cent of India's 330 GW of installed power capacity and account for a bulk of the industrial emissions of lung-damaging particulate matters and gases such as sulphur dioxide and nitrogen oxides that cause acid rain.[xxxiv] The Indian government has been making efforts to tackle air pollution in the country but this has had little impact due to inconsistent enforcement and improper implementation of policies.

Coal-based power plants need to adhere to stricter pollution norms from December 2017. Several environmentalists[xxxvi] have raised concerns about increasing air pollution across the country because of these polluting plants. Almost 40 per cent of the ash generated by coal-based power plants is not utilised and ends up in landfill sites as a waste product. Eighty per cent of the total ash generated by these power plants is fly ash while the rest is bottom ash which poses a serious threat to the environment.

For example, the inability to manage fly ash produced by the Kaniha NTPC plant situated in Angul district, Odisha, has emerged as a grave problem forcing villagers to live in perpetual fear. More than 50 per cent of the fly ash generated by the Kaniha NTPC plant has remained unutilised causing lung disease for people living around thermal plants. The average total fly ash pond generated by the Kaniha NTPC plant is 20,000 TPD, as put on record by the then State Forest and Environment

Almost 40 per cent of the ash generated by coal-based power plants is not utilised and ends up in landfill sites as a waste product.

Minister, Debi Prasad Mishra[xxvii]. About 5,000 villagers in Dereng in Kaniha block of Angul district in Odisha are living in between two ash ponds of NTPC and the Jindal India Thermal Power Ltd. and have alleged that there is severe fly ash pollution. In September and December 2018, NTPC sought to take up expansion work at these plants and on both occasions people's opposition led to the work being stopped.[xxviii]

About 5,000 villagers in Dereng in Kaniha block of Angul district in Odisha are living in between two ash ponds of NTPC and the Jindal India Thermal Power Ltd.

WATER SCARCITY AND POLLUTION

Coal-based power plants are water intensive.[xxxix] However, data on power plant water use in India is very limited. A study reported that about 32 per cent of the installed thermal capacity in India is in high water stress regions and with limited water resources any further expansion in coal power plants will add to this growing problem.[xl] Wherever the mines have breached the groundwater table the adjoining areas have suffered the consequences of a lowered water table which has directly resulted in wells and other near-surface sources drying up.[xli] It is clear that the harm being done to the water table by the mining industry must be considered seriously as in several places major resources lie beneath the water table. The breaching of the groundwater table must be subject to stricter regulations as the very basis of the survival of local communities is sacrificed at this stage.[xlii] The long-term effects on groundwater are even graver, like, permanent lowering of water table, soil degradation and loss of livelihood of dependent communities, drought, desertification, etc.

The coalfields in North East India have high sulphur content leading to a large volume of acid mine drainage. An acidic content deteriorates the soil quality severely thus affecting crop growth and yields.[xliii] It seems unjust that not only are communities living in coal-bearing areas providing resources for the profit and growth of other regions but the revenue thus earned by the government is not being used for the welfare of the people in the region to enable them to become more climate resilient. Instead, their lives are being sacrificed in the name of development. An estimate of the potential number of people who will be impoverished because of reduced crop yields, places the figure between 8 and 26 million between now and 2030.[xliv]

A study has revealed that during 1 July 2016 to 25 April 2017, 24 units of 13 power plants spread all over country were forced to shut down for different number of days due to water shortage, resulting in a loss of power generation of 7486.94 million units (MU). Furthermore, as per Environment (Protection) Amendment Rules, 2017, notified by the Ministry of Environment, Forest and Climate Change (MoEF&CC), all new plants installed after 1 January 2017 should not consume more than 3 m3/MWh power produced.[xlv]

HUMAN RIGHTS

As coal is the largest domestic fuel source in India, it employs many people in its supply chain. Due to limited or no formal availability of employment statistics, doing a detailed analysis of the coal supply chain is challenging. The Universal Declaration of Human Rights (UDHR) guarantees the right to equality. However, state policies and high-handedness of the government, corruption and intimidation by the industry has led to many communities facing displacement and other human rights violations through mining. Ensuring equity i.e. incorporating distributional concerns means first identifying and then weighing the risks and benefits to individuals and groups on the basis of differences in incomes, wealth and social conditions.

FREE, PRIOR AND INFORMED CONSENT

Human rights violations in coal mining begin with non-provision of adequate information to ensure free prior and informed consent which includes the basic right to be informed, to participate and ensure the rights of the people and communities is not violated. Not one of the nearly 700 coal mines can demonstrate a fair process of consultation and consent.[xlvi] The State has also created loopholes such as the exemption of environmental public hearings in case coal mines are being expanded.[xlvii]

Actually the request for increased exemption up to 50% first came up in July, 2015 during a meeting held between the then environment minister and the Coal Ministry, where CIL made a request to allow them to increase the production capacity by 50% without public hearing to meet the government's coal production commitment of 908 million tonnes. CIL also mentioned that to meet that production demand, an additional 212 projects will require EC and 154 projects will need forest clearance, clearly making a case for fast tracking clearances. Finally, at a meeting held on July 25, the EAC approved this long-pending proposal of CIL seeking exemption from public hearing when ECs are sought for coal projects seeking a capacity expansion of 50 per cent.[xlviii] Where public hearings have been held, they have been dominated by officials and people in favour of the promoters. For instance, at the public meeting to acquire land for ash pond of Kaniha Super Thermal Power Plant[xlix] or the environmental clearance letter for Ultra Super Critical Talcher Thermal Power Plant in Odisha, indicate that the people protested on issues of employment, compensation and pollution but "later supported the project for the development of the area[l]."

In most cases where consent is needed, the State has twisted it in the form of a 'no objection certificate' which is often forged or signatures are taken by misrepresenting the purpose of procuring signatures. The perceptions, intent and management culture of the owners have a big role to play in the implementation of the policies. Though the global practices are moving towards a free-prior-informed-consent, Indian Acts still rely on age-old systems of record keeping and reporting by mine owners. Furthermore, nothing in Indian Acts directs mine owners or managers to incorporate governance and management issues. The new regime has also ensured greater control over the processes through online monitoring and self-certification. The Acts need to be revisited considering the new safety standards as well as methods to operationalise them in a fair and just manner. Operations in Coalmines are regulated by the Mines Act, 1952 Mine Rules – 1955, Coal Mine Regulation-1957 and several other statutes framed thereunder. Directorate-General of Mines Safety (DGMS) under the Union Ministry of Labour & Employment (MOL&E) is entrusted to administer these statute. Even the inquiry reports of the Directorate General for Mine Safety are not made public.

In a developing country like India, there is a strong lobby working against diverting limited resources for reclamation of land because important development projects of irrigation, power, industries, mining and other sectors must have priority.

DISPLACEMENT

Land and adjoining forest resources are prime sources of livelihood for most of the rural population. The land acquired for large-scale coal mining is non-transferable. This land plays an important role in the lives of the communities and in its absence the local poor communities are forced to change their livelihoods. As land reclamation is not easy in a tropical climate because there are difficulties in grading the land and the restoration of soil this directly affects local communities' abilities to sustain themselves and leads to temporary or permanent migration. Land reclamation means recuperation of land to its original productivity, in which top soil is the key. It takes 500 to thousands of years to create an inch of topsoil in nature. The reason is that soil is often derived from rock and its weathering, erosion, chemical action, addition of humus, etc. and depends on a number of factors – parent rock type, topography, vegetation, climate, and so on. In tropical climate, different seasons affect the rate of attrition to varying degrees which affects soil formation.

