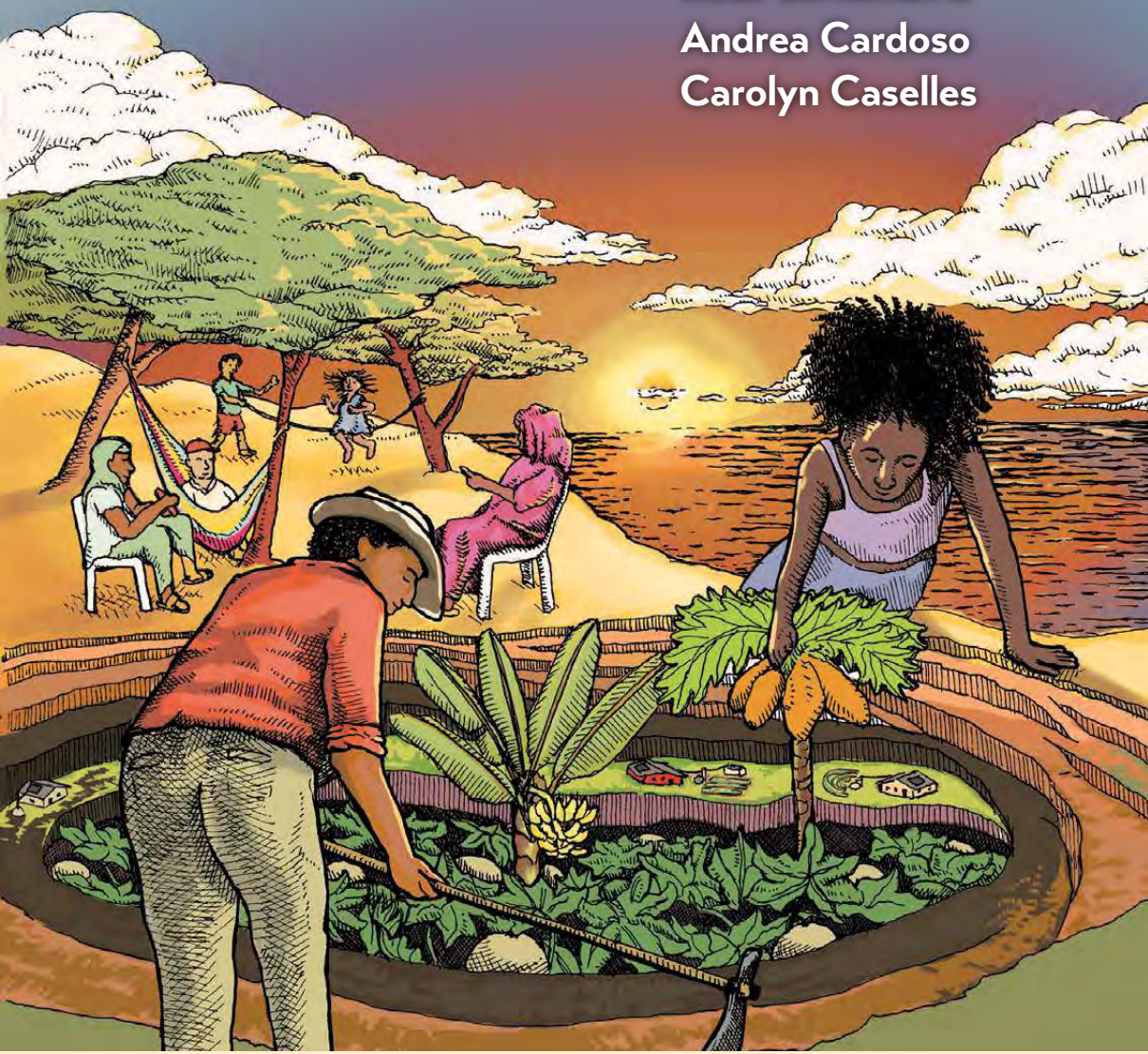
Number 5

CO-CREATION OF THE ENERGY TRANSITION AGENDA IN THE COLOMBIAN CARIBBEAN

Rosa Santamaría
Andrea Cardoso
Carolyn Caselles



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Contributions for a socially and environmentally just transition.

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CO-CREATION OF THE ENERGY TRANSITION AGENDA IN THE COLOMBIAN CARIBBEAN

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INTRODUCTION: APPROACHES TO THE GLOBAL CARBON CHAIN

Since the 1980s, coal has been mined on a large scale in the Colombian Caribbean. 90% of Colombia's coal production is extracted in the departments of La Guajira and Cesar through open-pit mining by multinational companies. Coal deposits in Cesar and La Guajira are located amid valuable ecosystems for the Caribbean region of Colombia, such as the Sierra Nevada mountain range near Santa Marta, the Perijá mountain range, the Zapatosa swampy complex, and the Ranchería river. These ecosystems are fundamental not only for agriculture and the regional economy for the quality of the soil and the abundance of water but also for the livelihood of indigenous, Afro-descendant, and peasant communities. The coal extracted in Cesar and La Guajira is meant for thermal use, and more than 90% of production goes to export-

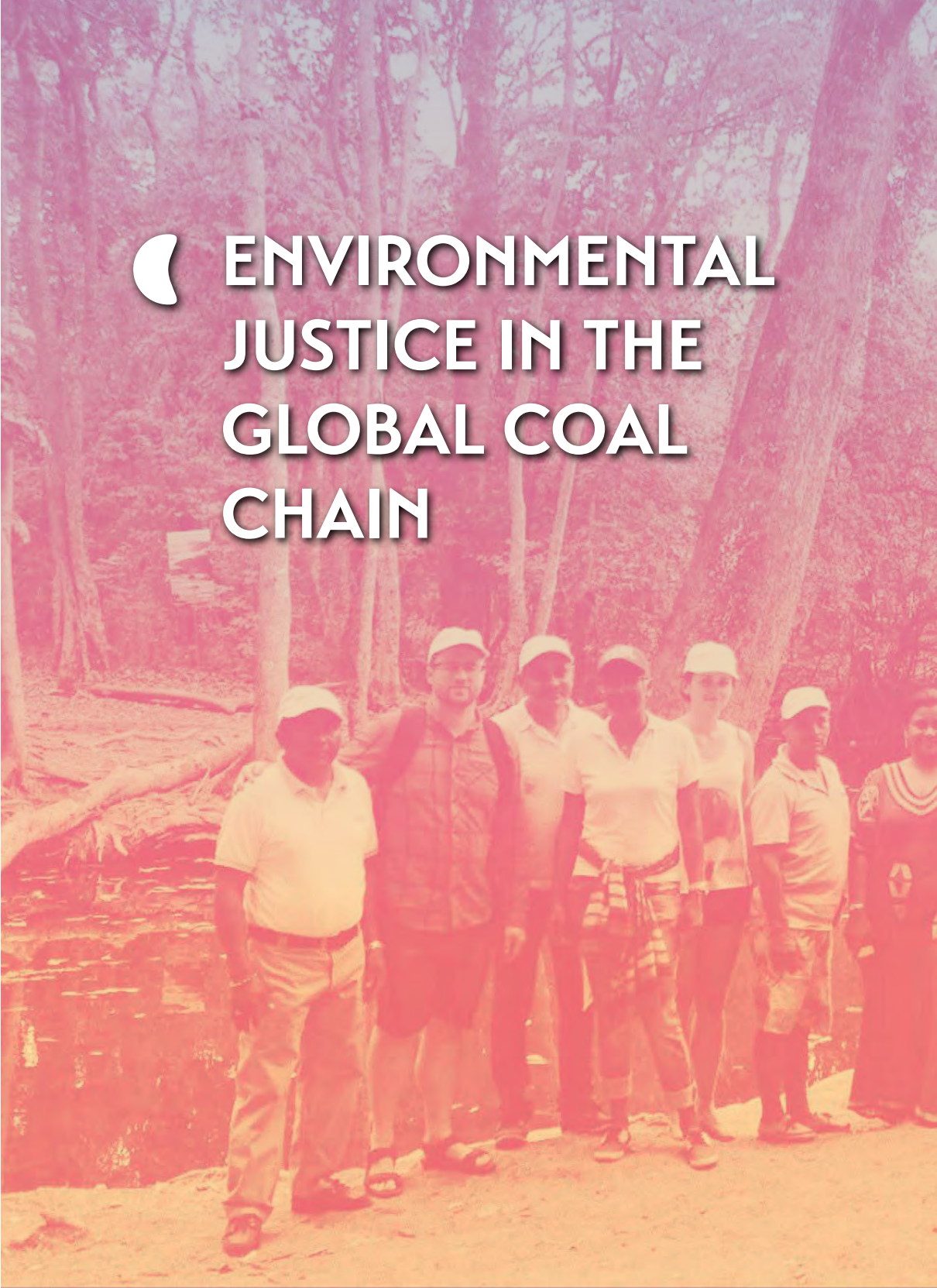
Photography: Marco Perdomo Ramos

ing purposes. This coal, shipped through the ports of Santa Marta and Puerto Bolívar, then burned to produce energy in importing countries, leaves behind a series of socio-environmental conflicts (Cardoso, 2018). Colombia has the largest open-pit coal mines in Latin America; coal extracted there is exported to Europe, China, Japan, India, Africa, and the United States. The exploitation of coal in Colombia has seriously impacted human rights and the environment for more than five decades, especially in indigenous and peasant communities located near the exploitation areas (Censat Agua Viva & Cordaid, 2016). Open-pit mining is carried out using heavy machinery that operates twenty-four hours a day with explosions, noise, and permanent dispersion of coal dust, which causes, among others, an increase in respiratory, visual, skin, and heart diseases in the population (Rosa Luxemburg Foundation & Sindicato Nacional de Trabajadores de la Industria del Carbón (Sintracarbón) [National Union of Coal Industry Workers], 2018), water pollution, reduction of land productivity and deterioration in the quality of life of people and communities. The mining areas coincide with the poorest in the country. They face serious water availability and land titling problems added to the serious public health crisis derived from the social impacts of coal exploitation. In this regard, a study by Ardila et al. (2010) concludes that the main effects of coal exploitation in these departments are the deterioration of the environment, perceived through the impacts on flora, fauna, and water sources; air pollution, which has generated an increase in respiratory diseases in the communities inside the exploitation zone's area of influence: the social and cultural heterogeneity produced by labor migration; the displacement of peasants from their territory and their traditional agricultural activities; growth of belts of misery; the emergence of union, communal and union-type social movements who question the administrative management of royalties, investment, and companies' social accountability, as

well as the environmental impact of ports and the coal shipment process. Proven coal reserves in Colombia are estimated at 6,419 million tons (Mt) and potential reserves at 16,347 Mt, which could keep Colombia as a producer for the next hundred years at the current exploitation rate. Colombian energy policies have focused on tilting its energy mix towards hydroelectric energy, due to its potential and viability (topographic characteristics and climate regime) and towards direct foreign investment in this sector (Procolombia, 2015). However, although the government projection for 2050 plans to diversify the energy mix with greater participation of renewable energies, it continues to include coal as an energy source (Unidad de Planeación Minero Energética [UPME], 2015). Faced with this scenario, the Research Seedbed in Energy Transition, in collaboration with various organizations, has held local forums in the departments of Cesar, La Guajira, and Magdalena since December 2017, with the participation of different actors, to try and rethink the decarbonization of the Colombian Caribbean. Although the concept of decarbonization at a global level is related to the disuse of fossil fuels in electricity production, in Colombia, this term is being used more often as the socio-environmental conflicts in the coal supply chain extend from extraction to combustion. Therefore, the expression has acquired a different meaning in environmental and climate justice. The social and environmental impacts for local communities are extensive in addition to the effects of climate change in importing countries. Unlike multinational development programs promoting carbon pricing, carbon capture, storage, and compensations are avenues for decarbonizing economies. Communities in Colombia are articulating decarbonization in coal mine closures, including the entire infrastructure of the coal supply chain, to promote a just transition that includes other economic activities for the territory. This book aims to analyze how the meaning of coal has evolved throughout its produc-

tion and commercialization chain and to showcase results from the dialogues in several local forums about the factors that should form a transition agenda from a mining-energy model to a transformation of the territory. As well as to determine the roles of social organizations, government institutions, and all the other different actors. These forums and conversations have been established as spaces for discussion with communities in the Colombian Caribbean to establish a road map for a future energy transition process in which all groups affected by the entirety of extractive mining activities inside this region are taken into account.

ENVIRONMENTAL JUSTICE IN THE GLOBAL COAL CHAIN



Photography: Marco Perdomo Ramos

Both the Paris Agreement and the Global Movement for Climate Justice appear to have created momentum to further document and analyze the forces which drive coal production and consumption, including attention to the global power structures that shape conflicts related to this (Bell & York, 2012; Brown & Spiegel, 2017). Climate justice movements are increasingly focused on keeping fossil fuels in the ground. We believe that these actions create an urgent need to further record and understand the effects of coal in global and local environments and analyze the forces that drive coal production and consumption (Bell & York, 2012). Therefore, any examination of the interactions between coal, climate, and development requires a comparative perspective and an interconnected perspective (Goodman et al., 2016). Today, climate change is a reality that cannot be turned away. Such is the global concern that many countries have begun to rethink their production models and their political actions around it, especially concerning activities derived from fossil fuels. The Paris Agreement (COP21) has been the starting point for countries that generate the most greenhouse gases (GHG) to consider the urgent need to reduce these emissions due to their effects on the environment and, therefore, on the quality of life of living beings. This impact is mainly generated by carbon dioxide emissions (CO2) into the atmosphere, which is the product of, together with other anthropogenic activities, coal combustion for electricity generation. In a framework of climate justice and the analysis of environmental conflicts in Colombia, the pollution of air and water due to coal dust rich in ash and CO2 stands out. Therefore, it is easy to visualize the connection between the environment and health, which implies evaluating the exploitation of goods and the environmental ills caused (Pulido-Iriarte, 2014). Clean air is vital for good health, as around 6.5 million premature deaths each year can be attributed to air pollution (International Energy

Agency [IEA], 2016). Colombia is the fourth biggest exporter of coal in the world, according to the International Energy Agency (IEA, 2017). Therefore, Colombia has an ethical and moral commitment to reducing emissions affecting climate change since coal combustion generates most CO2 emissions due to its high carbon content per unit of energy released (IEA, 2015b).

Additionally, the economic benefits of coal are achieved without considering the externalization of local socio-environmental costs of extraction, transportation, electricity production, and the cost of climate change (Cardoso, 2016; Richards & Boom, 2015). In addition to all this, it has been found that the global coal chain, understood as extraction, transport, and processing generates even more CO2 emissions (Heinrich-Böll-Stiftung & Friends of the Earth, 2015). The externalities that result from this activity along the social and environmental components denote effects on the communities and their productive vocations and natural resources such as rivers, vegetation, fauna, and flora. In this sense, many countries have set goals and have agreed to take actions that favor climate change. Since the Paris Agreement at COP21, a new direction for reducing the intensity of carbon use or decarbonization of economies has been set. At COP23 in Bonn, Germany, The Powering Past Coal Alliance was signed. More than a dozen countries from the Organization for Economic Cooperation and Development (OECD) and other developing nations pledged to eliminate the use of coal in their economies (Plumer & Popovich, 2019). Faced with this global scenario, Colombia, as the fourth largest coal exporting country in the world, must begin discussing in its policy which aspects should make part of an energy transition agenda and what should be the roles of social organizations, governmental institutions, and different actors in the construction of this transition agenda.

COAL AND CLIMATE

Since the 1950s, it has been known that the extraction and combustion of fossil fuels causes a greenhouse effect strong enough to alter the fragile climate balance that has allowed humanity to subsist and progress. There is an almost absolute consensus on the role that burning oil, gas, and coal have in increasing the planet's temperature (Cook et al., 2016). In response, more than 190 countries agreed in 2015, during the Conference of the Parties (COP21) in Paris, to reduce greenhouse gas emissions, limiting the increase in the Earth's temperature to less than 2° C above pre-industrial levels and hopefully below 1,5° C above pre-industrial levels (United Nations Framework Convention on Climate Change [UNFCC], 2015). Coal production increased seven-fold in the 20th century, as McNeill (2001) explained. Coal fueled the industrial revolution of the 19th century, although oil and gas gained relevance in the energy matrix in the following century.

