

Coal and Human Rights

Coal imports in Spain: Impacts on Colombia, Indonesia, Russia and South Africa



GREENPEACE

COAL AND HUMAN RIGHTS: THE IMPACTS OF SPAIN'S ELECTRICITY COMPANIES AND THEIR SUPPLY CHAIN

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INTRODUCTION

Today, the environmental and social impacts of extracting and burning coal for power generation are amply demonstrated. The current climate and human rights crisis in many countries calls into question the viability of maintaining economic activities based on the extraction and burning of coal, as these often have negative impacts on the enjoyment of human and collective rights. They are also incompatible with global emission reduction targets and the process of transition to a CO₂-neutral society.

Spain is a country that uses coal for electricity generation and other industrial uses (such as iron and steel and cement production) at a global level. In 2017, it was the country in the world that most increased its use of coal as a percentage and the one that most increased its emissions between 1990 and 2017 in Europe, mainly due to the burning of this fuel. For several years now, due to European regulations, coal extraction has been decreasing in Spain and subsidies have been granted to guarantee a fair and orderly closure of the mines where this fuel is extracted. However, the thermal plants have not yet been closed and the coal they currently burn comes mainly from imports from Colombia, Russia, Indonesia and South Africa, countries in which several documented cases demonstrate that coal mining is associated with human rights violations and serious environmental damage. These impacts are often unknown or ignored by those who consume electricity and, above all, by politicians and legislators in Spain.

The coal supply chains of energy companies in Spain, therefore, generate serious risks to human rights and the environment in third countries. However, the complexity and lack of transparency of Spanish energy companies about their coal supply chains would allow such companies not to respond effectively to the social and environmental impacts caused by their suppliers and subcontractors, while -at the same time- excusing themselves from any kind of liability for their direct or indirect involvement in human rights violations and environmental damage caused by such companies in their supply chains.

On 28 July 2017, the Spanish Council of Ministers approved the National Action Plan (NAP) on Business and Human Rights, which implements the United Nations Guiding Principles on Business and Human Rights (Guiding Principles), adopted in 2011 by the Human Rights Council. The Guiding Principles are based on three pillars: 1) the obligation of States to protect human rights, 2) the responsibility of companies to respect human rights and 3) access to reparation for victims of human rights violations. The pillars are related and each of them compiles a series of recommendations and proposals for preventing and remedying the adverse consequences of the activities of companies and those of their subsidiaries or business partners.

The second pillar of the Guiding Principles implies that companies prevent their own activities from causing or contributing to negative human rights impacts and address those impacts when they occur. They should also seek to prevent or mitigate negative

human rights impacts directly related to operations, products or services provided by their business relationships, even when they have not contributed to them. To this end, companies must have a human rights due diligence process in place to identify, prevent, mitigate and account for how they address their impact on human rights.

The **objective of this report** is to collect, examine and highlight the social and environmental conflicts related to the coal supply chains of energy companies that own thermal power plants in Spain. The report focuses on human rights violations according to the UN Guiding Principles and highlights the generation of poverty in local communities around mines in countries from which coal is imported, the loss of people's traditional livelihoods (agriculture, fishing and livestock), the adverse health effects of air, water and soil pollution, the loss of water sources, the forced displacement and resettlement of populations, the loss of territory and access to land, as well as the state of working conditions in mines.

The **methodology of the report** is based on documentary research that collects and consults information and materials on the international carbon trade, the energy and climate policies of Spain and the European Union; the negative impacts of burning coal; the responsibility of companies to respect human rights; human rights violations and environmental damage by coal mines, among other related issues. The report draws heavily on Greenpeace's previous research and available information and analysis from the Business and Human Rights Resource Centre.

The official websites of the Spanish government entities responsible for energy and climate policies, the Trade Map website, the Ministry of Industry, Trade and Tourism and the Spanish Chamber of Commerce databases and statistics, the annual reports on the activities and sustainability of the energy companies that own coal-fired power stations in Spain and the reports of the port authorities on coal transfers were also consulted. At the same time, some reports of the main allegations of human rights violations associated with coal mining in Colombia, Indonesia, Russia and South Africa were analysed. The data included in this report correspond to the information available up to 2019.

To complete the documentary review, requests for information were made to the companies that own the thermal power plants in Spain: Endesa, Iberdrola, EDP España, Viesgo and Naturgy. To this end, a questionnaire was drawn up and sent out to complete and detail information on their activities in the international coal trade, the origin and volumes of imported coal, the suppliers and subcontractors in their supply chains and the thermal power stations that use coal imported. In the same vein, to trace the imports of coal used by energy companies, the Spanish port authorities were consulted to request from them data on coal import volumes broken down by country of origin.

The **main limitation of the report** is the absence or insufficiency of official data, as well as its lack of public availability, on the origin and volumes of imported coal used by thermal power plants in Spain, about the suppliers and subcontracted companies with which energy companies maintain a commercial relationship throughout the supply chain. Not all the companies consulted responded to the request for information and those that

did so reserved the right to supply the information for reasons of competitiveness. The lack of this information has hampered the traceability, transparency and due diligence of the supply chains of the electricity companies owning the thermal power plants. Furthermore, the information provided by the port authorities on the volumes and origin of coal was limited to that in their annual reports in order not to affect the interest of their customers.

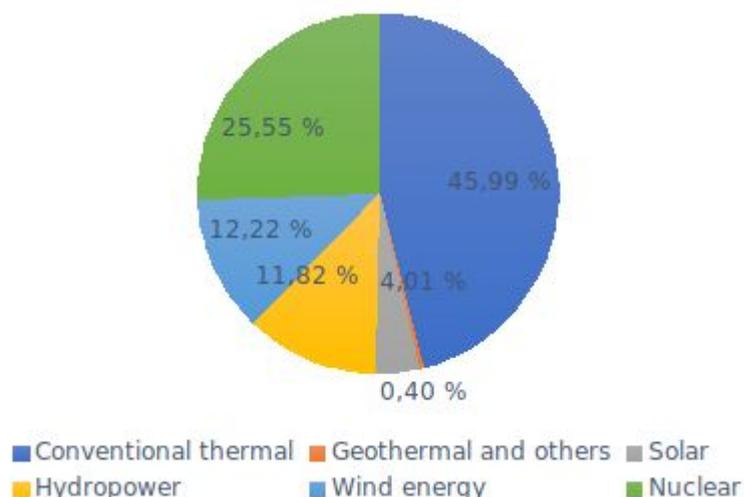
The coal landscape in Europe

In 2019, the European Union (EU) adopted a new climate and energy policy framework for the period up to 2030, which sets targets of reducing 40% of greenhouse gas emissions; improving EU energy efficiency by 30%; and increasing the share of renewable energy in total energy consumption by 32%.¹ These targets are pending revision following the adoption of the Paris Agreement and should be in line with scientific recommendations not to exceed the 1.5°C increase in global temperatures and contribute to a faster and imminent decarbonisation of the EU energy model.

Electricity and coal²

Electricity generation in the EU Member States still depends on about 50% of conventional thermal energy sources (coal, oil and gas), mainly coal, for several years the backbone of most European electricity systems.³ The EU has an installed coal capacity of 143 GW and more than 200 thermal power plants operating in 21 Member States.⁴

Figure 1: Power production by source at the EU-28 (2018)



¹ Framework on climate and energy by 2030. Available in: https://ec.europa.eu/clima/policies/strategies/2030_es

² Eurostat (2019). "Electricity generation statistics – first results". Disponible en: https://ec.europa.eu/eurostat/statistics-explained/index.php/Electricity_generation_statistics_%E2%80%93_first_results#Production_of_electricity

³ Eurostat (2018). "Producción e importaciones de energía"; at: <https://ec.europa.eu/eurostat/statistics-explained/pdfscache/14811.pdf>.

⁴ Europe Beyond Coal (2017). "Mapped: All of Europe's coal plants". Disponible en: <https://beyond-coal.eu/data/>

Source: Eurostat (2019). Electricity generation statistics-first results.

https://ec.europa.eu/eurostat/statistics-explained/index.php/Electricity_generation_statistics_%E2%80%93_93_first_results#Production_of_electricity

EU coal consumption, production and imports

In 2018, total EU coal consumption reached 596 million tonnes: 226 million tonnes of coal and 370 million tonnes of lignite.⁵ EU coal production was 74 million tonnes, 80% less than the 368 million tonnes in 1990. Poland, the Czech Republic (Czechia), Germany, the United Kingdom and Spain have been the main producers of hard coal in the EU. Meanwhile, lignite in the EU is produced mainly in the consuming countries. In 2017, Germany consumed 44% of the total lignite produced in the EU, followed by Poland (16%), the Czech Republic and Greece (both 10%), Bulgaria (9%) and Romania (7%).⁶

With regards EU coal imports from third countries, in 2017, 38.9% of coal imports came from Russia, the EU's main coal supplier in the last decade. 16.9% of coal imports came from Colombia. Between 2007 and 2015, Colombia doubled its share from 11.8% to 22.2% of the total. The United States was the third largest supplier of coal imports to the EU in 2017, accounting for 16.9% of the total. Australia, South Africa and Indonesia are also the main importers of coal into the EU.

Table 1: Quantity of imported coal (t) according to EU importing countries (28) and installed capacity (MW) in 2018

Importers	2014	2015	2016	2017	2018
	Imported quantity in Tons				
Germany	57.382.662	56.416.059	53.254.591	48.783.070	44.923.588
Austria	3.177.755	(*)	3.341.182	3.587.014	3.408.074
Belgium	6.727.686	5.612.814	5.592.703	(*)	(*)

⁵ Eurostat (2018). "Coal production and consumption statistics". Disponible en: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Coal_production_and_consumption_statistics#Consumption_and_production_of_hard_coal

⁶ Eurostat (2019). "Coal production and consumption statistics". Disponible en: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Coal_production_and_consumption_statistics#Consumption_and_production_of_hard_coal

Bulgaria	1.782.135	1.098.153	786.908	926.460	844.855
Cyprus	5.527	5.594	10	16.514	22.046
Croatia	961.420	1.001.600	1.080.743	(*)	498.952
Denmark	861	420	91	239	(*)
Slovakia	3.744.930	3.630.965	3.587.973	3.865.422	4.100.504
Slovenia	22.562	16.322	17.063	18.854	17.682
Spain ⁷	17.044.084,55	19.307.154,72	13.577.617,70	19.883.878,35	16.435.474,33
Estonia	82.347	7.420	17.291	(*)	40.099
Finland	5.436.918	3.539.621	3.905.536	(*)	(*)
France	14.281.342	13.516.227	12.884.256	15.042.030	13.469.447
Greece	205.241	333.637	331.060	(*)	459.185
Hungary	1.440.231	1.331.498	1.346.848	0	0
Ireland	1.839.601	2.418.414	1.766.517	1.348.689	1.781.180
Italy	19.563.224	0	(*)	(*)	14.807.404
Latonia	124.141	(*)	70.724	69.112	82.335
Lithuania	332.664	268.656	261.130	350.685	366.207
Luxemburg	84.374	66.728	70.455	65.511	51.164
Malta	15	18	65	71	16
The Netherlands	23.895.422	28.552.703	28.615.482	24.095.374	21.659.567
Poland	10.316.241	8.217.972	8.298.499	13.360.549	(*)
Portugal	4.433.216	5.098.811	(*)	5.625.546	4.604.356

⁷ Data of Spanish imports are based on statistics of the Ministry of Industry, Commerce and Tourism, included in the Datacomex database.