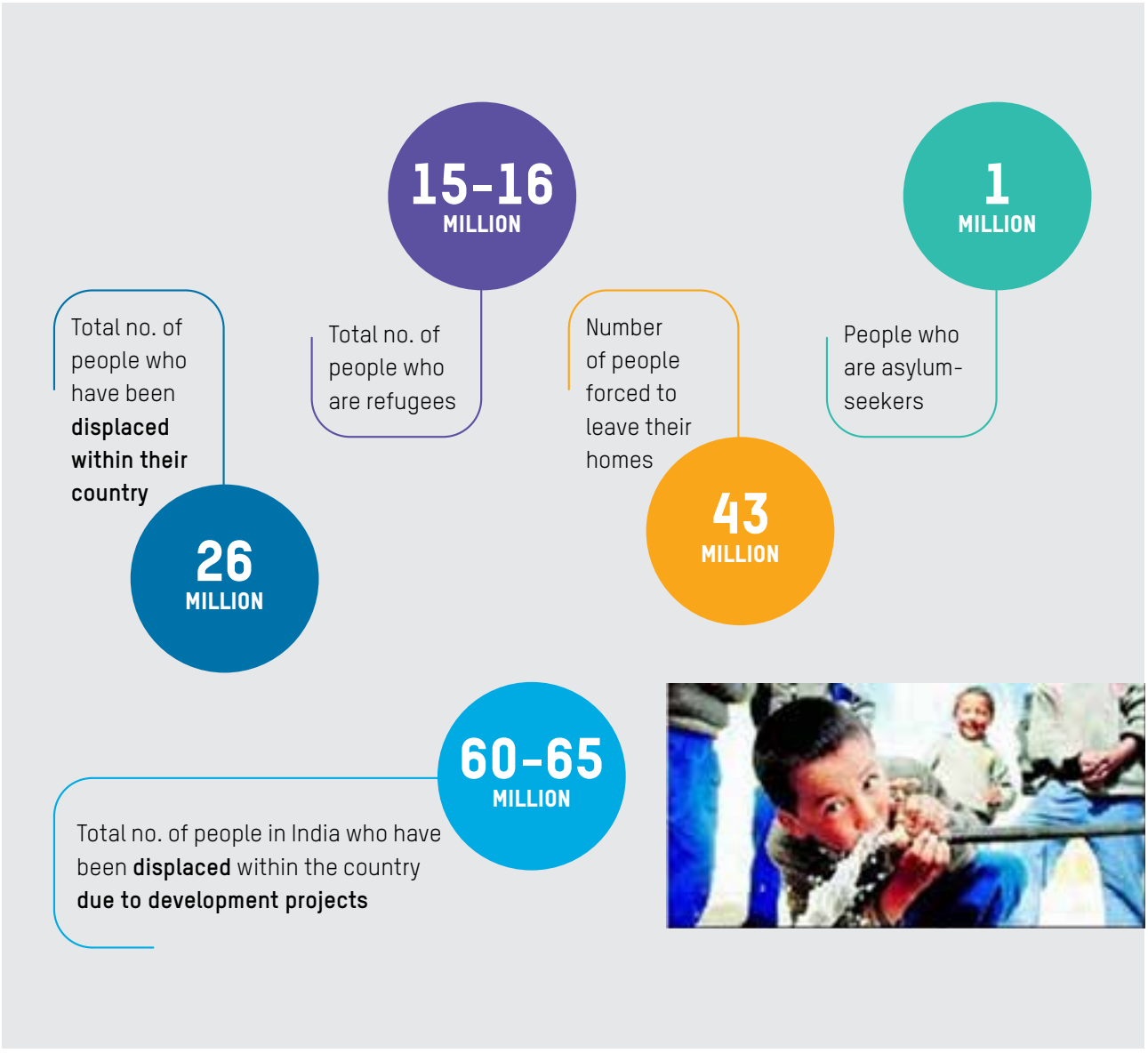
Furthermore, land reclamation becomes feasible only when a particular country has reached a stage of sound economic development and is equipped with adequate financial and technological resources. In a developing country like India, there is a strong lobby working against diverting limited resources for reclamation of land because important development projects of irrigation, power, industries, mining and other sectors must have priority.[li]

Land acquisition also results in dissembling communities as some of the villages are displaced and spread across several settlements. The Government

of India concedes that 50 million people had been displaced due to 'development' projects in the country in last 50 years.[lii]

The land is mostly acquired under the Coal Bearing Areas Act, 1957 that gives the State the power to acquire any land under which coal exists. This has been used for over-riding other protective legislations in the allocation of land for coal mining. Despite the new Land Acquisition, Rehabilitation and Resettlement Act (RFCTLARR) Act of 2013 which ensures fair acquisition processes, the procedures continue to weigh against the newly displaced people. Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RFCTLARR), 2013 has come into force on 1st January 2014, substituting century old Land Acquisition Act 1894. However, Section 105 of RFCTLARR Act, sub-sec (1) says that new Act shall not apply to the enactment relating to land acquisition specified in the 4th schedule of the RFCTLARR Act. The 4th Schedule contains the Coal Bearing Act (1957), along with 13 other Acts, which will continue to remain in force. Government of India enacted the CB Act (1957), deriving the provisions of LA Act 1984 for acquiring the private land of the coal blocks by the then government company National Coal Development Corporation, established in 1956. The land acquisition for private company captive coal block is done through LA Act 1894. Since LA Act 1894 has been repealed, now all the private land acquisition in the coal blocks, have to follow the land acquisition process contained in RFCTLRR Act.

FIGURE 2 – DISPLACEMENT OF TRIBALS – A BIRD'S EYE VIEW



The draft National Policy for tribals (2017) recorded that nearly 85.39 lakh tribals had been displaced till 1990 because of some mega projects (Figure 2). Tribals constitute at least 55.61 per cent of the total displaced in the country till 1990.[liii] The government does not recognise tribals as 'indigenous people.' It makes a huge difference as there exist a UN Convention for Indigenous People and other tools, to protect their rights and cultures. The official stand of India is that our country has been a melting pot of races and it is impossible to ascertain, who is indigenous and who is foreigner.

In Dumka, Jharkhand, police resorted to brutal methods in December 2008, on people opposing proposed Aamgachhi-Pokhariya Thermal Power Plant. The Jharkhand Police opened fire on a procession of 8,000-10,000 tribals protesting against the setting up of a 1000 MW coal-based power plant in Aamgachhi-Pokhariya villages. One tribal was killed on the spot, seven suffered bullet injuries and 15 people, including women, were severely beaten. People who suffered bullet injuries were also arrested and when in the hospital they were shackled to the beds. Many of the protestors are still defending cases against themselves even today[liv].

OCCUPATIONAL HAZARDS

According to the Ministry of Labour and Employment, "Coal mining is recognized as one of the most hazardous peacetime occupations mainly because of the highly unpredictable and varying nature of working conditions."[lv] Right to life includes the right to live in a safe environment which is denied not only to the people who are displaced but also to those working in the mines and living in their surrounding areas. Since safety in the mines is largely compromised as most of the actual mining operations are outsourced to contractors, communities' concerns are not recognised. For instance, as on 31 March 2019, about 70,000 contract workers were engaged in Coal India Limited only[lvi].

It is estimated that for every 5 million tonnes of coal input in a plant, one person loses his or her life and about eight people suffer disabling injuries.[lvii] The Comptroller and Auditor General (CAG) estimates[lviii] that initial and periodical medical examinations were done for company employees while only 1.58 per cent to 7 per cent of contractors' employees underwent a

According to the Ministry of Labour and Employment, "Coal mining is recognized as one of the most hazardous peacetime occupations mainly because of the highly unpredictable and varying nature of working conditions.

medical examination, which is mandatory, as revealed in Chapter 5 "Safety in Mining" CAG Report (2011), titled Union Performance Commercial Coal India Limited Corporate Social Responsibility. The Meghalaya mining accident happened on 13 December 2018, when 15 miners were trapped in a 370 feet-deep illegal coal mine in Ksan. Rescue operations by National Disaster Response Force (NDRF), army and navy were wind up on 1 March 2019, after sixty days of search.

