

# Leave the bones of Mother Earth in place: the liabilities left behind from Colombian coal exports

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*The Indigenous Peoples in the Colombian Caribbean view coal deposits as the bones of Mother Earth*

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- 2 Mao Yushi, Sheng Hong, and Yang Fuqiang, The True Cost of Coal (China: Greenpeace, The Energy Foundation, WWF, 2008). See also, Palmer, M. A., Bernhardt, E. S., Schlesinger, W. H., Eshleman, K. N., Fofoula-Georgiou, E., Hendryx, M. S., ... Wilcock, P. "Mountaintop Mining Consequences," Science, 2010; Epstein, P. R., Buonocore, J. J., Eckerle, K., Hendryx, M., Stout Iii, B. M., Heinberg, R., ... Glustrom, L., "Full Cost Accounting for the Life Cycle of Coal," Ann NY Acad Sci 1219 (2011): 73–98, doi:10.1111/j.1749-6632.2010.05890.x.; SE Bell and R York, "Coal, Injustice, and Environmental Destruction Introduction to the Special Issue on Coal and the Environment,"

## Introduction

Coal is one of the three main energy sources in the world. Coal, peat and oil shale were responsible for 43.9% of global CO<sub>2</sub> emissions while over the last decade coal has been the world's fastest growing energy source.<sup>1</sup> However, coal mining has a negative impact on the environment and human health throughout the extraction, transportation and combustion stages.<sup>2</sup>

In 2013, Colombia was the fifth largest net exporter of coal, after Indonesia, Australia, Russia and the US.<sup>3</sup> Although most of the world's 50 coal-producing countries use coal for domestic energy production, Colombia is a special case because it exports over 90% of its coal.<sup>4</sup> The coal exported by Colombia comes mainly from the Guajira and Cesar states in the Colombian Caribbean region. Coal production in Colombia has increased by 63% since 1999, with 89 million tons in 2014. Cesar's coal production has increased by 83%: from 9.7 million tons in 2000, to 57.1 million tons in 2013. Cesar's production overtook Guajira, traditionally the largest exporter, which in the same period increased its production by 48%, to 37.8 million tons in 2013.<sup>5</sup>

Colombia's coal mines, like many industries in the country, are filled with stories of displacement, terror, paramilitary violence and many fatal accidents. International organisations, have denounced human rights violations in coal mining areas, particularly due to cooperation between coal mining companies and paramilitaries. Mining companies have taken advantage of this alliance while paramilitaries have expelled thousands of inhabitants from areas where coal mining permits have been granted.<sup>6</sup>

Coal is one of the most important drivers of the numerous conflicts related to extractive industries particularly in the Caribbean Colombian region. These conflicts around the country principally affect the most impoverished and Indigenous and Afro-Colombian communities.<sup>7</sup> La Guajira, home to the biggest mine, remains one of the country's poorest states, with two out of three people living in poverty. Export-led exploitation is not benefiting the local population, as the resistance of local and Indigenous communities show. Meanwhile, with coal prices plummeting even faster than oil prices, government justifications for mining-led development are ringing increasingly hollow. This paper uncovers the political economy of coal

mining in Colombia to show who is benefiting and to make the argument that for the local population, for the country itself, and for the planet, it is time to leave the coal in the hole.

## The coal mining boom in Colombia and its conflicts

The expansion of large-scale coal mining in Colombia is driven by a combination of a boom in the international demand for coal and governmental neoliberal policies that consider mining as a way to bring about “development”. Through the Mining Code (Law 685 of 2001), the government promotes mining as a public utility with social interest in all branches and phases; arguing that coal extraction advances industrialisation, generates national and local development, increases exports, creates jobs, and state income. The Mining Code limits government participation to a regulatory role and leaves mining operations in the hands of the private sector.<sup>8</sup>

In Guajira and Cesar states, several multinational companies were granted open-pit coal mining concessions to extract and export coal over the past 20 years. The three main companies operating in the region are: Cerrejón (led by a multinational equally owned by BHP Billiton, Anglo American and Glencore-Xstrata) which reported 44% of total coal export in 2013; Drummond (a US-based company) responsible for 31% of total coal exports in 2013; and Prodeco (a subsidiary of the Switzerland-based Glencore-Xstrata), which exported 16% in 2013.<sup>9</sup>

The Colombian Constitution declares that the sub-soil is owned by the state. Under the Mining Code, however, the mining authority may authorise the exploitation of minerals through mining concessions. Consequently, landowners are forced to sell their lands, generating displacement and violating fundamental rights. Research demonstrates how coal mining companies in Guajira and Cesar are the agents behind the dispossession and displacement of Indigenous Wayuu and Afro-descendant communities.<sup>10</sup> While some communities were relocated because of mining expansion, other communities located close to the mines have been displaced due to dire environmental pollution and social conditions. Many communities have lost their traditional territories and cultural heritages.

