

**DIGGING DEEPER:
THE HUMAN RIGHTS IMPACTS OF COAL IN THE GLOBAL SOUTH**

Dejusticia and Business and Human Rights Resource Centre

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EXECUTIVE SUMMARY

Coal was at the heart of the first Industrial Revolution in Europe and North America. Today, in much of the Western world, it seems like an anachronism, a fuel from a dirtier time, when workers' black lung and soot-coated growing cities were accepted as the cost of progress.

Today, despite sluggish growth in coal consumption among developed countries and strong advocacy for transitioning away from coal around the upcoming Paris climate change negotiations, coal production and use have yet to decline globally.¹ Much of this has to do with increasing production and demand in the Global South.

This report highlights three key themes:

A. Coal is increasingly a Global South industry.

With coal production declining or being phased out in much of North America and Europe, and even beginning to fall in the world's largest producer and consumer, China, the future of coal will be decided in the Global South. In countries like Colombia, India and South Africa, production has increased in recent years despite falling prices. Among non-coal producing countries, Egypt has shifted from banning coal imports without special authorization to becoming an increasingly important coal importer. To be sure, this trend is not purely driven by internal demand. In many cases it reflects investment by companies from European, North American and Asian countries in coal mining and coal-fired energy technology, often fueled by coal exports from richer countries, and often with support from multilateral financial institutions. These Global South countries are embarking on these massive expansions without full consideration of the costs of these impacts on health, lost productivity, the environment, and local poverty as coal displaces other productive activities. As a result, it is impossible to know whether coal's net benefit is what its proponents claim – or if it in fact has a net positive socioeconomic impact.

B. Coal is a human rights issue.

The countries increasing coal production and consumption do so for the sake of development – of their domestic industries and their economy, of energy to reach more of their population more consistently and without blackouts. However, in many cases this development comes at the expense of the human rights of the people most vulnerable to the impacts of coal. In these cases, these countries are violating their own duties and commitments to protect their people's human rights.

C. Accountability is missing.

Human rights violations caused by the coal industry, and other actors that support it such as security personnel and government officials, are rarely prosecuted, nor are victims able to obtain civil remedies in most cases. Even if they are, decisions often take decades to be implemented (or never are), fines and damages imposed do not sufficiently remedy the losses, and those held responsible are typically only low-ranking officials or contractors, but rarely if ever individuals with decision-making authority, or the companies that give orders.

Moreover, where companies and governments have sought to address coal's impacts – whether in the context of increasing coal investments or in dealing with the aftermath of closing mines and

power plants – the measures to compensate affected workers and communities are often piecemeal, top-down, and too late: a clinic here, some bare-bones housing for a displaced community there, some desultory improvements to working conditions. These measures very rarely start with long-term and holistic planning or human rights impact assessments, which would include asking workers how they are affected and communities what would compensate them adequately for their losses. If coal has benefits for overall economic development as great as its proponents claim, it should be straightforward to transfer some of the net benefits in amounts sufficient to provide remedy for those most harmed by the development of coal mining and energy. However, because these victims often lack any power or influence, they rarely receive anything approaching adequate remedies.

This research focuses on four country case studies—Colombia, India, South Africa and Egypt—because of their geographical representation, and the diversity of their profiles in terms of coal production and consumption. Colombia, India and South Africa are three of the top coal producers in the world, but while Colombia exports almost all its coal, India and South Africa use most of the coal that they produce internally. Egypt has negligible coal reserves but has recently opened its doors to coal use in its industries. The different political conditions and social groups that are most vulnerable to violations in each of these countries illustrate the range of impacts that coal can have amid a range of contexts – but also reveal common trends.

Through these case studies, focused on the realities of the coal industry and its impacts on actual human lives, this study reaches six main findings:

1. **Coal is *not* cheap.**
2. **Coal aggravates poverty locally – and may have little positive net economic effect nationally.**
3. **The coal industry in the Global South is being fuelled by both the South and the North.**
4. **Human rights violations around the coal industry thrive in contexts of weak and/or repressive governance.**
5. **Corporate social responsibility is not enough. Accountability is essential.**
6. **A just transition from coal is crucial. A green economy alone is not the answer.**

In Colombia, already the world's fifth-largest exporter of coal, the government estimates that coal production will increase by 50% by 2019. This study highlights how coal-led development is an instance of the “resource curse”,² wherein a single, mineral-based industry crowds out other sectors and prevents the creation of a diversified economy. Coal mining has displaced indigenous peoples, farmers, and Afro-descendant communities, sometimes forcibly depriving them of land that is essential to both their livelihoods and their cultural identity, as they are pushed onto ever-smaller parcels. It has also exacerbated the already fragile situation of water scarcity in the largest arid region of Colombia where many of these communities are located.

India, the third-largest coal producer in the world, is relying on it to fuel its massive industrial expansion. As in Colombia, tribal peoples who are concentrated in the coal belt states of Odisha, Chhattisgarh and Jharkhand are frequently displaced – with their consent often fabricated, coerced, or simply never sought. Even where their homes and lands are not outright taken, indigenous and other rural peoples often face devastating pollution of their land and the rivers they rely on for drinking water, agriculture, and subsistence fishing. In addition to large mines operated by major

companies, thousands of small-scale mines dot Jharkhand, with 100,000 children reportedly working in dangerous “rat hole” mines. The poverty in these regions combined with weakly regulated company practices leads to disasters such as the death of 14 locals who were scavenging coal from a dangerous open dump pile maintained by a company in Odisha when it collapsed in 2013.

South Africa faces both shortfalls to meet the domestic energy demand of its huge mining sector, and increasing demand for coal-fired power from its African neighbors. Its own energy sector concentrates production in one region of Mpumalanga province, where studies have shown that coal is responsible for thousands of deaths from respiratory and cardiovascular disease, as well as elevated incidence of cancer, fetal development problems, and other illnesses. The communities who live nearby consist mostly of black South Africans, who are the most economically marginalized group in the country. They frequently live without electricity, even though it is produced next to them. Traditional societal structures in many of the affected communities have also excluded women in important decision-making, with coal companies reinforcing such structures through payments to traditional male leaders. Coal mining also drains scarce water resources from neighboring communities, and leaves behind toxic run-off known as “acid mine drainage” that can poison groundwater for decades or centuries after a mine closes.

In Egypt, the government has taken steps to reverse long-standing bans on coal use and imports, ousting a Minister of Environment who opposed increased reliance on coal over concerns about its impacts on health and livelihoods. Since May 2013, the government has refused to provide figures about current and planned increases in coal imports and use, or whether or how it is monitoring or enforcing the environmental obligations of cement and other companies that were granted the permission to use coal. It is making decisions to open Egypt to coal with essentially no civil society participation, amid a generalized increase in suppression of freedom of expression and protest.

Across the industry in the Global South, many workers suffer illnesses – and, along with other human rights defenders, have been killed, unjustly imprisoned or threatened for trying to organize to protect their rights. The violations of human rights are specific to each country. Yet human rights violations, taken as a whole, seem to be common to the coal industry across the Global South. Thus, the coal industry, governments that are about to make commitments at the Paris Conference of Parties (COP), and other stakeholders must understand the questions of coal’s impacts, and its future, as a matter of rights and remedies, not issues that can be addressed with only numerical targets, technical fixes and voluntary charity by companies.

I. INTRODUCTION

“End of coal.”³

“Coal is a dead man walking.”⁴

These and similar headlines have been circulating for the past year in the mass media, business news, and in economics and environmental circles around the globe. The last one, uttered by the head of asset management at Deutsche Bank, supposedly points to the “structural decline of coal”⁵. This trend line is perhaps surprising given that five years ago, coal was at \$120 a ton and rising. Now, the price has dropped below \$60.⁶

In 2012, there were 1,200 coal-fired power plants proposed globally, spread across 59 countries,⁷ but many of them have not been built or have not begun operating, and a recent report states that more coal plants are currently being cancelled than built.⁸ Many coal companies, particularly in the US and Australia, are filing for bankruptcy.⁹ The divestment movement has gained ground, with pension funds, banks, universities, churches and others dropping coal companies from their investment portfolios.¹⁰ China, the world's biggest consumer of coal, has pledged to peak its carbon emissions by 2030.¹¹ The EU as well has pledged to reduce its emissions by 40% from 1990 levels.¹² The recently launched US Clean Power Plan, the first national limits on carbon emissions from power plants, will likely cause the retirement of many US coal plants and prevent new construction.¹³ With the Paris Conference of Parties (COP) only a week away, the world is riding a wave of hope that states will sign a strong agreement to cap carbon emissions, to which coal is the largest contributor. These signs point to a “beginning of the end” for coal.¹⁴

But while coal may be declining in North America and Europe, that is not the case in the Global South. India, the second biggest consumer of coal after China, is planning to double its coal output by 2020; the state-run Coal India, which claims to be the largest public coal company in the world, grew its output by 32 million tons for 2014/2015—its biggest volume rise in its four-decade existence.¹⁵ South Africa, which uses coal for 77% of its energy consumption¹⁶ and is the fifth largest coal producer globally, is building two mega coal-fired power plants that will be among the largest in the world. Colombia, the fifth largest exporter of coal in the world,¹⁷ has increased its production by 10% in 2015. Egypt, a country with barely any coal reserves, is on its way to embracing coal in its industries. Finally, China has recently been found to not only have underreported its coal use by as much as 17%¹⁸, but has been planning to build 50 coal-to-gas plants—a process that uses more coal than a regular coal power plant.¹⁹ It is no surprise then that globally, financing for coal has not decreased—in 2014, it was at \$144 billion, only a billion less than in 2013. If coal is indeed on its way out in some parts of the world, it is staying put in the Global South.

II. WHY A HUMAN RIGHTS APPROACH

While the environmental and climate approach has been essential in tackling the challenges presented by coal, the human rights framework is another key lens that has not yet been applied to the industry. What can a human rights approach offer?

First, certain aspects of coal's impacts are not manifested in changes in the environment—such as the free, prior and informed consent of indigenous communities, the cultural rights and traditional livelihoods of displaced people, the threats to human rights defenders fighting a coal project, tax justice as it relates to social and economic rights, and socio-economic recovery following the closure of a coal mine. Using a human rights perspective to complement the environmental lens gives a more complete picture of coal's overall impacts by including workers and communities. As John Knox, United Nations Special Rapporteur on human rights and the environment, has said, “The protection of human rights and a healthy environment are mutually reinforcing.”²⁰

Second, given that Global South countries use the framework of rights to justify their support for coal (e.g., the duty to fulfill and promote the socio-economic rights of the poor, and the duty to protect the right to work of mine workers), a comprehensive rights-based analysis takes into account the human rights of all affected people and groups – and points out more clearly hidden impacts,

imbalances in the current approach, and the balancing that may ultimately be needed. In many cases, rights of different groups may be in tension, e.g., between the communities affected by mines and workers whose jobs are at stake, or between women or other vulnerable populations within a community, and men in the community.