United Kingdom	38.545.884	21.783.172	7.634.119	(*)	(*)
Check Republic	3.189.548	2.941.123	3.224.914	(*)	3.570.210
Rumania	695.544	801.668	798.754	860.628	930.041
Sweden	2.763.017	2.720.808	3.039.051	2.672.351	(*)
TOTAL	218.077.731,55	122.271.499	153.503.582,70	140.571.997,35	132.072.386,33

Source Trade Map import data.

() There are no quantities recorded in the Trade Map database.*

Impacts of coal-fired power generation

The production of electricity from coal in the EU generates emissions of gases that not only contribute substantially to climate change, but also affect the enjoyment of human rights, as they have important repercussions on people's lives and health.

In 2018, coal-fired power plants released a total of 625 million tonnes of CO₂, equivalent to almost 15% of total EU greenhouse gas emissions¹⁰. Germany and Poland have almost 50% of Europe's installed coal capacity and are therefore also responsible for about 50% of the greenhouse gas emissions of all thermal power plants.¹¹

Emissions of other pollutant gases (nitrogen oxides, sulphur oxides and microscopic particles, etc.) affect the enjoyment of human rights that depend on a healthy environment, such as the right to life, health, food, water, housing and self-determination, among others. In 2016, there were 11,910 premature deaths associated with coal-fired power plant operations in the EU.¹² Environmental pollution from coal-fired power stations is more intense in certain vulnerable groups, such as children, the elderly or women. In this sense, 5,482 cases of chronic bronchitis in adults and 231,099 asthma attacks in children due to the activities of coal-fired power stations in the EU are documented. Ten companies are the main operators of the most polluting power stations in Europe: RWE (Germany), EPH (Germany), PGE (Poland), CEZ (Czech Republic), Uniper (Germany), Endesa (Spain), ENEA (Poland) STEAG (Germany), ZE PAK (Poland) BEH (Bulgaria).¹³

Coal in the EU in 2019

Coal-fired power generation in the EU decreased by 19% in the first half of 2019. Coal is being replaced by renewable sources such as wind and solar, but also by natural gas which is also a fossil fuel causing greenhouse gas emissions and is already starting to be sold at more competitive prices. On the positive side, a considerable reduction in greenhouse gas emissions is expected due to the decline in coal-fired power generation.¹⁴ However, there are still EU Member States that keep their coal-fired power plants in operation, which contributes to the continued environmental and social impacts of burning and extracting coal. It is estimated that by 2025 the installed capacity of coal in the EU will be 105 GW and 55-60 GW in 2030.¹⁵

¹⁰ Climate Action Network (CAN) Europe y Sandbag (2019). "Just transition or just talk? Draft National Energy and Climate Plans reveal some EU countries are planning to stick with coal power beyond 2030". Disponible en: https://sandbag.org.uk/wp-content/uploads/2019/05/Just-Transition-or-Just-Talk_.pdf, p. 9.

¹¹ Europe Beyond Coal (2017). "Mapped: All of Europe's coal plants". Disponible en: <https://beyond-coal.eu/data/>

¹² Barreira, A., Patierno, M., Ruiz-Bautista, C. (2019). *Un oscuro panorama: las secuelas del carbón*. Madrid: Instituto Internacional de Derecho y Medio Ambiente, p. 18.

¹³ Sandbag, Greenpeace Central and Eastern Europe, Europe Beyond Coal, European Environmental Bureau, Climate Action Network (CAN) Europe (2018). "Last Gasp. The coal companies making Europe sick". Disponible en: <https://beyond-coal.eu/last-gasp/>

¹⁴ Sandbag (2019). "Europe's Great Coal Collapse of 2019". Disponible en: https://sandbag.org.uk/wp-content/uploads/2019/07/2019-EU-Coal-Report-FIN_1.2.pdf

¹⁵ Kanellopoulos, K. (2018). "Scenario analysis of accelerated coal phase-out by 2030. A study on the European power system based on the EUCO27 scenario using the METIS model", EUR 29203 EN, Publications Office of the European Union,

The elimination of coal in the electricity systems of the EU Member States is motivated by: (1) the end of subsidies for non-competitive mines in the EU, (2) the EU's pollutant emission control policy and (3) the increase in the carbon price in the emissions market.

1) The first reason relates to Decision 2010/787/EU approving the granting of financial aid to coal mining in the Member States, under the condition that the mines will close by 31 December 2018. One of the objectives of the aid was to ensure an orderly transition and conversion of the sector. In 2019, the extraction of coal in the EU from the mines that received this aid for closure has come to an end, except for those mines that repay the aid received since 2011. However, there are still many open-cast lignite mines in Europe, and, on the other hand, the closure of the mines does not imply the abandonment of the use of coal for electricity generation, as the plants can continue to use imported coal.

The progressive cessation of coal mines without closing thermal power plants in the EU increases dependence on imported coal to meet energy demand. Thus, coal from mines with low production costs and good transport links to seaports is better positioned in international trade. Although in the first half of 2019, there has been a historical decline in the import of EU thermal coal from countries outside the region¹⁶, imports from some Member States have remained stable depending on the international market trend and changes in the energy model at national level.

Figure 2: International coal trade in 2015 (Mt)¹⁷



Source: Eurocoal, 2019

(2) The second reason is that in 2016 the more restrictive emission limit values for NO_x, SO₂ and particulate matter (PM10) contained in Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated

Luxembourg, 2018. Available at: http://publications.jrc.ec.europa.eu/repository/bitstream/JRC111438/acd_in_metis_final.pdf, pp. 5-6.

¹⁶ Roca, J. A. (2019). "Europa compra cada vez menos carbón: las importaciones alcanzan la cota más baja en lo que va de siglo". Disponible en: <https://elperiodicodelaenergia.com/europa-compra-cada-vez-menos-carbon-las-importaciones-alcanzan-la-cota-mas-baja-en-lo-que-va-de-siglo/>

¹⁷ Euracoal (2019). "International Coal Trade". Available at: <https://euracoal.eu/coal/international-coal-trade/>.

pollution prevention and control) entered into force.¹⁸ With the purpose of complying with emission limits for NOx, SO2 and particulate matter, coal-fired power plants in the EU must make investments to bring their installations into line with European standards by 2020 at the latest.

3) In 2019, the increase in the price of emission allowances is already beginning to be observed, which, after several years of remaining at very low prices, have reached an average of 27 euros from January to September.¹⁹

THE SITUATION OF COAL AND THERMAL POWER PLANTS IN SPAIN

Coal in the Spanish electricity system

In 2018, 55.3% of electricity production in Spain was generated from non-renewable sources, while 46.7% corresponded to renewable sources.²⁰ At national level, coal-fired power stations had an installed power of 10,030 MW and produced 37,274 GWh, which corresponds to 14.1% of total production and 17.2% less than the previous year. Despite the decrease in its share of electricity, coal continues to be the third largest source of electricity generation in Spain.

The 16 coal-fired power plants that contributed to national electricity generation in 2018 were: Aboño, Alcúdia, Andorra, Anllares, As Puentes, Compostilla, La Robla, Lada, Litoral de Almería, Los Barrios, Meirama, Narcea, Puentenuevo, Soto de la Ribera, Velilla and Pereda. These plants are located in the autonomous communities of Andalucía, Aragon, Asturias, Galicia, Castile and Leon and the Balearic Islands.

Climate impacts of coal-fired power plants in Spain

The production of electricity from coal contributed almost 40 million tonnes of CO₂ in 2018. The three plants that generated the most CO₂ emissions in that year were Endesa's²¹ As Pontes (7,936,709 tons) and Litoral (6,268,515 tons), and Aboño (7,075,973 tons), owned by EDP.²² These three plants are one of the 30 most polluting electricity generation facilities in Europe, as explained in Figure 3²³

¹⁸ Guidelines 2010/75/UE by the European Council and the European Parliament, 24 November 2010, on industrial emissions (integrated control and prevention of contamination) Available in:

<https://eur-lex.europa.eu/legal-content/ES/ALL/?uri=CELEX%3A32010L0075>

¹⁹ <https://www.sendeco2.com/es/precios-co2>

²⁰ RREE (2019). "El sistema eléctrico español 2018". Disponible en:

https://www.ree.es/sites/default/files/11_PUBLICACIONES/Documentos/InformesSistemaElectrico/2018/inf_sis_elec_ree_2018.pdf, p. 9.

²¹ 70 % of Endesa belongs to Enel Group, of Italy. See: <https://www.endesa.com/en/about/a201611-profile.html>

²² European Commission (2019). "Union Registry", in: https://ec.europa.eu/clima/policies/ets/registry_en#tab-0-1

²³ *National Geographic España* (2018). "Las empresas europeas más contaminantes de 2018". Disponible en: https://www.nationalgeographic.com.es/mundo-ng/empresas-europeas-mas-contaminantes-2018_14110?fbclid=IwAR0V2N6ykMqPw0QemFioh00DO8of8sPNBtFlctGf1FyBKijRULw71UvcXRvY

Figure 3: Emissions and CO₂ emission factor associated with national electricity generation (REE)



Table 4: Verified greenhouse gas emissions by installation in 2018²⁴

IDENTIFIER IN REGISTRIES	NAME OF FACILITIES	VERIFIED EMISSIONS 2018 (T-CO ₂ -EQ)
Endesa Generación, S.A. - As Pontes (Unidad de Producción Térmica)	Endesa Generación, S.A. - Puentes	7.936.709
EDP España, S.A. - Aboño 1 y 2	EDP España, S.A. - Aboño 1	7.075.973
Endesa Generación, S.A. - Litoral	Endesa Generación, S.A. - Litoral	6.268.515
Endesa Generación, S.A. - Teruel 1, 2 y 3	Endesa Generación - Teruel	3.127.503
Viesgo Producción, S.L.- Los Barrios	C.T- Los Barrios	2.841.694
Gas y Electricidad Generación, S.A.U. - Alcúdia	Gas y Electricidad Generación, S.A.U. - Alcúdia	2.439.588
Naturgy Generación, S.L.U. - Instalación CT Meirama	Central Térmica- Meirama	2.241.920
Endesa Generación, S.A. - Instalación UPT Compostilla	Endesa Generación, S.A. UPT- Compostilla	1.871.082
Iberdrola Generación, S.A.U. - Lada 3 y 4	Iberdrola Generación, S.A.U. - Lada 3 y 4	1.215.185
EDP España, S.A. - Soto Ribera 1, 2 y 3	Central Térmica de Soto de Ribera 1, 2 y 3	1.005.791
Viesgo Producción, S.L. - Puente Nuevo	C.T. - Puente Nuevo	960951
Naturgy Generación, S.L.U. - Central La Robla	Central Térmica La Robla	858715
Iberdrola Generación, S.A.U. - Grupo1 - Central térmica Velilla del Río Carrión	C.T. Velilla del Río Carrión, Grupo 1	424.925
Naturgy Generación, S.L.U. - Narcea 1,2 y 3	Central Térmica Narcea	371.070

²⁴ European Commission (2019). "Verified Emissions for 2018", in: https://ec.europa.eu/clima/policies/ets/registry_en#tab-0-1.