Nevertheless, today, even in the era of low-carbon energy innovation, coal, which is the most carbon-intensive energy source, has made a comeback since 1999 (Steckel et al., 2015; Tyfield, 2014). Until 2013, there were fourteen consecutive years of growth in coal production (figure 1). The increasing dependence on coal was not only occurring in China and India but also in different developing and fast-growing countries, mainly in Asia, which use a higher proportion of the mineral in the energy mix to meet their growing demand (Steckel et al., 2015). The resurgence of coal has been driven by its low prices, the ability to import it from countries with low extraction costs, and the relatively low capital costs of coal-fired power plants (Edenhofer, 2015; Steckel et al., 2015).

Additionally, coal receives approximately 60% of total after-tax energy subsidies (Coady et al., 2015). In 2013, coal accounted for 46% of global CO2 emissions,

even though coal by itself only accounted for 29% of the world's total primary energy supply while oil accounted for 31%, with 33% of the share of emissions of CO2 (IEA, 2015a). Despite this, coal was still used for generating 41% of global electricity in 2013 (IEA, Directorate of Global Energy Economics, 2015). Coal power plants generated 31% of all the CO2 emitted by burning fossil fuels, more than the total emissions from oil demand worldwide transportation (IEA, Directorate of Global Energy Economics, 2015; Jones & Gutmann, 2015). Consequently, the coal rush has had severe implications for climate change mitigation strategies. McGlade and Ekins (2015) warned that the world could only burn about 12% of the world's current coal reserves, two-thirds of the oil, and about 50% of the natural gas reserves to reach the target temperature of plus 2°C. If four-fifths of the reserves are carbon which cannot be burned, then it can be estimated that approximately 88% of the known coal reserves must remain in the soil (McGlade & Ekins, 2015).

THE PEAK IN COAL CONSUMPTION ALREADY HAPPENED

In 2014, world coal consumption decreased by 0.9% (–71.4 Mt to 7,923.2 Mt), compared to a growth of 5.1% in 2013 and 2.6% in 2012 (IEA, 2015c), ending fourteen years of coal resurgence with a peak in 2013. According to IEA (2015a), the decline occurred in both OECD [Organisation for Economic Co-operation and Development] countries (–46, 9 Mt, –2.2%) as in non-OECD countries (–24.5 Mt, –0.4%). If we review the trend of the top ten coal consumers who accounted for 86.8% of world consumption, eight of them had a decrease in consumption in 2014 compared to 2013: Poland (-5.8%), Australia (- 4.7%), Russia (–4.5%), Germany (–4.2%), Japan (–4.1%), China (–2.9%), South Africa (–2.6%) and the United States (–0.4%) (IEA, 2015). Meanwhile, coal consump-

tion grew by 13.8% and 4.0% in India and Korea. However, the idea of maximum coal consumption should be viewed with caution. Two countries are critical to the future of coal: China and India. China is the world's largest coal consumer, producer, and importer (IEA, 2015a), and they have driven most of the more than 50% growth in global coal demands in the coal resurgence (Van Renssen, 2015). However, now they are promoting the reduction of coal consumption. In 2014, China's coal consumption decreased for the first time since 1999. At the same time, its economy grew by 7.3% (Shearer et al., 2016), and its CO2 emissions decreased by around 1.5% (IEA, 2015a). The increase in electricity consumption has been entirely covered by the growth in power generation from renewable sources (Jones & Gutmann, 2015). In 2014, hydroelectric power generation increased by 22%, wind and solar power generation increased by 34%, and demand for natural gas grew by 9% (IEA, 2015a). China's National Energy Strategy drove this transformation of the power mix for 2014-2020, which sets the goal of eliminating ten gigawatts (GW) from small thermal power plants by 2020 (UPME, 2015). Meanwhile, new coal plants in India account for almost half of the net coal capacity added worldwide. A significant expansion of coal production makes India the world's second-largest coal producer. However, rising energy demand also means they may become the world's largest coal importer, overtaking China (IEA, Directorate of Global Energy Economics, 2015). In 2015, world coal consumption continued to decrease significantly between 2.3% and 4.6% in January-September 2015, compared to the same period in 2014 (Greenpeace, 2015a). In China, the use of coal in the electricity sector fell by more than 4%, and its coal imports fell by a surprising 31% in the same period (Greenpeace, 2015a). The decline in the share of coal in electricity generation is a global trend. China's coal-fired power generation reached 79% in 2011 and has declined to 69% in 2015. The US is phasing out coal-fired power plants (Institute for Energy

Economics and Financial Analysis (IEEFA), 2015). Furthermore, the United Kingdom is committed to phasing out coal-fired power plants within the next ten to fifteen years (Greenpeace, 2015b). In the US, coal consumption has declined since 2012, and in Europe, the decline is being accelerated by the success of the renewable energy sector (Greenpeace, 2015b).

Ilustrated by: Stephany Hernandez.

CARBON CHAIN ANALYSIS

The analysis of the commodity supply chain as an analytical framework was introduced by Hopkins and Wallerstein (1977) to describe the territorial influence of capitalism. Subsequently, the book edited by Gereffi and Korzeniewicz (1994) introduced the analysis of the global supply chain of goods, identifying the following different dimensions: the input-output process; the geographic scope; the governance structure, including power relations and chain drivers; and the institutional context. The unit of analysis is not the mer-

chandise itself but the entire global economic and political system in which it is inserted (Smith & Mahutga, 2009). Furthermore, each merchandise supply chain has its history, its own geographic space, its conflicts, and governance structure (Bair, 2009). Ciccantell and Smith (2009) proposed extending the global commodity chain analysis, incorporating the extraction of raw materials by including the evaluation of techniques and technologies applied in extractive regimes and the environmental degradation and the mobilization of social movements which this entails. Extending the analysis to the consumption phase implies that the global commodity chain also addresses the final waste disposal phase, including the global greenhouse gas concern in the case of coal. Like the oil chain presented by Bridge (2008), coal is extracted from the environment, commercialized through trade, and, at the end of the chain, decommodified through its consumption, dissociation, and accumulated disposal

FIGURE 1. Links in the coal chain from its extraction in the Caribbean region of Colombia to its consumption in importing countries
Ilustrated by: Stephany Hernandez.

as atmospheric pollution or CO2 emissions. The north-south link along the coal chain makes it ideal for contributing to the current debate on ecological debt and unequal ecological exchange.

This debate was initiated by Latin American environmental organizations in 1992. According to Acción Ecológica (2019), the ecological debt is the responsibility of industrialized countries for the gradual destruction of the planet due to their forms of production and consumption, the disproportionate occupation of carbon sinks, and ecologically unequal exchange. Goods are exported without taking into account social and environmental damage.

Concerns about transparency in the freight chain also raise the following questions: Who benefits? Who is at a disadvantage? The responses to these questions depend on the structures of chains, their geographical distribution, and their forms of governance (Guthman, 2009; Talbot, 2009). The different methodologies for analyzing the goods chain are both descriptive and normative; they can be used to describe or explain, create transparency, and capture or redistribute value (Guthman, 2009). There are also alternative analytical frameworks, such as the French filière for analyzing agricultural products (Raikes et al., 2000) or the feminist approach to the commodity chain that includes an ecological perspective and a gender analysis which integrates race, age, and regional differences (Barndt, 2008; Ramamurthy, 2004).

This book uses the global commodity chain approach to analyze how environmental goods and ills are accumulated and distributed along the carbon chain and how these produce socio-environmental conflicts. The global merchandise chain approach allows incorporating "the mapping of the connection of micropolitical ecologies and linking disparate places of injustice by exposing their positions along a chain" (Robbins, 2014, p. 234, free trans.), including the social dynamics and the responses of actors (Conde & Kallis, 2012).

IMPACTS OF THE COAL SUPPLY CHAIN IN COLOMBIA

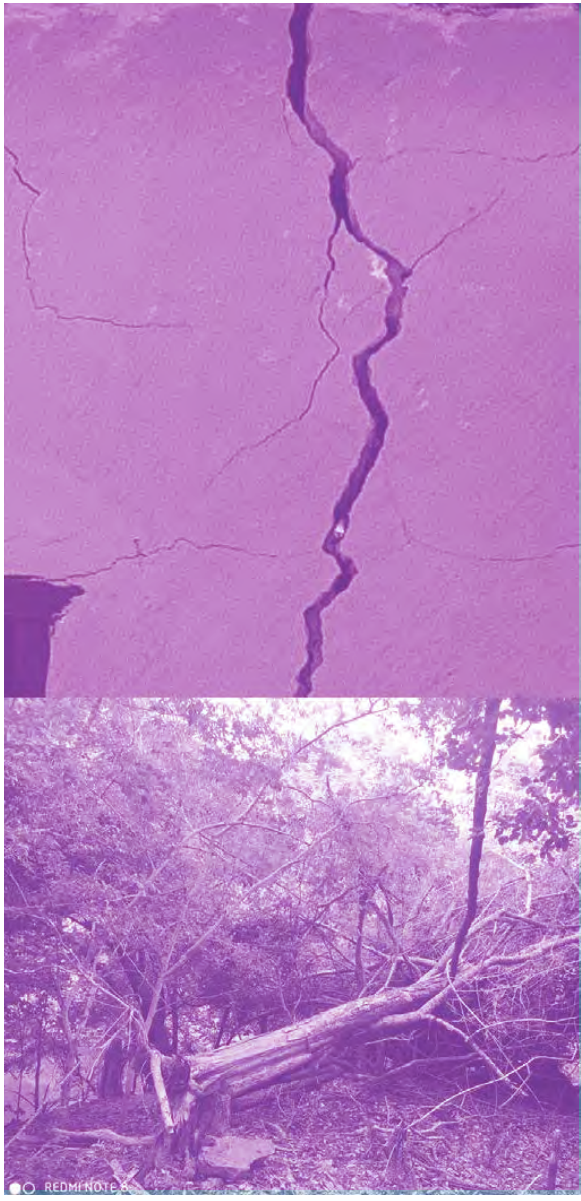
Areas of influence of coal mining in La Guajira
Photo: Marco Perdomo Ramos

FIGURE 2. Impacts of coal mining in the departments of La Guajira and Cesar
Photographs: : Laura Brito and Eusebio García

When we talk about coal mining, we tend to think exclusively about the monetary value it generates, the exports it drives, the foreign exchange it brings, or the royalties or taxes it pays (cf. Ponce Muriel, 2014). Moreover, coal mining generates significant wealth and plays a central role in the export basket. However, the value generated by the sale of coal abroad does not manage to

offset the environmental and social costs generated at the local level, such as damage to natural ecosystems, air and water pollution, impacts on public health, mining waste, agricultural losses, the production of carbon dioxide (CO2) or environmental liabilities (Cardoso, 2015; Gomez & Regaignon, 2015). Broadly Addressed in Cardoso (2015).

Another allegation revolves around the role of coal in alleviating poverty through jobs and in providing energy to the poorest. Some coal industries have even launched initiatives promoting coal for solving energy poverty. These initiatives are based on the idea that this mineral is the cheapest way to provide electricity to a fifth of the population without service (World Wildlife Fund (WWF), 2015). In this regard, the foremost advocates of coal and mining in Colombia have combined new discourses about their role in Colombia's development with more significant communication efforts to foster social acceptance while seeking to strengthen their influence on the



governance of mining through new national and international commercial alliances (Strambo & Puertas Velasco, 2017). In contradiction, the reality of coal is different. Coal is the most polluting source of energy and one of the leading causes of greenhouse gases caused by climate change.

Figure 2. Impacts of coal mining in the departments of La Guajira and Cesar Photographs: Laura Brito and Eusebio García

Globally, about 40% of all electricity comes from coal; however, it is responsible for 70% of CO2 emissions in the sector, making it one of the greatest threats to our environment and life on our planet (ABColombia, 2013). What is more, when the coal industry talks about "clean coal," it refers sparingly to technologies that can burn coal more efficiently and to anti-pollution systems that can remove some pollutants from the chimney. However, even the most modern coal-fired power plants only operate at around 44% efficiency, which means that 56% of the energy content of coal is lost. It is impossible to consider coal "clean" after generating so much air and water pollution, socio-environmental health impacts, and environmental and social conflicts (Conniff, 2008). In general, economic activities based on the exploitation of natural resources have triggered a series of negative impacts on the environment, such as the emission of greenhouse gases. Similarly, fossil fuel extraction activities are based on the extractivist development model, which goes along with processes of great corruption involving the public and private sectors. It brings inequality, rural exclusion, poverty, food crises, destruction of territories, cultural damage, abuse of power, and destruction of the environment (Roa Avendaño et al., 2018). This system has generated social and economic gaps due to the unfair distribution of wealth and resources, making it necessary to think about other processes for generating a new energy reality (Gudynas, 2011). Oil sands and fossil mines produce an unprecedented environmental impact, with hazardous waste deposits so large they can be seen

from space. They pose enormous risks of leaking and spilling into rivers and seas, a tremendous level of emissions, and unimaginable consumption of water, for which there are not even adequate impact evaluations (Aguayo, 2012). Communities in rural and urban areas, mainly low-income, are disproportionately affected by various pollution-causing activities associated with the fossil fuel economy. These poor and vulnerable populations face the worst impacts of climate change (Richards & Boom, 2015); local communities bear the highest social and environmental costs (Cardoso, 2015). In addition, the carbon chain impacts climate change that affects areas very unevenly and harms the most vulnerable (Richards & Boom, 2015). These pollution activities range from fixed sources, such as mines, power plants, refineries, and ports, to mobile sources, such as trucks and transport railways, ships, and toxic waste disposal equipment in hazardous waste and contaminated water landfills others (Farrell, 2012). All this without including the social aspects that, due to their nature, are difficult to evaluate and value. For the Colombian case, studies on open-pit coal mining were carried out by the Contraloría General de la República [Comptroller General of the Republic] and compiled from the perspective of environmental impacts by Fierro (2014). The same type of problems detected in a preliminary way for El Cerrejón is explicitly recognized for the Cesar region mining.

> Environmental impacts have not been recognized or managed in their entirety, or their evaluation and management are deficient, for which it can be affirmed that liabilities and environmental damages are being constituted. Furthermore, the diffuse and cumulative nature of the impacts on water and air, the lack of an environmental baseline, and adequate monitoring of bodies of water, air, vegetation, fauna, and, what is more serious, on the health of the villagers. (Fierro & Llorente, 2016, p. 2)

Regarding the socio-cultural impacts that occur in mining ar-

eas, the study mentioned above highlights the alteration of rural and local economies of communities in whose territories mining projects are implemented on a large scale. They hoard water sources, bring radical changes in the landscape, environmental pollution, and the peasants' involvement in poorly paid mining activities. Thus, sustainable agriculture, artisanal fishing, and hunting for survival, traditional activities that sustained or sustain still rural communities' lifestyles, are physically and culturally displaced by mining (Ponton, 2017). The department of La Guajira has been affected for more than thirty years by the large-scale open-pit coal mining exploitation of El Cerrejón Project, which includes the extraction of coal, its processing (crushing it into powder), stockpiling (of coal and rocky waste disposal into dumps and as backfilling of the extraction pits), transport by train and overseas shipment in Puerto Bolívar, from where it proceeds by large ships to the United States and Europe (Fierro & Llorente, 2016). Not only due to the poverty in which La Guajira has been immersed but also because of illegal acts like homicides, kidnappings, and massacres, the region has been the stage for numerous human rights violations affecting social sectors, such as trade unionists, journalists, indigenous people, mayors, and teachers, among others (United Nations Organization for Refugees Agency [UNHCR], 2014, cited in Ponton, 2017). In La Guajira, local communities, indigenous peoples, Afro-Colombians, and peasants have denounced the numerous impacts and conflicts stemming from El Cerrejón's mining activities, such as air, soil, and water pollution, cultural uprooting, health problems, violations of the right to food and the right to a healthy environment. These conflicts are mainly related to land grabbing, dispossession, and appropriation of communal water sources (Ortiz et al., 2014). They have led local communities to lose their health and livelihoods, as well as their rights to identity and territory (Censat Agua Viva & Cor-

daid, 2016). The externalities that result from this activity to social and environmental components denote effects on the communities and their productive vocations and natural resources such as rivers, vegetation, fauna, and flora. The Wayúu people and Afro-Colombian communities of La Guajira are disproportionately evicted by the expansion of coal mines and forced into malnutrition due to the loss of traditional lands (Harris et al., 2016). In Cesar, farmers have relocated due to the expansion of mines, but also due to serious environmental pollution and health problems (Cardoso, 2015). The main concern throughout the region is air pollution resulting from coal dust, which spreads during mining and transportation to the ports, which causes respiratory diseases (Agudelo et al., 2012). The generation and use of energy are the largest sources of air pollutants produced by humans (IEA, 2016). This type of pollution carries a greater risk of lung cancer, stroke, heart disease, and respiratory disease. The burning of coal is one of the biggest contributors to this pollution (Greenpeace, 2015). All of these effects will continue to worsen in the future if coal mining continues in Colombia. For this reason, the fight for public planning and policies that recognize, make visible, and compensate for the damage caused by coal to populations and their socio-environmental health must be strengthened. Planning and policies must contemplate the closure of mines, the transition process, and their economic alternatives. This reality presents us with the challenge of a just energy transition and materializes the right to clean energy.