But under the human rights framework, the violation of the rights of a minority *is* a violation – no matter the benefits for other groups or for the society as a whole. The government is obligated to protect people from such violations, and to provide remedy when they occur, taking into account that vulnerable groups or individuals often suffer most severely due to their political and social marginalization.

Third, a rights framework allows for more careful consideration of a group that has often been overlooked in sweeping claims for closing down the coal industry—workers.

Fourth, in addition to being rooted in globally accepted international standards, human rights standards for business are already the subject of commitments in principle by companies and governments. Some major companies like Cerrejón Coal in Colombia and Anglo Coal in South Africa have made company-wide human rights commitments. The European energy companies' Bettercoal initiative requires coal companies that Bettercoal members purchase from to meet human rights standards. At a more general level, major global business organizations like the International Organization of Employers have endorsed the UN Guiding Principles on Business and Human Rights. Where companies fail to meet their responsibilities and commitments under these standards, a human rights analysis provides an agreed framework to engage with companies to avoid abuse or provide remedy to victims.

Finally, using a human rights approach brings the important issue of accountability to the fore. This is particularly important in countries where impunity for abuses persists. Even if the coal industry is in decline, as claimed, the human rights approach insists on accountability for past violations, and for any that continue to occur as the industry fully sunsets. In the process, human rights must be protected, their violations must be redressed, and adequate remedies must be provided.

One note on scope: This report intends to complement climate-related analyses of coal's impacts, and related advocacy; those impacts are not this report's focus. This is not because climate impacts are unrelated to human rights. On the contrary, as Mary Robinson and many other human rights advocates urge, climate change is perhaps the greatest human rights challenge of our time. Rather, because this report seeks to complement analysis and advocacy on the future of coal that focuses on its climate impacts, it would have been redundant for this report to include that aspect of coal's human rights impacts, in addition to all the other angles that it considers.

III. WHY A GLOBAL SOUTH APPROACH

Prakash Javadekar, India's Minister of Environment, said in July 2015 that cuts in greenhouse gas emissions are "more for developed countries". He argued that providing electricity to the Indian population is the country's top priority, saying, "We will grow faster, and our emissions will rise."²¹ This exemplifies the unapologetic strategy of fossil fuel-driven growth being adopted by many Global South governments.

These governments often base their refusal to cut greenhouse gas emissions on the “historic responsibility”²² of top polluters like the United States, and the “hypocrisy by the West”²³ in asking developing countries to not use coal. “It is hypocritical for western governments who have funded their industrialization using fossil fuels, providing their citizens with enough power, to say to African countries, ‘You cannot develop dams, you cannot develop coal, just rely on these very expensive renewables... African countries will not listen.’” So said Donald Kaberuka, former head of the African Development Bank, in March 2015.²⁴

The historical accuracy of these objections is undeniable, yet the growth of the coal industry in the Global South means that it is equally impossible to ignore coal’s impacts there. Today, India, China and Indonesia alone are jointly using 71% of newly mined coal globally.²⁵ In Southern Africa, Botswana, Malawi, Mozambique, South Africa, Zambia and Zimbabwe are entering deals with independent contractors to build coal-fired plants.²⁶ Two of Africa’s largest economies, Nigeria²⁷ and Kenya,²⁸ are now opening coal-fired power plants for the first time in their histories. Pakistan, the Philippines and Vietnam are also increasing their coal use.²⁹

There is often another Global South country behind such new ventures. South Africa, for example, will be providing the coal needed for the Lamu plant in Kenya,³⁰ while it also provides technical assistance to the coal-fired power project in Nigeria. China remains one of the biggest financiers of coal projects around the world.³¹ The BRICS (Brazil, Russia, India, China and South Africa) Bank, now called the New Development Bank, may serve to slow or reverse decreases in coal financing from traditional (Global North) sources, coming to the rescue of coal projects “stranded” by lack of financing.³² The China-led Asian Infrastructure Investment Bank, which like the New Development Bank is meant to rival multilateral banks that are seen as dominated by Global North countries, may do the same.³³

Furthermore, a Global South focus also reveals the role of the Global North in what is happening in the Global South. While Europe and the United States are moving fast in transitioning to renewables at home, their funding institutions and private companies continue to conduct coal activities abroad.

In August of this year, Murray Energy, the largest underground coal mining company in the United States, bought Goldman Sachs’ mining operation in Colombia, which it had spent over \$600 million on, for only \$10 million. Murray Energy, expanding internationally for the first time, said that it needed to find opportunities abroad since the coal industry is “under attack” in the United States.³⁴

Between 2003 and 2013, 34 OECD countries, including 21 from the EU, provided \$12.8 billion worth of export credits to coal plant projects.³⁵ France, the host of this year’s COP, and Germany, hailed for its leadership in transitioning to renewables through its *Energiewende* (energy transition) program,³⁶ lead European countries in these export credits. France and the United States in 2012 also provided a \$1.1 billion guarantee for Eskom’s Kusile power plant in South Africa,³⁷ which will be the fourth largest coal-fired plant in the world.³⁸ Germany provided \$3.7 billion to coal projects in Greece, India, Serbia, South Africa and Australia through its state development bank from 2003-2013.³⁹ According to Sebastien Godinot, economist at the World Wide Fund (WWF), the EU may have policies on reducing emissions at home, but it barely has any climate standards for the provision of export credits by its individual members.⁴⁰

The World Bank has recently adopted a policy to restrict coal financing, but with a major exception tailored for the Global South. The policy allows funding in “rare circumstances” when there are “no feasible alternatives.”⁴¹ Such lack of alternatives could be argued to exist in many Global South countries that are heavily reliant on coal for their energy needs and where renewables are still in their infancy. For example, the World Bank has continued to accelerate its aid for developing more than 16 GW of coal power projects in Indonesia.⁴² Although the Bank is also making major investments in renewables, a coal plant once constructed exists for decades, undoing much of what the renewable energy projects are hoping to accomplish.

Similarly, richer countries that produce coal but have started to curtail their consumption are increasing their exports. A former White House climate advisor, for example, says the “United States is reducing its domestic coal use [but] then simply exporting some of those emissions abroad”. Another former US official says, “It erases everything the Obama administration is trying to do” to reduce US greenhouse gas emissions.⁴³ Three of the largest markets for these exports are Brazil, India and Mexico.⁴⁴

Using a Global South approach highlights what countries in these poorer regions of the world are doing with respect to coal, but also their nexus with the North. If developed countries do believe their claim that climate change affects us all, then they cannot only police what they do at home. They must also police what they cause abroad. This Global South focus with attention to the ongoing contributions of Global North countries supports the widely accepted approach of “common but differentiated responsibilities” for mitigating climate change and other global environmental crises.

IV. CASE STUDIES: COLOMBIA, INDIA, SOUTH AFRICA AND EGYPT

These four countries have been chosen as case studies for a variety of reasons: 1) their profile as coal producers and/or consumers; 2) regional spread; and 3) differences in political contexts and vulnerable communities affected by the coal industry.

Colombia, India and South Africa are all top producers of coal globally. While India and South Africa use most or all of the coal that they mine domestically, Colombia exports almost all the coal that it produces. Egypt, on the other hand, is a new entrant. Unlike the other three countries, it has negligible coal reserves, but is on its way to becoming a major importer.

These countries also show how coal impacts human rights in varying socio-political contexts. Egypt, still reeling from a revolution that toppled a three-decade dictatorship, currently has a government that quashes nearly all dissent by civil society or even government officials, and largely operates without transparency; in this environment, health experts and civil society are concerned that an industry with major potential health impacts will be largely unregulated. Colombia and India present the issue of vulnerable ethnic groups, given that the coal mines in the country are largely located in areas with high concentrations of indigenous peoples and (in Colombia) Afro-descendants. More generally, the poor in India face nearly complete marginalization in decisions that affect their lives. And the Modi government has vowed to fast-track economic liberalization and development, dismissing many community and environmental concerns as “anti-national”. India is particularly important given industry forecasts that it will overtake China in coal consumption by 2035.⁴⁵ South

Africa’s complex history of apartheid, and lingering sharp racial and economic inequalities, are central to how coal impacts human rights there. It is also a water-scarce country that hosts water-hungry mining industries.

The following sections highlight key human rights impacts at coal plants and mines in each country. The examples of specific impacts are illustrative rather than comprehensive, as the issues raised occur broadly, not in isolation.

A. Colombia

Despite having been mired in half a century of internal war, Colombia has seen a rapid increase in foreign direct investment in the past decade: it is now about to join the Organization for Economic Co-operation and Development (OECD). It has also been hailed for its progressive position at the United Nations climate negotiations and a leadership role in the creation of the UN Sustainable Development Goals. However, despite its international environmental stance and its increased economic development, it also has the second highest rate of internal displacement in the world,⁴⁶ fueled in part by environmental conflicts in its natural resource-rich areas.⁴⁷ It also continues to have severe human rights violations.⁴⁸

Foreign mining companies began investing in Colombian coal 30 years ago⁴⁹ and now dominate the extraction and export of coal in the country. Drummond, Prodeco (part of Glencore) and Colombian Natural Resources (a unit of investment bank Goldman Sachs, which as mentioned above was recently acquired by Murray Energy) operate mines in the department of Cesar, while BHP Billiton, Glencore and Anglo American jointly own Cerrejón Coal in the department of La Guajira, one of the largest open pit mines in the world.