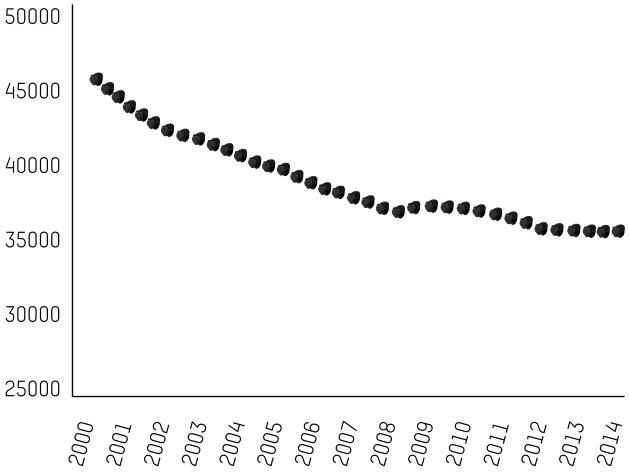
Employment in the mining sector has been decreasing substantially because of rapid improvements in mechanisation. Data from 2000 to 2014 indicates that nearly 100,000 jobs were reduced during this period (Figure 3).

IMPACT ON WOMEN

Women in the mining areas are the most vulnerable and are subject to exploitation. In a 30-day study[lix] and based only on references given by known people, nearly a 100 un-wed mothers were identified in Angul district indicating the gravity of the situation. This is a continuous phenomenon (study done in 2013). As coal mining brings ancillary (service) economic activity, it has ripple effect on the social fabric of the society, especially women, who have never explored any activity except household chores, say mining labour activity. Testimonies of women in coal mining areas in Talcher in Odisha show that displacements and loss of land were the most serious problems affecting their lives, as their link to livelihoods, economic and social status, health and security depended on land and forests. Whenever villagers have been displaced or affected, women have been forced out of their land-

based work and pushed into menial and marginalised forms of labour like working as maids and servants, construction labourers, and even prostitution[lx]. While traditional livelihood systems based on land gives women an important role in agriculture, collection of forest produce and managing the livestock and related activities, the immediate offshoot of mining has been a destruction of these roles for women in land-owning communities and also among agricultural labourers.[lxi]

FIGURE 3 - DECREASING EMPLOYEMENT IN MINING SECTOR (200-2014)



GAPS IN ENVIRONMENTAL ASSESSMENTS

In 2011, CAG found that 239 CIL mines that existed prior to 1994 were working without environmental clearances[lxii] in violation of the first notification by MOEF&CC in 1994, wherein for the first time in India, guidelines for taking environmental clearance for developmental, industrial and mining projects were laid down. In 2016, CAG found[lxiii] that in 25 per cent of the audited cases, the Environment Impact Assessment reports did not comply with the terms of reference and in 23 per cent cases they did not comply with the generic structure of the report. It also stated that there were no provisions for project proponents to fulfil their commitments in a time-bound manner and to ensure that the concerns of the local people were included in the final Environmental Assessment and Environmental Clearance granted by the State.

The case studies undertaken for this report exhibit a callous attitude of mining companies towards the environment and people, throughout India while the State and private entrepreneurs profit from the minerals found there. Table 4 gives the types of violations by all entities and investors' concerns since these violations lead to a risk to their investments which are already stressed.

TABLE 4 VIOLATIONS AND ADVERSE IMPACTS BY COAL MINING COMPANIES

Case Study and Company	Locations	Impact and Violations	Investors / Banks
North Eastern Coalfields Limited, Coal India Limited and Illegal Miners	Margherita, Assam and Arunachal Pradesh	Land, Water, Forest, Human Rights, Gender, Labour, Financial	Government of India, several other minority investors
Central Coalfields Limited, CIL	Tapin – Jharkhand	Land, Water, Soil, Forest, Human Rights	
Central Coalfields Limited, CIL	East Parej – Jharkhand	Land, Water, Soil, Forest, Human Rights, Gender, Labour, Children, Financial, Tribal	
Private Miners	Jaintia Hills – Meghalaya	Land, Water, Soil, Forest, Human Rights, Gender, Labour, Children,	Private promoters, traders
GMR	Talabira – Odisha	Land, Water, Soil, Forest, Human Rights, Financial	IDFC, Axis Bank
NTPC	Talcher – Odisha	Land, Water, Soil, Forest, Human Rights, Gender, Labour, Children,	SBI, ICICI

Note: Case reports for details are available with the Environics Trust.

INDIAN FINANCIAL INSTITUTIONS AND COAL SECTOR FINANCING

OVERVIEW

Based on the Coal Exit list (as mentioned in earlier part of the text), policies of the top five project finance aggregators of coal-fired power projects, this section briefly examines these from an environmental and social perspective. This is followed by recent data on the exposure of these financial institutions as well as relevant information on companies and projects that they have financed within the sector.

STATE BANK OF INDIA

POLICIES GOVERNING COAL SECTOR FINANCING

State Bank of India (SBI) claims to be "the first among the public sector banks to develop a sustainability roadmap for its operations across India" and recognises that "sustainable banking can be classified into two streams, viz. managing the environmental and social impact of the Bank's own operations and helping manage the impact of the organisations and activities that it finances."[lxiv] It is a signatory to the Carbon Disclosure Project and has also developed a "road map to issue Green Bonds.... In accordance with the Climate Bonds Standard Version 2.1."[lxv] The bank states that its guidelines on human rights cover its entire value chain which comprises of employees, suppliers, clients, communities and the countries in which it operates.[lxvi] SBI has a proposed policy on Sustainability and Business Responsibility[lxvii] which may be indicative of its trajectory in the long term.

Investing in renewable energy and creating awareness of the importance of environmental sustainability.

Among its key environmental responsibilities, SBI identifies "minimizing SBI's environmental footprint. Investing in renewable energy and creating awareness of the importance of environmental sustainability."[lxviii] The bank also states that it incorporates environmental protection in its materiality assessments and states that "reducing SBI's overall carbon footprint will help drive sustainable business practices in the long run."[lxix]

SBI also states that it is looking ahead at "the development of GHG abatement and offset strategy which will help the bank achieve carbon neutrality in the long term."[lxx, lxxi] It adds that this strategy will revolve around the formulation of a detailed renewable energy (RE) procurement and deployment plan for all of SBI's operations across the country along with an offset strategy to cover any remaining emissions that are not handled by the RE procurement strategy, followed by implementation using third party suppliers. With this in view, the bank has already started reducing what it describes as its 'own dependency' on fossil fuels by "investing in renewable energy, adopting the use of energy-efficient technology, implementing energy-saving initiatives and reducing the quantity of waste generated."[lxxii, lxxiii]

FINANCING THE COAL SECTOR AND ASSOCIATED CHALLENGES

State Bank of India's exposure to the coal and power sector is INR 2063.07 billion which is 8.8 percent of its lending portfolio for 2018-19. SBI has been a lender to controversial projects in the coal and power sector such as the Sasan Ultra Mega Coal Power Project and the Tata Mundra Ultra Power Project.[lxxiv] SBI is also among the top ten shareholders[lxxvi] of CIL and is one of its bankers. CIL has been criticised for its poor environmental and human rights track record[lxxvii] and has a low score on the Corporate Human Rights Benchmark.[lxxviii] SBI also lends to the National Thermal Power Corporation (NTPC)[lxix] which too has been

criticized for its environment and human rights track record . On the India Responsible Business Index[lxxxi] it has a low score in the area of community as a business stakeholder.