APPROACHES TO A JUST TRANSITION

Local research with communities in the influence areas of coal mining and transportation in the Colombian Caribbean. Own photograph

A TRANSITION IN THE GLOBAL ENERGY SYSTEM

The global climate reality forces us to create agendas favoring climate change mitigation and energy transition. This planning goes together with actions that cooperate and demand compliance with environmental objectives and, likewise, reduce the threat of climate change within the framework of ambitious global ac tion drastic reduction of greenhouse effect emissions in order to create benefits in the life of ecosystems, atmospheric quality and public health (European Commission, 2011). Along this path, developed countries –particularly European ones– increasingly recognize the seriousness of the use of fossil fuels and the deterioration of the environment. Attempting to compensate somehow for the damage they have been protagonists, they have directed some climate actions and adjustments in their trade policies. For this reason, in recent years, significant changes have been made in energy systems leading to more diversified energy baskets with a tendency to incorporate cleaner energy and technologies. Likewise, it will encourage its use and opt for new forms of economic growth. A shift towards renewable energies must characterize this transition as the primary means of energy production and the progressive reduction of production with fossil fuels and coal (UPME, 2015). Countries like the United Kingdom, France, Portugal, Austria, and Finland are discontinuing coal for energy use. Although in disparity with many countries directing their energy and commercial matrix towards its use, it is estimated that coal's lifetime will be short. In the United States, even with current trade policies in pursuit of extractivism based on the contributions of coal mining in the labor sector, many coal companies have closed because they cannot compete with natural gas prices, their growing demand, and the public's opinion leaning towards clean energy. Another example of this type of tran-

sition is that of the Ruhr region in western Germany, a fundamental change that started from two fundamental characteristics: the first was the way it originated locally, which benefited the autonomy of collectives, families, and citizen participation; the second has been the timely legislation, which turned these energies into a reliable and beneficial business for small, medium and large producers (Roa Avendaño et al., 2018). This transition began in the 1970s, in social movements that refuted nuclear energy and defended the environment; Later, those same movements began to experience alternative ways of life and perceiving committed rulers who created the first niches for new energy sources. In other countries, such as Ghana, support for groups affected by the coal industry has been strengthened, fossil fuel subsidies have been eliminated, and compensatory measures have been established for affected people (International Labor Organization (ILO), 2018). In France, the climate change legislation proposes objectives to reduce GHG emissions from the reorientation of various key economic sectors: home renovation, electrification of the transportation system, reduction of waste, promotion of a circular economy, and promotion of renewable sources of clean energy. Its most significant objectives include reducing GHGs by 40% by 2030 and 75% by 2050 compared to levels in 1990 and reducing final energy consumption by 50% in 2050 compared to levels in 2012 (Fundación Energías Renovables, 2019). Thus, in countries such as Germany or Chile, the sector of non-conventional sources of energy represents an important source of income for the country's economy and job generation (Calle et al., 2017).

THE NEED FOR A JUST TRANSITION OF THE MINING-ENERGY MODEL

Although it is true that energy is of great importance for human and economic development and acts as a critical element in the challenges that surround sustainable development, there is currently a call for guaranteeing the affordability of clean energy at a global level and addressing climate change by reducing fossil fuels in energy generation (McCauley et al., 2019).

> Energy use is at the foundation of our food systems, transportation, utilities, production, and distribution system. Therefore, a transformation in how we use and conceive energy will require profound transformations in each economic sector and within consumption and production patterns (Transnational Institute, 2020, p. 4).

Recently, there have been important changes in energy systems that seek more diversified energy baskets with a tendency to incorporate cleaner energies and technologies to promote better uses and opt for new forms of economic growth. The climate agenda has been gaining more and more importance in the definition of public policies and in planning clean energy processes worldwide. These processes must be characterized by a transition from the production and commercialization of energy based on fossil fuels towards economies and systems based on renewable energies so that extraction of oil and coal is progressively reduced (UPME, 2015). Within this framework, the need to transition to a global energy system that is low in carbon and, at the same time, more just is irrefutable. This shift must take energy justice issues into account to ensure that policies, plans, and programs ensure fair and equitable access to resources and technologies (McCauley et al., 2019). Therefore, as discussed at COP16 in Cancun 2010, the agenda for this transition requires taking into account the rights of the workforce and promoting the creation of decent work and quality jobs that follow the line of sustainability inside the nation's economic sectors. Likewise, it is necessary for climate action workloads not to be sustained

unequally by a group of workers, communities, or by any country but must be developed in synergy (Jenkins, 2019). The energy transition is the path that every country must undertake towards a future that is safer, juster, more respectful of the environment, and enjoys greater economic success. It is a long process and one that requires all of us. There is no single interpretation of the term energy transition, but it is commonly used to describe the gradual change from a specific energy supply model to a new stage of the energy system (Smil, 2010). The path to decarbonizing the economy is a challenge that should interest us all (citizens, governments, and industry) because we will all be affected if the situation does not change. In this sense, energy transition is the process in which the different paths to be followed to achieve a low carbon economy are established, a process of radical transformation in which not only energy sources are modified but also the entire system. The concept of just transition was born in the United States in the 1970s as a proposal during negotiations between unions, community members, and environmental organizations for the closure of a nuclear plant. In the following decades of 1980 and 1990, the concept achieved a greater diffusion and was recognized by different actors at the international level. In addition, it was valued as a conceptual reference that could capture the worker's demands in the face of environmental conflicts and reunite different forms of resistance against the political-economic model that destroys the planet, concentrates wealth, and exploits large numbers of people every day in the entire world (Transnational Institute, 2020). Therefore, energy transitions are a set of measures, actions, and steps that allow us to move from the conventional development model to a desired one, such as that of good living or the imaginary one we would build (Gudynas, 2011). From a general perspective, a just transition consists of ensuring and planning a process that considers dialogue

and consultation to communities, workers, consumers, and citizens who have been impacted by economies based on fossil fuels while trying to reach low-carbon economic, social, and environmental goals. It also refers to the provision of policies that support economic diversification strategies, labor market plans, training, and social security (Glynn et al., 2020). In other words, the energy transition will be fair if it guarantees respect for constitutional rights to local territories and decent work, collective rights, human rights, and nature's rights (Roa Avendaño et al., 2018). For the United Nations Framework Convention on Climate Change (UNFCCC), a just transition must be consistent in accordance with the principles of human rights, gender sensitivity, and indigenous rights, as consolidated in the Paris Agreement (Jenkins, 2019). In this sense, for governments to more effectively implement just transition principles in their National Determined Contributions (NDCs) and to meet the commitments agreed in the Paris Agreement, the following objectives need to be achieved: developing a labor market plan, identifying those sectors affected by the transition, and achieving a degree of engagement with local governments, businesses, communities, and civil society in these affected regions and sectors (Glynn et al., 2020). This just transition must be a process that puts all stakeholders on the same side and achieves union to establish what is best for all: a development model based on public policies at the local level that creates an environment conducive to a dignified life for all workers and communities affected by environmental contamination (Mustata, 2017). Communities must demand the transition and carry out actions in this direction, which will benefit them, energy security, and the environment. In this way, the change will occur gradually, in a context accepted and expected by all those involved (Mustata, 2017). However, the transition must consider the different historical and political situations in different coun-

tries; In other words, this process may differ depending on the space in which it takes place. For alliances in the international arena to be effective, it is necessary to recognize the differences in aspects such as debt, technology, ownership of knowledge, patents, the relative strength of local states and transnational companies, the level of energy democratization, corruption, among other factors that can define the most appropriate political actions in each context (Transnational Institute, 2020). To a large extent, the results of this transition process depend on changes in power relations (Roa Avendaño et al., 2018) because the current energy system is centralized and, therefore, requires companies structured the same way, which has contributed to intensifying the concentration and abuse of power since this benefits the interests of certain elites, particularly the transnationals, which control reserves, extraction, and technologies of oil and coal industries (Roa Avendaño et al., 2018). As a result, great inequalities have arisen in access to energy due to the concentration of control and decision-making. For this reason, it is necessary to rescue social control over energy sources and energy management from the corporate domain (Roa Avendaño et al., 2018). Therefore, it is necessary to be concise about what should be changed, to what extent, and the orientation of these changes (Bertinat, 2016). which are an opportunity to transform the economy and create sustainable and quality jobs, especially for low-income and disadvantaged communities, care for and protect populations affected by the fossil fuel economy within the transition's time frame. (Labor Network for Sustainability & Strategic Practice, 2016). For this, it is necessary for consensus among all those involved and for economic diversification alternatives to be established beyond coal mining, taking into account the potential of the Colombian Caribbean in terms of renewable energies.

Cerrejón Mine
Photograph: Marco Perdomo Ramos

THE COLOMBIAN CASE

There is a global trend towards change in the global energy system. Today, Colombia has significant energy potential, and its policies aim to strengthen the mining-energy sector. This extractive activity is the main engine of economic development in the country and worldwide. Fossil fuels and, in general, common goods have been the protagonists of economic success for many years; however, behind the success, there are profound negative impacts that have reverberated, also for many years, in the territories of the indigenous, peasant, and Afro-Colombian communities. Energy development has taken place in the country at the cost of the displacement of rural and urban communities, the impacts on water sources and the loss of biodiversity, the alteration of climatic regimes, devastation of the social fabric, and an increase in living costs, in addition to a series of socio-environmental conflicts derived from energy projects.

Consequently, the territorial rights of indigenous and Afro-Colombian populations, labor rights, the rights of women and children, and the rights of nature have been violated (Roa Avendaño et al., 2018). The department of La Guajira has one of the largest open-pit mines in the world. Coal mining has forever transformed the landscape of the Ranchería River, not only because of deep pits but also because of millions of rock waste dumped in piles in the valley, in addition to the impacts generated by present and future disturbances in groundwater and surface water flows (Ángel, 2019). The Colombian government has continuously allowed large energy projects that cause socio-environmental conflicts, which are increasingly notorious and frequent, and call the current mining-energy model into question. On the other hand, the deep environmental crisis suffered by the regions where energy projects have been carried out, and the high level of atmospheric pol-

lution lead to public and environmental health problems. The Paris Agreement's (COP21) actions mark a new direction for energy and climate policy change worldwide by promoting the energy transition for achieving a low-carbon, sustainable and equitable economy. The shift towards a low carbon society is a formidable possibility to advance the problems of inequality, poverty, and unemployment (ILO et al., 2017). Despite this, the country has not advanced in the mining-energy transition as it should. Instead, it has shown a lack of commitment in promoting policies that promote the development of new energy sources for achieving change. For example, while Cerrejón's coal in La Guajira continues to be exported to the rest of the world, the contamination and damage to local people, the environment, and the territories remain in Colombia (Censat Agua Viva, 2018). The Colombian State must design policies and programs aimed at the historical reparation of those affected by mining exploitation, water source and soil contamination, and the environmental and public health damage caused by these activities in Cesar, La Guajira, and other regions in the country.

JUST TRANSITION FOR COMMUNITIES IN COLOMBIA

In general, a just transition is defined in the social sphere as the opportunity that communities have to achieve genuinely democratic and just societies. However, in the political sphere, its definition is more common and is based on economic issues, where it is not ruled out that society continues to exploit natural resources, although in a way that (they point out), would be more "efficient." In this sense, Robins et al. (2018) consider just transition as an objective now part of the Paris Agreement. At its core, a just transition is a framework for action, a way of unifying societal concerns with climate

progress. For authors like Robins et al. (2018), a just transition is a means to identify public and private investment opportunities in sustainable and inclusive growth. Others doubt that it is possible to reconcile a sustainable economy or a just transition with economic growth. Some in the global north even propose "degrowth." In Colombia, different organizations and social movements are advancing in promoting energy alternatives or energy efficiency processes. An example of this is the Red Colombiana de Energía de la Biomasa (Red Biocol) [Colombian Biomass Energy Network], created by community, academic and non-governmental organizations who promote the use of bioenergy at a local scale and advance in the technological development of biodigesters that use organic waste for improving peasant households' quality of life. Similarly, they are joined by other organizations such as the Asociación de Pescadores, Campesinos, Indígenas y Afrodescendientes para el Desarrollo de la Ciénaga Grande del Bajo Sinú (Asprocig) [Association of Fishermen, Peasants, Indigenous People and Afro-descendants for the Development of the Ciénaga Grande del Bajo Sinú], Fundaexpresión, the Red de Reservas Campesinas del Santander [Santander Peasant Reserve Network], Censat Agua Viva and the Movimiento Ríos Vivos [Ríos Vivos Movement], which have been promoting a sustainability school to achieve various objectives towards non-traditional energies (Roa Avendaño et al., 2018).

Inclusion of all society is one of the ways to accelerate action for climate issues and optimize its benefits. Suppose the transition is managed efficiently and effectively. In that case, it will avoid the great human and economic costs of climate disruption, improving economic growth, creating new jobs, and reducing inequality, which is critical for maintaining decent work and thriving communities for decades to come (Robins et al., 2018). In terms of energy justice, a transition in La Guajira means guaranteeing communities access to electricity and respecting all their rights,

including the right to breathe healthy air, access to drinking water, and profiting from soils without traces of carbon. Everyone affected by mining activity on a daily and direct basis must be included and compensated (Mustata, 2017). There must be a social dialogue that includes negotiation, consultation, and exchange of information between all interest groups (ILO, 2017). The establishment of sustainable economic strategies that cover all those aspects of the currently dominant mining-energy system will have to disappear in the process. Many experiences worldwide illustrate the potential of social dialogue for leading to effective transition solutions (ILO, 2017). All of this must be based on long-term democratic planning (ILO et al., 2017) and genuine democracy in which workers and communities "have control over decisions that affect their daily lives" (Climate Justice Alliance, nd.) and an environmental policy that explicitly seeks equality and advocates for it through a comprehensive approach in designing a transition process towards a cleaner and more sustainable economy (Farrell, 2012).

JUST TRANSITION FOR WORKERS IN COLOMBIA

A transition requires radical changes. Impacts on employment, for example, crop up everywhere when talking about the end of mining and coal activities. That is why one of the fundamental pillars of a just transition must be workers, both direct and indirect, also taking into account as indirect workers those people who have lost their jobs and ways of life due to coal mining. The transition to a sustainable way of life will affect labor markets worldwide. For Gouverneur and Netzer (2014), it can be expected that a socio-ecological transformation

FIGURE 3. Coal mines in the departments of La Guajira and Cesar
Photo: Marco Perdomo Ramos

will have four critical impacts on labor markets:

1 Substitution of jobs that will displace employment in those sectors, such as the fossil fuel industries towards renewables

2 Elimination of jobs in sectors where there is no direct replacement for specific jobs, such as the European coal industry and the oil refinery

3 Transformation and redefinition of existing jobs, as in industrial sectors oriented towards saving energy and resources

4 Displacement of jobs as an effect of carbon leakages, such as the relocation of companies to other countries with less restrictive standards or regulations on GHG emissions

However, given the characteristics of the labor sector in the Colombian Caribbean, one of the concerns revolves around the employment options and limited alternatives in the departments of Cesar and La Guajira, since no sector offers salaries equivalent to mining, in particular for a workforce with low levels of education like that of these departments. Another critical concern is that changes in household income levels and local spending by mining companies will have flow effects

on the regional economy, indirectly affecting other economic sectors, such as construction, commerce, and real estate (Strambo, 2018). In this regard, for the Trade Unions for Energy Democracy (TUED) movement, the transition to a truly sustainable energy system can only happen if power definitively shifts from for-profit corporations to ordinary citizens and communities. Furthermore, energy democracy can replace market chaos with planning, unleash the potential of renewable energies and move towards energy decommodification (Sweeney & Trade Unions for Energy Democracy, 2012). In this direction, Pablo Bertinat assures: "Dephosilize, deprivatize, deconcentrate, decentralize, decommodify, democratize is the tongue twister to solve" (2016, p. 15), and energy democracy is the tool to achieve it. In any case, and considering all the challenges that just transition entails, the renewal of economies represents many opportunities for achieving social objectives. It has the potential to be a new engine of growth, both in advanced economies and in those developing, and it can become a generator of decent jobs that contribute significantly to the reduction of poverty and social inclusion. In turn, it will promote a low-carbon economy that coexists with the environment and causes a change in consumption and production patterns, contributing to the fight against climate change. Thus, a change of the economic model will improve the capacity to manage natural resources sustainably, increase energy efficiency and reduce waste while reducing social inequalities and socio-environmental resilience is increased (International Labor Organization, 2015). Global initiatives to reduce greenhouse gas emissions are an essential complement to current and planned measures on atmospheric quality, which will result in a considerable reduction in environmental pollution and a significant improvement in health and people's quality of life, mainly workers (European Commission, 2011).