Rank in global coal production	5 th
Annual production	87 million tons ⁵⁰
Percentage of production that is exported	92% ⁵¹
Main importers of coal	Netherlands (20%) ⁵² Falklands Islands (UK – most of it believed to be sent to UK mainland) (12%) United States (7%) ⁵³
Main companies	Drummond Ltd (30%), Glencore (28%) Anglo American Plc. (14%) and BHP Billiton Plc (14%) ⁵⁴

In the past 15 years, the government of Colombia has championed a development model that positions mining as the centerpiece of economic growth and prosperity.⁵⁵ In 2001, the former administration of President Alvaro Uribe made extensive changes to the mining code that incentivized inward investment by transnational companies.⁵⁶ The expansion of mining since then has been unparalleled: by 2010, the government had granted three times the number of mining concessions it had in 2002.⁵⁷ The current administration, under President Juan Manuel Santos, has maintained this business-friendly attitude, arguing that “responsible mining” (*minería responsable*) is crucial to development.⁵⁸

The emphasis on mining does not seem to be temporary. The government estimates that national coal production by 2019 will surpass 130 Mt.⁵⁹ Cerrejón and Drummond both hope to expand their operations and there are currently eight exploration requests in Catatumbo in the Northeast of the country.⁶⁰

1. The Human Rights Impacts of the Coal Industry

The Colombian government and transnational mining companies have often argued that coal production has helped eradicate poverty by bringing prosperity and development to nearby communities. However, actual figures belie these claims. Between 2004 and 2011, despite three decades of royalties and taxes from mining, La Guajira and Cesar rank third and seventh in terms of extreme poverty in the country, with 65% of the population in La Guajira and 76% in Cesar not having their basic needs met.⁶¹ The situation in La Guajira is severe: between 2008 and 2013, 3,000 children under the age of five died due to lack of sanitation, malnutrition and poor health infrastructure – most of which belonged to the indigenous communities of the Wayúu, Wiwa, Kogui, Arhuaco and Kankuamo.⁶²

Coal mining has permanently restructured the economies of departments away from other livelihoods upon which locals traditionally relied. In La Guajira, coal extraction amounts to 60% of the economy while in Cesar, it totals 45%. In both departments, the agricultural sector has been significantly reduced.⁶³ According to the UN Development Programme, the excessive concentration in the mining sector has limited the generation of a more dynamic and diversified range of jobs.⁶⁴

In addition, a recent change in legislation in 2012 slashed the share of municipalities in the royalties from over 60% to only 25%.

While coal has become Colombia's second leading export, its extraction, transport and shipping have also left a legacy of displacement, environmental damage and violence, particularly in marginalized communities. A member of a resettled community summed up the relationship of the community as follows: "In Patilla, Cerrejón was like a new boyfriend who brought us flowers and took us to the movies. Then we came here and it was like we were in an abusive marriage, full of machismo."⁶⁵

The situation is aggravated in the context of Colombia's history of paramilitary violence. PAX Netherlands reported that companies like Drummond in César supported, or at least knew and did not take steps to prevent, the actions by paramilitary groups that caused deaths, forced displacements and disappearances in their area of operations.⁶⁶ Drummond has denied these allegations.⁶⁷

a. Indigenous Peoples

Indigenous communities are already one of the most vulnerable populations in Colombia.⁶⁸ An estimated 70,000 indigenous people from the Wayúu and Wiwa communities have been displaced in La Guajira alone due to mining operations.⁶⁹ In the case of Cerrejón, the indigenous communities of Media Luna, Tamaquito and Espinal were displaced.

Although Colombia has ratified International Labor Organization (ILO) Convention 169⁷⁰ on indigenous and tribal peoples' rights, the right to free, prior and informed consent has often been

disregarded in the construction or expansion of projects. Many groups have complained that prior consent was not sought, and they were not adequately informed about projects, resulting in some communities creating their own autonomous consultation processes.⁷¹

Where there has been relocation due to coal activities, communities are often given settlements that are inferior to their former housing.⁷² The companies often do not give ownership of the new housing to the resettled families, supposedly to “‘protect’ community and social cohesion as families cannot sell the houses and leave since they do not own them.” This leaves the resettled locals perpetually dependent on the company.⁷³ The communities of Chancleta and Roche, for example, are semi-urban housing closely spaced with one another, a far cry from their old homes that were scattered across vast tracts of land that they farmed. The officially recognized minimum area of land for a farming family’s dignified subsistence is 72-98 hectares.⁷⁴ Cerrejón gave the families a hectare each.⁷⁵

The issue of land is not only crucial in economic terms, but is also central to the cultural identity of most indigenous peoples, including those residing in La Guajira. Spirits, their sacred ceremonies, their deceased ancestors buried in their communities, and their core identities are intertwined with the land. A number of communities have complained that their elders can no longer dream in the houses given by mining companies, evidencing the profound disruption of Wayúu religious and spiritual life.⁷⁶

A particularly critical issue affecting the Wayúu people as well as other residents of La Guajira has been access to clean water, in the most arid Colombian region. While Cerrejón uses around 17 million liters per day, the average La Guajira resident uses only 0.7 liter.⁷⁷ In an effort to control air pollution, Cerrejón uses remarkable amounts of water to spray the dust that is produced during coal mining, as well as the roads where coal is transported, but it soon evaporates. The water is extracted from local rivers, impacting the livelihoods of residents that have traditionally relied on them for agricultural activities and drinking water. Cerrejón has recently attempted to reroute the Rancheria River and Arroyo Bruno to access coal reserves under the riverbed, threatening even further the already precarious water situation in the region. Cerrejón, for its part, insists that it is planning to reroute the river in order to protect it.⁷⁸

Compounding this is the permanent lack of access to clean water by several groups. This clearly violates Act 5395, which states that human consumption of water should be prioritized before any other type of use.⁷⁹

b. Afro-Colombian Communities

Afro-Colombians (which in Colombia are a protected group) have also suffered numerous abuses related to coal. One of the most serious cases of forced displacement of Afro-descendant communities in Colombia is the case of Tabaco in La Guajira. In 2001, Cerrejón employees, along with armed guards, the police, and the army, violently displaced 700 residents by using bulldozers in order to expand the open-pit coal mine.⁸⁰ According to community leader Rogelio Ustate, although 14 years have gone by and despite a 2008 agreement⁸¹ with the company, the former residents of Tabaco are still waiting for the reconstruction of their community.⁸² Cerrejón has asserted that it is committed to resolving outstanding questions around the Tabaco displacement and “reuniting the divided community of Tabaco”.⁸³

This was also seen in the community in Don Jaca located between the Drummond and Glencore ports, whose displacement has caused them loss of their traditional fishing livelihood and thus of their culture and identity.⁸⁴

The impacts of these projects on Afro-descendant indigenous peoples' livelihoods arguably breach article 330 of Colombia's Constitution, which requires that exploitation of natural resources respect the cultural, economic and social integrity of Afro and indigenous communities.⁸⁵

c. Rural Communities

Rural communities (composed of ethnic and/or mestizo groups) have been severely affected by air pollution from coal mining, and its transport to the country's main Caribbean ports. Bosconia in Cesar is one of many towns that have been exposed for years to coal dust from trains transport coal through the territory.⁸⁶ Long-term exposure to coal dust throughout northern Colombia has resulted in health problems across communities, including cancer and respiratory diseases.⁸⁷ Towns have also been affected by the trains' noise pollution and vibrations, which can damage local infrastructure and the foundations of people's houses, and has brought about fatal accidents due to the lack of proper warning signs at train crossings.⁸⁸

In 2010, for the first time in Colombian history, the government ordered mining companies to resettle the towns of El Hatillo, Plan Bonito and Boquerón due to extreme air and water pollution. The towns are currently negotiating with Drummond, Glencore and Colombia Natural Resources. Although resettlement is the solution being ordered by the government, some advocates see it as another form of forced displacement of populations whose rights have already been violated, particularly for lack of their free, prior and informed consent.⁸⁹

d. Trade Unions and Workers

The legacy of coal has not only been felt by communities and their leaders, but by mine workers as well. According to a recent report by DanWatch, workers have reported conditions like black lung disease, lead poisoning, and silicosis,⁹⁰ caused by companies' failure to put in place sufficient mechanisms to prevent, cure or treat occupational illnesses and risks.⁹¹ Moreover, a number of workers have reported unsafe working conditions and inadequate wages, particularly for those who are subcontracted.⁹²

Union leaders have also been the target of death threats and in some cases have been killed. In one case, Drummond and Glencore allegedly paid paramilitary groups in el Cesar to protect their infrastructure and prevent further labor strikes.⁹³ Three Drummond trade union leaders were killed by paramilitaries allegedly paid by Drummond. A domestic court sentenced a Drummond subcontractor to prison for the killings.⁹⁴ Drummond denies having made payments to illegal groups, although former members of the paramilitary groups have testified to receiving payments from Drummond. The company has sued in a US court a group of American and Colombian lawyers who have been seeking compensation for the victims.⁹⁵

2. What lies ahead

A big sign greets those who enter the resettled communities of Chancleta and Roche: "Cerrejón: *Minería Responsable*" (Responsible Mining). Indeed, the company often showcases its projects for the

community as proof that it takes its corporate social responsibility seriously. For example, Cerrejón provided start-up funds for what it calls “productive projects” for families to explore alternate livelihoods.

According to London Mining Network, 96% of the livelihood projects failed in one community.⁹⁶ Some community members say their wishes to start farming projects have been ignored and they were advised to become taxi drivers or motorcycle mechanics instead.⁹⁷ Some other “productive projects” where agricultural land is provided are currently not operating—for lack of water that is largely used by Cerrejón.⁹⁸

The Colombian government itself, through its Comptroller’s Office, has found that mining is causing social, environmental, economic and cultural conflicts in the country, and resulting in important losses of land for communities.⁹⁹ Its 2013 study found that the presence of multinational mining companies produces two structural consequences in the country: a) the state stops directly intervening in the economic activity of the area; and, b) the social demands of farmers, indigenous groups and Afro-Colombians are not adequately met.¹⁰⁰

Violations that have already occurred need to be addressed. It is critical that the government enforce existing rulings and legislation that protect human rights and prevent further violations. Finally, the government and companies must promote the inclusive and respectful participation of affected communities in mineral extraction, as well as in the discussion of broader ways to ensure respect for human rights by business.

B. India

India is the third-largest consumer of coal in the world, generating approximately 80% of its electricity from coal. It is also the third-largest producer¹⁰¹ with a production of 613 MT of coal in 2013, and the third largest importer,¹⁰² as despite its vast reserves, it needs to compensate for the poor quality of its domestic coal. The high ash content of India’s coal pollutes twice as much as the coal it imports.

The government nationalized the coal industry through the establishment of Coal India Limited (CIL) in 1975 to oversee the entire country’s coal mining operations. CIL currently is 80% owned by the government and the remaining 20% is publicly traded.

In 1973, the Coal Mines (Nationalization) Act was passed. It consolidated the nationalization of all the mines and determined which companies were eligible to mine coal in India.

Coal mines are spread across fifteen states, with Odisha, Chhattisgarh and Jharkhand being the top coal producers.