C.T. Anllares	C.T. Anllares	257.179
Total		38.896.800

Source: Own preparation

The uncertain future of coal-fired power plants in Spain

Although Spain's current energy and climate policy seems to be committed to reforming the national energy model, **the date of closure of coal-fired power plants operating in the country has not yet been defined in a binding instrument.** The Draft Integrated National Energy and Climate Plan (PNIEC, for its Spanish acronym) does not rule out the possibility of maintaining some coal-fired power stations beyond 2030, as the scenario envisages an installed capacity of 1,300 MW for coal.²⁵ The PNIEC assumes that the contribution of coal to the electricity system will decrease its share by 2030, **with minimal intervention by the authorities, unless there are risks of achieving the decarbonisation targets.**

In 2019, 16 thermal power plants are identified as operating, belonging to Endesa, Iberdrola, EDP España, Viesgo, Naturgy and Hunosa. However, the EU policy on emission control, carbon market prices and the regulation on the end of subsidies for non-competitive mines in the EU has direct consequences on the operation of thermal power plants in Spain. It is estimated that at least nine of the thermal power plants, plus half of the Alcúdia plant in Mallorca, will cease to operate before 2020. The remaining five would be in operation beyond 2020 awaiting authorisation to close them, or a binding instrument setting a date for the completion of energy generation from coal burning.

Table 5: The state of coal-fired power plants in Spain

Company	Coal-fired power plant	Planned Closure	Status of process
Endesa	As Pontes	Beyond 2020	In September 2019, it was announced that Endesa, despite the investments made, planned to accelerate the closure of its As Pontes and Litoral coal-fired power plants due to current market conditions (prices of CO2 rights and raw materials). The company has announced the cessation of its activity and is assessing the request for closure.
	Litoral		This plant is in a similar situation to As Pontes
	Alcúdia (G3+G4) (number of limited hours)		The fourth additional provision on thermal power plants of Law 10/2019 of 22 February on climate change and energy transition in the Autonomous Community of the Balearic Islands provides for the cessation of operation of groups 3 3 and 4 in 2025 ²⁶
	Compostilla	2020	It has an environmental impact report that does not foresee that the dismantling will generate "significant adverse effects" on the environment and the resolution authorizing the definitive closure is in process.

²⁵ Ministerio para la Transición Ecológica (2019). "Borrador del Plan Nacional Integrado de Energía y Clima 2021-2030". Disponible en: https://www.miteco.gob.es/es/cambio-climatico/participacion-publica/documentoparticipacionpublicaborradordelplannacionalintegradodeenergíayclima2021-2030_tcm30-487344.pdf, p. 40

²⁶ https://www.boe.es/diario_boe/txt.php?id=BOE-A-2019-5579.

	Andorra		Andorra has an environmental impact report that does not foresee that the dismantling will generate "significant adverse effects" on the environment and the resolution authorising the definitive closure is in process.
	Alcúdia (G1+G2)		In March 2019, an administrative resolution was published authorising the closure on 1 January 2020 of two of the four groups operating at the plant
Iberdrola	Lada	2020	In 2017, the MITECO was asked to close the Lada and Velilla plants.
	Velilla		They have an environmental impact report that does not foresee that the dismantling will generate "significant adverse effects" on the environment and the resolution authorising the definitive closure is in process.
EDP España	Aboño	Beyond 2020	EDP has made the investments to be able to continue operating beyond 2020 but has not announced the closing date.
	Soto de Ribera		
Viesgo	Los Barrios	Beyond 2020	Viesgo has made the investments to be able to continue operating beyond 2020 but has not announced the closing date.
	Puente Nuevo	2020	Viesgo has not made the investments for the plant to operate beyond 2020.
Naturgy	La Robla	2020	In January 2019, the company asked the government to close its coal-fired power plants.
	Narcea		Between June and July 2019, it presented the Meirama and Narcea dismantling plan for the environmental assessment process, while waiting for the closing authorization.
	Meirama		La Robla y Narcea already count on an environmental impact assessment that does not foresee that dismantling them would "create significant adverse effects" on the environment and the resolution authorising its definitive closure is ongoing
Naturgy y Endesa	Anllares	2020	This plant already has closure authorisation and will have to proceed with the partial dismantling of the plant within a maximum period of three years from the date on which the closure becomes effective ²⁷ .
Grupo Hunosa	La Pereda	Beyond 2020	This plant does not have a known closure plan and, being a low-power plant, does not have to comply with industrial emissions regulations.

INVESTMENTS FOR THE ADAPTATION OF PLANTS TO THE NEW EU EMISSION LIMITS

In June 2020, the exemption that frees coal-fired power stations, included in the National Transitional Plan, from complying with the more restrictive emission limit values contemplated in Directive 2010/75/EU, will conclude. Electricity companies, with the intention that their coal-fired power plants will operate beyond 2020, need to invest in desulphurisation and denitrification plants to comply with European air quality standards or, failing that, are conditioned to closure.

The companies EDP and Viesgo have made the necessary investments for the Soto de Ribera and Aboño (Group II) and Los Barrios plants, respectively. Endesa has also approved and made investments for the As Pontes and Litoral plants to operate beyond 2020. However, in September 2019, it was announced that the company had plans to accelerate the closure of these plants because current market conditions (prices of CO₂ rights and raw materials) have made these plants uncompetitive. The date of closure of the plants has yet to be confirmed and the company must request authorisation from the Ministry for Ecological Transition (MITECO) for the closure of the Anllares de Naturgy plant, which so far has only authorised the closure of the Anllares de Naturgy plant and the closure of Lada and Velilla de Iberdrola, Alcúdia, Teruel and Compostilla de Endesa,

²⁷ See Resolution 13 of November 2018 by the General Directory of Energy & Mines Policy by which the Goods Community of the Thermal Anllares Plant is authorized to close the Anllares Thermal Plant at Paramo del Sil (León), available at: https://www.boe.es/diario_boe/txt.php?id=BOE-A-2018-16788

de Narcea, La Robla and Meirama de Nurgy and Puente Nuevo de Viesgo are still being processed.

The role of imported coal in Spain

In 2019, there are no mining companies producing coal for thermal power stations, with the exception of the San Nicolás well, in Mieres (Asturias), whose coal production is destined for the operations of the La Pereda thermal power station, owned by the public company of the Hunosa Group. This situation generates a greater (absolute) dependence on imported coal from most of the coal-fired plants in operation.

In recent years, most of the coal burned by thermal power stations in Spain comes from abroad. In 2018, coal imports reached a total of 16,435,474.33 tons, equivalent to 17.3% less than in 2017. Imports from Asturias (19,517,964.24) and Galicia (15,253,987.74) highlight, places where the following plants are located: Aboño, Lada, Narcea, Soto de la Ribera, Meirama, As Pontes and La Pereda.

Table 6: Imports of coal in Spain

Año	2014	2015	2016	2017	2018	2019 September
Millions de euros	1.155,00	1.270,98	864,83	1.838,28	1.532,10	643,44
Tons	17.044.084,55	19.307.154,72	13.577.617,70	19.883.878,35	16.435.474,33	6.998.183,96

Source Datacomex

Table 7: Imports of coal (t) to Spain by year and by country of origin²⁸

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 January-September	
	IMPORT	TOTAL									
Colombia	2.570.947,64	3.648.779,17	6.302.489,94	2.527.810,61	5.623.108,68	6.283.602,79	3.408.313,96	4.575.725,70	3.478.878,36	703.071,43	38.419.656,84
Indonesia	2.261.268,00	3.312.057,03	5.633.947,34	3.392.386,00	3.936.464,47	3.851.389,00	3.996.866,08	4.257.490,64	4.493.734,03	2.270.389,07	35.135.602,58
Russia	804.666,80	1.913.716,91	3.328.986,60	2.388.533,28	2.387.667,64	4.059.945,12	2.504.355,27	5.031.328,94	3.694.599,15	1.830.328,09	26.113.799,72

²⁸

Datacomex, available at: <http://datacomex.comercio.es/>

South Africa	2.436.421,14	3.065.108,02	2.818.136,06	1.551.704,02	1.555.013,03	1.208.987,00	314.615,00	1.431.988,03	890.373,00	502.335,00	15.272.345,29
U.S.A	1.928.359,61	1.591.662,99	2.245.964,40	1.811.693,44	1.296.117,18	1.356.032,57	1.181.910,29	1.770.217,68	1.458.102,36	518.210,56	14.640.060,51
Australia	1.671.746,34	1.996.269,00	1.350.337,00	1.005.997,00	915.610,00	1.251.582,00	1.361.149,07	1.071.572,00	1.334.156,65	658.451,00	11.958.419,06
Other	792.076,05	1.014.789,74	1.073.959,81	1.299.702,70	1.330.103,54	1.295.616,23	1.992.318,32	1.745.555,37	1.085.630,78	515.398,81	12.145.151,35
Total	12.465.485,57	16.542.382,85	22.753.821,14	13.977.827,05	17.044.084,55	19.307.154,72	13.577.617,70	19.883.878,35	16.435.474,33	6.998.183,96	158.985.910,22

As for the origin of imports, data from the Secretary of State for Trade of Spain, show that the four countries from which the largest amount of imported coal comes from 2010 to September 2019 are: Colombia, Indonesia, Russia, and South Africa. In 2018, Indonesia was the main supplier of coal to Spain, covering a market share of 27.34%. Russia took second place, with a market share of 22.48%. Third place went to Colombia, with a market share of 21.17%. Colombia's coal imports have experienced a significant decrease compared to the 2015 imports of 6,283,602.79 tonnes.

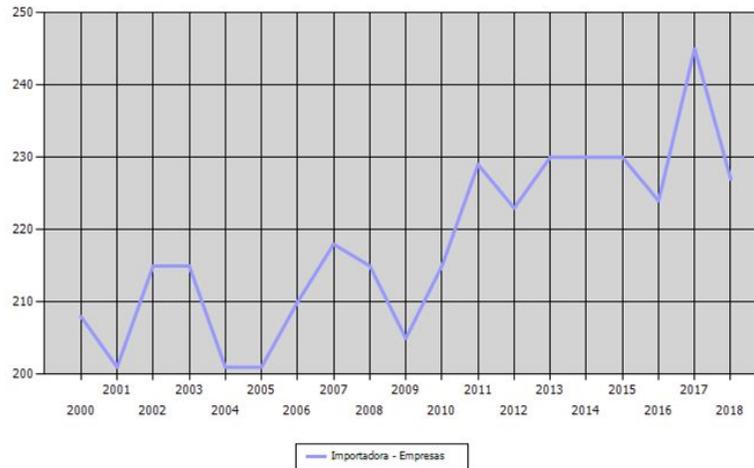
According to information from the Ministry of Industry, Trade and Tourism (MINCOTUR for its Spanish acronym), some 1041 operators²⁹ (which may or may not have the legal form of a company) have imported coal in the period between 2000 and September 2019. In 2017, there was a record 245 operators who imported coal from different countries during various periods of the year. Of the 1041 operators in the period in question, at least 109 have, on one or more occasions, imported various volumes of coal directly from one or more of the main countries from which Spain imports coal: Colombia (52), Indonesia (14), Russia (61) and South Africa (43).³⁰

In the same period, the MINCOTUR database also registers operators in Spain who have made several imports with different volumes of coal from Germany (361 operators), France (130 operators) and the Netherlands (181 operators). These countries are importers of coal from Australia, Colombia, the United States, South Africa and Russia. It is therefore possible to assume that the coal imported by Spain from other European countries originates in a third country, beyond the EU. However, there is no publicly available data to confirm the true origin of coal moving between the different ports of the EU Member States.