The main impacts from coal extraction in the Colombian Caribbean region are: deterioration of flora, fauna and water sources; air pollution that generates an increase of respiratory diseases; social and cultural heterogeneity due to labour migration; displacement of Indigenous, Afro-descendent, and rural populations; loss of traditional agriculture; growth of “misery zones”; increased civil unrest such as union strikes and protests.<sup>11</sup>

In Cesar, social movements continue to denounce high levels of air pollution, resulting in respiratory disease, and river diversions – critical for local food security. Eusebio Garcia, coordinator of the environmental negotiation with mining companies stated at La Jagua de Ibirico:

Organization & Environment, 2012, <http://oae.sagepub.com/content/25/4/359.short>.; Emily Morrice and Ruth Colagiuri, “Coal Mining, Social Injustice and Health: A Universal Conflict of Power and Priorities.” Health & Place 19 (January 2013): 74–79, doi:10.1016/j.healthplace.2012.10.006.

- 3 IEA-International Energy Agency, “Key World Energy Statistics,” 2014, <http://www.iea.org/publications/freepublications/publication/KeyWorld2014.pdf>.
- 4 J. Wilde-Ramsing and Kristóf Rácz, Colombian Coal in Europe: Imports by Enel as a Case Study, 2014.
- 5 SIMCO, “Sistema de Información Minero Colombiano,” 2015, [http://www.upme.gov.co/generadorconsultas/Consulta\\_Exportaciones.aspx?idModulo=4](http://www.upme.gov.co/generadorconsultas/Consulta_Exportaciones.aspx?idModulo=4).
- 6 PAX, The Dark Side of Coal. Paramilitary Violence in the Mining Region of Cesar, Colombia (The Netherlands: PAX for Peace, 2014).
- 7 Mario Alejandro Pérez-Rincón, “Conflictos Ambientales En Colombia: Inventario, Caracterización Y Análisis,” in Minería En Colombia IV: Control Público, Memoria Y Justicia Socioeconómica, Movimientos Sociales Y Posconflicto, ed. Luis Jorge Garay, vol. 4 (Bogotá, Colombia: Contraloría General de la República, 2014), 492, [http://www.colombiapuntomedio.com/Portals/0/Archivos2014/Biblioteca2014/Libro\\_mineria\\_vol\\_IV\\_serie\\_final.pdf](http://www.colombiapuntomedio.com/Portals/0/Archivos2014/Biblioteca2014/Libro_mineria_vol_IV_serie_final.pdf).

8 Julio Fierro, Políticas Mineras En Colombia (ILSA Instituto Latinoamericano para una Sociedad y un Derecho Alternativo, 2012). See also, Alvaro Pardo, "La Conflictividad Por El Territorio, El Control de Los RNNR Y La Renta Minera. El Choque de Las Locomotoras Mineras En Colombia," in *Minería En Colombia II: Institucionalidad Y Territorio, Paradojas Y Conflicto*, ed. Luis Jorge Garay (Contraloría General de la República de Colombia, 2013), 143–91.

9 IEA-International Energy Agency, "Key World Energy Statistics," 2014, <http://www.iea.org/publications/freepublications/publication/KeyWorld2014.pdf>.

10 A Chomsky, GM Leech, and S Striffler, "The People Behind Colombian Coal: Mining, Multinationals and Human Rights," 2007.

11 Fabio Silva, "Las Paradojas de Una Bonanza: Impactos de La Actividad Carbonera En Los Departamentos Del Cesar Y Magdalena," ed. F Silva (Santa Marta, Colombia: Universidad del Magdalena y Colciencias, 2010).

12 Cristian Ternera, "El Carbón En El Cesar. Entre Abundancias, Miserias Y Conflictos: Etnografía de Una Realidad," in *Las Paradojas de Una Bonanza: Impactos de La Actividad Carbonera En Los Departamentos Del Cesar Y Magdalena*. Universidad Del Magdalena Y Colciencias., ed. F Silva (Santa Marta, Colombia. 235p., 2010).