This year, after almost 40 years of a state monopoly over coal mining in India, the government of India passed two game-changing laws—the Coal Mines Special Provisions Bill, and the Mines & Minerals Development and Regulation (MMDR) Bill¹⁰³—allowing private companies to mine and sell coal in India. These laws also made way for foreign investment in India’s coal sector.¹⁰⁴

To meet the continuous need for power, Piyush Goyal, Minister of State for Coal, recently pledged to double the use of domestic coal to more than a billion tons by 2019.¹⁰⁵

Number of coal plants	116
Coal reserves	60 billion MT (4 th -ranked globally)
Total installed production capacity of operating coal plants	169,000 MW
Annual coal production	649 million tons (3 rd -ranked globally)
Annual coal consumption	744 million tons (3 rd -ranked globally)
Net imports of coal	95 million tons
Companies that operate coal mines (partial list)	Coal India Limited (state-owned) Neyveli Lignite Singareni Collieries Adani Mining Jindal Steel & Power Reliance Power RPG Group Sasan Power

1. The Human Rights Impacts of the Coal Industry

a. Land rights

Large-scale land acquisitions with grossly inadequate compensation for those displaced, or “land grabs”, are widespread across the country, particularly for mining projects.¹⁰⁶ Both companies and governments at the national and state levels have been accused of acquiring land without the free, prior and informed consent of indigenous communities or the meaningful consultation of affected groups.

For example, tribal groups protested at the site of a coal-fired plant being built in Dumka district, Jharkhand, by CESC (part of the RPG Group conglomerate) in 2008 over alleged deprivation of their land. In a public hearing organized by a retired judge of the Delhi High Court villagers presented affidavits and testimonies with evidence that they had been misled into selling their land, that their signatures on some documents related to their land were coerced, and that some of these documents even appeared to be forged.¹⁰⁷ As a result, some villagers protested, and two were killed in clashes with police. The company insisted that it would use a minimal amount of farmland, and blamed local politicians for misleading members of community into opposing the project.¹⁰⁸

Welspun Energy reportedly acquired land for a thermal power plant in Mirzapur, Uttar Pradesh, “forcibly [and] at a meagre price by creating an atmosphere of fear...with the help of local property dealers, according to a report by Down To Earth and a local NGO coalition, Vindhya Bachao Movement. Responding to these accusations, the company insisted that it had not displaced farmers.¹⁰⁹ Despite these and related environmental concerns, the Government of India approved the project, granting environmental clearances, in 2014.¹¹⁰

Reliance Power’s Sasan Coal Power Project¹¹¹ in Sasan village, Singrauli district in Madhya Pradesh, built with a loan from the US Import-Export Bank¹¹² and certified under the United Nations Clean

Development Mechanism, has resulted in “forceful evictions,... intimidation by police and administration to accept paltry compensation for their lost land and houses, or else...”, with large families resettled into “tiny two room houses” much smaller than their former dwellings, according to a report by Carbon Market Watch.¹¹³ While some of the communities’ members were compensated, many lived in the forest and did not have deeds for their land and therefore did not receive compensation. Some protested the resettlements, but were beaten by local police and arrested; one villager, named Sudarshan, mysteriously disappeared in the night after refusing to vacate his land, and has never been found.¹¹⁴ Reliance says the resettlement village is “one of the most robust community development and corporate social responsibility initiatives by a power plant” in India. But the Los Angeles Times, in a report based on dozens of interviews with villagers, found that only a fraction of the 376 small concrete houses it built are occupied, with locals saying the homes are far from jobs and too small for farming.¹¹⁵

While these and many other cases present a gloomy picture of land acquisition without protection of affected people’s rights, in some cases plant construction has been halted due to difficulties presented in acquiring land, often caused by local opposition, such as the construction of Damodar Valley Corporation’s Thermal Power Plant at Raghunathpur in West Bengal¹¹⁶ and the Pakri-Barwadih coal plant in Hazaribagh, Jharkhand.¹¹⁷

b. Health impacts

Health impacts of coal mining are widespread, especially respiratory diseases. For example, people of the villages surrounding the Udupi Power Corporation plant in Karnataka, owned by Adani Power¹¹⁸ have protested to block further expansion of the plant over ongoing health problems and crop losses attributable to pollution from the plant, and no response from the state government to petitions seeking remedy.¹¹⁹ Specifically, fly ash spread from uncovered vehicles has resulted in respiratory and other health problems, with a 2012 expert report finding that “all respondents in the core zone complained of serious health problems due to the contaminated air, water and land”, and loss of livelihood for farmers whose crops were damaged by toxic mists from cooling towers, hazardous waste discharges into streams, and other pollution.¹²⁰

A 2013 report for Greenpeace India and two Indian research groups, carried out by a former World Bank official who had overseen the Bank’s work on pollution, attempted to quantify the national health impacts. It found that pollution from coal power plants is causing 80-120,000 premature deaths per year, and as many as 20 million new asthma cases. It concluded that coal-fired energy production, as currently conducted in India, is responsible for “hundreds of thousands of lives [lost]...and millions of asthma attacks, heart attacks, hospitalisations, lost workdays and associated costs...” It also found “adverse impacts are especially severe for the elderly, children, and...the poor [and] minority groups... are likely to be disproportionately exposed to the health risks and costs of fine particle pollution.”¹²¹

c. Labor issues

Mine workers are extremely prone to respiratory diseases including tuberculosis and asthma caused by inhaling coal dust for long periods, with companies failing to follow protocols to minimize coal dust, according to recent news reports. Doctors at some mines acknowledge that they lack the equipment and medicines they need to treat workers.¹²²

Fatal mine collapses and deaths also occur due to lack of safety protections in the mines and negligence by the owners. A large number of accidents have been reported in Indian coal mines, with CIL alone reporting an average of approximately 55 deaths and 200 serious accidents per year in recent years – and trade unionists insisting that many more worker deaths are never recorded.¹²³

d. Child labor

Apart from formal, licensed mines operated by large corporations, “rat hole” mines are widespread in India. As the name suggests, these are crudely built, narrow holes, hand-dug from the surface directly to the coal reserve underground. These holes can be as small as two feet in height: workers crawl through them, chipping away coal by hand, day and night. Those operating these mines have found the perfect workers: children.¹²⁴

Employment in the mines represents one of the worst forms of child labor. Despite a national ban, children work in rat hole coal mines in the Jaintia Hills of Meghalaya state for 12 hour shifts underground in flip-flops and jeans.¹²⁵

A study estimated 70,000 children work in these mines, most of whom were illegally trafficked from the neighboring countries of Bangladesh and Nepal.¹²⁶ The National Commission for Protection of Child Rights has confirmed these dangerous conditions.¹²⁷ A few years ago, local newspapers reported the discovery of skeletons in the mines, believed to be of child workers. No inquiry was conducted. According to a local NGO, children get trapped and die there, but are not recovered due to lack of means. They also are not reported due to their status as illegal migrants.¹²⁸

A sustained media campaign led the National Green Tribunal to pass a directive in April 2014 completely banning rat hole mining in the state of Meghalaya, but the state is petitioning the national government to permit and recognize informal mining, with improved safety measures.¹²⁹

e. Poverty & livelihoods

Despite the fact that coal companies have caused significant generation of employment, they have had major, countervailing detrimental effects on communities which had previously sustained themselves with farming, fishing, hunting and other activities.

The Tata Mundra Plant illustrates these contradictions. The World Bank’s International Finance Corporation, which financed the project, touted it for its support to local communities.¹³⁰ However, its effects on the Wagher fishing community, a Muslim minority identified as “a socially and educationally backward caste” by the government,¹³¹ in Gujarat contradicts these claims.

According to the report of an independent expert team, the affected communities were not adequately consulted,¹³² while the Asian Development Bank Compliance Review Panel found that the fisher folk were excluded from the consultation process during important parts of project planning.¹³³ The operations of the power plant devastated the community’s livelihood, having salinized fertile land and ground water, and caused both decline in the local fish population, and lasting health effects on the community.¹³⁴

With the destruction of their fishing livelihood, the community, with the support of local NGOs, filed lawsuits against the company. In response to the complaint, Tata stated that the issues raised by

the Wagher community were not specific to the Mundra Project but in fact were issues regarding Gujarat's coastline. Tata also insisted that it had a healthy working relationship with the community.¹³⁵

Chhattisgarh and Jharkhand, the states with the richest minerals in India and contain 40% of the country's coal reserves, also are two of the country's five poorest states.¹³⁶

In a 2013 mining disaster at the Kulda opencast coal mine, operated by a CIL subsidiary in the Basundhara-Garjanbahal region in Odisha, 14 local villagers were killed and many were injured.¹³⁷ The accident was a result of the height of the coal dump, which was above the stipulated limits. The victims were not authorized workers but people from a nearby community with very little economic activity; their livelihoods depended on scavenging coal from these mines. Since the mine company did not technically employ any of these villagers, their families were not given any compensation for the deaths. The management claimed that the locals were informed beforehand about the potential threat of venturing in the area. The local people claimed otherwise.¹³⁸

Loss of livelihood as a result of mining, due to deprivation of lands and harm to crops and natural resources without alternate work or means of subsistence, produces a trap of extreme poverty, leaving affected communities with few if any alternatives, and leading some to undertake life-threatening activities like illegally scavenging coal.

The Impacts of the Coal Industry on India's *Adivasis*

The *Adivasis*, officially referred to as the "scheduled tribes", are India's tribal peoples, making up 7.5% of country's population (104 million).¹³⁹ The highest concentration of *Adivasis* are in the states of Odisha, Chhattisgarh and Jharkhand, in the heart of India's coal belt, in addition to Madhya Pradesh and seven other states in North-East India. As these coal-bearing areas encompass land and resources that tribal communities have historically relied on for livelihoods and for cultural or sacred associations,¹⁴⁰ the *Adivasis*, who constitute the poorest stratum of Indian society, have suffered disproportionately from mining projects through disruption of their traditional ways of life and forced displacement.

The expansion of open cast coal mining in Jharkhand, for example, posed a major threat to its indigenous populations. Over 20 mines reportedly threaten the land, water and livelihoods of 200 *Adivasi* villages, under the expansion plans.¹⁴¹ People's Democracy reports¹⁴² that the Pachhwara coal mines of Jharkhand's Pakur district have left *Adivasi* peasants in abject poverty, with few or no jobs created for locals, as these jobs were given to outsiders. During the summer, people would walk for long distances to fetch water, as the level of underground water has dropped, allegedly due to mining activities. Coal dust also overwhelms locals, causing respiratory illnesses such as asthma. Forests and farmland of the *Santhali* peasants have been severely reduced by coal mining, leaving many with too little income to live on. They have thus been left to scavenge and to sell coal that falls off from trucks plying the roads.