²⁹ The number 1,041 corresponds to the total import operators that have carried out at least one import operation in the period between 2000 and September 2019. If it had more than one operation, it would only compute once. When disaggregating the annual information, the sum of import operators per year is larger than the total of the period consulted, because it is computed only once.

³⁰ Although it can give the impression that there are few companies, the MINCOTUR database only computes those that have carried out at least one import operation. That is, in general, these companies may have imported different volumes of coal in several monthly periods in the same year. However, the database does not allow to identify the years in which each of the registered companies have carried out import operations, nor their volumes of imported coal.

Figure 4: Evolution of the number of companies with coal import operations (2000-September 2019)³¹



Energy companies do not usually provide information on the origin of the coal they use in their power plant operations, neither. Only Endesa states in its 2018 Activity Report that the company contracted 9.4 million tonnes of imported coal, of which it has transported 7.6 million tonnes under its charter portfolio, mainly from Indonesia (70%), Colombia (21%) and the rest from the Baltic and the United States (12%).³² However, it does not specifically indicate the quantity and origin of coal used by each of its thermal power plants in operation. **In the consultation made to the companies on the quantity and origin of the coal used in their thermal power stations, Naturgy responded that the countries where they buy coal is reserved information for reasons of competitiveness. Endesa, EDP Spain, Iberdrola, Viesgo did not answer the question.**

Figure 5: Main coal supplier markets for Spain (2018)

³¹ "DataEmpresas. Estadísticas del comercio exterior español". Available at: http://datacomex.comercio.es/principal_comex_em.aspx.

³² Endesa (2019). "Informe de Actividades 2018". Disponible en: https://www.endesa.com/content/dam/enel-es/home/inversores/infoeconomicafinanciera/informes anuales/documentos/2019/publicado/IA_2018.pdf, p. 37 y 78



Source: Trade Map³³

According to the information compiled for this report, due to the proximity of the facilities, it is estimated that coal imported from the Port of A Coruña is destined for the plants of Compostilla and Meirama. In this Spanish port, energy products are the most relevant of the goods moved. In 2017, the traffic of coal in this port experienced an increase that added up to 45% of the total of solid bulks. The unloading of coal registered a total of 1,286,262 tons.

The coal imported in the Port El Ferrol is used to cover the demand of As Pontes and even Meirama. The imported coal is transported from the Port of Ferrol, which, according to data from the Port Authority Ferrol-San Cibrao, in 2018, 4,730,189.61 tons of coal were unloaded in this port,³⁴ while in 2017 a total of 33 ships were unloaded with 4,796,068 tons of thermal coal, mainly from Indonesia. Coal represents between 0-10% of the total goods of the Port of Ferrol. Most of the Indonesian cargo is thermal coal.

The Port of El Musel, for its part, supplies several coal-fired power stations, including Velilla, Lada, Aboño, Soto de Ribera, Narcea and La Robla. In this port, the traffic of thermal coal in the Port of El Musel registered a total of 3,767,057 tons in 2018, which corresponded to 22% of the total of solid bulks.³⁵ To meet the demand for coal, the stevedoring company, Marítima del Principado S. L., has begun the procedures to expand its activity of storage, classification, screening and mixing of coal. This expansion would allow it to store up to 500,000 tons of anthracite mainly from Russia, according to the promoter of the project. The anthracite would serve to cover the demand of coal of the thermal power stations and other Asturian industries and of bordering provinces.

For its part, the unloading of thermal coal at the Port of Santander in 2017 was 275,786 tonnes³⁶, which also supplies coal to the Lada and Velilla plants.

³³ Trade Map: https://www.trademap.org/Country_SelProductCountry_TS.aspx?nvpm=3%7c724%7c%7c%7c%7c2701%7c%7c%7c4%7c1%7c1%7c1%7c2%7c1%7c2%7c1%7c1

³⁴ Autoridad Portuaria de Ferrol-San Cibrao (2019). "Memoria de Anual 2018". Disponible en: https://www.apfsc.com/wp-content/uploads/2019/07/memoria_2018.pdf, p. 55

³⁵ Autoridad Portuaria de Gijón (2018). "Memoria anual 2018". Disponible en: <https://www.puertogijon.es/wp-content/uploads/2019/08/MEMORIA-Puerto-Gij%C3%B3n-2018.pdf>, p. 13

³⁶ Autoridad Portuaria de Santander (2017). "Memoria anual 2017". Disponible en: <http://www.puertosantander.es/Memoria/17/Memoria2017.pdf>, p. 73

For the operations of the Litoral thermal power station, coal is used that enters through the Endesa terminal in the Port of Carboneras.³⁷ **In 2018, this port registered an increase in the movement of coal, reaching a total of 3,433,206 tons of coal.**³⁸ The fuel used in the plant is coal imported from Colombia, Russia and South Africa.³⁹ The Ribera II quay at the Port of Carboneras, concessioned to Endesa, has also experienced a 35.42% increase in traffic since 2017 in the distribution of coal to Mediterranean ports. In 2018, there was an increase which, in percentage terms, represents an increase of 17.33%.⁴⁰

In the case of the Alcúdia plant, coal arrives from the ports of Carboneras and Tarragona. The landing of coal in the Port of Alcúdia reached a total of 1,028,372 tons in 2018, of which 1,026,952 tons come from the peninsula and 1,420 tons from abroad. Meanwhile, in the Port of Tarragona, in 2018, the landing of coal was 3,031,805 tons, of which 2,103,774 tons come from abroad. The coal imported from this port has also been used to cover the demand of the Andorran power station.

The Los Barrios power station, located in the bay of Algeciras, was built to receive the imported coal that is unloaded at the port, whose coal unloading pier is owned by Endesa, which has a terminal for mooring and unmooring, unloading ships and handling solid bulks at the Los Barrios Thermal Power Station. The port of Algeciras registered 1,335,092 tons of foreign coal in 2017.

THE RESPONSIBILITY OF COMPANIES TO RESPECT HUMAN RIGHTS AND PROTECT THE ENVIRONMENT IN SPAIN

Despite the Spanish Government's commitment to implement the UN Guiding Principles, the responsibility of companies to respect human rights and protect the environment remains in Spain with a purely voluntary approach, which has proved insufficient for companies to implement due diligence processes to identify, prevent, mitigate and account for the potential and actual human rights impacts caused wholly or partially by their activities, or directly linked to their operations, their products or the services provided by their business relationships.

The National Action Plan (PAN) has a "vocation to raise awareness and promote human rights among business, public and private actors. For this reason, it lacks appropriate measures that include mandatory regulations to ensure that companies implement due diligence processes, in accordance with the second pillar of the Guiding Principles. The only measure envisaged in the NAP is that the Government will promote the implementation of the OECD Due Diligence Guidelines for the Responsible Management

³⁷ Cfr. "Declaración Ambiental 2017 UPT Litoral Almería". Available at: <https://www.endesa.com/content/dam/enel-es/home/sostenibilidad/medioambiente/gestionambiental/documentos/2017/declaracion-medioambiental-endesa-generacion-upt-litoral-almeria-firmado.pdf>

³⁸ Autoridad Portuaria de Almería (2018). "Memoria Anual del Puerto de Almería". Disponible en: <https://apalmeria.com/wp-content/uploads/2019/09/memoria-2018-af.pdf>, p. 75

³⁹ CSN (2012). "Estudio del impacto radiológico de las centrales térmicas de carbón sobre sus entornos". Disponible en: <https://www.csn.es/documents/10182/27786/INT-04-27+Estudio+del+impacto+radiol%C3%B3gico+de+las+centrales+t%C3%A9rmicas+de+carb%C3%B3n+sobre+sus+entornos>, p. 78

⁴⁰ Autoridad Portuaria de Almería (2018). "Memoria Anual del Puerto de Almería". Disponible en: <https://apalmeria.com/wp-content/uploads/2019/09/memoria-2018-af.pdf>, pp. 11-12

of Supply Chains for minerals from conflict and high-risk areas. However, it does not contain concrete actions to implement this measure.

Only some laws in Spain require certain companies to carry out environmental impact or occupational risk assessments, maintain environmental management systems, or disclose non-financial information, including a description of the due diligence procedures applied for the identification, assessment, prevention and mitigation of risks and significant impacts on human rights and the environment and for verification and control, as well as the measures that have been adopted.

An example of this is that Law 11/2018 on non-financial information and diversity, which seeks to be exhaustive and precise on the content of the non-financial information statement, presents some weaknesses such as the lack of a sanctioning regime in the event of non-compliance, of a control body for monitoring and supervision of the obligation to present non-financial information, of a definition of the figure of the independent verifier and of performance indicators, among others.⁴¹ The practice of disclosure of non-financial information by Spanish companies is still far from the objective of identifying risks in order to improve sustainability and increase the confidence of investors, consumers and society in general.

For its part, the second pillar of the UN Guiding Principles indicates that the responsibility to respect human rights constitutes a global standard of conduct applicable to all companies, wherever they operate, and that it exists irrespective of the ability or willingness of States to fulfil their own human rights obligations. Therefore, the lack of standards at the national level to ensure respect for human rights in the context of corporate activities does not imply that companies do not address the negative impact on human rights.

The responsibility to respect human rights requires companies to prevent their own activities from causing or contributing to negative human rights impacts and to address those impacts when they occur. They should also seek to prevent or mitigate negative human rights impacts directly related to operations, products or services provided by their business relationships, even when they have not contributed to them. To this end, companies must have a human rights due diligence process in place to identify, prevent, mitigate and account for how they address their impact on human rights. This process should include assessing the actual and potential impact of human rights activities, integrating findings, and acting on them; monitoring responses; and communicating how negative consequences are addressed.

The environmental and human rights commitments of electricity companies in Spain

The environmental and human rights commitments that the companies operating coal-fired power plants (Endesa, Iberdrola, EDP España, Viesgo and Naturgy) in Spain have said they respect are:

⁴¹ Vázquez, O. (2019). "Ley de información no financiera. Retos y oportunidades". Disponible en: <https://observatoriorsc.org/ley-de-informacion-no-financiera-retos-y-oportunidades/ley-informacion-no-financiera-retos-y-oportunidades/>

ENVIRONMENT AND CLIMATE CHANGE

- The five companies count on commitments to protect the environment, mitigate their environmental impacts, manage environmental risks appropriately, fulfill and respect the environmental legislation, among other issues
- However, their climate commitments are not ambitious enough to reach the goals of the Paris Agreement
- Four out of the five companies establish commitments to contribute to the struggle against climate change, through de-carbonisation and promotion of renewable energies
- Only Endesa has specific objectives to reduce emissions at the short, mid and long term
- EDP and Viesgo do not consider the closure of their thermal coal plants within their climate commitments

Human rights and due diligence

Endesa, Iberdrola, EDP and Naturgy have public commitments to respect human rights in accordance with the UN Guiding Principles. The second pillar of the UN Guiding Principles states that the responsibility to respect human rights implies that companies prevent their own activities from causing or contributing to negative human rights consequences and deal with those consequences when they occur. They should also seek to prevent or mitigate negative human rights consequences directly related to operations, products or services provided by their business relationships, even when they have not contributed to them. To this end, companies must have a human rights due diligence process in place to identify, prevent, mitigate and account for how they address their impact on human rights. This process should include assessing the actual and potential impact of human rights activities, integrating findings, and acting on them; monitoring responses; and communicating how negative consequences are addressed.