ICICI BANK

POLICIES GOVERNING COAL SECTOR FINANCING

ICICI Bank's disclosures[lxxxii] under Principle 6 of the National Voluntary Guidelines on the Social, Economic and Environmental Responsibilities of Business (NVGs)[lxxxiii] state, "the aspects outline under this Principle are not substantially relevant to the Bank given the nature of its business." This appears to be in contradiction with the inherent and explicit applicability of NVGs which expand much beyond a company's direct operations. The statement indicates that the bank does not take into account the impact of its lending to coal industries.

FINANCING THE COAL SECTOR AND ASSOCIATED CHALLENGES

ICICI Bank's exposure to the coal and power sector is INR 384.75 billion which is 3.05 per cent of its lending portfolio for 2018-19. ICICI Bank has been financing companies like Lanco Infratech that is among the companies listed in the 'Coalgate' scandal.

IDFC

POLICIES GOVERNING COAL SECTOR FINANCING

IDFC states that it has "mainstreamed environmental and social risk management into its business operations" since 1997. Its environmental and social policy states, "ensures that lending is environmentally sustainable."[lxxxv] In 2013, IDFC was the first Indian financial institution to sign[lxxxvi] the Equator Principles, which is an internationally respected framework for identifying, assessing and managing environmental and social risks in project finance. After the formation of IDFC Bank, a subsidiary of IDFC, it became the named signatory of the Equator Principles (Eps). Later, following the merger of IDFC Bank and Capital First in 2018, the emergent new bank, IDFC Capital First, is now the bearer of commitment towards the EPs within the IDFC Group of Companies.

IDFC reports to multilateral agencies which purport to define and uphold global standards in environmental management including the International Finance Corporation (IFC), the Asian Development Bank (ADB) and like SBI the Carbon Disclosure Project. Apart from lending to renewable energy projects, IDFC also states that it "focuses on crucial and urgent issues such as land acquisition, climate change..." through its policy advocacy initiatives. It also states that it has worked with the government, other financial institutions and industry associations to build the possibility of greater "private sector investment in the low carbon sector."

FINANCING THE COAL SECTOR AND ASSOCIATED CHALLENGES

A look at IDFC's banking subsidiary IDFC Bank shows that it remains invested in coal and power projects[lxxxvii] in contrast to IDFC's commitment at the group level. IDFC's exposure to the coal and power sector is INR 116.62 billion which is 7.2 per cent of its lending portfolio for 2018-19.

ICICI Bank's exposure to the coal and power sector is INR 384.75 billion which is 3.05 per cent of its lending portfolio for 2018-19.

AXIS BANK

POLICIES GOVERNING COAL SECTOR FINANCING

The bank's policy on environmental management states, "[it] shall strive to go beyond compliance requirements and enhance its environmental performance, wherever possible" and "aim to influence business partners."[lxxxviii] It also states, "[it will] promote environmental sustainability and equitable growth through sustainable lending practices." It also refers to Sustainable Lending Policies and Procedures (SLPP) which, inter alia, "draws from international frameworks such as Equator Principles, IFC Performance Standards Framework for Environmental and Social Sustainability, the World Bank Group General Environment, Health & Safety (EHS) Guidelines and Sector Specific Guidelines."[lxxxix] SLPP also includes an 'exclusion list' which includes "polluting industries unless the units

have clearance from pollution control authorities and have installed effluent treatment plants." The bank adds that it actively supports "sustainable sectors such as renewable energy" and is in the process of issuing green bonds.[xc]

In its materiality assessment,[xci] Axis Bank concedes that areas such as "integrating E&S risk factors in investment and lending decisions," managing its carbon footprint and "committing to human rights principles" are not significant for the bank due to a perceived lack of business impact.

FINANCING THE COAL SECTOR AND ASSOCIATED CHALLENGES

Axis Bank has financed controversial coal and power projects such as the Sasan Ultra Mega Coal Power Project (UMPP) that has been criticised for its negative environmental, social and human rights impact.[xcii] Axis Bank's exposure to the coal and power sector is INR 272.867 billion, which is 3.09 per cent of its lending portfolio for 2018-19.

PUNJAB NATIONAL BANK

POLICIES GOVERNING COAL SECTOR FINANCING

Punjab National Bank (PNB) states that the scope of its policy on the environment is limited to the bank. However, it states that it "avoids financing to the industries which are causing harm to the environment and gives preference to the green projects which are environmental friendly and promote usage of clean energy" and "avoids business that can have negative impacts on the ecosystem and the society." It also "promotes financing of clean energy initiatives and using environment friendly operations."[xciii]

FINANCING THE COAL SECTOR AND ASSOCIATED CHALLENGES

PNB's exposure to the coal and power sector is INR 3721.30 billion which is 6.8 per cent of its lending portfolio for 2018-19. PNB has financed controversial coal and power projects such as the Sasan Ultra Mega Coal Power Project (UMPP) that has been criticised for its negative environmental, social and human rights impact.[xciv] It is also a banker to Coal India Limited as per CIL's 2017-18 annual report.[xcv]

From a policy and due diligence perspective there is considerable variance in the banks' level of commitment with ICICI Bank notable for its lack of publicly stated policy measures. There is a good mix of encouraging policy content among the other four large coal project aggregators – from screening or avoidance to E&S risk management and carbon emissions reduction, with IDFC and Axis Bank most mature in these areas but, self-evidently, there is nothing to ensure that they do not finance projects with damaging impacts on the environment and to the wider community. Despite multiple commitments to sustainability in general and to a reduced carbon footprint in particular it is clear that these financial institutions have a long way to go before it can be said that they effectively support sustainable development. Meanwhile, from a governance perspective, these financial institutions should also reflect on whether some of their NPAs may have been reduced if environmental and social factors had been more rigorously built into their credit appraisal processes.

In 2018, 34 coal based thermal power plants were categorised as financially stressed with a cumulative outstanding debt of INR 1744.68 billion.

In 2018, 34 coal based thermal power plants were categorised as financially stressed with a cumulative outstanding debt of INR 1744.68 billion.[xcvi] Projects with capacity of 15 GW out of the total stressed capacity of 40 GW are under construction.

The reasons attributed for these stressed assets are non-availability of fuel, lack of power purchase agreements, inability of promoters to infuse capital, contractual/tariff related disputes, issues related to banks/financial institutions and delay in project implementation leading to cost over-runs. The reasons for shortfall of coal supply as stated in the Standing Committee on Energy in 2018 report, are - delays in environmental and forest clearances, land acquisition, law and order and evacuation problems[xcvii].

In 2018, 34 coal based thermal power plants were categorised as financially stressed with a cumulative outstanding debt of INR 1744.68 billion.

As of March 2019, the rate of stalled private sector projects as a percentage of total projects under implementation stood at a record high of 25.4 per cent[xcviii]. However, in public sector projects the has declined and its has resulting in an overall stalling rate of 11.08 per cent, during January to March 2019.[xcix] Among the stated reasons for stalling of projects, lack of environmental clearances and land acquisition problems together contributed 14 per cent to the stalled projects please check sentence.[c]

In a note submitted to the Parliamentary Committee of Estimates, a former RBI Governor attributed "too little due diligence" as one of the reasons for the NPA crisis in the Indian banking sector. He stressed on the need for strengthening governance of public sector banks and the process of project evaluation and monitoring to lower risks of project NPAs.[ci]

RECOMMENDATIONS

The State needs to take a serious view of the prevailing situation in coal mining sector, like regulatory mechanisms, weak monitoring, non-compliance, etc., considering financial and more significantly climate uncertainties. Energy planning and implementation is a very complex process in the context of a country which needs high growth rates with a low or no carbon footprint. It needs to evolve mechanisms to address the long-term needs for energy without jeopardising its climate goals. Investors, particularly banks and financial institutions, have to respond to critical issues for de-risking as they already have huge non-performing assets[cii].