*[...]Coal has brought us nothing good. . . . coal has only brought misery, poverty, famine. . . . we want things to be like they were before when we were a rice farming village. We were farmers and lived happily, we had a healthy environment, but today the irrational situation of coal mining concerns us. Coal mining is destroying the environment and water sources, all agricultural land and the source of our livelihoods, including the Perijá forest reserve where the water sources, aquifers and springs are located.*<sup>12</sup>

In 2012, the mining company Cerrejón began a diversion project of the Ranchería River, announcing that 500 million tons of coal under the river would generate royalty income for the local community. In Guajira, the Wayuu Indigenous Peoples protested against the diversion of the Ranchería river stating that for the past 30 years of mineral exploitation they had not seen any royalty income invested in their territory. La Guajira has a 64% poverty rate, the highest in Colombia. No population in the region has an sufficient water supply. Hospitals are often on strike because salaries have not been paid. Education ranks last in the country, and 50% of the Wayuu children suffer from malnutrition.

The deviation of the river undermines the survival of the Wayuu people.<sup>13</sup>

Because of the controversies around the diversion of this river, Cerrejón decided to suspend the project. However, in 2014 they announced another diversion project on a branch of the Ranchería called the Bruno stream. As a result of this total lack of respect for the previous years of struggle the Wayuu Indigenous people responded with:

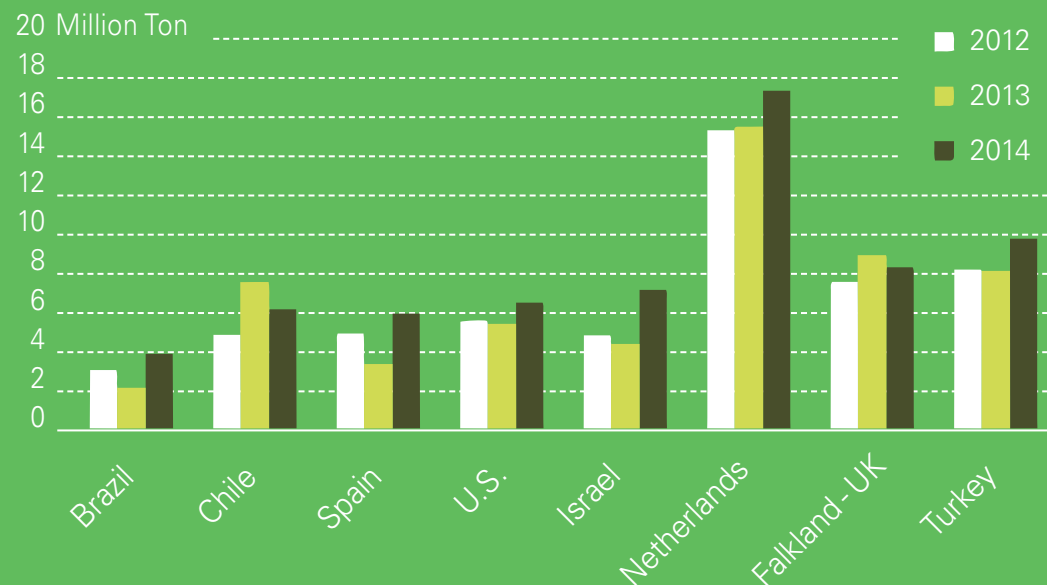
CERREJÓN ENOUGH! of that media discourse where you boast as our green ally. Who do you think you are, Cerrejón? With your mining you have diverted rivers, mountains and displaced communities. And now you intend to divert the Bruno stream... NO MORE!... Stop lying Cerrejón, because when there is thirst, the first to feel it is the land and if the land is thirsty, it cannot feed us, and it is precisely the thirst and hunger that affects those who live in La Guajira. The government is outraged because of the malnutrition and drought in La Guajira, but it does not condemn the assassins of our rivers, our culture, our people ... I tell you and I warn you, it's my voice and all the people seated in the peninsula of La Guajira: **¡NO TE METAS CON EL BRUNO NI CON NINGUNO!**<sup>14</sup>

## Lack of transparency: European imported Colombian coal

By 2014, Colombia continued to increase coal exports to 85Mton, while coal prices decreased 40%-50%. Most of the coal was exported to Europe (62.3%). In particular to the Netherlands (20.21%), Turkey (11.45%) and the Falkland Islands – UK (9,74%). While coal prices were plummeting, Colombia increased coal exports to these countries (See figure 1). The burning of the 85Mton on a global scale resulted in an estimated total emissions of 220.15 CO<sub>2</sub> tons (85 x 2.59).