Supply chain and human rights: The scope of companies' commitment to respect human rights encompasses not only their activities and those of their subsidiaries, but also all their business relationships, including their suppliers, contractors and external collaborators. Companies often include clauses in contracts with suppliers that respect human rights, corporate social responsibility or adhere to company principles and values. Failure to comply with these clauses may result in termination of the contract.

Transparency in the coal supply chain: The transparency of electricity companies' coal supply chains is still opaque, as companies do not provide data on coal suppliers. Information from companies on how they ensure respect for human rights in companies and trading partners in coal supply chains is limited. No company provides enough information on suppliers at risk of human rights violations. This makes it difficult for stakeholders to assess and monitor the due diligence processes applied by companies in the coal supply chain.

Bettercoal initiative

Bettercoal is an initiative launched in 2012 by European companies in the energy sector to continuously improve corporate responsibility in the coal supply chain. However, it should not be forgotten that the activity being verified is the extraction of a natural resource whose negative impacts have been amply demonstrated. On the one hand, the extraction of coal not only generates negative impacts and differences in the human and labour rights of the people involved in the operations, but also of the people and communities that are in the vicinity of the mines. On the other hand, coal is the main responsible for global climate change. Therefore, coal extraction maintains an energy system dependent on a fuel that generates significant emissions of CO₂ and other highly polluting gases (nitrogen oxides, sulphur and microscopic particles, etc.) that contribute significantly to climate change and its negative impacts on people and the environment, which is incompatible with the objectives set out in the Paris Agreement. Despite the objective of the Bettercoal initiative, it cannot be ignored that it is an initiative regulated by the electricity companies themselves, beyond any external control. Bettercoal does not certify supplier companies in the coal supply chain, but rather it is a system that verifies the information provided by suppliers on the performance of coal production sites in accordance with the principles of the Bettercoal Code. The initiative therefore independently evaluates coal mining operations through the Supplier Assessment Process⁴².

Four out of the five electric companies that use imported coal for their thermal power plant operations in Spain were members of the Bettercoal initiative until 2018: Endesa, Iberdrola, EDP and Naturgy. Iberdrola announced in early 2019 that it will not renew its membership of the initiative due to the closure of its thermal power plants and its minimal participation in the world coal market. In 2019, only Naturgy and Endesa are members of the EDP initiative.⁴³

Endesa maintains its voluntary commitment to remain a member of the initiative throughout 2019 to ensure that the company's management of the world's coal market is sustainable.⁴⁴

For its part, Naturgy reports that during 2018, 94% of imported coal came from suppliers that met the standards of the Bettercoal Code.⁴⁵ Iberdrola and EDP Spain do not report activities related to the implementation of the Bettercoal initiative in 2018.

⁴² Bettercoal (2018). "Assessment Manual". Disponible en: https://bettercoal.org/wp-content/uploads/2018/07/Bettercoal-Assessment-Manual_v1.pdf

⁴³ See: <https://bettercoal.org/membership/>

⁴⁴ Endesa (2019). "Informe de Actividades 2018". Disponible en: https://www.endesa.com/content/dam/enel-es/home/inversores/infoeconomicafinanciera/informesanuales/documentos/2019/publicado/IA_2018.pdf, p. 300

⁴⁵ Naturgy (2019). "Informe de Responsabilidad Corporativa 2018". Available at: https://www.naturgy.com/sostenibilidad/gestion_de_la_sostenibilidad/informes_de_responsabilidad_corporativa, p. 111

THE HUMAN RIGHTS SITUATION OF LOCAL COMMUNITIES IN COLOMBIA, INDONESIA, SOUTH AFRICA AND RUSSIA, THE MAIN COUNTRIES EXPORTING COAL TO SPAIN

The human rights situation of local communities in the main countries exporting coal to Spain is presented: Colombia, Russia, Indonesia and South Africa. These countries were chosen as case studies because they are among the main suppliers of coal globally, have been the main exporters of coal to Spain in the period 2010-2019 and have particular features, such as the dynamics of systematic human rights violations that occur around coal mining such as: criminalization and repression of the right to protest, environmental pollution, tax benefits that favour companies and impoverish communities, among others.

Coal mining is one of the activities that makes more indiscriminate use of water, both for the process of cleaning coal and to mitigate the spread of dust produced with its extraction, generating a negative impact on ecosystems and surrounding communities, whose access to water becomes restricted and limited. The right to land is another of the complexities of the list, since the displacement of entire communities is a common denominator that comes with the mining concessions granted, the lands of common use and indigenous territories are invaded and usurped, ignoring the aspirations of these peoples to assume control of their own institutions and ways of life and of their economic development and to maintain and strengthen their identities, languages and religions, within the framework of the States in which they live.

In order to provide an adequate context for descriptions of the impacts of mining on territories, it can be observed de facto that the regulatory frameworks in which coal mining is carried out are weak and are designed to considerably benefit the extractive industry, while the participation of civil society in decision-making is increasingly reduced, the right to protest and free expression are constantly violated with repressive acts coming from the public force and the private security of companies, in addition to the increase in the accumulation of natural resources in the hands of a few.

COLOMBIA

At present, oil, coal and gold are the main exploitation and export goods in Colombia. Due to their high demand in the international market, the arrival of transnationals in the country and extraction projects have structurally impacted the economy and the dynamics of local communities, with political, social and environmental repercussions, by State policies to adapt to international investment, in a context of complex environments, characterized by: the current armed conflict; the critical political and social transition brought about by the signing of the peace agreements with the FARC guerrilla after six decades of armed conflict; the volatility of international markets and the historical debt to historically violated subjects of special protection, such as women, children, indigenous peoples and Afro-descendants, among others.

Cerrejón (part of Anglo American, BHP Billiton and Glencore) is the coal company in La Guajira that extracts 108,000 tons of coal/day for export. Cerrejón initially settled in the municipalities of Albania, Hatonuevo, Maicao and Barrancas, whose economies were essentially dedicated to agriculture and trade.

With Cerrejón came the expropriation of land, air pollution, the loss of land use for agriculture and livestock, the control of water sources and their pollution,⁴⁶ affecting mainly the Wayuu indigenous people, who, due to their matrilineal character, lead women to play a central role within these communities, as well as black or Afro-Colombian communities.

The impacts on the environment and on the local communities that Cerrejón has had are mainly centred on the scarcity of water (including the diversion of two main streams and the extinction of 17 more), related to the construction of a dam on the region's main river, the Ranchería; likewise, the mining company has been denounced by several Wayuu communities and by civil society organizations for the contamination of tributaries and soils with coal dust and residual material.⁴⁷

In addition, the first paramilitary checkpoints in the region were registered in 2002 and, following the military takeover by these extreme right-wing groups, some 1,500 people were victims of forced displacement, in parallel with economic studies on the decision to build the dam. The flooding for the dam meant contamination and an increase in diseases, such as dengue fever, and the displacement of inhabitants of towns such as Caracolí and Piñoncito, among others, who had to abandon the lands they had occupied for years.⁴⁸

Forced displacements are also part of the list of problems that Cerrejón caused, as the purchase of low-cost farms led to the appropriation of peasant, Afro-descendant and indigenous lands. However, these were not the only problems.

The violent evictions of indigenous and Afro-Colombian communities, forced to relocate, using the private security of the company and the public force (police, army and mobile anti-riot squad, ESMAD [for its Spanish acronym]), made it clear that economic interests are a priority for the State rather than the protection and guarantee of human rights.

Since 2000, Cerrejón has expropriated and displaced, with the consent of the national government and the public force, the following communities: Tabaco; Manantial, Oreganal; El Descanso; Sarahíta; Espinal; Caracolí; La Horqueta; Roche and Las Casitas, of which only five communities have been resettled⁴⁹.

Table 8. Communities displaced and/or resettled due to coal extraction

Communities	Ethnic group	Community stop existing	Year when displacement and/or resettlement started
Tabaco	Afro Colombian	Yes	2001

⁴⁶ Universidad de La Guajira (2016). "Análisis sobre el Proyecto Cerrejón de Desviación del Arroyo Bruno para seguir el plan de extracción de carbón", https://www.business-humanrights.org/sites/default/files/documents/analisis_arroyo_bruno.pdf

⁴⁷ "Las Huellas del Cerrejón" (2017). Disponible en: <https://www.youtube.com/watch?v=ryssy7pJhJI>

⁴⁸ CINEP (2012). "Represa del río Ranchería: falsas promesas de desarrollo". Disponible en: https://www.cinep.org.co/publicaciones/PDFS/20120701.represa_rancheria75.pdf

⁴⁹ Ibid.

El Descanso	Afro Colombian	Yes	1997
Palmarito	Afro Colombian & indigenous	Yes	1996
Oreganal	Afro Colombian	No	1995-1997
Sarahíta	Afro Colombian	Yes	1997
Jamiche	Indigenous	No	1988-1989
El Espinal	Indigenous	No	1991-1993
Manantial	Afro Colombian	Yes	1985
Caracolí	Afro Colombian & indigenous	Yes	1991-1993
Cabezaepero	Indigenous	Yes	1997
Las Mulas	Indigenous	Yes	1986-1989

Source: Prepared from community testimonies by CINEP/PPP Team, 2014-2015⁵⁰

In the department of Cesar, Drummond, Colombia National Resources (CNR) and Prodeco (a subsidiary of Glencore) are the companies that currently extract coal.

Drummond faces complaints about disasters, such as the environmental damage caused by the irresponsible loading of coal in Santa Marta Bay; complaints about processes of "involuntary resettlement" of entire communities due to the atmospheric pollution generated by coal dust; and complaints about environmental pollution and personal injuries committed by private security forces.⁵¹ It has also received sanctions for violations of labour rights, especially for illegal subcontracting.⁵² The corporation is currently facing serious allegations of supposed links with paramilitary groups,⁵³ an issue that will be analysed by the Commission for the Clarification of the Truth and the Special Peace Jurisdiction, despite the denial of the facts by the company.⁵⁴

Figure 6: Trajectory of the social struggles associated with the extraction of coal, gold and oil in Colombia, 2001-2011

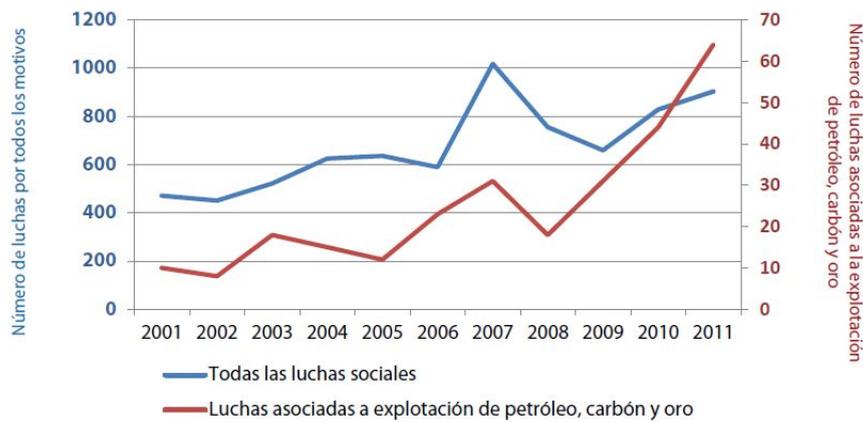
⁵⁰ CINEP (2016). Informe Especial: "Minería, conflictos agrarios y ambientales en el sur de La Guajira". Disponible en: https://www.cinep.org.co/publicaciones/PDFS/20160501.informe_especial_mineria.pdf p. 18

⁵¹ Ibidem

⁵² Business & Human Rights Resource Centre (2016). "Colombia: autoridades laborales sancionan a Drummond y Cerrejón, entre 40 empresas, por tercerización laboral; incluye declaración de Drummond". <https://www.business-humanrights.org/es/colombia-autoridades-laborales-sancionan-a-drummond-y-cerrej%C3%B3n-entre-40-e-mpresas-por-tercerizaci%C3%B3n-laboral-incluye-declaraci%C3%B3n-de-drummond>.