FIGURE 4. Cultural and sports festival of La Sierra, in commemoration of murdered leaders. La Sierra, Chiriguaná, Cesar
Photograph: Marco Perdomo Ramos

FORUMS AND TALKS ON DECARBONIZATION AND ENERGY TRANSITION IN THE COLOMBIAN CARIBBEAN

Forums, talks, and local workshops on decarbonization and energy transition in the Colombian Caribbean

The responsibility of working inside the territories hand in hand with their leading actors, local communities implies having the necessary tools to make approaches to their realities without generating more significant conflicts to those which already exist. Therefore, it is essential to recognize the contexts in which we work to jointly propose methodologies that allow an intimate understanding of their social reality, personal and collective lives, and relationship with the environment, respecting their traditions, experiences, and struggles. These territories, home to social, cultural, and racial diversity, are located in the country's northern regional area. Colombia's largest open-pit coal mines are located in Cesar and La Guajira's regions. Magdalena's region is home to the coal corridor and port for the Cesar mines. Social, environmental and economic conflicts are exacerbated by a sinister history of violence, displacement, poverty, and discrimination, which has repercussions in a highly complex scenario from any professional point of view. Actors converging there confront each other in exercises of power over the land, that is, over tracts of land disputed between the ancestral and the commercial. The complexity of these struggles is portrayed by the trajectory of the Colombian armed conflict, the leading cause of it being land ownership. In a specific context, those territories in which minerals such as coal are abundant have become an attraction for companies and the Colombian State since this mineral's quality and heat capacity represents a profitable business at the international level. Coal mining has unleashed a series of conflictive situations in the Caribbean territories of ancestral Afro, peasant, and indigenous communities over the last four decades. These actors understand the relationship between communities, companies, and State and have coexisted in constant disputes because if one is absent, the others take greater power and control. Within this relationship, these actors converge in an intermediate and allied way to play the role of spokespersons, observ-

ers, supporters, and facilitators of dialogue scenarios. Under this premise, the methodology implemented in this research process for developing workshops in academic spaces and local workshops was composed of an academic and a participatory and social part. In the academic sphere, there were various moments in which national and international researchers presented their work and experiences on transition processes at the local, national and global levels. Representatives of NGOs working in the territories studied shared their work and participated in these spaces and methodologies. Participatory work tables, experience panels, and social mapping workshops were developed in the social sphere. For analyzing information produced in the local forums, all the presentations were transcribed together with the sections for participation, questioning activities, and public intervention. Then a qualitative analysis of the texts was carried out through the ATLAS.ti program to establish cross-cutting issues, such as energy transition, impacts of mining, direct impacts on the livelihood of communities, closure of mines, economic diversification, and proposals or alternatives, among others.

ACTORS

Actors in the territory are diverse in their cultures and ways of living. There, the relationship between community and land prevails, which adds meaning to the physical spaces in which the populations' daily, ancestral, and ritual activities occur. The characteristics of these actors, among which we find ethnic, peasant, and city communities, are variable according to their social, cultural, and economic conditions, particularly concerning their world views. The main actors in the framework of actions and projects for the energy transition are those who live near the coal mines, such as the Wayuu

Photography: Marco Perdomo Ramos

indigenous people in La Guajira and peasant and Afro-Colombian populations in Cesar and Magdalena. Mining companies recognize these communities as those living in their sectors of influence due to their proximity to exploitation. The dynamic actors of the struggle and the social movement are, in particular, those grouped as social organizations in the protection and safeguarding of their territories, who stand out for their participation in multiple social, political, and academic struggle scenarios. This is the case of Fuerza Mujeres Wayuu [Strength Wayuu Women], Mujeres Guerreras de la Sierra [Warrior Women of the Sierra], Comité de Defensoras y Defensores del Territorio [Committee of Defendresses and Defenders of the Territory], Consejo Comunitario de El Cruce, La Sierra y La Estación (Conecise) [Community Council of El Cruce, La Sierra and La Estación], and work unions, among others. Such organizational forms work to defend their rights against the effects of large-scale mining, along with national or international social organizations that support, make visible, and are in solidarity with social conflicts experienced inside their territories and participate in their different legal, training, and recovery actions for the social fabric as a legitimate form of struggle to preserve the territory.

PARTICIPATORY WORKSHOPS

Several participatory workshops had the objective of generating horizontal dialogue with the communities and working on specific issues which corresponded with them. In this dialogue, the participants were the main protagonists. Each participatory workshop had three moments: preparation, development, and closing. In this first moment, the workshop activity was devised, organized, and proposed, in addition to defining its duration, location, and budget. This workshop methodology is constructed with the participants who will attend the activity. The voice of those communities

that will participate is also taken into account. In each workshop, a spokesperson for the communities contributes, proposes, and gives opinions about their dynamics and development in the preparation phase. It should be noted that the previously designed methodology is unfinished and is not rigidly designed for its execution; instead, these participatory workshops are open to changes before and during the activity itself. Changes that arise in its implementation allow the workshop to be genuinely participatory because actors present will feel part of the activity even in the execution phase. Finally, at its closing, conclusions and the evaluation are developed by participants in order to manifest observations and improvement actions. Under this premise, a relationship with different actors in the territory has been developing, mainly with affected communities and social organizations, for creating scenarios for horizontal dialogue on the needs generated by the impacts of large-scale mining and the preservation of their territories through local workshops and academic workshops. Both types of activities have been the scene of the co-creation of an energy agenda in the Colombian Caribbean. Academic decarbonization and energy transition workshops have been held periodically since 2017 in response to the need to discuss the impacts of large-scale mining in the territories and to listen to actors based on their experiences and social struggles. This series of events was carried out in its first two versions under the name of I y II Foro de Descarbonización de la Economía del Caribe Colombiano [I and II Decarbonization Forum of the Colombian Caribbean Economy]; In its third version, it was developed under the title of Foro de Transición del Modelo Minero-Energético a una Reconversión Productiva del Caribe Colombiano [Forum for the Transition of the Mining-Energy Model to a Productive Reconversion of the Colombian Caribbean]; and its latest version, in virtual mode, was baptized as the virtual seminar Transición justa del modelo minero-energético: descarbonización y alternativas transformadoras para

el Caribe colombiano [Just transition of the mining-energy model: decarbonization and transformative alternatives for the Colombian Caribbean].Face-to-face versions of these academic workshops were hosted at the Universidad del Magdalena [Magdalena University] facilities. All were developed in cooperation with different NGOs who work with communities and seek to bring discussions of the territory closer to the academy, a process in which the university serves as a bridge or node and allows the visibility of those social realities. These spaces for knowledge, dialogue, and discussion will be the central axis of this chapter. Additionally, other pertinent points will be noted which emerged in the local workshops held during 2018 by the Research Seedbed for Energy Transition and within the Caribbean Research Alternatives for a Transformation in Energy and Economy (Create) workshop, organized by the Technical University of Berlin, the University of Magdalena and the Friedrich-Ebert-Stiftung Foundation Colombia.

I FORUM ON THE DECARBONIZATION OF THE COLOMBIAN CARIBBEAN ECONOMY

The first version of the forum was held in the context of the commitments of the Paris Agreement at COP21, which marked a new direction for the undertaking of efforts to reduce greenhouse gas (GHG) emissions to limit the temperature rise to 1.5 ° C. above pre-industrial levels. The objectives of the first agreement were to promote change within those countries that generate higher GHG in their production and energy processes towards non-polluting technologies and processes, to provide the necessary resources to counteract the effects of climate change, supporting developing countries in their energy transition to low fossil fuel economies. This space was organized in a coordinated manner by the Universidad del Magdalena, the Heinrich Böll Stiftung Founda-

tion, the Centro de Estudios para la Justicia Social Tierra Digna [Tierra Digna Center for Social Justice Studies], and the Red de Justicia Ambiental en Colombia [Environmental Justice Network in Colombia]. It took place at the facilities of the Universidad del Magdalena on December 1, 2017, intending to discuss for the first time decarbonization in the Colombian Caribbean. In particular, over what is happening in these territories in the presence of mining activity, consequences, and conflicts, and the need to get out of the extractive economic model by learning the past, present, and future of the affected communities.

Here, the need for the collective construction of a transition agenda from a mining-energy model towards the productive reconversion of the Colombian Caribbean was evidenced. A dialogue is to be held about the roles different interest groups should assume in said process. The development of the methodology was carried out through three participatory panels. In the first, conceptual elements were developed which allowed us to understand the reality of the extractive activity in the departments of Cesar, La Guajira, and Magdalena from three different approaches: the first oriented to the internation-

FIGURE 5. . Forums, talks, and local workshops on decarbonization and energy transition in the Colombian Caribbean
Own photograph

al policies of CO2 reduction; the second, to the violation of human rights and its ecological footprint; and the third, to international actions which seek transparency and non-violation of human rights.

FIGURE 6. Digital graphic report of the first panel of the I Decarbonization Forum of the Colombian Caribbean Economy
Source: Prepared by GoVisual

1. Conceptual panel

The Caribbean region is the epicenter of coal extraction in Colombia, which has generated ecological damage due to the excessive exploitation of natural resources in the territories inhabited by ethnic or Afro-descendant communities. There are many aftereffects left by this activity on the environment and lifeforms: damage to public health, the transformation of the landscape, deterioration of ecosystems, toxic pollution of the air, water, and fauna, forced displacement of ancestral knowledge and places conducive to economic and social development. Such consequences have left communities deprived of the means to subsist, which is why it is possible to speak of a violation of human rights. In this field, communities do not have legal tools to counteract the problems they are currently experiencing. We must update and manage to consolidate baselines and strategic environmental evaluations that allow planning and environmental ordering according to technical environmental studies, not territorial policies. It is necessary to pay special attention to the protection of strategic ecosystems.

2. Panel of cases and experiences

The second panel discussed the experiences of La Guajira, Cesar, and Magdalena communities, concerning the effects that coal activity has been generating in their integral and environmental health and the development of their economic activities and cultural knowledge. Activity which has left for them a vision of an uncertain future as a product of misery, destruction, the dispossession of fertile lands, water sources, and natural resources, in addition to taking away from them a scenario of peace, wealth, and social harmony

3. Opportunities and alternatives panel

Finally, the third panel was focused on post-carbon opportunities and alternatives that, in

this context, benefit from civil mobilization actions, the creation of activist or resilience groups, and a change in the political discourse directed towards climate justice. The economic model of coal extraction in the Caribbean region is flawed; It is a system that ends the possibilities of progress for the communities, their socio-structural and territorial transformation, and their vision of the future. It is essential to say that debate on the transition of the mining-energy model is new in the political scene and for organizations in Colombia. On the other hand, this debate cannot be considered solely from the perspective of the geopolitics of coal, for which the mineral market is the one that leads us to think about the transition, for this is not entirely true. What leads us to consider the transition is that the extractive model of territorial exploitation is a failed model due to its environmental and social damage

The mining closure.

There is an intensification of coal exploitation driven by the political discourse of economic growth. In this way, the miners are not

FIGURE 8. . Forums, talks, and local workshops on decarbonization and energy transition in the Colombian Caribbean
Source: Own photographs


PANEL
Casos & Experiencias
EN EL PASADO ÉRAMOS
ERAMOS UN CORREGIMIENTO DE PAZ
PODÍAMOS PESCAR
Paz
armonía
PRODUCIAMOS NUESTROS ALIMENTOS
Era para
Riqueza
Felicidad
SOMOS TERRITORIOS CON DROGAS Y PROSTITU
LOS JÓVENES YA NO VAN A LA UNIVERSID SINO A LA MINA
INTEGRAL
Contaminación
YA NO PODEMOS PESCAR NI CULTIVAR
TENEMO HAMBRE
PUEBLO ENSUEÑO
HOY
YA NO SE PUEDE PESCAR
EL AIRE NO SE PUEDE RESPIRAR


OLICITAMOS
acompañamiento
EL FUTURO SON NUESTROS JÓVENES
GUÍA TURÍSTICO
¿CÓMO SE IMAGINAN SUTERRITORIO EN EL futuro
INCIERTO
EN 5 AÑOS SE ACABAN LAS CONCESIONES....
AÑARON NUESTRAS Costumbres
organizarnos VOLVER A LO QUE ERAMOS
ACTUAR ¡YA!
QUE NUESTROS NIÑOS PUEDAN PENSAR EN LIBERTAD
UNA POBLACIÓN SIN TREN
DECIDEN HASTA LO QUE DEBEMOS COMER
El futuro es el PRESENTE
NI EN EL BOQUERÓN
¿A DÓNDE NOS VAMOS A IR?
EN EL LATILLO NO HAY FUTURO
ORDEN DE DESALOJO
NO ESTÁN OBLIGANDO A ABANDONAR NUESTRAS TIERRAS
CÓMO PODEMOS RECLAMAR
LO QUE NOS QUITARON
DEMANDA
LA Solución
ES CÓMO NOS PODEMOS QUEDAR
miseria
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muerte
ENFERMEDAD
HACER PROGRAMAS Y PLANES PARA RECUPERAR LA SIERRA NEVADA Y LOS TERRITORIOS
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OPORTUNIDADES
•JUAN SEBASTIAN PEÑVELA
NO LE SAQUE LA PIEDRA A LA MONTAÑA
2014
CREACIÓN MESA AMBIENTAL
TRABAJOS PARA REPLANTEAR LA MINERÍA
MEMORIA
GEOLÓGICA
TRABAJO CON LAS AGUAS SUBTERRÁNEAS
HISTÓRICA
·PÁRAMO SUMAPAZ
·DESCUBRIMIENTO PUENTE DEL INDIO
RECIENTE
PARO DEL '93
CREACIÓN DE GRUPOS ACTIVISTAS
NO A LA MINERÍA
INCENTIVAMOS LAS HUERTAS CASERAS
ESCUELA
FÚTBOL
la minería NO ES LA ÚNICA OPCIÓN
•ANGÉLICA ORTÍZ
CLAN IPUANA
MUJERES FUERZA GUAYÚ
ESCUCHAMOS POR PRIMERA VEZ LA PALABRA
PROGRESO
CON LA LLEGADA DE LA MINERÍA
NOS ENGAÑARON Y NOS HICIERON FALSAS PROMESAS
$ GANARON NUESTRA CONFIANZA Y COMPRARON NUESTRAS TIERRAS A MUY BAJO COSTO
DISCRIMINACIÓN
SOBRE TODO CON NUESTRAS MUJERES
EL GOBIERNO APOYA A LAS EMPRESAS
PERO NOSOTROS NO TENEMOS AGUA
NOSOTROS NOS ORGANIZAMOS Y LUCHAMOS
NUESTRO PRESIDENTE SE GANÓ UN PREMIO AMBIENTAL
PERO NOS SENTIMOS AMENAZADOS