Colombian coal destined for Europe is controversial in various European countries. Cerrejón, Drummond

Figure 1. Colombia Coal Export by Country destination



Source: SIMCO- Colombian Mining Information System, Knoema databases<sup>15</sup>

Figure 2. Coal Prices in nominal US\$



13 Letter from Vicenta Siosi Pino an indigenous Wayuu woman to the President Juan Manuel Santos. 2012 [http://www.observapaz.org/index.php?option=com\\_content&view=article&id=200:carta-de-una-indigena-wayuu-al-presidente-juan-manuel-santos&catid=2:propuestas-de-paz-de-las-organizaciones&Itemid=22](http://www.observapaz.org/index.php?option=com_content&view=article&id=200:carta-de-una-indigena-wayuu-al-presidente-juan-manuel-santos&catid=2:propuestas-de-paz-de-las-organizaciones&Itemid=22)

14 Letter from Miguel Iván Ramírez Boscán, Wayuu Indigenous to Cerrejón mining company. 2014 <http://www.las2orillas.co/tu-te-crees-cerrejon/>

15 Knoema. Coal Prices: Long Term Forecast to 2020 | Data and Charts. <http://knoema.es/xfakeuc/coal-prices-long-term-forecast-to-2020-data-and-charts?action=export&gadget=37121f8b-131e-d4e0-914d-18de508014ff#>





Source: Censat.org

## Why not leave the coal in the hole if the environmental liabilities are higher than the market price of coal?

hasl have documented the socio-environmental liabilities that occur at each stage in the life cycle (extraction, transport and combustion) and at different scales (local, national and global) of each ton of extracted coal.<sup>18</sup> The key socio-environmental liabilities identified arise from pollution, public health risks, water table depletion, land and ecosystem services losses, community displacement, sacred territories and cultural heritage loss, damages from transportation and shipping, and coal reserve loss.

The economic valuation of these liabilities determines that each ton of extracted coal in Cesar produces socio-environmental liabilities at the national level valued between US\$100.87/ton – US\$147.52/ton (updated to 2014 prices) during the extraction phase and until transportation to harbor for export.<sup>19</sup> These results are almost double compared to the market price of one ton of thermal coal, which in 2014 fluctuated between US\$56.5/ton - US\$71.3/ton (Figure 3). These values far exceed government royalties earned from coal concessions (See Figure 3). In Colombia coal mining companies must pay 10% of the coal price as royalties (different from tax on profits) for a production over 3 million tons per year.

Since 100% of extracted coal in Cesar is exported, further liabilities related to including transportation

and Prodeco sell almost 70% of their production to European power plants including those operated by: E.ON, GDF Suez, EDF, Enel, RWE, Iberdrola and Vattenfall. Research from the Centre for Research on Multinational Corporations (SOMO) have reported that Colombia is the single largest source of coal used in Dutch power plants, while Russia, the US, and South Africa play a smaller role in supplying Europe with coal. SOMO's reports revealed a "chronic and acute lack of transparency in the coal supply chain, effectively shielding coal-importing power companies from association with the adverse social and environmental conditions at the mines supplying them with fuel."<sup>16</sup>

European organisations, such as "Pax for Peace", state that European energy companies importing coal from Colombia should have the responsibility to investigate whether human rights are met. They state that two actions are necessary: First, to place a moratorium on European energy companies from buying coal if these companies do not respect human rights and, secondly, to include transparency in the coal chain into international agendas.<sup>17</sup>

16 J Wilde-Ramsing and T Steinweg, *The Black Box- Obscurity and Transparency in the Dutch Coal Supply Chain*, ed. Centre for Research on Multinational Corporations, 2012.