⁵³ Business & Human Rights Resource Centre (2019). "Colombia: Empresas de carbón Drummond, Cerrejón, Grupo Prodeco y Colombia National Resources rechazan amenazas de muerte contra sindicalistas y líderes sociales". Disponible en: <https://www.business-humanrights.org/es/colombia-empresas-de-carb%C3%B3n-drummond-cerrej%C3%B3n-grupo-prodeco-y-colombia-national-resources-rechazan-amenazas-de-muerte-contra-sindicalistas-y-l%C3%ADderes-sociales>

⁵⁴ Business & Human Rights Resource Centre (2018). "Colombia: Fiscalía señala a Drummond por financiar crímenes de guerra paramilitares de 1996 a 2006"; con comentarios de la empresa. Disponible en: <https://www.business-humanrights.org/es/colombia-fiscal%C3%ADa-se%C3%B1ala-a-funcionarios-de-drummond-por-financiar-cr%C3%ADmenes-de-guerra-paramilitares-de-1996-a-2006-con-comentarios-de-la-empresa#c178759>



Source : CINEP/PPP Social Struggles Database

Generally, the cornerstone of socio-environmental conflicts lies in the violation of the right to prior consultation of communities that will be affected by mining activities in the extraction of coal. However, although it is well known that the right to prior consultation grants communities recognition of autonomy to decide on their territories and their destiny, it is no secret that economic interests, institutional weakness (due to the existence of the phenomenon known as "revolving doors" in which local, departmental and national authorities exchange public and private functions) and corruption use grey areas in legal matters and abuse of power and force to look after their own interests.

Figure 7 Maps of the main coal mines in Colombia



Source: Colombia Plural- Own Adaptation

Table 9 Type of Human Rights Violations of Populations Affected by Coal Mining in Colombia

<p>La Guajira department (Province)</p>	<p>Air pollution, contamination of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, abuse of public force, links of companies with illegal armed groups, affectation to a dignified life, destruction of the social and cultural fabric, illegal land appropriation by non-state armed actors.</p> <p>The Wayuu indigenous communities, together with other tribal groups (Afro-Colombians), have been victims of forced displacement, usurpation of ancestral lands, since their livelihoods have been severely affected, forcing people to seek new means of subsistence, generating a breakdown of the social fabric in the structures of the communities. Access to water has been one of the main problems faced by these groups, since, in this case, Cerrejón has been accused before the courts of drying, diverting and contaminating the water tributaries that served as a means of subsistence for the people who inhabit the Guajira.</p>
<p>Cesar department (Province)</p>	<p>Air pollution, contamination of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, abuse of public force, alleged links of companies with illegal armed groups, according to ongoing investigations, affectation of dignified life, destruction of the social and cultural fabric, illegal land appropriation.</p> <p>The communities of the department of Cesar near the coal mines have been displaced to a greater extent by the guerrillas and paramilitary groups and later acquired by the mining companies. Pollution has also been another determining factor in forced resettlement, as in the case of the community of Don Jaca, where people have had to move because their livelihoods were significantly affected by the coal dust.</p>

Colombia: Complaints filed against mining companies

Company	Allegations
CERREJÓN (Anglo American, BHP Billiton, Glencore)	Environmental and economic damage and serious human rights violations that are affecting the population of La Guajira impacted by the project. ⁵⁵ The Wayúu people and the communities of La Guajira have been denouncing for years that drought, health problems and the deterioration of their way of life are related to the mining megaproject of El Cerrejón. The Government has pointed out that the problem is corruption, lack of education or climate change. The Constitutional Court, in its decision T-704/16 of December 2016, gives a strong blow ⁵⁶ to the state authorities and the El Cerrejón mine.
COLOMBIA NATURAL RESOURCES (Murray Energy)	In 2015, the company stopped operations for a few months due to the environmental risk involved in loading barges of material in the port of Santa Marta, until Drummond allowed it to use its port through an agreement brokered by the Ministry of Mines and Energy. In January 2018, Colombian Natural Resources, along with three other companies, was fined for failing to relocate three settlements affected by the emission of atmospheric carbon particles in the centre of Cesar. ⁵⁷
PRODECO (Glencore)	Among the multiple denunciations against Prodeco are: in 2006, a denunciation for failing to deliver the royalties corresponding to the department of Cesar for mining exploitation and, in 2013, for environmental damages for the construction of a dump outside the zones authorized by the ANLA; the latter cost the company the temporary suspension of its environmental license. ⁵⁸
DRUMMOND	Allegations about the hiring of Colombian paramilitaries to assassinate and torture three union leaders in 2001. ⁵⁹ Communities in three towns raised their total concern about unrestrained and uncontrolled mining, which is forcing them to leave their territories and be dispossessed of their populations, as is the case of the communities of Hatillo, Plan Bonito and

⁵⁵ The Herald (2019). "Lawsuit against Cerrejón seeks to curb the social and environmental impact of mining in La Guajira. Available at: <https://www.elheraldo.co/la-guajira/demanda-contra-cerrejon-busca-frenar-impacto-social-y-ambiental-de-mineria-en-la-guajira>

⁵⁶ Colombia Plural (2017). "El Cerrejón sí es el problema de La Guajira". Available at: <https://colombiaplural.com/cerreion-problema-la-guajira/>

⁵⁷ Rutas del Conflicto. Colombia Natural Resources. Available at: <http://rutasdelconflicto.com/convenios-fuerza-justicia/node/356>

⁵⁸ Rutas del Conflicto. Prodeco. Disponible en: <http://rutasdelconflicto.com/convenios-fuerza-justicia/node/342>

⁵⁹ Business & Human Rights Resource Centre (2019). "Perfil de las demandas judiciales contra la empresa Drummond". Disponible en: <https://www.business-humanrights.org/es/perfil-de-las-demandas-judiciales-contra-la-empresa-drummond-0>

Boquerón. In the latter, it is planned that the one responsible for the displacement is the Loma mine, which contributes at least 58% of the contaminating factors that are generated against the population.⁶⁰

Indonesia

Over the past 15 years, Indonesia's coal production has increased exponentially and has positioned itself as one of the world's largest coal exporters and the largest exporter of bituminous coal. This expansion has been triggered, at least in part, by a chaotic growth in the licensing of new coal mines, following the deployment of the Indonesian government's "Decentralization Agenda".

Rapid and unstructured expansion brought with it a range of problems, including rampant corruption, illegal mining, deforestation, land tenure claims, and concerns about overexploitation of resources and sterility of land. Another aspect is that coal mining companies rarely close mines properly or rehabilitate them, as required by internal regulations. All these emerging problems reinforce the idea of the urgency of efficient mining regulation in a weak state, with corruption scandals.⁶¹

The rapid growth of coal mining in the last 5 years has led to massive land grabbing. Operating coal mines occupy nearly 4 million hectares throughout the country, not counting abandoned or closed mines and their devastating impacts. The companies do not comply with the minimum requirements required by law, in terms of water rehabilitation and land protection. Coal mining leaves the land dry and barren, watersheds are depleted and polluted, and groundwater is depressed. Based on this, it is pertinent to state that coal mining destroys any potential crops in the land it affects.⁶²

Another negative impact of mining on affected communities includes gender discrimination related to reduced livelihood opportunities based on traditional land work (crops, ploughs, sowings, agriculture in general), leading to a reduction in the status of women within the family and society, while increasing their workloads and economic dependence.

Mining has largely transformed the original social and economic formations, resulting in significant changes in livelihoods. First, mining operations take place in a highly critical and biodiverse ecosystem where the local population is quite scarce. From primary forestry, based on local ecology, slash and burn agriculture and fishing occupations, communities are undergoing rapid transformation into flourishing cities with market economies based on mining. Women, who are the custodians of the ancient traditions in most local cultures, are generally at a great disadvantage with such rapid

⁶⁰ Colombia Informa (2016). "La Drummond sigue causando daños y desplazamiento en el Cesar". Disponible en: <http://www.colombiainforma.info/la-drummond-sigue-causando-danos-y-desplazamiento-en-el-cesar/>

⁶¹ Stockholm Environment Institute (2018). "Contemporary coal dynamics in Indonesia". Disponible en: <https://www.sei.org/wp-content/uploads/2018/06/contemporary-coal-dynamics-in-indonesia.pdf> p. 5.

⁶² Waterkeeper Alliance; JATAM (2017). "Hungry Coal. Coal Mining and Food Security in Indonesia". Disponible en: <http://waterkeeper.org/wp-content/uploads/2017/05/Hungry-Coal-English-Web.pdf> p. 3

transformations. Their economic capabilities are eroded, while women also tend to lag when it comes to taking advantage of economic opportunity gains.⁶³

Women also internalize this gender role shift and find themselves in a situation of loss to cope with their low status. Income has undoubtedly increased with mining, for compensation, for work or for business, but for the most part men access and control them, resulting in wastefulness of money, interruptions in family life expressed in increased visits to prostitutes and taking multiple wives or lovers, desertion and domestic violence.⁶⁴

All the above is a consequence of the lack of diversification in the labour supply of the economies that revolve around coal mining, in which there is no room for the growth and economic development of the communities other than that offered by the mining companies. This, in turn, results in the populations close to the mines being forced to move to the cities because of pollution and the lack of opportunities to develop other types of activities that are not related to mining. In urban areas, changes in general economic structures mean increased crime and violence in the community, decreased alcoholism and family cohesion, violence against women within the home and on the streets as an expression of men's frustration at not being able to cope with change.⁶⁵

Table 10: Type of Human Rights Violations of Populations Affected by Coal Mining in Indonesia

Region	Impacts
Southern Kalimantan	<p>Air pollution, pollution of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, affectation of dignified life, destruction of social and cultural fabric, illegal land grabbing, affectation of large-scale food sovereignty.</p> <p>The carbon extraction process has a significant negative impact on agricultural production, as well as on local communities, soil stabilization, the hydrological cycle, carbon sequestration and biodiversity habitat. Given that South Kalimantan is rich in tributaries, downstream communities are also affected by landslides, sedimentation, depleted groundwater and the discharge of acid mine drainage and toxic heavy metals. Local communities and NGOs have made multiple complaints about the excessive pollution experienced daily in these mining areas and the air pollution caused by coal dust.</p>
East Kalimantan	<p>Air pollution, pollution of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, affectation of dignified life, destruction of social and cultural fabric, illegal land grabbing, affectation of large-scale food sovereignty.</p> <p>People in these areas are suffering severe crop reductions because of pollution. Many inhabitants of the Makroman sub-district reported that their rice, fruit and fish harvests had been reduced by up to 50% due to the accumulation of sludge in rice fields and fish farms. In</p>

⁶³ The Australian National University (ANU). "Impacts of Mining on Women and Youth in East Kalimantan". Disponible en: https://crawford.anu.edu.au/pdf/staff/rmap/lahiridutt/CR3_KLD_Mahy_Impacts_Mining_Indonesia.pdf p. 1.