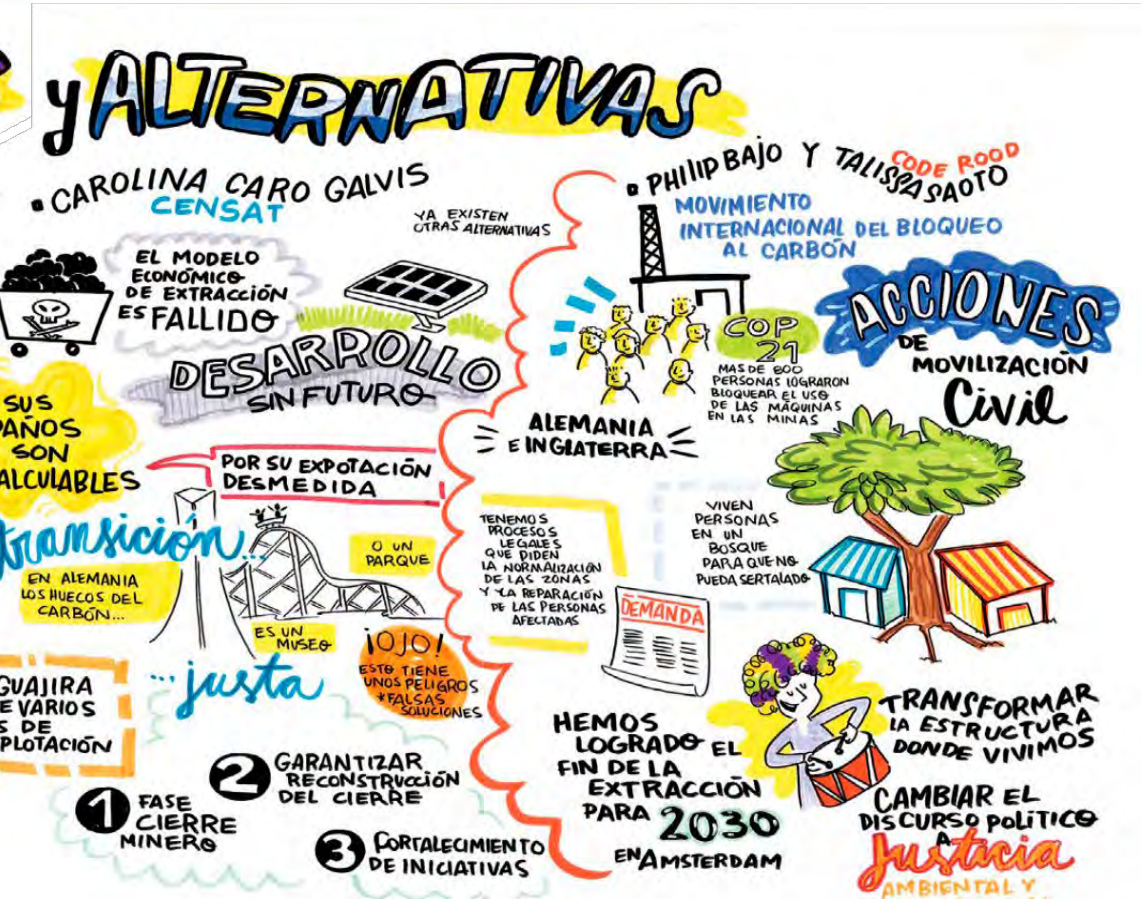


FIGURE 9. Digital graphic report of the third panel of the I Decarbonization Forum of the Colombian Caribbean Economy
Source: Made by GoVisual

thinking about the closure but expanding the coal mines. However, mine closure plans must be discussed participatory manner, and compliance with environmental legislation must be demanded. It is necessary to consider the impacts which will remain and emerge after closures and internal handling of the aftermaths, guaranteeing the broad, effective, and binding participation of communities of all sectors. It should be a discussion of knowledge, for technical knowledge always prevails in these issues. Part of those alternatives' future will be to rebuild a geopolitical place of those communities' knowledge, so they are the ones who decide about their territory. In the second phase after the closure, the question remains of how construction and comprehensive repair of the territory will be guaranteed and who will finance it. Colombian legislation is responsible for regulating mining environmental liabilities; It is the burden of the mining companies and the State to regulate what should be done with mines after they are closed. A mining closure plan refers to the set of processes and activities that seek to compensate, prevent and mitigate the impacts caused by mining exploitation; These have been regulated since 1974 in the Código de Recursos Naturales (art. 3) [Natural Resources Code], the Ley General Ambiental [General Environmental Law], the Código de Minas (art. 45, inc. 2; art. 84; art. 95, art. 209) [Mining Code] and the Decreto 2041 de 2014 sobre licenciamiento ambiental referente a la necesidad de un plan de desmantelamiento, restauración final, abandono y/o terminación (art. 6 y art. 41) [Decree 2041 of 2014 on environmental licensing regarding the need for a dismantling, final restoration, abandonment and/or termination plan]. In the progress of the Plan Nacional de Desarrollo Minero con Horizonte a 2025 [National Mining Development Plan with Horizon to 2025], it is established that a mine closure plan is urgent, so the country commits to reducing this activity by stopping its expansion. The community must agree on plans

to seal these mines through genuine participation. The right to a healthy environment is interdependent with realizing other collective and individual rights. Suppose protection of this right has been achieved from its autonomous perspective, as it happened with Colombian ruling on the rights of the Atrato River. In that case, the state must guarantee the participation of interested persons and has the duty of reparation. Citizens, especially those affected by these exploitation projects, have the right to access information, decision-making, and justice.

Recovering the territories The attending communities agreed that territories lost by coal mining in the Caribbean must be recovered. A financing fund is necessary to recognize environmental liabilities generated by mining, guaranteeing a healthy environment, good public health, and, in general, ensuring respect for human rights. This path can be achieved with the support of an adequate diagnosis, an action plan based on traditional activities, land restitution, training for the workforce, and community pedagogy for lasting social and cultural change. As for the future, exploration of new markets and mechanisms for a decent living for people and the territory is proposed, for example, through fishing, livestock, agriculture, ecotourism, and access to clean energies.

Discussions of the 1st Forum on Decarbonization of the Colombian Caribbean Economy

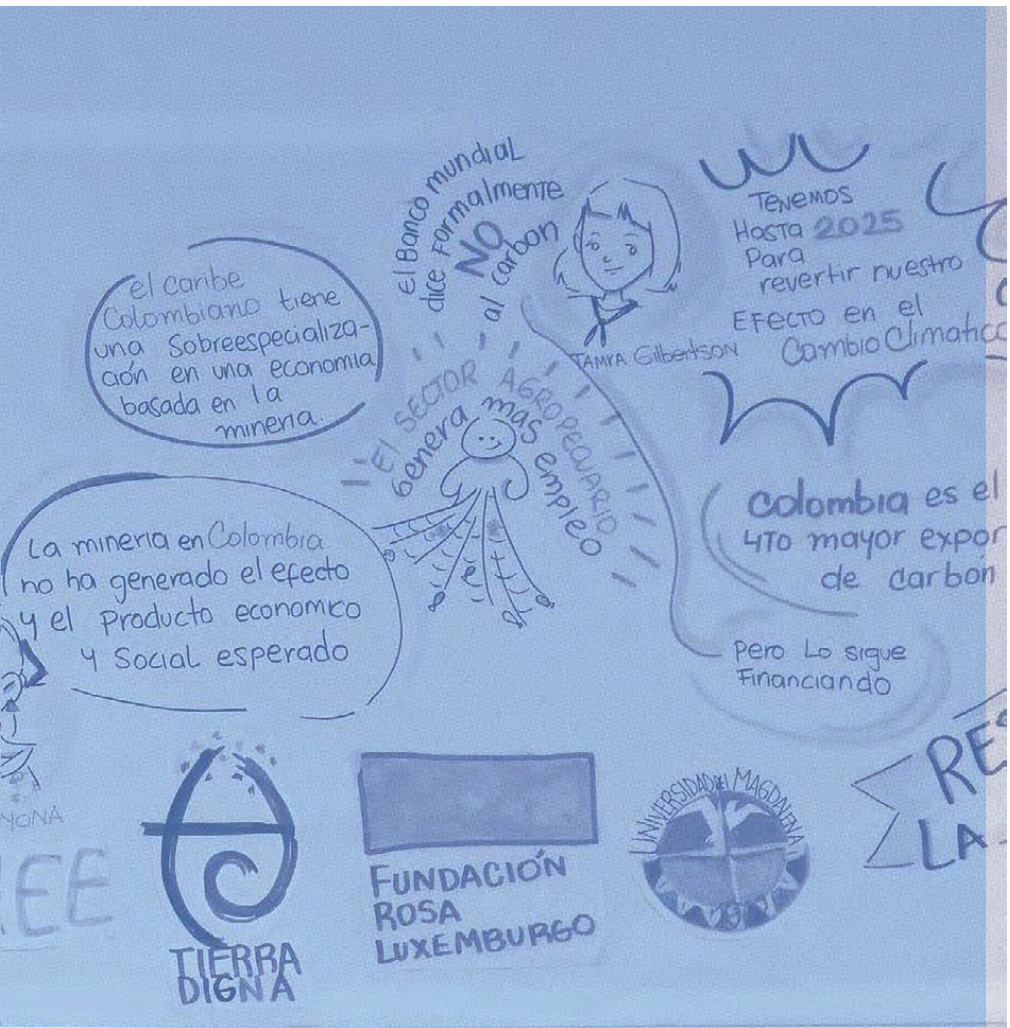
For a transition from coal mining to other productive activities to be generated, it is crucial to present the participation of communities to build locally. Meaning, it is necessary to understand that dependence on coal is a reality that must enter into a transition towards the generation of new productive projects, with a positive relationship concerning the environment's preservation. This objective is only possible by recovering total ownership of the territory where the mining companies are located. Regarding the role

of different actors, participating communities argue that the financial co-accountability of the state and mining companies should be the first step for achieving healthy and fair agreements. These agreements must be coordinated, solid, and respectful at all levels of gov-

FIGURE 10. G. Graphic report of the II Decarbonization Forum of the Colombian Caribbean Economy
Source: Prepared by Liliana Deavila Pertuz

ernance, cooperation with the private sector, community oversight, relationships between institutions based on dialogue, agreement, economic diversification, alliances, and teamwork. These conditions include organizations that vouch for the rights of the communities, compensation in economic terms to affected people in the territory, the creation of channels of trust with the community, and social articulation to produce sustainable living alternatives.

In summary, the communities agreed that it is necessary to con-



tinue fighting for the repair and recovery of their rights, for the implementation of inclusive and democratic post-extractive policies, for the guaranteeing of social and cultural well-being, and the well-being of the environment. We must continue working with NGOs and the academy in mutual support for dialogue with the state. In this way, the need for coal mining to end through the generation of productive projects, including the communities' desire to recover the territory where the mining companies are evidenced. It is necessary to have the joint design of life plans for the affected communities considering the environmental and social damages caused by coal extraction. Therefore, these communities demand a sustainable development plan based on traditional activities such as fishing, livestock, and agriculture to recover their traditional knowledge. A development where areas intervened by mining are rehabilitated, and those that were not are protected with the State's support and mining companies.

II DECARBONIZATION FORUM OF THE COLOMBIAN CARIBBEAN ECONOMY AND DISCUSSION ABOUT THE IMPACTS ON MINING TERRITORIES

As a result of the First Decarbonization Forum, the need for collective construction of a transition agenda from the mining-energy model towards the productive reconversion of the Colombian Caribbean and determination of the roles that different groups of actors must assume in the process was revealed. For this reason, from May 14 to 16, 2018, the second version of the forum was held, with the support of the Inter-American Association for Environmental Rights (AIDA), the Network for Environmental Justice, Censat Agua Viva, Tierra Digna, and the Rosa Luxemburg Foundation. By creating the II Decarbonization Forum

as a space for public discussion and organizing work tables made up of academics, students, representatives of organizations, and affected communities discussed from the communities' point of view, which elements should be taken into account in the transition process from coal mining to other productive activities in the departments of Cesar, La Guajira, and Magdalena.

Conditions for transition

There must be cultural transformations, changes in power relations, articulation of the transition joined by the creation of autonomy, and various forms of sovereignty. For local communities, the departments of Cesar, La Guajira, and Magdalena have been treated by the Colombian State as sacrificial territories for their coal reserves. For this reason, the reconstruction

FIGURE 11. Activity 1 "Opportunities of the energy transition" II Decarbonization Forum of the Colombian Caribbean Economy.
Own photograph, May 18, 2018.

and repair of these territories in any transition process constitutes an irrevocable pillar. Attendees developed two activities for identifying the most significant changes generated by coal extraction within the territory, perceived social and cultural transformations, and the need for guarantees, compensation, and economic diversification in the territory.

Activity 1. Opportunities of the energy transition

IIt began by discussing energy transition opportunities in the Colombian Caribbean. Regarding legal aspects, a class action was mentioned as a decision-making method that involves the communities. Royalties were the central issue regarding economic aspects since they generate productive projects and social investments. In addition to royalties, land redistribution and food sovereignty recovery were critical for those attending the forum. Regarding the alternatives to the current economic and labor model in the mining departments, community tourism and energy autonomy based on small-scale renewable energies play an essential role for these social actors. They questioned the assumption that renewable energies are entirely friendly to the environment. Some impacts must be considered even as they bring benefits concerning greenhouse gas emissions or soil and water degradation due to chemical pollution. In Colombia, large hydroelectric plants have already come under scrutiny because of the environmental damage caused by the Hidroituango projects in Antioquia and El Quimbo in Huila. In La Guajira, the Wayuu culture communities stated that, with the arrival of the first wind farms, they had difficulties falling asleep due to the noise caused by nearby wind turbines, something happening already with the endless noise caused by the mines and coal transportation. An entirely western approach could not conceive the problems that lack of sleep causes in a Wayuu community. In their culture, dreamers are women in charge of spiritually guiding the community through the interpre-

tation of dreams, which is crucial in maintaining the social fabric.

For this reason, it is only by understanding and promoting the local cosmogony that these effects can be fully measured. Such questioning also requires analyzing the words and expressions used daily. We often refer to the "environmental impact" of extractive projects in traditional academia, thus choosing a neutral and objective term. The gathering mentioned using the word "damage" instead, for which its maximum expression would be ecocide, emphasizing the

FIGURE 12. Activity 2 "A 2 "Before and after the mining territories" II Decarbonization Forum of the Colombian Caribbean Economy.
Source: Own photography, May 18, 2018.

potential irreversibility of its effects. One hope raised during the meeting was that integrating this know-how into our way of generating knowledge can also empower communities, so they are the ones who take leadership in future scenarios.

Activity 2. Before and after the mining territories

A second moment arose around the scenario of a post-coal mining transition. Affected communities were asked about their needs and aspirations to specify and strengthen their territorial autonomy proposals. After a brief account of the coal chain, understanding exploitation (mines), transportation (by truck and train), and shipping (deep-sea ports) as phases that generate similar impacts and dam-

FIGURE 13. Activity 2 "A before and after the mining territories", II Forum on Decarbonization of the Colombian Caribbean Economy.
Source: Own photograph, May 18, 2018.

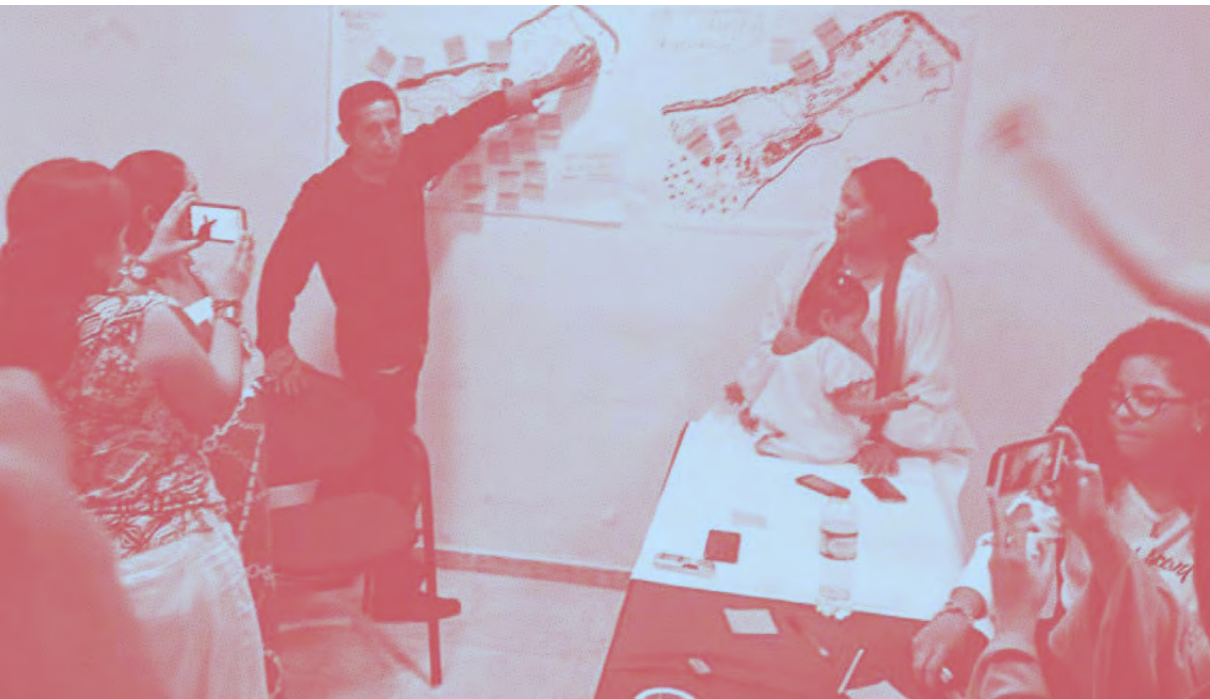


FIGURE 14. "Before and after the mining territories" II Decarbonization Forum of the Colombian Caribbean Economy.
Source: Own photography, May 18, 2018.

ages, but also impacts and damages particular to each. Attendants carried out a first social mapping activity, in which they illustrated problems associated with each stage of the coal chain and the territorialization of conflicts.