Adivasi resistance to mining and displacement is widespread, with some examples of success in protecting their communities. In a path-breaking judgment,¹⁴³ the Supreme Court of India declared

that “there is nothing in the law which declares that all mineral wealth sub-soil rights vest in the State, on the other hand, the ownership of sub-soil/mineral wealth should normally follow the ownership of the land, unless the owner of the land is deprived of the same by some valid process.” And as a result of their protests, the indigenous communities of the Mahan forests in central India no longer face the threat of being evicted to make way for a giant coal mine. They stand vindicated, as Mahan will be not mined — for the time being.¹⁴⁴

2. What lies ahead

India faces contradictions between the drive to develop and industrialize, and the need to address the severe negative impacts of coal energy. In making major decisions on these questions, vulnerable populations’ rights must be put back at the forefront. Given that good laws are often on the books, but enforcement is largely lacking, civil society organizations have been addressing governance gaps, raising communities’ awareness, and organizing them to collectively claim their rights. It is crucial that a space be created for communities and their advocates to meaningfully participate in decisions that affect their lives.¹⁴⁵

C. South Africa

Commercial coal production in South Africa commenced in the late 19th century in response to the growing energy demands of the Kimberley diamond fields.¹⁴⁶ The discovery of gold at the Witwatersrand several years later similarly prompted the mining of coal fields in the area to meet the needs of the gold mines.¹⁴⁷

Coal has traditionally been the preferred source of energy in South Africa owing to the country’s extensive and easy-to-access reserves.¹⁴⁸ South Africa’s isolation during Apartheid further exacerbated this reliance on coal because alternative energy sources as abundant as coal were simply not available in the country.

Ninety percent of South Africa’s electricity is generated by coal-powered stations operated by the state energy company, Eskom.¹⁴⁹ Eskom has invested in a few renewable energy projects; however, the capacity generated by these is negligible. This is unfortunate, as natural conditions in South African are ideal for solar and wind-generated energy resources.

Company that operates the coal plants	Eskom
Number of coal plants owned by Eskom	15
Coal reserves	Estimates range from 30-53 billion tons (discrepancy due to disagreement regarding how much of this is recoverable).
Total installed production capacity of operating coal plants in MW	45,000 MW
Annual coal production	244 million tons
Annual coal consumption	168 million tons
Net exports of coal	56 million tons

Domestic coal use	77% of coal produced
Residential/domestic	2%
Industrial	45% (33% petro-chemical; 12% metallurgical)
Governmental/Electricity Supply	53%
Companies that operate coal mines	Anglo American Exxaro Sasol BHP Billiton Glencore
Primary countries that it exports to	China, India, EU, SADC
Companies, international financial institutions or governments providing major financing or technical expertise on coal mining or coal-fired power development	African Development Bank, World Bank, BHF Bank, part of Sal. Oppenheim Group (Germany), BNP Paribas (France), Calyon Credit Agricole (France), Commerzbank (Germany), HypoVereinsbank (Germany), KfW (Germany), and Natixis (France), CIC (France), Natixis (France), Société Générale (France), COFACE (France), and Crédit Agricole (France) ¹⁵⁰
Share of coal mining in the country's overall economy	2.1%

The National Environmental Management Act¹⁵¹ recognizes the right of workers to refuse work that is harmful to human health or the environment and to be informed of such dangers¹⁵². The same Act stipulates that sustainable development calls for the anticipation, prevention and avoidance of negative human and environmental impacts or, where this is not possible, for impacts to be minimized and remedied¹⁵³; those responsible for the negative impacts are legally responsible for the costs of prevention and remedy¹⁵⁴. But these protections have not been effective in containing negative environmental and human rights impacts of the coal industry.

1. The Human Rights Impacts of the Coal Industry

a. Health Impacts

Coal mining and coal-fired energy production in South Africa are centered in the Highveld region of Mpumalanga province in the east of the country. In 2007, the government declared this an air pollution Priority Area as a result of the area's exceedingly high levels of toxic air emissions, the vast majority of which was attributable to coal operations. The Waterberg area, another coal mining region, has also been declared an air pollution Priority Area.

Several studies have attested to the adverse human health impacts of this air, ground and water pollution caused by coal operations. Research by groundWork¹⁵⁵ has concluded that Eskom accounts for 54% of Mpumalanga's deaths related to air pollution-related cardiovascular diseases and 51% of both hospital admissions and deaths related to respiratory illnesses caused by outdoor air pollution.¹⁵⁶ The study also attributes a higher incidence of cancer, reproductive complications and fetal development problems to coal outputs in this region.¹⁵⁷

Research by Greenpeace¹⁵⁸ argues that 2,200 premature deaths in Mpumalanga (including 200 young children) are caused each year by Eskom emissions. It projects that excess emissions that would be permitted under an exemption that Eskom has sought from environmental regulations would cause approximately 20,000 premature deaths (including 1,600 young children) over the remaining life span of Eskom's coal plants.¹⁵⁹ Without confirming the figures of these NGO reports, Eskom itself largely recognizes the health implications of its operations, with one internal report finding that in Mpumalanga fatalities related to toxic air emissions could be as high as 550 per year and annual hospital admissions for illnesses related to toxic air emissions could exceed 100,000.¹⁶⁰ Publicly, Eskom does not answer questions about the health impacts of its power plants.¹⁶¹

In April 2015, 22 coal miners, who worked at Sasol's Mpumalanga operations for varying durations between 1971 and 2015, announced that they were instituting a civil claim against the company after contracting lung diseases during their employment. The miners allege that "Sasol failed to provide and maintain a working environment in its mines that was safe and without risk to the health of its employees and that it failed to comply with...[its legal] duties".¹⁶²

b. Water and food security

At 490 mm of rainfall per year, South Africa receives just over half of the global average.¹⁶³ Its limited water resources are under significant pressure from agricultural, industrial and domestic demand.

Coal's adverse impacts on water and high yield soils, and by implication on food security¹⁶⁴, are multiple and complex. Coal-fired energy generation is water-intensive: Eskom's total water usage is approximately 10,000 liters per second¹⁶⁵.

Coal mining also uses water intensively. Civil society groups have raised concerns about the integrity of the environmental authorization process for mines, because the Department of Mineral Resources both assesses applications for extraction rights, and is responsible for environmental regulation of mining – including assessing the impact of a proposed operation on water resources. The Centre for Environmental Rights (CER) has described this situation as "the minerals fox guarding the environmental henhouse"¹⁶⁶. Bench Marks Foundation says the Mining Ministry is too "conflicted" to effectively safeguard environmentally sensitive and protected areas, with "a revolving door between politicians and the mining houses" leading to the business case to grant licenses routinely overriding environmental concerns.¹⁶⁷

Communities and NGOs have also raised concerns about mining companies' failure to comply with regulatory orders. For example, Coal of Africa (CoAL), subsequent to receiving one of the highest fines ever for environmental non-compliance in 2010, proceeded to make unauthorized use of water. Government issued a directive instructing the company to desist from all unlawful water use. A coalition of NGOs together with affected communities obtained a court order to compel CoAL to desist.¹⁶⁸ In a recent report, one of the coalition members, Bench Marks Foundation lamented that "...[w]e constantly see... the exclusion of communities and civil society in decisions affecting these very important and affected stakeholders... [I]n May 2015, despite the intense opposition and the interdict, the Department of Mineral Resources granted CoAL the Mining Rights for its Makhado Project".¹⁶⁹ As Mphatlene Makaulule, of Dzumo La Mupo (Voice of Nature), observed: "...[t]he miners are taking our water that our community needs. They are taking away our drinking water, water for our crops and nature's water..."¹⁷⁰

The Waterberg area in Limpopo province is the new breeding ground for coal mines and coal-fired power stations operated by independent power producers. Under the Coal Baseload Independent Power Producer Procurement Program, the Minister of Energy has determined that 2500MW of “new coal” will be procured, despite water scarcity that could affect many livelihoods via shortages for agricultural irrigation, livestock and tourism.¹⁷¹

Acid mine drainage refers to the process by which mining creates acid water; when this water mixes with materials unearthed during mining, it can take on toxic minerals and heavy metals. This toxic run-off water can contaminate “...groundwater, streams, soil, plants, animals and humans...[and] can remain active for decades or centuries after a mine closes.”¹⁷² South Africa has legislation requiring measures to ensure that coal mining companies fund and assume responsibility for impacts of their mines post-closure, but compliance is frequently a challenge and enforcement sorely lacking.¹⁷³ Experts such as the Centre for Applied Legal Studies have warned that this process can cause farmlands that rural people depend on for food security to become “wastelands”.¹⁷⁴ Moreover, the large footprints of coal mines in Mpumalanga are causing some of the country’s most fertile grain-producing lands to be lost to mining, threatening food security and putting greater pressure on communally held land in other regions such as the Eastern Cape.¹⁷⁵

c. Gendered impacts

The impacts of coal affect poor women disproportionately, and in interrelated ways.

Women typically assume responsibility – material and otherwise – for their partners and children who suffer from the health impacts of coal. More often than not they do not have job security but generate income in the informal sector. Moreover, they are often marginalized in decision-making structures, particularly traditional ones.¹⁷⁶

In many cases, coal mines make little provision for housing and other infrastructure to support miners’ families. As a result men employed in coal operations can be separated from their families for extended periods, with women left to do all family work. Many mining towns feature heavy alcohol abuse and a thriving sex industry, which contribute to the spread of HIV/AIDS.

In February 2015, a group of grassroots women activists – many of them living close to coal sites in South Africa and neighboring countries – met to report on the negative impacts of Sasol’s operations, including among others pollution and ill health, displacement, loss of livelihoods, access to food and water, impacts on children, and suppression of their protests. Sasol responded that it had not received any recent complaints about the issues that the women raised. The women are now seeking to establish a collaborative platform to pressure coal companies to assume responsibility for their human rights impacts.¹⁷⁷

2. What lies ahead

In May 2015, thousands of South Africans marched on the French Consulate to protest Engie’s (formerly GDF Suez) investment in the Thabametsi coal plant, which was scheduled for construction. Protesters urged Engie to stop investing in dirty coal and to support the transition to greener energy sources in South Africa. In October 2015, Engie announced that it would no longer be investing in coal.¹⁷⁸

Community mobilizations have thus been instrumental in pushing back on the negative impacts of coal. However, while coal companies sometimes take measures to respond to community grievances, these efforts are often inadequate. A 2014 study by Bench Marks Foundation found that Anglo American and BHP Billiton’s grievance mechanisms were ineffective: the companies had failed to make community members aware of the mechanisms, and most ways to access the mechanisms assumed higher levels of literacy and education than prevail in the communities.¹⁷⁹ Both companies pledged to engage with the report’s findings and take them into account to improve their grievance mechanisms. Going forward, both companies and government bear responsibility for ensuring that workers and communities harmed by coal mining and coal-fired energy have access to remedies for these harms.