⁶⁴ Ibidem. p. 10

⁶⁵ Endcoal (2014). "Rejection of Railroad Development of Central Kalimantan Coal". Disponible en: <https://endcoal.org/resources/rejection-of-railroad-development-of-central-kalimantan-coal/>

	<p>addition, the water previously used for watering, drinking and washing is so polluted that drinking water should be purchased. These problems exist in both active and inactive mining sites, as only a minority of the latter have been restored after extraction stopped.</p> <p>Another negative impact of mining on affected communities includes gender discrimination related to reduced livelihood opportunities based on traditional land work (crops, ploughs, sowings, agriculture in general), leading to a reduction in the status of women within the family and society, while increasing their workloads and economic dependence.</p>
South Sumatra	<p>Air pollution, pollution of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, affectation of dignified life, destruction of social and cultural fabric, illegal land grabbing, affectation of large-scale food sovereignty, diminishing diversified employment opportunities.</p> <p>Although the social-environmental impacts in South Sumatra are practically the same as in Kalimantan, the corruption is much more notable than in the other regions, this is since this territory is not being exploited proportionally with the amount of coal it possesses, which has turned its lands into a much sought-after target for mining companies.</p>

Indonesia: Allegations against mining companies

Company	Allegations
ADARO ENERGY	The company has received complaints that have been classified as employment opportunities and land compensation issues. An Indonesian NGO has accused Adaro of river pollution, unfair land compensation to local residents, inciting conflicting land claims, inciting other social problems and displacing villages that use violence against residents.
KALTIM PRIMA COAL	Villages such as Segading, Sepaso and Sekerat in the Bengalon mining concession have experienced serious problems as a result of mining. Although the families of the mine's direct employees have benefited from the jobs, the communities have had to deal with significant water pollution, land loss and other problems. Villagers report serious dust and noise disruptions from the explosions, often without prior notice. Explosions destroy windowpanes and cause cracks in buildings. The children wake up crying in shock and fear from the night explosions [ii].

[i] Wiki Bases (2019). Adaro Energy Indonesia Complaints Mechanism. Available at: http://www.baseswiki.org/en/Adaro_Energy_Indonesia_Complaints_Mechanism.html

ii] Banktrack. Kaltim Prima Coal mine. Available at: https://www.banktrack.org/project/kaltim_prima_coal_min

Indonesia's coal industry is concentrated in two parts of the archipelago: Kalimantan (Indonesian Borneo) and Sumatra. Although Kalimantan accounts for approximately 70 %

of the country's coal production, Sumatra may have even larger coal reserves.⁶⁶ Coal concessions have been granted in 23 of Indonesia's 33 provinces, but the largest areas are in the provinces of South Sumatra, South Kalimantan and East Kalimantan.

In Indonesia, the coal industry is rather fragmented, with only a few large producers and many small players owning coal mines and coal mine concessions (mainly in the two areas outlined above).⁶⁷ The main mining companies established in these areas are Adaro Energy, Kaltim Prima Coal, Bukit Asam.

Figure 8: Map of the location of coal mining in Indonesia



RUSSIA

The Russian coal industry today occupies an important part of the market in the national economy, practically 100 percent of coal mining organizations have a private ownership pattern.⁶⁸ Indeed, after the privatization of the monopoly of Rosugol, the state-owned coal company, in 1997, small companies first appeared, and later large companies throughout the country.⁶⁹

With a global backdrop of strong decline in coal mining and a growing number of international organizations exposing the impacts of coal mining and the sale of fossil fuels, Russia paradoxically increased coal production in 2017 by three percent compared to the previous year, and is now the third largest coal exporter in the world. The damage has been incalculable to the climate, forests and people.⁷⁰

⁶⁶ Banktrack (2013). "Indonesia Forests to Coal". Available at: https://www.banktrack.org/download/indonesia_hotspot_pdf/indonesia_hotspot.pdf

⁶⁷ Indonesia Investments (2019). "Coal". Available at: <https://www.indonesia-investments.com/business/commodities/coal/item236>

⁶⁸ UGOL (2012). "Russian Coal Industry". Available at: http://www.ugolinfo.ru/2012_Ugool_Minexpo.pdf

⁶⁹ World Bank (2002). Available at: <http://documents.worldbank.org/curated/en/230951468757533962/pdf/wps2820.pdf>

⁷⁰ FERN; Coal Action Network (2018). "Slow Death in Siberia – How Europe's coal dependency is devastating Russia's forests and indigenous Shor people". Available at: https://www.fern.org/fileadmin/uploads/fern/Documents/Slow%20Death%20in%20Siberia_1.pdf

The use of coal in Russia is basically aimed at the metals industry and electricity generation. It is used for electricity and heating purposes in the housing and utilities sector, in large power plants, boiler houses and to provide heating for residential buildings, single-family houses and the like. Electricity generation has a diverse structure in Russian regions depending on the type of fuel used.

Table 11 Type of Human Rights Violations of Populations Affected by Coal Mining in Russia

Region	Impacts
Kuzbass	<p>Air pollution, pollution of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, affectation of dignified life, destruction of the social and cultural fabric, illegal land grabbing, affectation of the homes of inhabitants in neighbouring areas, reduction of diversified employment opportunities.</p> <p>In Kuzbass, three factors can be identified that intensify the impact of this implacable extraction of coal on the people of the region. First, Russian mining companies intentionally exploit near existing population centres, rather than in less populated areas. This reduces infrastructure costs, including roads, railways, electricity and water pipelines, as well as available labour. Secondly, the abandoned Kuzbass coal mines are neither restored nor refilled. Filling occurs when materials such as rock, subsoil, industrial slag and coal waste that were removed in the mining process are placed in the vacuum created by a previous coal extraction. Without filling, a much larger area of land is destroyed for coal mining. Third, 70 to 80 percent of mining in Kuzbass is open pit. The dangers of underground mining are well known and include dangerous working conditions for miners and occupational diseases such as respiratory diseases. But open-pit methods carry their own dangers: they threaten the health of those living nearby, as well as the surrounding environment, with air, water, soil and noise pollution. This is aggravated if pollution prevention technology is not used or if biodiversity and ecosystem restoration programmes are not carried out.</p>
Kansk-Achinsk	<p>Air pollution, pollution of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, affectation of dignified life, destruction of the social and cultural fabric, illegal land grabbing, affectation of the homes of neighbouring inhabitants, diminishing diversified job opportunities.</p>
Pechora	<p>Air pollution, contamination of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, affectation of dignified life, destruction of the social and cultural fabric, appropriation of land in an illicit manner, affectation of the homes of neighbouring inhabitants, reduction of diversified job opportunities.</p> <p>The main contribution to waste generation is made by companies for mineral extraction (almost 79%) and manufacturing (15%). Other types of economic activities generate about 6 per cent of waste. The main industries that generate and accumulate waste are coal mining and wood processing.</p>

Russia: Allegations against mining companies

Company	Allegations
SUEK	Coal mining in Kuzbass has destroyed forests and villages and endangered the Shor Indians. Shor's leading anti-carbon activists are also seeking asylum after escalating threats and intimidation from governments and corporations [i]. Mining water consumption increased between 2009-2010 to 171.6 million cubic metres. Although SUEK implemented a project under the Kyoto Protocol in this period with the objective of reducing contamination, its air contamination has continued to be very heavy. Available statistics in this corporation show that contamination increased in 10% between 2008 and 2009 and fell later, in 2010, to the levels of 2008. In 2010, 174,180 tons of dangerous waste were dispersed in the atmosphere. [ii]
KUZBASSRAZREZUGOL	It destroyed traditional, vital livelihoods of Teleut peoples. This led to the loss of traditional Teleut forms of living in business, culture and language [iii]. Besides, it has existing links with corruption scandals and fiscal evasion. Coal is extracted near existing urban townships instead in less populated areas. This reduces infrastructure costs, including roads, railroads, electricity networks and water pipelines, as well as availability of labour force [iv]

[i] FERN. Press Release: Eu Demand Helping Drive Human Rights Abuses In Russia's Coal Heartland. Available at: <https://www.fern.org/news-resources/press-release-eu-demand-helping-drive-human-rights-abuses-in-russias-coal-heartland-99/>

[ii] Bantrack. SUEK Russian Federation. Available at: <https://www.banktrack.org/company/suek>

[iii] HAMBIBLEIBT. Open letter from South Siberia, where hard coal is mined for RWE. Available at: <https://hambachforest.org/blog/2019/02/20/open-letter-from-south-siberia-where-hard-coal-is-mined-for-rwe/>

[iv] FERN; Coal Action Network (2018). Slow Death in Siberia – How Europe's coal dependency is devastating Russia's forests and indigenous Shor people. Available at: https://www.fern.org/fileadmin/uploads/fern/Documents/Slow%20Death%20in%20Siberia_1.pdf

Russian coal reserves are widely dispersed and are found in several important basins. These range from the Moscow basin in the far west to the eastern end of the Donetsk basin in the south, the Pechora basin in the far north-east of European Russia and the Irkutsk region, Kuznetsk, Kansk-Achinsk, the Lena, South Yakutia and Tunguska basins extend across Siberia to the far east⁷¹.

⁷¹ World Energy Council (2019). "Coal in Russia". Available at: <https://www.worldenergy.org/data/resources/country/russia/coal/>

Figure 9: Location of main coal mines in Russia with their respective extractive companies



In 2011, coal mining was conducted at 111 surface mines and 82 underground mines, with a total annual production capacity of more than 380 million tonnes. This coal is produced by 49 concentrators and 2 enrichment plants, with a total coal processing capacity of more than 170 million tonnes. Average monthly labour productivity in coal mining in 2011 was 197 tonnes per month (102% for 2010).⁷² With 177 billion short tons of coal, Russia had the third largest recoverable coal reserves in the world by the end of 2016, after the United States and China. Russia produced 425 million short tons the same year, making it the world's sixth-largest coal producer after China, India, the United States, Australia and Indonesia.⁷³

The European part of Russia and the Urals depend mainly on gas for their heating needs, and the proportion of coal is negligible (less than 10%), in Siberia and the Russian Far East, every second kilowatt-hour of electricity is produced from coal. Electricity use in Russia has increased at a rate of 20% over the last ten years, a growth that is mainly explained by power generation in gas-fired power plants.⁷⁴ However, a large part of the coal extracted from Russia is exported to electricity companies in other countries, including Spain.

In 2016, Russia consumed around 45% of its coal production and exported the rest. Although coal does not represent the country's main energy source, in the Siberian

⁷² Ibidem. p. 4.

⁷³ U. S. Energy Information Administration (2017). "Country Analysis Brief: Russia". Available at: https://www.eia.gov/beta/international/analysis_includes/countries_long/Russia/russia.pdf

⁷⁴ Ecodefense (2013). "Russian Coal Industry: Environmental And Public Health Impacts And Regional Development Prospects". Available at: <https://below2c.files.wordpress.com/2013/06/russian-coal-industry-preliminary-english-version.pdf>

region coal does play a more important role, as it is where most Russian coal is mined and where most is consumed.⁷⁵

In a global context of sharp decline, and a growing number of international organisations, such as the World Bank and the IMF, which increasingly discourage fossil fuel related projects, Russia increased coal production in 2017 by 3% compared to the previous year, and is now the world's third largest coal exporter. The damage that the mining sector has brought with it is incalculable: to the climate, the forests and the people.⁷⁶

The huge size of the mining industry in Russia and the support of the government generate many conflicts around coal specifically. Undoubtedly, one of the most notorious is the environmental degradation that occurs in mining regions. An example of this is the deterioration that conservation areas are suffering, 14% of the territory of Kemerovo Oblast (Kuzbass) belonging to nature conservation areas with various protected states, which have been severely affected by coal mining.