Phasing out coal is an important element in ensuring lower levels of emissions in the future. This requires evolving methods of unwinding investments and opting for a just transition of communities and workers dependent on coal mining and coal-based power generation by imparting newer skills to them and engaged in economic activities in the emerging energy-fields, like solar, wind, etc. Ministry of Skill Development and Entrepreneurship can be instrumental in accomplishing this task.

Financial institutions and banks can no longer isolate themselves from the impact of their financing. Awareness among the people is increasing and these institutions cannot be insulated from any backlash. Increasingly, campaigns are also beginning to target investors and they will be under greater public scrutiny. Therefore, they will be expected to go in for very strict due diligence for their investments and lending.

FOR GOVERNMENT AND REGULATORY AGENCIES

1. REVIEW AND ADDRESS SURPLUS CAPACITY AND PROMOTE APPROPRIATE POLICIES

Surplus capacity in energy must be an ideal situation for any country. However, surplus capacity as it exists in India today has a twin problem of the debt burden of the banks who have lent to assets that have been stranded and as one news reports says 'unviable utilisation rate of 35% in 2017-18 in the State of Karnataka which doesn't has coal mines'. Eventually, the costs for coal transportation from the central-eastern region, absence of long term PPAs, tariff's downward revision, poor quality imported coal and outdated sub-critical technology eventually leads to high costs for upkeep of these plants . The current estimates of bank exposures are as much as INR 1744.68 billion and the total value of the stranded assets is estimated to be even higher as estimated in a 2018 report. As per the 2018 Parliamentary Standing Committee report on Energy, the stressed capacity amounted to 40 GW.

Banking regulators must advise the banks to ***refrain from further investments in fossil fuels particularly coal-based plants*** including those by state governments. Several investors including banks already have a huge exposure to companies that are insolvent. The current losses have to be stemmed and further care has to be exercised in lending. Since the future of coal mining and coal-based power is progressively going to be uncompetitive, because cheaper and eco-friendly modes of electricity generation are coming to fore, directives should be issued on risks of coal-based plants and potential impairments to PSU banks to keep away from such investments.

A significant improvement is possible in the environmental management of coal mining and the power generation process, as their record of

The current estimates of bank exposures are as much as INR 1744.68 billion and the total value of the stranded assets is estimated to be even higher.

Not even 50 per cent of the coal mines and thermal power plants have been submitting their mandatory six-monthly compliance reports.

compliance is abysmal. The record of compliance by coal companies is abysmal, as corroborated by the fact that Coal India subsidiaries face Rs 53,331 crore penalties for over producing, obviously implying huge violations of environmental compliance. It will be relevant to mention here *if Coal India needs to pay the levies, its finances will be critically hit. Its reserves, which stood at Rs 38,000 crore as on April 1, 2019, fall short by Rs 15,000 crore*[civ]. ***Strict compliance of mining and environmental laws*** for violating units must be ensured on an urgent basis to send a message that shoddy environmental and social compliance and due diligence will not be tolerated. The state governments must also play an important role in ensuring compliance. ***Tackling the issue of illegality and violations of the law*** in the mining sector is solely the responsibility of state governments. Unless the nexus of illegal operations is dealt with stringently, the other issues of environmental impact and impact on workers and communities, as elaborated in all the six case studies here, cannot be dealt with properly. What are the impacts? Also an allegation which needs to be substantiated. As per government's own admission on the floor of parliament, there are 96,000 illegal mining operating in the country and the implementation are vast – loss of revenue to government, massive environmental and ecological depletion, destruction of land, soil and water, uprooting in-situ communities, etc. Not even 50 per cent of the coal mines and thermal power plants have been submitting their mandatory six-monthly compliance reports.[cv] CAG[cvi] has indicted the central and state governments and made a number of recommendations to improve the process of reporting and monitoring and ensure compliance. However, these recommendations have yet to be put into practice.

2. STRICT IMPLEMENTATION OF THE NATIONAL GUIDELINES FOR RESPONSIBLE BUSINESS CONDUCT (NGRBC)

NGRBC[cvii] is an important development in tune with global demands for business accountability. It is important that the government ensures strict implementation of NGRBC by businesses. This will not only improve the conditions on the ground but more importantly enable businesses to draw more investments from ESG investors. Increasingly, international financial institutions and investors are facing greater scrutiny and will be forced to exclude financing companies that do not have a good track record. The government has rightly initiated the process of developing a National Action Plan[cviii] on Business and Human Rights. It is important that it is strictly implemented for which a monitoring process needs to be put in place to ensure that companies, financial institutions and banks comply.

a. Implementing National Guidelines for Responsible Financing making it mandatory for all banks to conduct ESG due diligence and publish their reports in the public domain

The National Guidelines for Responsible Financing[cix] published by the Indian Banking Association in 2016 must be implemented and made mandatory. A transparent process of conducting ESG due diligence must be established and implemented. This is necessary as the nature of financing has become complex and fixing responsibility of investors towards ESG compliance is becoming difficult. The process and the outcomes need to be placed in the public domain so that there is a wider scrutiny of compliance.

3. INSTITUTING A TRANSPARENT AND EFFECTIVE GRIEVANCE REDRESSAL MECHANISM TO ACCEPT AND ADDRESS GRIEVANCES OF PROJECT AFFECTED COMMUNITIES

Grievance redressal systems are almost non-existent for project-affected communities and even where they exist, they are relegated to a part of the local administration's responsibilities. Given the diverse roles that the district administration

plays, addressing the issues of project-affected communities does not get adequate priority. Therefore, a transparent mechanism for accepting and remedying grievances must form an integral part of investments policies of – government and investing companies, both.

FOR BANKS AND FINANCIAL INSTITUTIONS INVESTING AND LENDING TO COAL AND POWER COMPANIES

With several of the investors already saddled with non-performing assets, future of coal-extraction and its utilization in thermal power generation, appears uncertain. This has led to a situation where the public has to pay for their inefficiencies and corrupt practices.[cx] The apparent immunity of the investors and bankers to the adverse economic and environmental implications of mining may be short-lived as the recent stripping of the immunity given to the International Finance Corporation by the US Supreme Court shows.[cxi] The recommendations for banks and financial institutions include:

Banks and financial institutions should include specific actions and case reports in relation to their lending and due diligence.

1. **DISCLOSE POLICIES AND MECHANISMS RELATED TO PROJECT FINANCE SPECIFICALLY HIGHLIGHTING SYSTEMS TO IDENTIFY AND MITIGATE ESG RISKS**

   Banks and financial institutions should disclose their policies and mechanisms for identifying ESG risks and the means to mitigate such risks especially for project finance. This will create an atmosphere of greater diligence for businesses following their responsibilities and also be a means of redressal of the grievances of the affected.

2. **DISCLOSE POLICIES, MECHANISMS AND ACTIONS RELATED TO PROJECT FINANCING IN BUSINESS RESPONSIBILITY REPORTS**

   The practice of presenting Business Responsibility Reports as mandated[cxii] by the Securities and Exchange Board of India (SEBI) should not remain a tick-box mechanism. Banks and financial institutions should include specific actions and case reports in relation to their lending and due diligence so that their intent and process are transparent.

3. **ADOPT INTERNATIONAL STANDARDS ON RESPONSIBLE FINANCE**

   Banks and financial institutions should adopt global standards such as the Equator Principles and the Global Alliance for Banking on Values (GABV) to reduce and mitigate risks related to project finance. Banks and financial institutions must also strive to set an example globally on this front. While the Equator Principles seek to commit financial institutions to a set of norms, GABV aims to evolve a culture within banks to undertake responsible financing and stewardship.