In its National Development Plan,¹⁸⁰ South Africa has articulated values to guide the country’s move away from dependence on coal by 2030 towards “an environmentally sustainable, climate-change resilient, low-carbon economy and just society... making communities less socioeconomically vulnerable...” This objective must be translated on the ground however, and in a process that involves meaningful participation by the communities most affected, including the workers.

Promises of Lavender: The Reality of Living Next to a Coal Mine

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To its North is the Kendal Power Station. To its South, there are three coal mines; one is operational and the other two have been abandoned. Indeed, the Arbor community in Mpumalanga, which is the center of the coal industry in South Africa, is a real fence line community that lives with coal mining every day.

When the mine wants to blast – which happens every day – it warns the people in nearby houses to leave their houses, and wait under the trees about a kilometer further until it is over. Old man Kgologweng, in that section, now lives in a low corrugated iron shack—a replacement of his old house, which had mostly collapsed as a result of blasting.

Arbor was a nice place to come and settle in, says Chief Skosana (that’s his name, he is not a chief), who settled in Arbor seven or eight years ago. He was attracted by its spacious feel, and the freedom of living without criminal elements. Other research reports¹⁸¹ that people were attracted by the possibility of informal coal mining from the abandoned mine, and harvesting firewood from the trees the mine had planted. The abandoned mine was one of 27 on the list for rehabilitation.

Things however changed as Continental Coal created an open pit coal mine on what is now one end of town. At first – in 2010 – the mine talked to the community. They made many promises. They would talk to people about their plans. They would hire people from the community with driving skills. They would have a project teaching people how to build, and help them gain certificates. There would be projects in agriculture, such as bee keeping, and sewing. It turned out that there was only one project. In 2012, five people were hired to plant lavender, harvest it and make perfume.

The project failed and there are no more lavender bushes left. But the worst is that the mine chose 10 people to represent the community in a forum, who now seem to be getting paid by the mine. The mine is not doing, complained the community members, what it was supposed to: to provide electricity and water, and to deal with the dust problem.

The dust from the coal mine is terrible. It is a thin black dust that makes you cough and makes people sick, they say. It gives you a type of tuberculosis. On a windy day, you cannot leave your house or your shack. “You cannot breathe in this dust”, says an old man who has built close to the mine road. Next to him is the young boy called Lucky, who has made his own miniature caterpillar machine from wire with plastic cold drink bottle bottoms fashioned into wheels. His caterpillar has a front box and string with which he lifts the soil outside the house – half soil, half coal dust – from one miniature mine heap to another. His reality is living with coal.

On our walk we discover coal heaps on every corner of the town. This coal, explain our hosts, is dumped each month, in the middle of the month, in heaps by coal mine workers. It is for people’s use. Unfortunately, this is unwashed coal, so it is rich in sulfur which creates a sharp smoke when it is burnt indoors. And the coal comes in big blocks, that still need to be crushed, and with pieces of grey shale in between, which doesn’t burn at all. Maybe, says one of our hosts, this is coal the mine doesn’t want anyway.

The last row of houses on the east side is right up against a big earth wall. Our hosts say this is a wall that was built to stop them from seeing what the mine is doing. They wonder if the mine plans to put dangerous waste on it. “No”, says Philip Morake, who had been a mineworker for many years, “it’s the overburden and the miners will just leave it there until they need it for backfilling”. He worked on this mine as a truck driver removing the coal from the open pit. But he left last year. He was a safety representative, and he knew that it was a mine worker’s right, under law, to refuse work under dangerous conditions. But the bosses want production, and you can’t get in their way. He explains that the first mine, Andrew Mine, dug a trench between themselves and the community to drain away the run-off from the heaps. But the trench is now interrupted by a road which channels the coal right into the community.

Originally, there was only Arbor colliery, a railway siding and an Indian family that they remember as “Ganesh”, who later moved. This family rented out rooms to people, including mine workers working for Andrew Mining, who found it convenient to stay there. Today, there must be between 3000 and 4000 people living there. They include mine workers.

There are few organizations in this settlement. There is an African Church, a primary school that offers Adult Basic Education in the evenings, two soccer teams (under 15 and under 23) with a packed soccer field over weekends, and lots of *shebeens*, which are formerly unlicensed drinking establishments that sprouted during the Apartheid era due to the liquor prohibitions among black and colored South Africans. What Sibongile would like to see is tar roads, RDP houses,¹⁸² a clinic, a community office and hall to meet in.

Everywhere there are children. They are playing in the yards, some of which have a floor of black coal dust. A small girl gives me a big smile. I smile back and then my heart sinks: what will become of her here? What is she breathing in every day? It is the coal dust churned up by the wind and the vehicles passing by, including mining vehicles. It is the carcinogens released by the burning coal

discard dumps (due to spontaneous combustion). It is the sulfur and other impurities released by coal burnt in her parents' shack. It is the pollution from the Kendal power station. This is the high price she will pay for living next to coal mines and a power station.

D. Egypt

In May 2013, almost one month before the ouster of President Mohamed Morsi, the Egyptian government stated that it was considering allowing cement factories to use coal as an alternative to address fuel shortages. At the time, the use of coal for energy was almost nonexistent, and Egyptian law did not regulate coal use, apart from a clear ban on its use in the vicinity of residential areas. The first Minister of Environment after Morsi's ouster, Laila Iskandar, stood firmly against the use of coal in energy production, and delayed the cabinet's decision to allow cement factories to use coal. The Minister of Tourism, whose industry would also be negatively affected by pollution, supported Iskandar.

Iskandar was among a group of cabinet members who were later removed from their positions. The new Minister of Environment has favored the use of coal in energy production. In April 2014, Egypt's cabinet approved the use of coal to generate energy, a move that was seen as supportive of the cement industry. Aside from cement and other energy-intensive industries, the government also decided to start using coal to address shortages in the national power supply.

In April 2015, the Prime Minister issued a decree that further weakened restrictions on the use of coal, particularly by expanding the permission for its use to a list of industries that had not previously been authorized. According to the decree, industries such as aluminum, cement and steel are now allowed to use coal as well. A coalition of NGOs has raised concerns over the environmental and health impacts of this decision, citing a 2014 Egyptian Environment Ministry study that estimated the health costs of coal use by the cement industry at \$3.9 billion per year, and the potential costs of coal use by the energy industry even higher. The amended regulations leave the door open to other industries being authorized to use coal by future decrees.¹⁸³ Environmental groups fear that this signals that this will not just be a temporary measure for the electricity deficit in Egypt, but rather a long-term decision to make Egypt dependent on coal for decades. Notably, all coal imports that took place before decision number 964 of 2015 were in fact illegal; cement companies could apply for exemptions to the import ban, but not one had done so.¹⁸⁴

Egypt is now constructing five coal-fired power plants. There are no official sources stating the size of imports, but a look into the number of private sector entities importing coal gives us an estimate of 3 million tons in 2014.¹⁸⁵ The top country sources for coal imports to Egypt are Russia, Ukraine, the United States, and China. Although coal accounts for a minimal amount of energy production in Egypt, precise recent figures are unavailable – but the share has likely increased significantly given the recent relaxing of regulations. Coal is currently being used in the industrial sector only, not by the energy sector.

Cement factories will likely be the first to rapidly increase use of imported coal. The following cement companies operate plants that now use coal, or are being retrofitted to use it: LaFarge, ItaliCementi, Misr-Beni Suef, Misr-Quena, Cemex (Asuit Cement Company), El Ammriya Cement

Company, Titan Cement Company, Al Sweedy for Cement, South-Valley for Cement, The National Cement Company, and Arabian Cement Company.¹⁸⁶

Even though the amendments of decision number 964 tightened some environmental standards, the decree did not adopt environmental standards as tight as comparable EU standards, as the government had committed to do, including, perhaps most importantly according to civil society observers, provisions on transparency, local communities' participation in the decision-making process, and access to information.¹⁸⁷

The European Bank for Reconstruction and Development (EBRD) is providing major financing for coal in Egypt. In correspondence with the Egyptian Center for Economic and Social Rights, the EBRD indicated that it plans to provide funding for cement companies in Egypt to convert their plants to coal.

1. Impacts of the Move to a Coal Industry

- a. Access to Information

The introduction of coal into Egypt has been shrouded in secrecy; the government has denied access to information about its decisions on coal. According to the Egyptian Initiative on Personal Rights, coal was approved “despite broad popular opposition and despite the objection of a big number of environment and energy experts and some ministers, including the Minister of Environment at the time.”¹⁸⁸ Until now, there are no official figures to even establish the amount of coal being brought into the country. Moreover, the Prime Minister’s decree no. 964 of 2015, which amended the regulations implementing the Law for the Protection of the Environment 4/1994, was taken in the absence of an elected parliament.¹⁸⁹ The current Minister of Environment Khaled Fahmy has said that the government intends to prioritize “clean coal” – i.e. coal in industrial and energy production that uses advanced technology to “scrub” emissions of pollutants. Business observers in Egypt are skeptical of this statement, however, given the significantly higher costs of “clean coal” plants. Sherif Abdel Messih, CEO of Future Energy Corporation in Egypt said, in response to the minister’s announcement, “What [the coal industry doesn’t] tell you is that the cost of such plants is so high it will never be built by any Egyptian businessman or government.”¹⁹⁰

According to Ahmed el Droubi, an environmental activist and co-founder of the civil society movement Egyptians Against Coal, extensive corruption and inefficiency in law enforcement call into question whether the Egyptian Environmental Affairs Agency (EEAA) can effectively implement environmental safeguards, monitor emissions, and issue fines, as it has the authority to do. According to Droubi, as well as a source in a transportation company servicing the coal industry, since the removal of former Minister of Environment Iskandar, there have been no penalties or fines recorded by the ministry concerning the utilization and transportation of coal. This is notable according to Droubi, since several cement factories used coal before the decree permitting them to do so, and before the EEAA approved modifications to these factories for the utilization of coal.