SOUTH AFRICA

Mining has long been an integral part of the development and advancement of South Africa's economy and has contributed greatly to making its economy the strongest on the African continent. As the country's second largest income, in terms of the value of total sales after gold, coal provides 6.1% of the country's total merchandise exports.

Table 12: Type of Human Rights Violations of Coal Mining Affected Populations in South Africa

Region	Impacts
Mpumalanga	<p>Air pollution, contamination of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, affectation of dignified life, destruction of the social and cultural fabric, illegal land grabbing, reduction of diversified employment opportunities.</p> <p>Clean up Air pollution, contamination of water sources, denial of access to water, denial of access to information, denial of access to land, forced displacement, land grabbing, affectation of dignified life, destruction of the social and cultural fabric, illicit land appropriation, reduction of diversified employment opportunities.</p>
Limpopo	<p>Water use in the Olifants river basin has increased dramatically in recent years due to the extraction of coal for electricity production, the extraction of a variety of other minerals, large-scale irrigation schemes for agriculture and urban development. This, in turn, has had considerable negative impacts on human health, arising from pollution and water scarcity and air and land pollution. The sources of pollution and degradation of water quality are diverse, including industry, mining, wastewater treatment facilities, household waste and</p>

⁷⁵ U. S. Energy Information Administration (2017). Country Analysis Brief: Russia. Available at: https://www.eia.gov/beta/international/analysis_includes/countries_long/Russia/russia.pdf

⁷⁶ FERN; Coal Action Network (2018). Slow Death in Siberia – How Europe's coal dependency is devastating Russia's forests and indigenous Shor people. Available at: https://www.fern.org/fileadmin/uploads/fern/Documents/Slow%20Death%20in%20Siberia_1.pdf

	agricultural chemicals and pesticides; together they have created a toxic environment.
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South Africa: Allegations against mining companies

Company	Allegations
ANGLO AMERICAN	Explosions from nearby coal mines were causing cracks in houses and broken windows. Residents complain that they are breathing in the dust generated by the explosion and the ash dumps of the Eskom power plants, which create harmful breathing conditions for those living nearby.[i] The communities also lost access to drinking water. An independent water sampling report commissioned by Action Aid found that the water, in four sites where there were two schools, was unfit for human consumption and that this was probably caused by the mine. Villagers who refused to be relocated had their water (and other amenities) cut off without warning and were forced to collect water from contaminated sources. For those villagers who were relocated, this was more forced than agreed with them, and although they were provided with a small house, the only agricultural land they had access to was the small plot around the house. The small financial compensation they received could not replace their ability to support themselves through agriculture. Resistance to the expansion of mining on their lands and resettlement has been met with police brutality and the threat of legal action against villagers and the lawyers who represent them.
BECSA (BHP Billiton)	According to documentation provided by DMR, BHP Billiton undertook to develop an environmental remediation project "to treat BECSA's net surplus contaminated mine water so that it can be recovered and returned to the Upper Olifants River Basin. The project was identified as "water infrastructure development". The Commission raises concerns about this project, highlighting the combination of environmental protection and rehabilitation responsibilities with SLP projects, which significantly reduce the company's overall financial obligations.[iii] The Commission also notes that the company's environmental protection and rehabilitation responsibilities have been combined with SLP projects, which significantly reduce the company's overall financial obligations.[iii]
ESKON (Power plant)	Air pollution caused by the burning of fossil fuels has a wide range of health effects, including mortality and cardiovascular and respiratory diseases. A summary report from 2017 lists the health impacts of Eskom's coal plants. Each year they are responsible for causing 2,239 premature deaths, 2,781 cases of chronic bronchitis in adults, 9,533 cases of childhood bronchitis and several other negative health impacts. The total cost associated with these impacts exceeds \$2.3 billion. Adverse environmental impacts and climate change are directly related to the amount of carbon dioxide released, including from coal-fired power plants. The consequences of global warming include drought, rising sea levels, flooding, extreme weather and loss of species. [iv]

[i] Business & Human Rights Resource Centre (2019). "So. Africa: Coal mines accused of causing diseases and cracks in houses; Anglo American & South32 comment". Available at:

<https://www.business-humanrights.org/en/so-africa-coal-mines-accused-of-causing-diseases-and-cracks-in-houses-an-glo-american-south32-comment>

^[ii] London Mining Network briefing (2010). "An introduction to Anglo American plc". Available at:

https://www.banktrack.org/download/an_introduction_to_anglo_american_plc/introductiontoangloamerican.pdf

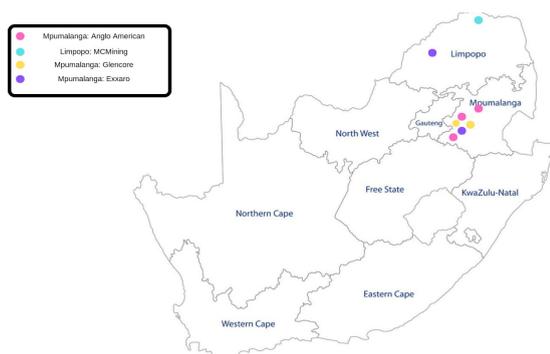
^[iii] South African Human Rights Commission (2016). "National Hearing on the Underlying Socio-economic Challenges of Mining-affected Communities in South Africa". Available at:

<https://www.sahrc.org.za/home/21/files/SAHRC%20Mining%20communities%20report%20FINAL.pdf>

^[iv] Banktrack. "Eskom South Africa". Available at: <https://www.banktrack.org/company/eskom#issues>

The thermal coal projects are mainly located in the Mpumalanga province in north-eastern South Africa, a region traditionally rich in coal. For this reason, it has attracted many large mining companies to establish mines in this area. Eighty-three percent of the total amount of coal produced in South Africa is mined in Mpumalanga. Coal is also mined in the provinces of Limpopo, Kwazulu-Natal and Free State and is concentrated around the cities of Lephalale, Witbank, Ermelo and Secunda. On the other hand, coking coal projects are mainly located in Limpopo Province in northern South Africa, a region where exploration and development of the Vele mines and the Makhado project (owned by Coal of Africa Limited) has increased in recent years. The area has road and rail infrastructure providing access to export facilities along the east coast of South Africa.

Figure 10 Location of the main coal mines in South Africa with their respective operation companies



ALTERNATIVE, FAIR AND SUSTAINABLE RECOMMENDATIONS FOR COMPANIES AND GOVERNMENTS IN COUNTRIES WHERE COAL IS MINED

- 1. Establish a regulatory framework that includes standards and obligations on issues of transparency and access to information;** good use, conservation and restoration of natural resources; reparation for communities affected by mining activities; and compliance with conventional human rights instruments and the United Nations Guiding Principles on Business and Human Rights, including due diligence for both private and state actors throughout the supply chain of coal exported from these countries to the rest of the world.
- 2. To protect, ensure and promote the effective enjoyment of human rights** and fundamental rights of communities that suffer the negative impacts of the coal business caused by companies and governments of producing countries.
- 3. Companies must comply with the standards of respect for human rights,** especially the rights to a dignified life, a healthy environment, ecological balance, food sovereignty, the right to water and territory, among others. This is not a voluntary responsibility (or part of Corporate Social Responsibility schemes), but an obligation that assists all those who violate rights, and it is their duty to compensate and repair the people and communities affected.
- 4. Establish effective mechanisms for repairing human rights abuses committed by companies** that extract and burn coal, that respond to the needs and voices of the communities concerned, from a perspective of integral reparation to the affected people and communities and that provide guarantees so that these damages are not repeated, with differential approaches of gender, ethnicity, age and migratory condition, respecting the principle and fundamental right to popular consultations and to free, prior and informed consent.
- 5. Promote and implement a new 100% renewable and democratic energy model** that does not violate human rights and respects the principles of social and environmental justice. In other words, a model that benefits all people and the environment, where there are no "sacrifice zones" in any corner of the planet, by means of local energy production and management, thus halting the serious gradual deterioration of natural resources (water, air, forests, biodiversity, etc.).
- 6. Establish effective and systematic controls of environmental pollution levels in all areas of coal mining operations.** Governments should ensure that they monitor mining companies for compliance with permitted pollution levels.
- 7. Accelerate and facilitate accountability processes and commitments to prevent, mitigate and redress human rights abuses by mining companies** in their countries of origin, and in countries that directly or indirectly support, promote or are affected by the

multiple negative impacts surrounding the coal mining industry that hinder a renewable, democratic and just energy transition.

8. To establish a vision with a gender and ethnic approach that allows to evaluate the possible solutions to face the problems around coal mining from a feminist vision, since women tend to suffer in a differentiated way the impacts of this activity. Their invisibility must be combated in the process of negotiating land and compensation issues, recognizing their role as a cornerstone for the maintenance of the social fabric and guaranteeing their physical and psychological protection in the social dynamics that perpetuate women's abuses.

9. Adopt policies that guarantee the economic survival of workers and communities during transition processes, through programs that allow their independence as individuals and the recovery of their livelihoods or adaptation to other forms of economic relationship.

RECOMMENDATIONS TO THE GOVERNMENT OF SPAIN

- 1. Set a date in a binding instrument to eliminate coal from the national electricity system by 2025 at the latest** and set 2040 as the limit for zero net greenhouse gas emissions and a fair and democratic 100% renewable energy model.
- 2. Guarantee, speed up and grant authorisation for the closure by June 2020 of coal-fired power stations that have not made the necessary investments to adapt their installations** to European standards and of those that request closure despite having made such investments.
- 3. Ensure that the closure of coal-fired power plants is carried out within the framework of a fair, equitable and gender-sensitive energy transition.**
- 4. To monitor and supervise that coal-fired power plants operating beyond 2020 comply with the emission limits established by European regulations, without exception.**
- 5. Promote and implement the UN Guiding Principles on Business and Human Rights** in the activities and supply chains of companies owning thermal power plants operating beyond 2020.
- 6. Establish effective mechanisms to ensure the duty of vigilance and control of States**, which oblige companies to implement human rights due diligence processes to identify, prevent and mitigate the risks and impacts of human rights violations and environmental damage.
- 7. Strengthen non-financial disclosure regimes through monitoring and verification mechanisms and effective sanctions if companies fail to meet their obligations or provide insufficient information.**

RECOMMENDATIONS TO ENERGY COMPANIES

- 1. Make public commitments to respect human rights and protect the environment in accordance with global business, human rights and environmental standards.**
- 2. Implement human rights due diligence** processes effectively and in collaboration with stakeholders to identify, prevent, mitigate and account for adverse effects caused by their activities, including those of coal supply chains.
- 3. Use their leverage to prevent or mitigate negative impacts on human rights and the environment** and contribute to a democratic, just, 100% renewable and gender-sensitive energy transition.
- 4. Comprehensively and comprehensively include human rights issues in non-financial reporting statements.**
- 5. Improve transparency and identification of risks and negative impacts of the carbon supply chain.**

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