[i] OXFAM commentators have left it blank

[ii] United Nations Forum on Business and Human Rights. OHCHR. 2018. https://www.ohchr.org/EN/Issues/Business/Forum/Pages/ForumonBusinessandHumanRights.aspx (accessed on 25 June 2019)

[iii] ESG issues. Principles for Responsible Investment. https://www.unpri.org/ (accessed on 25 June 2019)

[iv] The Equator Principles. 2013.The Equator Principles Association. https://equator-principles.com/about/ (accessed on 25 June 2019)

[v] Principles of Value Based Banking. Global alliance for Banking on value. 2011. http://www.gabv.org/about-us/our-principles (accessed on 25 June 2019)

[vi] Daniel Kaufmann, Erica Westerberg, Rebecca Iwerks, Joseph Williams, Rob Pitman. 2019. Contract, Environment, Gender, Project and Commodity Sales Data among New Disclosure Requirements of Strengthen EITI. National Resource Governance Institute. https://resourcegovernance.org/blog/major-new-EITI-disclosure-requirements (accessed on 25 June 2019)

[vii] Press Information Bureau. Government of India.National Guidelines on Responsible Business Conduct. 2019. http://www.pib.nic.in/Pressreleaseshare.aspx?PRID=1568750 (accessed on 25 June 2019)

[viii] Press Information Bureau. Government of India. National Guidelines on Responsible Business Conduct. 2019. https://www.iba.org.in/reports/national-voluntary-guidelines-for-responsible-financing_290.html (accessed on 25 June 2019)

[ix] National Guidelines on Responsible Business Conduct. India. Ministry of Corporate Affairs. Government of India. 2018. http://www.mca.gov.in/Ministry/pdf/NationalGuildeline_15032019.pdf (accessed on 25 June 2019)

[x] Press Information Bureau, Government of India. Production, Supply and Import of Coal. 2018. http://pib.nic.in/newsite/PrintRelease.aspx?relid=186616 (accessed on 25 June 2019)

[xi] Power. 2019. India Brand Equity Foundation. https://www.ibef.org/download/power-mar-2019.pdf (accessed on 25 June 2019)

[xii] Rahul Tongia and Samantha Gross. 2018. Working to turn Ambition into reality: The politics and economies of India's turn to renewable power. The Brookings Institution https://www.brookings.edu/research/working-to-turn-ambition-into-reality/ (accessed on 25 June 2019)

[xiii] Coal Reserves. Ministry of Coal. Government of India. 2018. https://coal.nic.in/content/coal-reserves (accessed on 25 June 2019)

[xiv] India's coal imports rose 12 percent to 18 million tonne in January. The Economic Times. 2018. https://energy.economictimes.indiatimes.com/news/coal/indias-coal-imports-rose-12-per-cent-to-18-million-tonne-in-january/62968934 (accessed on 25 June 2019)

[xv] India's coal imports rises 13% to 21 MT in April. The Hindu Business Line. 2019. https://www.thehindubusinessline.com/economy/indias-coal-import-rises-13-to-21-mt-in-april/article27252846.ece

[xvi] Provisional Coal Statistics. Coal Controller's Organisation. Ministry of Coal. 2107. http://www.coalcontroller.gov.in/writereaddata/files/download/provisionalcoalstat/ProvisionalCoalStat2016-17.pdf (accessed on 25 June 2019)

[xvii] Rahul Tongia and Samantha Gross. 2019.Coal in India. Adjusting to transition. The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2019/03/Tongia_and_Gross_2019_Coal_In_India_Adjusting_To_Transition.pdf (accessed on 25June 2019)

[xviii] Statistical Year Book India. Ministry of Statistics and Programme Implementation. 2014. http://mospi.nic.in/Mospi_New/upload/SYB2014/CH-15-MINING/Mining.pdf (accessed on 25 June 2019)

[xix] Report of the Expert Committee. Planning Commission, Government of India. 2006. http://planningcommission.gov.in/reports/genrep/rep_intengy.pdf (accessed on 25 June 2019)

[xx] NITI Aayog, Government of India. Draft National Energy Policy. 2017. https://niti.gov.in/writereaddata/files/new_initiatives/NEP-ID_27.06.2017.pdf (accessed on 25 June 2019)

[xxii] Coal Vision 2030. Coal India Limited. 2018. https://www.coalindia.in/DesktopModules/DocumentList/documents/Coal_Vision_2030_document_for_Coal_Sector_Stakeholders_Consultation_27012018.pdf (accessed on 25t June 2019)

[xxii] Tim Buckley. 2019. Over 100 Global Financial Institutions Are Exiting Coal, With More to Come. Institute for Energy Economics and Financial Analysis. http://www.indiaenvironmentportal.org.in/files/file/IEEFA-Report_100-and-counting_Coal-Exit.pdf (accessed on 25 June 2019)

[xxiii] Coal Vs Renewables Finance Analysis. Centre for Financial Accountability. 2018. https://www.cenfa.org/wp-content/uploads/2018/06/2017-COAL-vs-RENEWABLE-Report.pdf (accessed on 25 June 2019)

[xxiv] Ibid.

[xxv] Stressed/ Non-performing Assets in Electricity Sector. Standing Committee on Energy, Lok Sabha Secretariat. 2018. http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf (accessed on 25 June 2019)

[xxvi] Anon (2018). Demand for Grants 2018-19). Report of 46 Standing Committee on Coal and Steel 16 Lok Sabha (2017-18). Lok Sabha Secretariat. New Delhi

[xxvii] Burden of Disease Attributable to Major air pollution sources in India. Health Effects Institute. 2018. https://www.healtheffects.org/publication/gbd-air-pollution-india (accessed on 25 June 2019)

[xxviii] Central Electricity Authority. Ministry of Power. Government of India. http://www.cea.nic.in/tpeandce.html (accessed on 25 June 2019

[xxix] India's first ever environmental rating of coal-based power plants finds the sector's performances to be way below Global benchmarks. Centre for Science and Environment. 2015. https://www.cseindia.org/indias-first-ever-environmental-rating-of-coal-based-power-plants-finds-the-sectors-performance-to-be-way-below-global-benchmarks-5685 (accessed on 25 June 2019)

[xxx] India's Emission Ranking improves, but Thermal power push could pose risks. The Weather Channel. The Times of India. 2018. https://weather.com/en-IN/india/pollution/news/2018-12-10-india-emission-ranking-thermal-power (accessed on 25 June 2019)

[xxxi] Promoting Inclusive Growth. IMF annual report. International Monetary Fund. 2017. https://www.imf.org/external/pubs/ft/ar/2017/eng/index.htm (accessed on 25 June 2019)

[xxxii] Global warming of 1.5 C. Intergovernmental Panel on Climate Change (IPCC). 2018. https://www.ipcc.ch/sr15/ (accessed on 25 June 2019)

[xxxiii] The Paris agreement and NDCs. https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs (accessed on 25 June 2019)

[xxxiv] Sudarshan Vardhan and Neha Dasgupta. 2017. Some India coal utilities may miss emission goals, risk shutdown-govt. body. Thomson Reuters Corporate. https://af.reuters.com/article/commoditiesNews/idAFL4N1KN33F (accessed on 25 June 2019)

[xxxv] Notification. Ministry of Environment, Forest & Climate Change. http://moef.gov.in/wp-content/uploads/2017/08/Thermal_plant_gazette_scan.pdf (accessed on 25 June 2019) year needed

[xxxvi] Notification. Ministry of Environment, Forest & Climate Change. http://moef.gov.in/wp-content/uploads/2017/08/Thermal_plant_gazette_scan.pdf (accessed on 25 June 2019) year needed

[xxxvii] Subhashish Mohanty (2011). NTPC to deal with ash pond crisis. Telegraph. 9 July 2011

[xxxviii] NTPC faces protest heat in Odisha's Kaniha plant. The New Indian Express. 2018. http://www.newindianexpress.com/states/odisha/2018/dec/14/ntpc-faces-protest-heat-1911422.html (accessed on 25 June 2019)