Egyptian NGOs opposing coal question how the government can ensure safe use of potentially hundreds of millions of tons of coal, given that they view the government as already ineffective at protecting the environment.¹⁹¹

b. Health Impacts

The Prime Minister's decree also undid a prohibition on the use of coal and other heavy fuels in residential areas. Under the new decree, the Prime Minister can authorize such use under "necessary conditions and to serve public interest," but civil society groups fear that companies' influence on the government will play a greater role than public interest considerations in these authorizations.¹⁹² Furthermore, the amendments give cement factories a five-year grace period before they are required to comply with the new, stricter standards on emissions.

Civil society organizations in Egypt have repeatedly warned against the severe negative effects of using coal on health and environment.¹⁹³ One worker we interviewed (who for security reasons asked to remain anonymous) from a transport company that serves the coal industry mentioned that there is a high rate of health impacts, especially respiratory illnesses, among the workers in the Alexandria port where coal is imported, and that there is a lack of awareness among the workers of the health impacts of their work.

c. Freedom of Association, Assembly & Expression

Following the lobbying by cement companies to push for coal's entry into Egypt, the Egyptians Against Coal movement was established. A coalition of leading NGOs including the Egyptian Center for Economic & Social Rights (ECESR), and Egyptian Initiative for Personal Rights came together with Egyptians Against Coal to oppose coal imports.

Shortly after the government decided to allow the use of coal in April 2014, it passed a freedom of assembly law that Egyptian human rights groups called "a legal shield to repression"¹⁹⁴ and that Human Rights Watch called "deeply restrictive".¹⁹⁵ With the law preventing activists from protesting and hosting public events, under threat of imprisonment, movements such as Egyptians Against Coal have been severely curtailed. El Droubi and Dr. Ragia El Gerzawy of Egyptian Initiative for Personal Rights both blame their anti-coal campaign's decline on the freedom of assembly law.¹⁹⁶

V. SIX MAIN FINDINGS

Across the four case studies above and a survey of older coal-producing countries like the United States, Australia, China, as well as new countries that are just about to start mining or using coal, we have found six common themes.

1. Coal is *not* cheap.

Coal is widely seen as a cheap energy source. It powered Western industrialization and is found in every region of the world, so Global South countries now see coal as their hope for catching up on industrial development.

This hope has no sound basis. Coal is supposedly cheap only because its full cost has never been included in its market price, and is routinely ignored in energy decision-making. Coal has consistently been accompanied by severe externalities such as harms to health, fundamental human

rights abuses, and environmental degradation. Instead of internalizing these costs so they are included in the price of coal, governments frequently support coal mining and coal-fired energy with direct subsidies and generous tax exemptions.¹⁹⁷

Companies are rarely held accountable for the *long-term* and *sustainable* rehabilitation of coal mines after they close. Around the world, there are tens of thousands of derelict mines that were simply abandoned by the companies, and the sites are often left unremediated, or repaired at taxpayer expense.

While the specific external costs will differ from one country and region to another, the costs of impacts captured in this report have been quantified. A review of research carried out to inform World Bank decision-making compared the external costs of coal-fired electricity generation to other forms. It found that the most credible study quantifying coal's costs, based on a large, multi-year, peer-reviewed study of lifecycle impacts, resulted in total costs per MWh for coal in 2010 exceeding the total costs for other forms of power generation (nuclear, natural gas, wind, biomass). This was because of the very high external costs of coal, based on impacts such as health effects in mining communities, air pollutants from combustion, effects of mercury, and contributions to climate change, swamped the advantages of coal-fired power's low explicit costs, causing its total costs to double its explicit costs.¹⁹⁸ These figures, with coal's costs roughly doubling when external costs were considered, were corroborated in a more specific study examining the costs due to contribution to climate change, human health effects of air and water pollution, and water consumption of the coal mines supplying Kusile power station in South Africa.¹⁹⁹

A scholarly study of coal in Appalachia,²⁰⁰ a large coal mining region in the United States, found that, examining the cost of coal in the value of life lost versus the economic benefit of coal, the costs exceeded its benefits by an estimated \$8-18 billion per year. The study also found that mortality rates in Appalachian counties increase with greater coal mining, affecting all segments of the population, not only the coal-mining workforce.

The Social Cost of Carbon (SCC), estimated by scientists and economists from the Interagency Working Group (IWG) formed by President Obama, is another attempt to quantify the costs of each ton of carbon emission, in which power generation is the single largest component (and coal is the largest fuel source) in terms of its climate impacts. The IWG currently estimates this at \$40 a ton.²⁰¹ A recent study by Stanford University pegs this at \$220, however, and it expects that the actual cost could be much higher²⁰² since it does not include social costs apart from climate impacts.

These limited attempts to quantify the costs of coal illustrate just how much we still do not know about what coal costs to communities, workers, governments and taxpayers in many countries in the Global South. Without accurately tallying the full costs, it is impossible to know if coal presents any net benefit at all.

And these figures do not even consider non-environmental social costs such as housing and poverty impacts of displacement of communities, suppression of protest, and other human rights impacts, which have proved more difficult to quantify.²⁰³ How does one put a dollar value on the cost to indigenous communities of no longer being able to dream in their land, or to carry out the spiritual and traditional practices that are essential to their identity?

2. Coal aggravates poverty locally – and may have little positive net economic effect nationally

Peabody Energy, one of the largest coal mining companies in the world, launched a campaign called “Advanced Energy for Life”—a supposed effort to end the “world’s number one human and environmental crisis”—energy poverty.²⁰⁴ The claim, repeated across the industry, is that cheap coal is the answer for the billions of people around the world who do not have access to electricity. Yet a study of projects to alleviate energy poverty by the Australia Institute “could not find a single example where coal companies have supported coal-powered energy poverty alleviation projects. The reason that even coal companies do not use coal-fired power to assist with energy poverty alleviation is that it is not economically rational to do so.” The study also provided data to challenge the coal industry’s claims that it drives world economic growth, and increases life expectancy and quality of life.²⁰⁵

As the cases of La Guajira and Cesar in Colombia, Chhattisgarh and Jharkhand in India, as well as Mpumalanga in South Africa show, coal-affected communities often end up being the poorest in their country. Entire economies are built around and become solely dependent on the coal mine or power plant, eclipsing other sources of livelihood that often provide greater independence and resilience to communities when coal prices fluctuate or when companies close altogether. Across these countries, communities living right next to coal mines or coal power plants often do not enjoy the electricity being generated next to them. They constantly have to compete with the coal company for water, which significantly affects their food security and ability to sustain their own productive livelihoods.

Research has shown that general poverty and childhood poverty rates are increased in the areas of Central Appalachia where mountaintop removal mining occurs, with the mining activity causing falling property values, increased volatility in employment, and decreased diversity in economic activity.²⁰⁶

Journalist Richard Martin, who recently published the book *Coal Wars: The Future of Energy and the Fate of the Planet*, after traveling to China and the coal regions of the United States, observed that coal brought jobs but not development. “... [T]here’s this odd, cultural double-mindedness about the coal industry that in many ways has been the economic lifeline for a lot of these places, but at the same time has kept these people in a state of dependency and inability, inflexibility, that prevents them from adapting to economic change... to these broad, global economic shifts.”²⁰⁷

A study of the socioeconomic impacts of coal mining in Appalachia showed a link between lower educational achievement and undiversified (coal-dependent) economies.²⁰⁸ Paradoxically, a 10% *increase* in coal-mining wages was correlated to a 6.5% *decrease* in secondary school enrollment, signaling that many chose to work in the coal-mining industry over completing their high school education.

These experiences in the United States are mirrored in coal-dependent Global South countries included in our case studies. Focusing narrowly on energy demand, often to fuel other industries, governments subject already poor and vulnerable communities like the fishing community of Wagher in India and Don Jaca in Colombia to forced displacement and deprivation of livelihoods. Even for those employed in coal mines, the benefits are often stacked against costs to their own health and safety from working in the mines, and the harms to their communities.

The International Covenant on Social, Economic and Cultural Rights enshrines the rights of individuals to “an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions,”²⁰⁹ which the UN Committee on Economic, Social and Cultural Rights has recognized includes the right to water.²¹⁰

3. Coal is a Global South problem that is fuelled by both the North and the South.

May Hermanus, former Chief Inspector of Mines of South Africa and a well-recognized expert on mining and sustainability, sees that the solution to the problems surrounding coal cannot realistically and effectively be undertaken by just one country. “It’s a race to the bottom,” argues Hermanus, pointing to the fact that the coal industry is a global one, where companies that are unconcerned with their social and environmental impacts can seek out countries with attractive regulatory frameworks.²¹¹ This research affirmed the global nature of the industry, as many of the same companies operate or plan to invest across the countries in the case studies and others—Glencore, BHP Billiton, Anglo American, Adani, Vale, Rio Tinto, Murray Energy, and more. No sustainable solutions can be had piecemeal in an industry that is transnational.

Cooperation should not just be at the level of the governments, but also that of social movements, activists and researcher-advocates. This should not just be done within countries, but across Global South countries, given that the human rights problems by the coal industry prove to be similar across different socio-political contexts and geographic locations.

4. Human rights violations around the coal industry thrive in weak and/or repressive governance structures.

Human rights violations generally thrive in the context of weak governance or repressive states. But these contexts have a particular multiplier effect on the impacts of coal-related abuses.

In the countries in this study, strong legislation regulating the coal industry generally does exist. The problem is in implementation. In South Africa for example, a 2014 report showed that Eskom purchased coal from 19 companies that had no water licenses.²¹² Compliance with environmental plans that companies submit as a prerequisite to obtaining mining licenses is often unenforced. Fulfillment of their social and labor plans is often assumed rather than verified.²¹³ Especially for a water-scarce country like South Africa, this failure of regulation is staggering. The problems are most acute around mine closure, as their closure plans are often unfunded, leaving the authorities with no leverage over the company, and the community with no means to remediate its land and other resources.

This is also the case in Egypt, whose current government routinely suppresses civil society. The right to access information, an integral part of the right of freedom of expression, becomes a mere formality in a country that does not allow its citizens to express dissent or to even seek official information on matters that affect public interest. How was the decision to welcome coal into the country taken? Were communities that are likely to be affected by the repeal of the prohibition on coal plants in residential neighborhoods consulted? How much coal is Egypt importing? A lack of transparency means those protections that do exist can easily go unenforced, and makes accountability for violations nearly impossible.