Attendees were asked a series of questions to illustrate their realities: How have their landscape, their cultural relationships, and their ways of inhabiting the territory been transformed in the context of the coal mining operation? What damages have already been generated, and what is their relationship to the violation of rights? What changes in the landscape have there been in their environment due to coal mining? What kind of impacts can occur after the closure of mines, ports, and train routes? For the social cartography exercise, groups worked elaborating a map of their territory, where times before and after the arrival of the mining exploitation were represented.

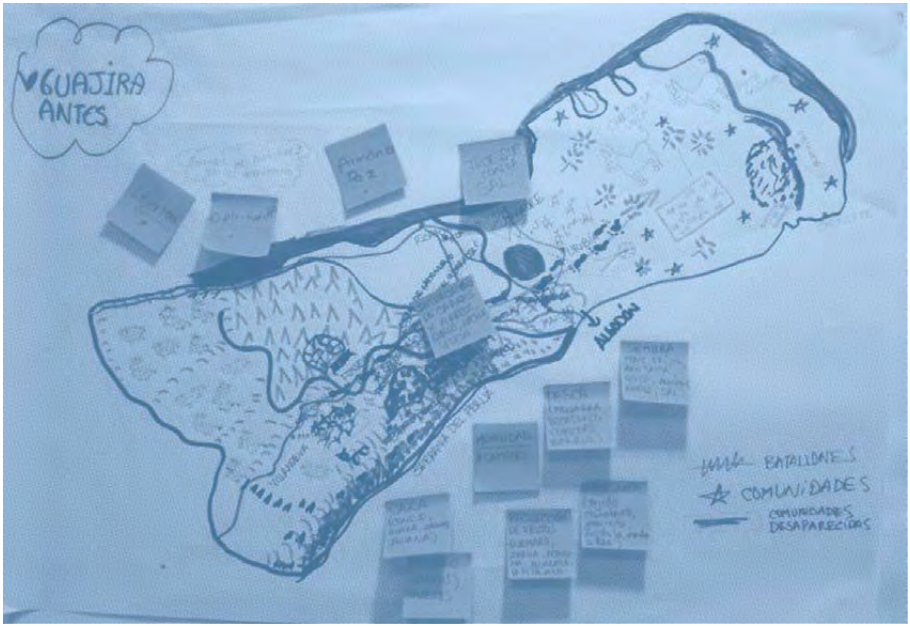


FIGURE 15. Social cartography: department of La Guajira before the arrival of the mine
Source: Own photograph, May 18, 2018.

In the words of this illustration's authors:

> La Guajira was an area dedicated to livestock, agriculture, and fishing; Products such as goat's milk and cheese were exchanged for cow's milk and cheese, along with salt, corn, and crafts. They traveled freely on horse paths; no armed groups were found in the area. The trips were made by the guidance of the natives' dreams, which showed them the way. The Ranchería River was mighty with crystal clear water, and all its streams led to its mouth in Riohacha.

After the arrival of mining, La Guajira has become a desert terrain: sixteen streams of the

Ranchería River have disappeared, for which entire communities have been forced to migrate to places that pale in comparison to everything that was taken from them. The tropical dry forest has disappeared; it was a wilderness that communicated the Serranía del Perijá [Perijá mountain range] with the Sierra Nevada de Santa Marta [Santa Marta snowy mountain range]. The Ranchería River was diked. From the municipality of Barrancas, the river looks polluted and diminished. The railway line split the territory and contaminated its surroundings, affecting animals, which are now born with malformations and get run over constantly. Rice

FIGURE 16. Social cartography: department of La Guajira after the arrival of the mine.
Source: Own photograph, May 18, 2018.

crops no longer exist due to the loss of rivers and aquifers inside the territory where the mines are located now. The agricultural economy constituted 35% in the department and decreased to approximately 7%, in addition to the creation of army bases and the appearance of illegal armed groups, along with the presence of the Colombian national army.

A vital element identified in this exercise was that the department of Cesar used to be

FIGURE 17. Social cartography: Cesar department before the arrival of the mine.
Source: Own photograph, May 18, 2018.

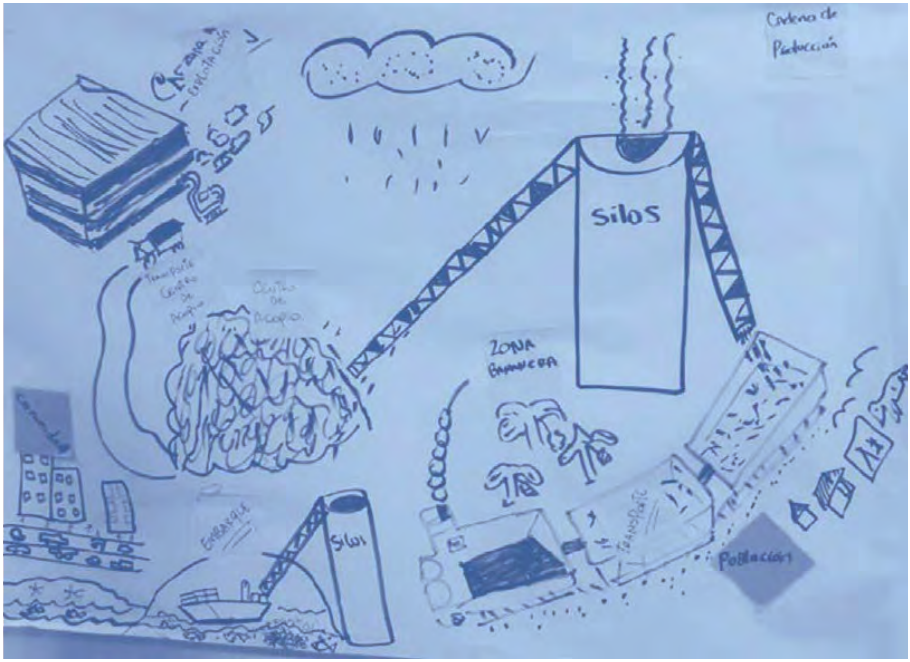


FIGURE 18. Social cartography: department of Cesar after the arrival of the mine.
Source: Own photograph, May 18, 2018.

a territory dedicated entirely to agriculture and livestock raising. There were rice, wheat, and avocado crops, and 5,000 people were employed in more than 13,000 hectares of rice. In addition, there were many natural wells and mighty rivers that gave quality to the soil and allowed it to produce efficient and effective crops. Now it has been more than thirty years since the department of Cesar is mostly mining operations. Drummond Ltd. has more than 6,000 hectares that were previously cultivated. Likewise, water wells were contaminated due to mining activity; different rivers, such as the Sororia, became arid, which has taken away fishing al-

FIGURA 19. Social cartography: Magdalena department before the arrival of the coal ports
Fuente: Fotografía propia, mayo 18 de 2018.

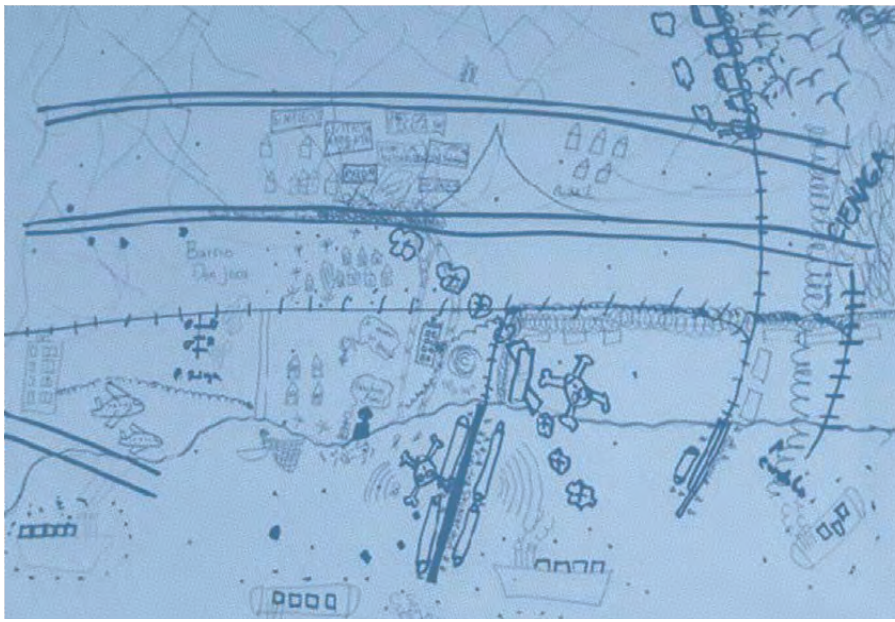
together. Contamination is visible along the entire railway line and throughout the mining corridor. The development of large-scale mining has generated a series of situations that have modified social, economic, environmental, and cultural aspects and influenced the destruction of the social fabric, such as prostitution, drug addiction, delinquency, adolescent pregnancy, forced displacement, and urban population growth. Don Jaca used to be a fishing community entirely. The areas belonging to the railways and ports for unloading and transportation coal in the Magdalena were previously fishing areas. The landscapes were pleasing to the eye. A wa-

ter-spring in the Don Jaca sector supplied the entire place with drinking water. The establishment of the different ports brought employment to the people at first. However, later it brought unemployment and poverty in the territory and a significant impact on the marine and terrestrial ecosystems of the region.

Results: factors to take into account in the transition agenda of the mining-energy model in the Colombian Caribbean

Throughout the discussion, it became evident that coal dependence needs to come to an end through the generation of

FIGURE 20. Social cartography: Magdalena department after the arrival of the coal ports.
Source: Own photograph, May 18, 2018.



productive projects that include the desire of the communities to recuperate the territory where the mining companies are. The attending communities ask for the joint design of life plans that consider coal extraction's environmental and social damages. Therefore, these communities ask for a sustainable development plan based on traditional activities like fishing, livestock, agriculture, and ancestral knowledge recovery. Likewise, they request protection of areas not intervened by mining exploitation and the rehabilitation of those that were, along with the support of the State and the mining companies. Additionally, they discussed what the role of government institutions and different actors should be in the construction of the transition agenda. Given this, the attendees to the II Forum considered necessary social articulation for establishing alternatives, financial co-responsibility of the State and the mining companies, cooperation with the private sector, oversight by the community regarding the rehabilitation of impacts, economic compensation

FIGURA 21. Working groups "Factors to be taken into account in the transition agenda of the mining-energy model in the Colombian Caribbean" II Decarbonization Forum of the Colombian Caribbean Economy.
Source: Own photograph, May 19, 2018.

FIGURA 21. Working groups "Factors to be taken into account in the transition agenda of the mining-energy model in the Colombian Caribbean" II Forum for the Decarbonization of the Colombian Caribbean Economy.
Source: Own photograph, May 19, 2018.

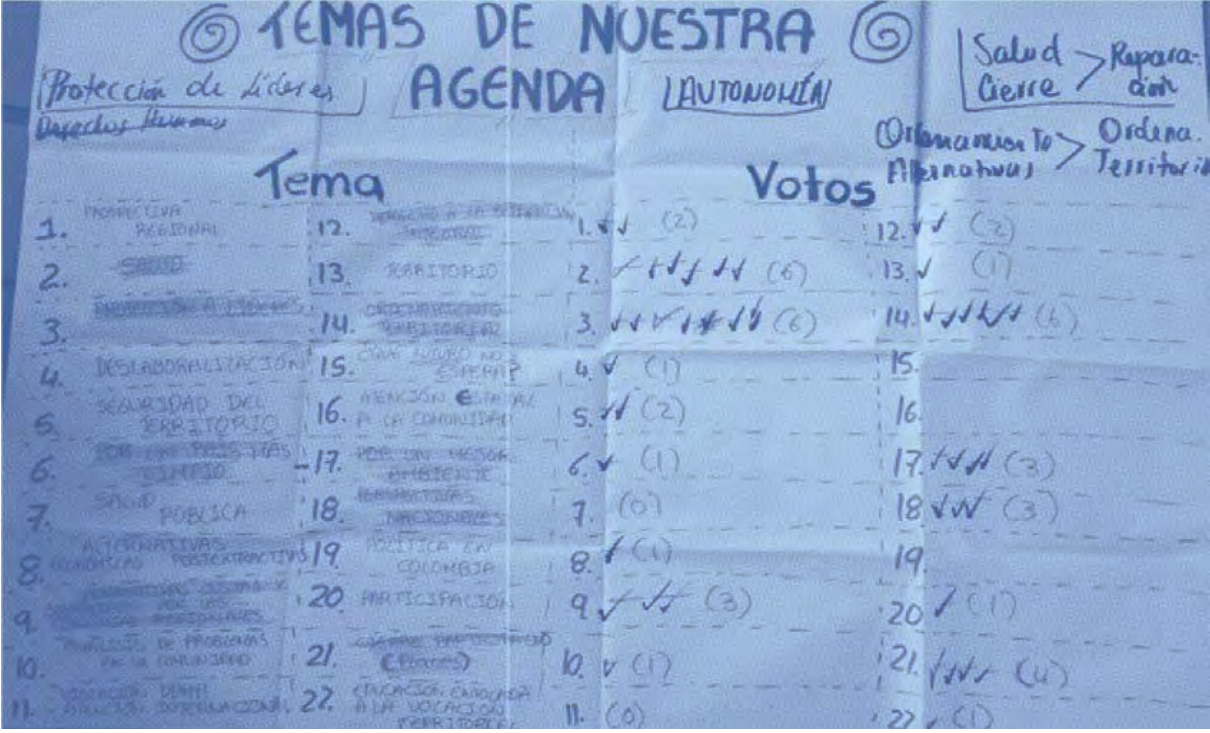


FIGURA 23. Topics proposed by the communities to be included in the transition agenda of the mining-energy model.
Source: Own photograph, May 19, 2018.

of the territories, guaranteeing of social struggles through the support of post-extractive policies and the partnership of academia and other organizations in the design and implementation of an agenda for the transition. After this discussion, several critical issues were decided to design a transition agenda for the mining-energy model through dialogue and voting.

Discussions of the II Forum of the Decarbonization of the Colombian Caribbean Economy

By way of conclusion, in this second version of the forum, six points emerged, considered necessary for the communities in any transition process: regional autonomy, guaranteeing of leaders' rights, economic resources and investment, fair and sustainable

alternatives, health and social reparation, participatory closure plans and territorial perspective. Finally, split into groups, participants delved into any problems, actions, necessary relationships, responsible parties, and impediments or limitations that may arise in each of those points chosen by the community as crucial in the transition agenda for the mining-energetic model. Problems that may arise and limit or prevent the implementation of energy transition plans in the departments of Cesar, La Guajira, and Magdalena revolve around the violation of the right to local and citizen participation. The high degree of corruption present in political power and state institutions; the tremendous power companies have and their high degree of influence; people's lack of trust in state institutions; local unemployment; poverty; lack of specialization; poor health conditions for workers and communities; violence and intimidation against leaders; insecurity; lack of financial resources; poor advisement and state support; lack of political will; lack of alternatives to mining; irreparable damage to livelihoods; infertilization of lands after mining; and lack of environmental and social awareness on the side of local communities. Faced with these possible negative scenarios, which, for the most part, are realities that even today are experienced in mining territories, some actions are proposed which people can use to counteract these problems. Some of these proposals are about denouncement; social mobilization; judicial actions; local awareness campaigns and socio-environmental training; active and organized participation; recognition of one's life plans; participatory citizen organization; community oversight offices; campaigns to raise awareness of corruption practices; articulation between leaders and influential actors in the mining departments of the Colombian Caribbean; exchange of experiences; investment and support for households; alliances and state resources to invest in local economic activities and productive projects; education in ag-

FIGURE 24. Opening of the III Forum for the Transition of the Mining-Energy Model to a Productive Reconversion of the Colombian Caribbean: words from the dean of the Universidad del Magdalena.
Source: Photograph by the press team of the Univeristy of Magdalena, April 3, 2019.

riculture; local campaigns against drug addiction, prostitution and teenage pregnancy; changes in local economic vocation; access to higher education; encouraging entrepreneurship (seed capital); attracting attention and seeking support from NGOs; strengthening and empowering unions; training communities on mining closure; and forming alliances with universities, the SENA [National Training Service] and other educational centers. Finally, in response to this discussion space's central question, attendees considered it essential for aspects such as community participation to be taken into account in the closure and transition to other productive activities for building transition agendas from the local level, attending to the reality of coal dependence, the generation of community production projects and the recovery of the territory's ownership by local communities

III FORUM FOR THE TRANSITION OF THE MINING-ENERGY MODEL TO A PRODUCTIVE RECONVERSION OF THE COLOMBIAN CARIBBEAN

The third version of the forum was held on April 3, 2019, with the Technical University of Berlin and the Rosa Luxemburg Foundation. In this edition, a dialogue was held with mining companies and state entities about the process of closing mines and the factors that should be part of a transition agenda from a mining-energy model to a productive reconversion of the Colombian Caribbean. The development of the forum took place in two sections. The first was a day of keynote speeches by Antonio Hernández, Etna Bayona, Andrea Cardoso, Xaquín Pérez, Hanna Brauers and Juanita Gómez. Their interventions revolved around the closure of mines, the labor sector in mining, economic diversification, transition, and cases of transitions at the international level. The second was a discussion where representatives of the mining companies of Drummond, Cerrejón, and Prodeco, the railway company Fenoco, the port of Santa Marta, the Port Society, and the National Mining Agency had to answer the following questions: How did the mining companies plan to close the mines? What is the role of the government and different actors in the construction of the transition agenda?