[xxxix] Greenpeace. Water used by coal- based power plants can meet needs of 25 crore people. The Economic Times. 2016. https://economictimes.indiatimes.com/news/politics-and-nation/water-used-by-coal-based-power-plants-can-meet-needs-of-25-crore-people-greenpeace/articleshow/52572601.cms (accessed on 25 June 2019)

[xl] Tianyi Luo, Deepak Sriram Krishnan and Shreyan Sen. 2018. Parched Power. Water Demand, Risks, and Opportunities for India's Power sector. https://www.wri.org/publication/parched-power

(accessed on 25 June 2019)

xli Niharranjan Mishra and Nabanita Das. 2017. Coal Mining & local environment: A study in Talcher coalfield of India. Sage Publication. https://journals.sagepub.com/doi/pdf/10.1177/1178622117728913 (accessed on 25 June 2019)

xlii R. Sreedhar.2016. Water in Mining Areas in India. Environics India. http://environicsindia.in/wp-content/uploads/2016/03/WaterinMiningAreasIndia.pdf (accessed on 25 June 2019)

xliii Mayuri Chabukdhara and O P Singh. 2016. Coal mining in northeast India: An overview of environmental issues and treatment approaches. Research gate. https://www.researchgate.net/publication/303530005_Coal_mining_in_northeast_India_an_overview_of_environmental_issues_and_treatment_approaches/download (accessed on 25 June 2019)

xliv Climate Change can push 45 million Indian into poverty. The logical India. 2015. https://thelogicalindian.com/news/climate-change-can-push-45-million-indians-into-poverty-2/ (accessed on 25 June 2019)

xlv Srinivas Krishnaswamy and Geetika Singh (2018). ENERGY-WATER NEXUS - A study on Water and Coal Power Linkages in India. Vasudha Foundation. November 20

xlvi Reports of National Coal Gathering. Unpublished mimeographs. Environics Trust. 2014a, 2014b, 2016, and 2017

xlvii MOEF&CC (2012). OFFICE MEMORANDUM No. l - ll015/30/2004. IA. 1l(M). Guidelines for granting Environment Clearance for expansion of coal Mining Projects involving one time Production Capacity Expansion up to 25% in the existing operation - reg. December 19, 2012

xlviii Srestha Banerjee, Ikshaku Bezbaroa (2017). Environment ministry panel exempts public hearing for companies seeking coal mine expansion. Down to Earth. 24 August 2017

xlix News Report (2018). Palli Sabha held for NTPC ash dyke. Pioneer. 2 June 2018

l MOEF&CC (2018). 2x660 (Stage-III, Expansion) coal-based Ultra Super Critical Talcher Thermal Power Project, Near Talcher Town, Tehsil Talcher Sadar, Angul District, Odisha by M/s NTPC Ltd-reg. Environment Clearance. No, J-13012/31/2009-IA. II(T). 12.9.2018

li Ooi Jin Bee (1983). Natural Resources in Tropical Countries. Singapore University Press

lii Lok Sabha Secretariat (2013). Displacement and Rehabilitation of People Due to Developmental Projects. Reference Note No. 30/RN/REF./December/2013. PARLIAMENT LIBRARY AND REFERENCE, RESEARCH, DOCUMENTATION AND INFORMATION SERVICE (LARRDIS). New Delhi

liii Ministry of Tribal Affairs. 2019. National Policy on Tribals (Draft). Government of India.

liv Personal communication with the victims

lv Report of the working paper on Occupational Safety and Health. Ministry of Labour and Employment. 2011. http://planningcommission.nic.in/aboutus/committee/wrkgrp12/wg_occup_safety.pdf (accessed on 25 June 2019)

lvi Coal India Limited. Contract Labour Payment Management Portal. 2019 http://210.212.20.44:50005/CLIP/Forms/publicViewWO.php (accessed on 29 July 2019)

lvii Standard Note. Ministry of Labour and Employment. 2019. http://www.dgms.gov.in/writereaddata/UploadFile/Standard2019.pdf (accessed on 25 June 2019)

lviii Performance Audit. Corporate Social Responsibility. Coal India Limited. 2011. https://cag.gov.in/sites/default/files/audit_report_files/Union_Performance_Commerical_Coal_India_Limited_Corporate_Social_Responsibility_9_2011_chapter_5.pdf (accessed on 25 June 2019)

lix Nari Surakhya Samithi Angul. 2014. Situation of Un-Wed Mothers in Angul: A field perspective from Select Development Blocks. Environics Trust. http://environicsindia.in/wp content/uploads/2014/05/AngulUnwedMothers.pdf (accessed on 25 June 2019)

lx Sanjeev Kumar Patro (2015). Crimes against women: Odisha among top 10. Pioneer. 5 July 2015

lxi K. Bhanumathi. Status of Women Affected by Mining in India. Samata India. http://www.samataindia.org.in/documents/Status%20of%20Women%20Affected%20by%20Mining%20in%20

India.PDF (accessed on 25 June 2019)

lxii Performance Audit. CSR. Coal India Limited. 2010. https://cag.gov.in/sites/default/files/audit_report_files/Union_Performance_Commerical_Coal_India_Limited_Corporate_Social_Responsibility_9_2011.pdf (accessed on 25 June 2019)

lxiii Report of CAG on Environmental Clearance and Post Clearance Monitoring. Ministry of Environment, Forests and Climate Change. 2016. https://cag.gov.in/sites/default/files/audit_report_files/Union_Government_Report_39_of_2016_PA.pdf (accessed on 25 June 2019)

lxiv Issues – Coal India Limited. Banktrack. 2017. https://www.banktrack.org/company/coal_india#issues (accessed on 25 June 2019)

lxv Climate Bonds Standard. Climate Bond Initiative. 2016. https://www.sbi.co.in/portal/documents/44589/101996501/Green+Bond+Framework/5bb248cb-13bb-459d-88d6-ef6abdabdb35 (accessed on 25 June 2019)

lxvi K. Bhanumathi. Status of Women Affected by Mining in India. Samata India. http://www.samataindia.org.in/documents/Status%20of%20Women%20Affected%20by%20Mining%20in%20India.PDF (accessed on 25 June 2019)

lxvii Sustainability and Business Responsibility Policy. State Bank of India.https://www.sbi.co.in/portal/documents/41076/60023/Sust.+Policy+for+Upload.pdf/1d48f9f7-dc82-49cc-afd5-4e2fe2ffec62 (accessed on 25 June 2019) year needed

lxviii Issues. Banktrack. Coal India Limited. 2017. https://www.banktrack.org/company/coal_india#issues (accessed on 25 June 2019)

lxix Sustainability and Business Responsibility Policy. State Bank of India.https://www.sbi.co.in/portal/documents/41076/60023/Sust.+Policy+for+Upload.pdf/1d48f9f7-dc82-49cc-afd5-4e2fe2ffec62 (accessed on 25 June 2019)

lxx https://economictimes.indiatimes.com/industry/banking/finance/banking/sbi-announces-steps-to-go-carbon-neutral-by-2030/articleshow/65855255.cms?from=mdr

lxxi https://www.sbi.co.in/webfiles/uploads/files/1500874497770_REQUEST_FOR_PROPOSAL.pdf

lxxii Sustainability and Business Responsibility Policy. State Bank of India.https://www.sbi.co.in/portal/documents/41076/60023/Sust.+Policy+for+Upload.pdf/1d48f9f7-dc82-49cc-afd5-4e2fe2ffec62 (accessed on 25 June 2019) year needed

lxxiii Issues – Coal India Limited. Banktrack. (2017). https://www.banktrack.org/company/coal_india#issues (accessed on 4 June 2019)