5. Corporate social responsibility is not enough. Accountability is essential.

Coal companies in the countries in this study often take special pride in their corporate social responsibility projects and the millions – and in some cases billions – of dollars that they have spent on these. It is true that coal companies put up schools, clinics, and livelihood projects, most often substituting for the government in impoverished places where the state may barely exist.

The record of community after community denouncing harms caused by coal shows that these are not enough. The actual violations of rights, in the form of killings, physical harm, loss of livelihood, damage to culture, health deterioration, and forced displacements cannot be “balanced” by corporate social responsibility projects. Companies must exercise due diligence to avoid human rights abuses not out of charity but out their responsibility to respect the human rights of workers and communities. Erring corporations should be held accountable by states, and adequate remedy provided to those whose rights have been infringed upon. If coal provides such clear net benefits as the industry and its proponents in government claim, it should be very straightforward for those harmed to share in the net gains – in other words, to be made more than whole. In most cases the “losers” from coal mining and power development rarely receive compensation that comes close to providing adequate remedy for the harms they have suffered.

Some coal companies have taken steps to address some of these impacts. Cerrejón Coal in Colombia and Anglo Coal in South Africa have adopted human rights commitments. Cerrejón recently shelved plans to double its coal production after indigenous communities objected to plans to divert 26 kilometers of the Ranchería River. It has asked NGO and academic experts to evaluate its human rights performance and make recommendations, which it has committed to follow. Yet both of these companies continue to face major concerns over the impacts of their operations.

Among energy companies, some European coal buyers have created the Bettercoal initiative. It includes a code for mining companies that they purchase from, covering transparency, human rights, and social and environmental performance. It does provide for site-level assessments, but these are largely carried out by coal mining companies themselves, with only one to date (Drummond in Colombia) conducting a third-party assessment – in a process that NGOs criticized as lacking independence or transparency and ignoring victims of violence or the need to provide remedies for abuse.²¹⁴ The initiative as a whole is entirely governed by energy companies that use coal – leaving it open to criticism from development organizations that it fails to include the voices of affected people, lacks transparency, and sidesteps the need for remedies for past abuses.²¹⁵

6. A just transition from coal is needed. A green economy alone is not the answer.

Given advances in the global climate campaign and the urgent need to act to stop climate change, it might seem inevitable that the world will soon move away from coal. However, whether in continuing to use coal or in transitioning out of it, human rights must be protected.

The very manner of transition can violate human rights, especially in countries that are almost fully reliant on coal for their energy needs such as India and South Africa. Coal mines and power plants

cannot be closed overnight, letting these countries go dark and seriously aggravating poverty in the societies as a whole.

Journalist Richard Martin highlights that while coal has brought environmental catastrophe, “there is still a human cost to its downfall.”²¹⁶ He writes, “We focus a lot on convincing people that coal is contributing to climate change, that climate change is a problem. But if we’re looking for political compromises... it seems the more pertinent argument is just convincing people that this isn’t going to destroy them in the process.”²¹⁷

The process of undertaking a just transition will be as important as its content. A top-down approach, which seeks to swiftly introduce changes without the buy-in of the community most affected, can fail despite the best intentions. For example, the decision of the National Green Tribunal of India to immediately ban all mining in Meghalaya state, hailed by environmental activists as a landmark legal victory, swept the state like a storm, leaving thousands of families, many of them migrants, without jobs. No one prepared the families – not the government, not civil society – for the day after the rat hole mines were plugged.

In an issue as complex as transitioning out of an industry that has become central to the economy of a community or a country, decision-making must be careful, inclusive and most likely time-consuming. Communities, who best know how they may have both benefited and been harmed by the coal industry, often resist because they see no other viable alternative to their dependency on coal. Within a rights-based approach, a transparent and participatory process must be led by those whose rights are most at stake.

According to Tracy-Lynn Humby, a professor at the University of Witwatersrand Law School, the problem is the idea that one can close a mine. “A mine never closes,” according to her, because once operations cease, informal settlers can move in, health impacts linger, spontaneous combustion and sinkholes imperil lives, and the issue of long-term and geographically wide-ranging rehabilitation takes decades and necessarily would involve several stakeholders, not least the company. Furthermore, companies usually try to cut costs as a mine closes, which can further weaken the mechanisms that would be needed to help a community recover. According to her, we need to move away from the idea of mine closure to models of long-term stewardship.²¹⁸

The necessity of having a gradual and inclusive process that is led by those most affected is equally important in the case of labor. While workers are often seen as those who stand to lose immediately from a transition from coal, the case of South Africa’s labor movement as well as the International Trade Union Confederation (ITUC) are clear examples of how labor can be engaged with constructively and how they can lead in planning for a just transition.

The ITUC has been actively lobbying for just transition to be included in the negotiating text for the Paris COP.²¹⁹ In South Africa, the labor unions themselves have joined forces with environmental groups in creating a plan for a just transition to renewable energy sources, which they expect can generate one million jobs (compared to around 76,000²²⁰ currently employed in the coal mining industry in the country). According to the One Million Jobs Campaign, they are “attacking the causes and consequences of climate change and global joblessness, not the cosmetics of the market.”

However, trade unions and other workers’ advocates do not only seek a shift to a green economy, which they warn can simply be turned into “green capitalism” that could perpetuate existing

weakness of unions, and the abuses that thrive in such a context.²²¹ The President of the National Union of Metalworkers of South Africa (NUMSA) warns that, “green jobs can be as indecent as blue or brown jobs... It can use cheap labor, exploit women and children, use labor brokers and be dangerous in terms of occupational health and safety.”²²²

Communities can start taking stock of their own strengths and what they can build on as they renew their economies and ways of life after coal. Retraining these workers requires significant investment, and a long-term plan that should start being implemented long before a mine approaches its final stages of existence. There are sufficient cases of successful transitions of formerly-heavily coal-dependent communities around the world to learn from.²²³ The transition was hard and costly, but nevertheless possible. Industrialized countries that have financed their growth on carbon-intensive models have a moral obligation to help poor countries avoid the same path, so should financially contribute to bottom-up models of “just transition” in the Global South.

A just transition should not just be about a “shallow change focused on protecting the sectors of the workforce most vulnerable to mitigation strategies,” but a “deep, transformative change to ensure both sustainability and justice in the move to a low carbon economy”, as South African researchers have stated.²²⁴

VI. CONCLUSION: NO, COAL IS NOT DYING

Vulnerable people from all corners of the world – from coastal villagers in Alaska to farmers in India and Kenya – have already demonstrated that climate change is an issue of human rights and justice. The demand for countries and companies to make commitments to limit greenhouse gases, and provide for adaptation to ongoing climate change, is at its core a demand for the protection of and respect for human rights. But the human rights arguments for limiting carbon emissions do not stop at climate impacts. As this report shows, the coal industry has also borne responsibility for abuses of workers’ and communities’ rights.

The target of limiting greenhouse gas emissions to achieve a halt of global warming at 2°C cannot be a narrowly scientific goal, looking only to future action and impacts. Measures to reach this target must also respect and protect other human rights: the rights of the poor in those countries without sufficient energy from clean sources to sustainable development that includes them, via access to clean energy among other means, and the rights of victims of abuses involving coal and other fossil fuels to real remedies.

Respecting these rights will begin by giving these people a central voice in plans for climate solutions, for counting the costs and benefits to them of both past practice and future plans – but also by going beyond numbers, to hear the stories and realities that these often voiceless people have to tell. Moreover, workers, who are often expected to stand to lose from moving away from coal, must have a central role in a just transition.

Coal’s plummeting prices in recent years have led companies, unsure that they will recoup their investments, to shelve some plans for marginal coal mining projects. But the dynamic toward reduced coal mining also makes coal as an energy source for poor countries *more* appealing: it appears even cheaper than in recent years, with so many of its costs externalized and foisted onto workers and society.

Beyond greenhouse gas targets that will slow and ultimately reverse the climate crisis, a solution with human rights and human dignity at its core requires a much deeper understanding of the full impacts of coal, other fossil fuels, their alternatives, and the green transition. Violations of human rights that have occurred in the context of fossil fuel extraction and use can continue, though perhaps in different forms, no matter what type of energy becomes dominant after Paris. The challenge to the negotiators and observers in Paris, then, is this: A strong climate accord is not sufficient. It must be based on human rights and justice, to protect the rights of the most vulnerable in society.

VII. RECOMMENDATIONS

In all these recommendations, it is crucial that participatory processes be created to include the voice of vulnerable groups and affected communities. Mere formal documents or processes are not sufficient if they are not grounded on the realities of people on the ground and are not owned by rights holders.

To Global South and Global North governments:

- Support strong climate and greenhouse gas targets at the COP21 with substantial funding for a “just transition” away from fossil fuels, involving representatives of workers in the coal industry as core stakeholders
- Coordinate their efforts towards an international regulatory framework on the coal industry that has become increasingly global, to prevent companies’ flight from one country to another that has more lax regulations in their activities
- Enforce legal protections for communities, the environment and workers in connection with coal mining and coal-fired power, and strengthen legislation where it does not meet international human rights standards – with a focus on vulnerable populations including indigenous peoples and marginalized racial groups, women, and children
- Ensure that judicial and administrative procedures provide effective, timely remedies that are accessible to workers in the coal industry and to communities affected by coal extraction and coal-fired energy

To coal companies:

- Adopt and implement a commitment to human rights in their operations and business relationships, including:
 - commissioning independent and community-driven human rights impact assessments to maximize benefit and avoid harm to all affected people and communities
 - creating community-driven and rights-respecting grievance mechanisms
- Commit to seeking free, prior and informed consent of indigenous peoples and meaningful consultation of all communities affected by projects, and to abiding by the process’s results.
- Engage affected communities in substantive and genuine discussions regarding reparations and remedies

- Diversify sources of revenue to become less reliant on coal in case greenhouse gas regulations and other measures to tackle externalities in production and use of coal make their current business models uneconomic.

To energy companies and investors:

- Require coal companies in their supply chain to take the actions laid out above

To investors:

- Divest from or refuse to invest in coal companies that violate human rights of their workers and of affected communities.

To civil society:

- Take steps toward closer collaboration and alignment of goals and tactics across climate, human rights, environmental justice, gender, indigenous peoples, land rights and labor rights movements

To university researchers and Global South governments:

- Fund and conduct participatory research to quantify the full social costs of coal mining and coal-fired energy production and to develop models for qualitative assessment of coal's impacts that take into account the full rights and narratives of affected people, with special attention on vulnerable groups

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