17 J. Wilde-Ramsing and Kristóf Rác, *Colombian Coal in Europe: Imports by Enel as a Case Study*, 2014.

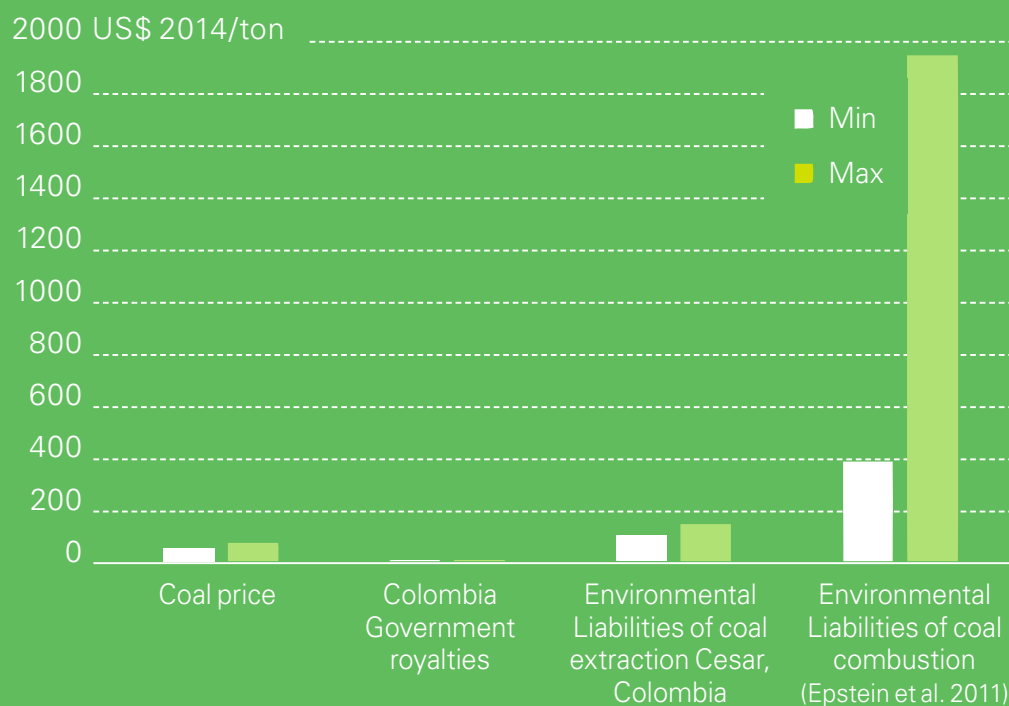
18 Andrea Cardoso. *Behind the life cycle of coal: socio-environmental liabilities of coal mining in Cesar, Colombia*, Forthcoming 2015.

to markets and combustion would significantly raise the costs of coal use, and would be estimated at US\$ 388.72/ton – US\$1,959.86/ton.<sup>21</sup>

Only examining the impacts at the national level, we see that a ton of coal from Cesar exported to Europe, the US or Asia, has other impacts beyond the uncompensated socio-environmental liabilities that have been estimated between US\$100.87/ton – US\$147.52/ton. Numerous impacts cannot even conceivably be calculated in monetary terms and should be accounted for in their own languages of valuation. These include displacement of local communities, infringement of territorial rights, health problems, frustration in the communities, irreversible depletion to the water table, biodiversity and ecosystem services losses, and human lives, among others.

Throughout the entire coal life cycle it is the local communities who bear the heaviest social and environmental costs. It is no coincidence that it is often those from the most impoverished communities, Indigenous and Afro-Colombian communities in the case of Guajira and Cesar; while on the other end of the life-cycle, the combustion of coal affects the communities at the surrounding areas of the power plants and on top of this also contribute to climate change whose impacts also accrue in highly unequal ways, prejudicing the most vulnerable.

**Figure 3. Coal Price vs. Coal mining socio-environmental liabilities**



Yet even a purely economic calculus, that takes into account the irreversible losses of coal reserves, water tables and biodiversity and ecosystem services leads to the need to question the coal boom in Colombia. Given the mismatch between the meager financial benefits and the disproportionate liabilities that are many times the magnitude of income, and which are increasingly exacerbated as coal prices drop, raises the question to both the Colombian government and to the world, why not leave “the bones” in the hole?

19 Ibid.

21 Based on the estimation given in Epstein, Paul R. et al. “Full cost accounting for the life cycle of coal.” *Annals of the New York Academy of Sciences* 1219.1 (2011): 73-98. They included the loss of public health, pollution and damage on climate change in their accounting of costs associated to coal combustion in electric power stations .