The actuality of coal mining and transition in Cesar and La Guajira

that each ton of coal extractFor communities facing an exit from coal mining, studying the steps they should follow after leaving mining aside is critical. It is necessary to know what will be produced for the markets, how jobs will be replaced and how local competitiveness will be strengthened in mining territories. Around this theme, it is known that La

Guajira and Cesar have become territories of ecological and social sacrifice. Therefore, it is vitally important to find different alternatives to coal mining that can still provide income for the State. For this reason, one concern for the transition plan is what will happen after the coal extraction industry is gone since the government has received royalties and jobs have been created thanks to it. Although this is an issue that must be considered at the time of a transition, damages generated in the territories due to mining are much greater and even more expensive if one wants to speak in economic terms. Cardoso (2015) shows that each ton of coal extracted in Cesar implied environmental and social damage for a minimum value of 144.64 dollars in 2019, which is equivalent to three times the price of a ton of coal. Although the mechanisms for measuring these damages caused by coal correspond to purely economic valuation languages, it is still important to recognize that each ton of coal extracted in places like Cesar or La Guajira carries socio-environmental costs in other valuation languages which cannot be appraised exclusively monetary terms (Cardoso, 2018). With these figures, it is evident that the beneficiaries of coal mining in Colombia are a minority –most of which is made up of large multinationals–, while the local communities suffer most of the environmental and social costs generated in their territories. There are various economic and social problems in the mining municipalities of Cesar and La Guajira, where there are supposed to be large incomes: the surrounding communities live in misery, hunger, prostitution, violence, and insecurity. Therefore, before considering a future mine closure, the real concern should be what is happening in the present. It is ironic to see that the non-mining municipalities of La Guajira and Cesar have advanced more and present far fewer economic and social conflicts than those within the presence of companies that contribute royalties to the municipalities. La Guajira, for example,

was the fourth poorest department in the country in 2018 with a multidimensional poverty index of 51.4 percentage points (Departamento Administrativo Nacional de Estadística (DANE) 2019). These economic models or "development engines" have not positively impacted local communities. In addition, people directly or indirectly affected are very skeptical about the trust given to control and regulatory entities, both in the mining activity and commitment to the community. In this context, an inhabitant of the Don Jaca district expresses his concern since the entities responsible for doing justice regarding the damage and pollution caused by coal mining do not work for the community. People feel that mining companies do not support locals and the State does not do its job; it does not watch over, control, or enforce the law. The community is concerned about state evasion regarding regulation and management of processes that permit the common welfare. One of the most common allegations of supporters of an economy based on the coal industry is that it can be linked with local economies and coexist with other productive activities; However, the reality is different. Mining competes with agriculture for the use and exploitation of the land. In the department of Cesar, coal mining has not coexisted with local and rural economies such as agriculture and, rather, it has been associated with the clearing of agriculture and the manufacturing industry (Centro de Estudios para la Justicia Social Tierra Digna et al., 2015). Among the most notorious damages are the effects on water sources. The sinkholes caused by coal extraction have contaminated the aquifers, as the water stored there is seeping underneath. Another way to pollute the water is with blasting for coal extraction, which moves the Earth's tectonic plates and causes the loss of sealing so that polluted waters seep and pollute aquifers, which is one of the main reasons for high infant mortality rates in La Guajira. All this demonstrates a negative environmental impact that directly affects the community. A victim of this

situation attests that the water's contamination does not allow them to cultivate or raise livestock in those areas. Water discharges from mining waste have polluted rivers and streams. An example of this is the Ranchería river in La Guajira. For the community, it is a vital river that runs through nine municipalities inside the department, and due to coal mining, six of them have been affected by pollution. Likewise, multiple other impacts are causing damage and conflicts to communities, the environment, and the economy, such as the dynamite blasting used for mining extraction, which weakens the land and puts the construction of homes at risk in the municipalities surrounding the Cerrejón mine, such as Albania, Hatonuevo and even Fonseca. The deforestation carried out by mining companies in many hectares of land has devastated millenary and centenary trees and has prevented the growth of new ones. Even after restructuring and rebuilding the land, only a layer of 30cm of fertile soil remains. In contrast, the rest of the soil in deeper levels continues to be sterile and does not have the necessary nutrients. On the other hand, the breeze carries coal dust in the air to the rivers and the sea, where it ends up contaminating the water and all of the species that inhabit it. This pollution is happening inside the fishing areas of Don Jaca, Taganga, Neguanje, and others near the ports in Magdalena, where the fish appear with certain amounts of charcoal in their bodies. These species then end up on our plates, and many of us consume them without knowing they can cause damage to our health. There are numerous municipalities in the vicinity of the mines, and as a result, multiple socioeconomic conflicts and environmental impacts unfold. The Centro de Estudios para la Justicia Social Tierra Digna and the Centro de Estudios Políticos para las Relaciones Internacionales y el Desarrollo (Ceprid) (2013) define the impacts of extractive-mining activities as environmental, on the health of the population and of a sociocultural nature, all of which cause a breakdown of the social

fabric and limitations in the exercise of civil and political rights. They also explain that, from the environmental point of view, the effects of mining extraction materialize in the rise in emissions of toxic gases; deviation of the river bed; contamination of water sources as a consequence of the use of toxic substances such as arsenic and mercury; decrease in surface and underground water currents; the emergence of acidic waters; destruction of hills; destruction of non-recoverable plant layers; destruction of the soil and arable areas and the natural forest. Garay (2013) also found that the generation of waste in the case of coal is close to ten tons of waste for every ton of coal exported. More than 92% of coal production is exported without generating production chains, making the country a net exporter of raw materials and an accumulator of polluting waste, which favors the reproduction of ecological and social injustice caused by the generation of non-compensatory externalities. Among the most frequent environmental impacts are physically altered landscapes, waste piles, subsidence, spontaneous combustion of coal waste, water pollution, abandoned buildings and factories, loss of vegetation, open wells, and the creation of mining environmental liabilities (MEL). MELs constitute an area "where there is a need for restoration, mitigation or compensation for environmental damage or unmanaged impact, produced by inactive or abandoned mining activities that put health, quality of life or public or private assets at risk" (Arango & Olaya, 2012, p.1). Other studies offer an analysis of the impact of coal mining on the life of communities in aspects such as food security and public health since coal mining companies have degraded the surrounding soil and contaminated or dried up sources of water, with devastating effects on agriculture and livestock (Harris et al., 2016; Re: Common, 2016; Wilde-Ramsing & Steinweg, 2012). In addition, the implementation of large-scale mining projects has led to the breakdown of the social fabric and the fragmen-

tation of the community, due, in large part, to the offering of gifts, privileges, and economic remuneration by mining companies to community leaders who give their consent to the promotion of extractive activity (Ponton, 2017). In addition, coal is highly toxic for human health due to the toxic traces it leaves behind, such as carbon oxide (COx), sulfur oxide (SOx), nitrogen oxide (NOx), particulate matter (PM), and heavy metals, which significantly deteriorate air quality while posing serious risks and effects to people who inhale it as well as to plants, animals, and soils. The risks and damages of coal manifest daily in the socio-environmental health of departments from which it is extracted (Fundación Rosa Luxemburg & Sintracarbón, 2018). The risk of exposure to these harmful effects on human health is related to the proximity to coal mining: only by inhaling its residues, there is an imminent risk since people are exposed to particulate material, heavy metals present in coal, and polycyclic aromatic hydrocarbons, all elements which cause serious effects such as cerebral infarction, heart problems, respiratory diseases, lung cancer and stomach cancer (Fundación Rosa Luxemburg & Sintracarbón, 2018). Today, there is strong evidence of a causal association between short –and long-term– exposure to environmental PM and increased mortality and morbidity rates. Furthermore, scientific results suggest that PM derived from combustion is more harmful than other types of particles in the air (Brook et al., 2010; Espitia-Pérez et al., 2018; Janssen et al., 2011; Janssen et al., 2012; Saikia et al., 2018).

Direct Implications of Coal Mining on Livelihoods

Among the most controversial topics discussed in this forum are the impacts of coal mining on the livelihoods of communities. Regarding this, Hanna Brauers, from the Technical University of Berlin, pointed out that coal mining is an essential reference for the country's finances because, in addition to the royalties it gener-

ates, it covers a high percentage of GDP in the mining departments: in 2020 it represented 38.9% of GDP in La Guajira and 40.7% of GDP in Cesar (Ministerio de Comercio, Industria y Turismo 2020a, 2020b). If coal extraction in Colombia were to be reduced, the demand for direct employment would decrease. Alternative activities to the coal industry are already causing labor migration, financial damage, or deprivation of essential public services for the populations surrounding the mining industry. In this sense, Etna Bayona, from the Universidad del Magdalena, highlights the productive chains that this economic activity has generated and its macroeconomic importance to prompt up businesses such as hotels, restaurants, or community and financial services, which constitute an essential income for these populations (Ministerio de Comercio, Industria y Turismo, 2020b). Generally speaking, there were many disparities in the forum's attendees about coal mining. Most of the community representatives and researchers spoke about the impact of this economic activity. One of them was the representative of the ecological sector of the Territorial Planning Council of the Santa Marta District, who expressed how dust produced by the blasts has affected people's health or how these blasts have affected houses' infrastructure by causing the ground to move. There have even been repercussions on fishing, a critical productive activity in different municipalities around the ports. In this regard, the Spanish researcher Xaquín Perez, from the University of Copenhagen, spoke of contamination in groundwater and how harmful it is for human consumption, as well as the creation of killer lakes which accumulate gases and sometimes cause the displacement of neighboring inhabitants, as it happened in Spain. In this sense, other attendees presented their local situations around the contamination of groundwater and river beds by mining waste and its effect on tracks of land used for livestock.

Additionally, the leaders of Don Jaca ask themselves what

Photo: Marco Perdomo Ramos

will happen to the children of fishing parents, who depend on this activity for their sustenance, in a scenario where fishing is no longer possible. The mining sector is affecting other productive sectors and wreaking havoc on people's health and their sources of livelihood. Aspects like these make it somewhat challenging to close mines indiscriminately since, as can be seen, negative externalities occur, and some positive ones. If a closing process is carried out autonomously and forcibly, it will discriminate against certain groups. When foreseeing a closure of mines, measures must be taken to protect and replace what coal mining provides to the surrounding communities and the local and national GDP.

Mine closures

Regarding the closure of mines, the forum participants identified the positive environmental impacts after the ending of mining operations. Likewise, they mentioned the possibility of rehabilitating lands used for these practices and making them available for the benefit of society. Participants also expressed their concern about long-term contamination, the so-called perpetuity impacts, and, of course, rehabilitation, as they fear that in the event of mine closures, there will be no compensation of any kind and that instead of seeking actions that promote the preservation of ecosystems in the future, some other form of land dispossession and resource exploitation may occur for development's sake. It should be noted that mistrust is directed at mining companies and local authorities due to their poor institutional capacity and lack of transparency. For Juanita Gómez of the Stockholm Environmental Institute, the closure of mines could generate significant migratory flows towards the regional centers.

An example of this was what happened in the department of Cesar when the cotton industry fell, and there were significant migratory movements towards Valledupar. In this sense, movements like these could threaten

the adequate provision of essential public services, generating insecurity and instability in the regions. Therefore, long-term planning is necessary: planning a change of this magnitude takes time, so local and national governments must establish prevention strategies with reasonable anticipation. Implementing long-term planning brings innumerable benefits, including allowing the authorities and actors dependent on these industries to identify alternative economic activities and new public sector financing structures and mobilize all the necessary resources for these activities. Consequently, work must begin on the diversification of the economy, as mentioned by Bayona, who assured that these departments have excellent growth potential and that it is time to stop depending on the mining-energy sector. Long-term planning should focus on those potential sectors that require investment and research and contribute to a genuinely inclusive social development that reduces poverty rates. Thus, supported by Adolfo Meisel, she argues that potential sectors such as tourism, culture, and the agricultural industry should be exploited, and their development studied in the medium term. However, it is essential to recognize the concern that other potential sectors may not be able to boost the local economy as mining does, so that between now and 2034, the year for which the definitive closure of mines in Colombia is planned, those sectors that will replace the income from this extractive activity must have been already carefully studied and analyzed. With long-term planning, it is expected that production diversification will be consolidated and reflected in the GDP of departments such as Cesar and La Guajira. The perceived future for Colombia is uncertain, and the impacts on the regional economic aspects will be inevitable, hence the importance of immediate planning. The mine closure process requires the participation of the affected community, so its impacts are analyzed, and alternatives to it are established. Likewise, it is necessary to rehabilitate lands used for these

practices and repurpose them to benefit those most affected by building schools, parks, soccer fields, and other projects. Finally, it is essential to implement long-term planning to identify alternative economic activities and new financing structures for the public sector.

Productive alternatives to mining

When mining arrived in the territories more than thirty years ago, local communities ceded territory to multinational companies in exchange for perks and incentives: new land and housing in less fertile and drier territories. This displacement and the reorientation of work towards the mining sector strongly weakened the communities' vocation for agricultural and livestock-related endeavors. One participant sums it up like this: *"due to necessity, aid was accepted from the multinationals […], but they arrived with falsehoods."* A clear example of this deception was the construction of the dam on the Ranchería River. It was supposedly built to supply water for the aqueducts of neighboring communities. Instead, it was used to boost Cerrejón's operation. A similar problem is faced in the Bruno stream in La Guajira. It is crucial to develop productive alternatives as an integral part of mine closure plans. Return to ancestral agricultural vocations of local communities was proposed as a real possibility; however, emphasis was placed on remaining critical about large agricultural operations, such as monocultures or ecotourism. A productive alternative to mining must be fair to the community and the environment. Furthermore, it is crucial to strengthen and empower the local community in this process. The processes of diversification of the energy matrix and the economy in territories focused on coal mining present various impediments, among which is the undervalued role of societies in procuring new production methods and their limited capacity for exploiting their comparative advantages, governments' poor participation in direct and indirect ways and

costs associated with technologies which reduce the proliferation of GHGs. That is why, when evaluating alternatives to extractivism, a differential in economic, political, social, cultural, environmental, and territorial impacts must be taken into account. Here the academy must have a central role in exploring the potential of different productive alternatives to mining. Although the ability to generate decent employment in the community is important, these alternatives' negative effects on the territory and its people should not be ignored. From the perspective of the III Forum for the Transition of the Mining-Energy Model to a Productive Reconversion of the Colombian Caribbean and within an international context, the speakers Hanna Brauers and Xaquín Pérez presented an overview of how transition processes of the energy matrix and the linking of communities and governments in the diversification of sustainable production have been carried out. They highlighted key aspects such as linking a state that takes advantage of the legislation in favor of renewable resources and thus increases its power to influence public investment for transferring large market sectors to other sustainable sources of energy and forms of production. Likewise, they argued about prioritizing affected communities since they suffer different risks during the energy production and transition processes. Meanwhile, efforts should be made to use technologies that reduce GHG emissions and include communities in activities that stimulate the generation of added value in their territories to reduce socioeconomic inequalities. This concern is because despite representing an important source of national income, mineral extractive activities such as oil drilling or coal mining have become a focus for exploiting natural resources and legitimizing the backwardness of mining regions instead of representing a guarantor of progress, as national governments and mining companies pretend to showcase. Bayona recognizes that transition processes are long-term movements and, therefore, alternatives