lxxiv Sasan ultra mega coal power project (UMPP) profile. Banktrack. 2016. https://www.banktrack.org/project/sasan_ultra_mega_coal_power_project_umpp_#about (25 June 2019)

lxxv Tata Mundra Ultra Mega Power Project. Banktrack. 2016. https://www.banktrack.org/project/tata_mundra_ultra_mega_power_plant_umpp_ (accessed on 25 June 2019)

lxxvi Annual Report 2017-18. Coal India Limited. 2018. https://www.coalindia.in/DesktopModules/DocumentList/documents/Annual_Report_Accounts_2017-18_10082018.pdf (accessed on 25 June 2019)

lxxvii Issues – Coal India Limited. Banktrack. 2017. https://www.banktrack.org/company/coal_india#issues (accessed on 25 June 2019)

lxxviii Corporate Human Rights Benchmark (CHRB) Company Scoresheet – Coal India. 2018. https://www.corporatebenchmark.org/sites/default/files/2018-11/Coal%20India%20CHRB%202018%20Results%20on%2020181026%20at%20171452.pdf (accessed on 25 June 2019)

lxxix NTPC signs term loan of Rs 5,000 crore with State Bank of India. The Economic Times. 2019. https://energy.economictimes.indiatimes.com/news/power/ntpc-signs-term-loan-of-rs-5000-crore-with-state-bank-of-india/67944211 (accessed on 25 June 2019)

lxxx National Thermal Power Corporation. Banktrack. 2016. https://www.banktrack.org/company/national_thermal_power_corporation_ntpc_/pdf (accessed on 25 June 2019)

lxxxi Praxis, Oxfam India, Corporate Responsibility Watch. 2018. Making Growth Inclusive-2018: Analysing Policies, Disclosures and Mechanisms of Top 100 Companies. https://www.responsiblebiz.org/stories/ntpc-57.html

(accessed on 25 June 2019)

[lxxxii] https://www.icicibank.com/managed-assets/docs/investor/annual-reports/2018/icici-bank-ltd-business-responsibility-report-fy2018.pdf (page 6)

[lxxxiii] National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business. Ministry of Corporate Affairs. 2011. http://www.mca.gov.in/Ministry/latestnews/National_Voluntary_Guidelines_2011_12jul2011.pdf (accessed on 25 June 2019)

[lxxxiv] Lanco Infratech India. Banktrack. 2016. http://coalbanks.org/company#lanco_infratech_ltd&tab_issues (accessed on 25 June 2019)

[lxxxv] Environment Management. IDFC. http://www.idfc.com/our-firm/environment_management.htm (accessed on 25 June 2019) year needed

[lxxxvi] https://www.freepressjournal.in/business-wire-india-section/idfc-becomes-the-first-indian-financial-institution-to-join-the-equator-principles-association

[lxxxvii] IDFC India. Related Dodgy Deals. https://www.banktrack.org/bank/idfc#dodgy_deals (accessed on 25 June 2019)

[lxxxviii] Policy on Environmental Management. Axis Bank. 2018. https://www.axisbank.com/docs/default-source/default-document-library/axis-bank_policy_on_environmental_management_2018_external.pdf?sfvrsn=96b8b355_4 (accessed on 25 June 2019)

[lxxxix] https://www.axisbank.com/docs/default-source/default-document-library/axis-bank-sr-2018--final-report_v1-0.pdf?sfvrsn=e115b455_2

[xc] Environment. Axis Bank. https://www.axisbank.com/docs/default-source/default-document-library/9_environment.pdf?sfvrsn=0 (accessed on 25 June 2019)

[xci] Promoting Inclusive Growth. IMF annual report. International Monetary Fund. 2017. https://www.imf.org/external/pubs/ft/ar/2017/eng/index.htm (accessed on 25 June 2019)

[xcii] Sasan Ultra Mega Coal Power Project. Banktrack. 2016. https://www.banktrack.org/project/sasan_ultra_mega_coal_power_project_umpp_#issues (accessed on 25 June 2019)

[xciii] Lanco Infratech. Issues. Banktrack. 2016. http://coalbanks.org/company#lanco_infratech_ltd&tab_issues? (accessed on 25 June 2019)

[xciv] Sasan Ultra Mega Coal Power Project. Banktrack. 2016. https://www.banktrack.org/project/sasan_ultra_mega_coal_power_project_umpp_#issues (accessed on 25 June 2019)

[xcv] Annual Reports and Accounts. Coal India Limited. 2018. https://www.coalindia.in/DesktopModules/DocumentList/documents/Annual%20Report201718.pdf (accessed on 25 June 2019)

[xcvi] Stressed/ Non-performing Assets in Electricity Sector. Standing Committee on Energy, Lok Sabha Secretariat. 2018. http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf (accessed on 25 June 2019)

[xcvii] Standing Committee on Energy (2018). Stressed/ Non-performing Assets in Electricity Sector. Lok Sabha Secretariat

[xcviii] Arjun Srinivas.2019. New Investments in India remains in a slump in January- March. Livemint. https://www.livemint.com/companies/news/new-investments-in-india-remain-in-a-slump-in-january-march-2019-1554145836159.html (accessed on 25 June 2019)

[xcix] ibid.

[c] ibid.

[ci] Bankers' optimism led to bad loans. Livemint. 2018. https://www.livemint.com/Home-Page/aa7eXvi1nDjWQgaC6ZyraO/Raghuram-Rajan-says-bankers-optimism-led-to-bad-loans.html (accessed on 25 June 2019)

[cii] Report of Parliamentary Standing Committee on Energy (2018)

[ciii] https://energy.economictimes.indiatimes.com/news/power/financial-distress-in-indias-thermal-power-sector-from-40-60-bn-stranded-assets/65450032

[civ] Debjoy Sengupta 2019. Coal India subsidiaries face Rs 53,331 crore penalties for over producing. Economic Times. 26 July 2019

[cv] Ministry of Environment, Forests and Climate change. Government of India. environmentclearance.nic.in (accessed on 25 June 2019)

[cvi] Report of CAG on Environmental Clearance and Post Clearance Monitoring. Ministry of Environment, Forests and Climate Change. 2016. https://cag.gov.in/sites/default/files/audit_report_files/Union_Government_Report_39_of_2016_PA.pdf (accessed on 25 June 2019)

[cvii] National Guidelines on Responsible Business Conduct. Ministry of Corporate Affairs. 2018. http://www.mca.gov.in/Ministry/pdf/NationalGuildeline_15032019.pdf (accessed on 25 June 2019)

[cviii] National Action Plan on Business and Human Rights. 2018. http://www.mca.gov.in/Ministry/pdf/NationalPlanBusinessHumanRight_13022019.pdf (accessed on 25 June 2019)

[cix] National Voluntary Guidelines for Responsible Financing. Indian Banks' Association. 2016. https://www.iba.org.in/reports/national-voluntary-guidelines-for-responsible-financing_290.html (accessed on 25 June 2019)

[cx] Kumar Shankar Roy. 2018. PFC REC accuse Ind-Barath of Rs 1000 crore fraud. DNA India. https://www.dnaindia.com/business/report-pfc-rec-accuse-ind-barath-of-rs-1000-cr-loan-fraud-2672824 (accessed on 25 June 2019)

[cxi] Sasha Chavkin. 2019. No longer above the law, the World Bank faces fight of its life. International Consortium of Investigative Journalists (ICIJ). https://www.icij.org/investigations/world-bank/no-longer-above-the-law-the-world-bank-faces-fight-of-its-life/ (accessed on 25 June 2019)

[cxii] Circular on [Format for Business Responsibility Report (BRR)]. Securities and Exchange Board of India (SEBI). 2015. https://www.sebi.gov.in/legal/circulars/nov-2015/format-for-business-responsibility-report-brr-_30954.html (accessed on 25 June 2019)


Fair Finance India