directed towards the community must be sought to avoid counterproductive situations. In the case of the proliferation of sectors, the positive potentialities of the Caribbean region concerning agriculture stand out as an activity that generates an exponential growth in jobs, compared to mining production. Furthermore, coal imports from the European Union are decreasing rapidly, due in part to the emerging environmental awareness in the Member States (Oei & Mendelevitch, 2019), and a drop in demand from Turkey, which has reported on its intentions to strengthen national coal production and decrease its imports in the long term (Cardoso & Ethemcan, 2018). These market behaviors are also reasons to think critically about the coal transition in Colombia. All this creates the need for allocating resources to develop infrastructure, social assistance programs such as early pensions and subsidies, and research on economic diversification. In Colombia, figures from the leading coal companies (Drummond, Cerrejón, and Prodeco) confirm that coal mining offered, until 2018, 13,837 direct jobs and 17,229 indirect jobs (Grupo Prodeco, 2019 Cerrejón SA, 2018; Drummond Ltd. Colombia, 2018). Union representatives are concerned with an agile and unplanned exit from coal mining since they do not know which actors and institutions will protect workers in this scenario, who will be responsible for the exit's socio-environmental liabilities, and which productive alternatives can arise after. This fear is compounded by the fact that, to date, the Drummond and El Cerrejón companies do not have an elaborate closure plan, which implies the risk that the environmental and social impacts of their mining operations will not be repaired and they will not be offering productive alternatives to workers (Censat Agua Viva, 2018). Unions facing these dangers demand the academy's attention be directed to clearing up the dynamics of international coal markets, investigating the macroeconomic effects of their collapse, and proposing methods of closure for the

mines, which take into account the fundamental rights of workers and surrounding communities. Concerning this, Hanna Brauers, from the Technical University of Berlin, described how the mining-energy transition is lived in Germany, an example that Colombia can follow in terms of the policies the government must develop. The German State adopted modernization programs for the coal industry, business opportunity creation, security payments against unemployment, worker retraining, and substitution of coal-based energy production inside the mining regions to solar and wind-based. Additionally, they invested in infrastructure to improve mobility and higher education. All of the above cushions the impacts the transition may have in the labor sector. Tourism and the cultural industry should be encouraged as alternative sectors to mining. For example, it is recommended to create ethnic design circuits and tourism circuits, export ethnic clothing, the La Guajira-Santa Marta-Sierra Nevada circuit, museum routes, cultural heritage, and vallenato [a type of local music] festivals. Similarly, Bayona mentioned that *"protectionism, subsidies or promotion must be for those sectors where the region's people have a real vocation for,"* with which she said that only those sectors could promise growth and become competitive after the closure of mines.

Intersectoral Alliances

A crucial point follows: dialogue and agreement between the community, workers, the company, and the State is necessary, which is why state and civil society actors often seek to generate spaces for dialogue between communities and companies. However, on many occasions, this has proven quite tricky. A participant from the community of Provincial (La Guajira) denounces one of these commonly witnessed efforts:

"Companies enter the territory to socialize their projects and plans. How is it possible for a company person to come walking in like Pedro by his house

(T/N: common idiom) to my home, where I should feel safe, and they just start taking pictures, without asking for my permission and then try and socialize what they have already decided they are going to do? If they do not respect you, there can never be a good relationship."

Another participant adds: *"How do you ask me to sit down with the same people who've destroyed my territory for their own gain?"* This position is explained by the resistance of the communities to normalize the abuses of these private actors; that is, to turn them into everyday occurrences that only require negotiation and socialization processes.

For this reason, the communities affected by coal mining in Colombia express little hope for a better future since they affirm that they are not taken into account in decision making, granting of licenses for mining activity, or in victims' reparations. However, the only spaces for these purposes in their territories have been those in which mining companies get to socialize their projects and make themselves known. They also allege their lands have been taken away, their culture, dreams, and even their health and quality of life are deteriorating daily due to mining. These facts go completely against international legislation such as Convention 169 of the International Labor Organization, which grants indigenous communities the right to prior consultation and establishes the duty of the government to officially ask them whether or not they agree on possible measures that may positively or negatively affect their collective rights or the exercise of said rights.

In Colombia, companies and the State are experts in fragmenting communities and workers through selective payments and incentives. Historically, these spaces of struggle have been co-opted through individual interests. For this reason, it is crucial to establish strong relationships between communities and workers in the energy sector in order to arrive united along with joint proposals to the negotiating table.

To date, these alliances have not germinated in all spaces. However, cases such as the one of the National Union of Coal Industry Workers (Sintracarbón) show that generating this type of alliance is possible. Representatives of the Union of Energy Workers of Colombia (Sintraelecol) reflect on the conflicts that have impeded these relations and on the need to overcome them:

> "Tension between the communities and the union organizations is natural, we have to admit it! It is not easy to find coincidences, but there are points where agreements can be reached […] conflict must be processed on what is common, but without denying or hiding it."

Therefore, in addition to contributing to the communities' struggle through knowledge production, a socially responsible academy must help articulate these sectors in favor of a just energy transition. Meetings like this are a real opportunity to bring these two sectors closer together and open spaces for discussion and agreement. In addition, when communities and workers do not allow themselves contact with companies and the State, academia and journalists must communicate their claims to the spheres of power and public opinion.

Research topics identified

Real impact of renewable energies on the labor market

After the closure of the mines, one of the doubts discussed during the meeting was the future of local workers in the mining industry; El Cerrejón alone employs 13,270 people (Cerrejón S. A., 2018). One of the frequently heard arguments in favor of the energy transition is that it creates new jobs at the local level, without thinking deeply about the thousands of jobs that would be lost if the mines were closed or those who would be displaced by wind and solar projects' use of resources such as land. Furthermore, there is no absolute clarity on the job-generating potential of renewable energies. The largest solar park in

Photography: Marco Perdomo Ramos

Colombia in El Paso, Cesar, with an installed capacity of 86.7 MW –corresponding to the consumption of a small city– only hires one operator permanently. With this in mind, one of the union representatives exclaims: "Clean energy, economically speaking, is going to clean out the communities." However, other participants questioned the current capacity of multinational mining companies to generate employment at the local community level. A representative from Provincial (La Guajira) highlighted that, in her community, the one closest to the El Cerrejón mine, only five inhabitants are mine employees. In addition, these five workers perform low-technical work, such as security and various trades, which does not represent a significant income for the community. According to this version, most employees come from urban centers or abroad. According to figures from the Ministry of Labor, these companies offer employment to 1.9% of the department of La Guajira and 1.3% of the department of Cesar (Fuente de Información Laboral de Colombia (Filco), 2018a, 2018b). At this juncture, the academy must also devote attention to studying the true impact of the energy transition on the local labor market and helping to identify options in the medium and long term..

Mapping of environmental conflicts and creation of synergies

In the department of La Guajira, one of the most renowned environmental conflicts is the one unfolding around the Bruno stream, used by neighboring populations to supply their basic needs and aqueducts. Suppose this stream disappears because of its diversion by Cerrejón, as has already happened with the Tabaco and Aguas Blancas streams; related damages include loss of biodiversity, water shortages, and inability to meet the population's basic needs. Likewise, the township of Cañaverales in the municipality of San Juan del Cesar, La Guajira, faces a significant environmental conflict due to the im-

minent opening of new open-pit exploitations that will be carried out a few meters from the Cañaverales spring, which could cause fluctuations in the phreatic level of underground streams and the quality of surface water. Therefore, this would directly influence agricultural production and the communities' food sovereignty. In the department of Cesar, the outlook is no different.

A clear example is the municipality of La Jagua de Ibirico, where the exploitation of coal has caused the migration of fauna, the imbalance of ecosystems, and the contamination of water sources. As for the capital of the department of Magdalena, the impacts generated with the transportation of coal by the transnational Drummond are increasingly evident. The composition of local beaches was altered by coal dust released into the atmosphere when extracting and transporting the mineral or because of emergencies like the one in 2013 when a cargo ship released dozens of tons of coal into the sea. The mapping of these and other socio-environmental conflicts is vital since it allows a joint vision of the problems in the territory. In addition, it can be a tool for identifying cross-cutting needs and generating proposals for managing these problems jointly. To achieve this objective, one could start from community mappings, through which the inhabitants play a part in the diagnosis of problems with the contribution of their experiences. The first steps in the construction of conflict maps will lead to the formulation of projects which allow proposing solutions to the problems identified, natural resource management mechanisms, and demands for guarantees from government entities and multinational companies. In any case, the map-building process requires the inclusion of communities and the integration of social movements which represent their interests.

Discussions of the III Forum of Transition of the Mining and Energy Model to a Productive Reconversion of the Colombian Caribbean

The existing disparities between communities, state institutions, and coal companies were evidenced in this third forum. The general feeling from both attendees and panelists was that of disagreement, some for not knowing what would become of them after coal exploitation and others from fear of not knowing how to solve those problems caused to their communities by this economic activity. Despite that, all attendees and forum presenters agreed that this type of dialogue scenario between communities, companies, and academia should continue to be offered. On the first day of the event, some background was presented on the international experiences of the energy transition of Germany and Spain and perspectives on the energy transition in Colombia; specifying how Colombia can plan a future without coal, what economic opportunities remain after coal exploitation and an evaluation of the use of resources from the royalty law. Any context of coal mine closures must lead towards a transition to just land reform, small-scale agriculture, and autonomous education for everybody. To this end, the affected community's participation is required, where impacts are analyzed and alternatives are sought to compensate for the damages. A long-term agenda or planning must be generated, which allows the identification of alternative economic activities and new financing structures from the public sector for these communities. As a result of the first three forums, the need arose to generate productive projects in a transition, including the feelings and knowledge of the people affected by the coal supply chain activities in Cesar, Magdalena, and La Guajira. Intersectoral alliances are crucial for the joint fight towards a just transition. This type of alliance leads to participatory, equitable, and inclusive initiatives and synergies between actors who work with the communities. These associations can propose more equitable and inclusive solutions, which also contemplate knowledge from different traditions. Four crucial sectors that can cooperate are civil society, academia, workers,

and communities, which does not mean ruling out all kinds of alliances with the public and private sectors since necessary inputs can emerge from these meetings. However, it is recommended to keep a critical eye on these actors due to the high risk for the legitimacy of an incipient movement of being co-opted by establishing alliances with actors that directly or indirectly reinforce the problems faced by communities and workers, undermining a just transition.

VIRTUAL SEMINAR "JUST TRANSITION OF THE MINING-ENERGY MODEL: DECARBONIZATION AND TRANSFORMATIVE ALTERNATIVES FOR THE COLOMBIAN CARIBBEAN

Due to the pandemic generated by Covid-19, this seminar took place virtually from July 14 to 31, 2020, through the Zoom platform and was broadcast on YouTube. The main objective of this space was to share experiences, knowledge, and contributions from the academic and scientific community, NGOs, and representatives of communities from the departments of Cesar, La Guajira, and Magdalena regarding coal mining its implications, its transition, and its alternatives. This space was divided into six talks, each with a specific theme and a moderator, organized by different NGOs: the Semillero de Transición Energética, Censat Agua Viva, Indepaz, Cinep Programa por la Paz, José Alvear Restrepo Legal Collective and AIDA. There were moments for presentations and dialogue groups and for answering some questions and interventions by the guests. The virtual tool Mentimeter was also used to create surveys and graph them in real-time; in this way, we could ask about a specific topic and obtain graphic answers to interact with the participants. In general, discussions revealed specific challenges for the closure of mines and a gradual transition

to renewable energies, conferring a critical value on generating business ideas for the communities involved and planning activities that produce more significant social benefits. Regarding renewable energy generation on the path away from fossil sources, it is necessary to understand how clean energy is obtained and what is needed to produce it. In addition, it is crucial to analyze the term "clean" because behind renewable energies, the same exploitative dynamics of conventional energy are hidden, which constitutes the "mirage of renewable energies." One of the most important aspects addressed in the virtual seminar was forced displacement, a practice that constitutes the violation of the human rights of the communities caused by the capitalistic system's definition of "development," which causes socioeconomic crisis and inflicts suffering upon people. They must learn to live without lands for developing productive, social, and spiritual activities for prolonged periods, which generates even more poverty and inequality in the region. For this reason, it is essential to strengthen national and international standards associated with resettlement processes to achieve fair agreements between mining companies and communities. The State must support these processes and become a watchdog of prosperity and shared development, committing itself to create infrastructure, economic, physical, and mental health plans that meet the communities' needs to stably develop their ways of life

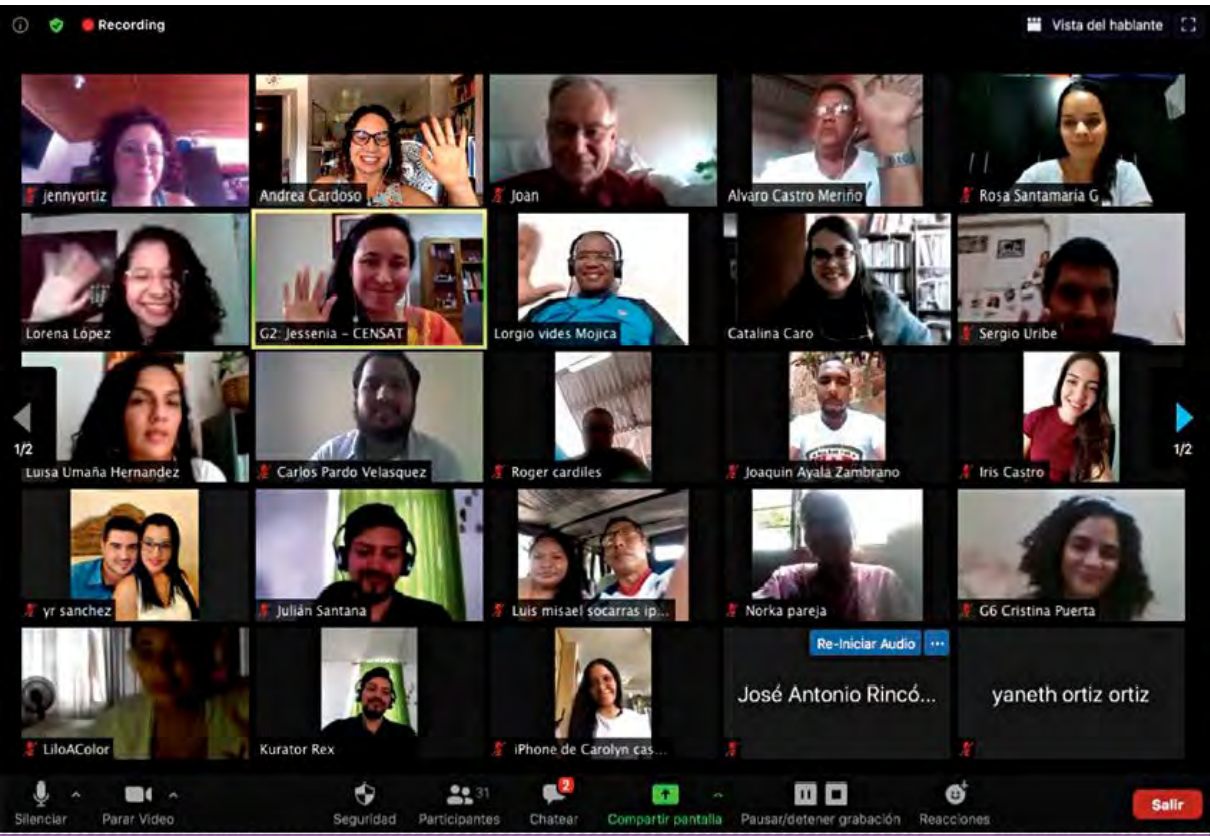
First conversation "Reconfiguration of extractive borders and new corporate and state strategies".

The current demand for coal, its effects, and actual cost in the extraction environment

Coal has different meanings depending on the actors who speak about it. On a global level, coal means CO2; For mining companies, the discourses of clean coal or veter coal (veterinarian coal) define that clean and responsible coal is possible; For indigenous people of the Sierra Nevada

de Santa Marta, coal corresponds to the bones of Mother Earth and, therefore, should not be looted; for Turkish workers, coal is their bread and butter, while for Colombian workers it means selling their souls to the devil (Cardoso & Ethemcan, 2018). Coal, after oil, is the second most used resource for electricity production in the world. In 1976, the Colombian government authorized coal exploitation in La Guajira for the Cerrejón company, which today exports more than 32 million tons a year and has an exploitation li-

FIGURA 26. First discussion "Reconfiguration of extractive borders and new corporate and state strategies".
Source: Event screenshot, July 14, 2020, https://youtu.be/jORfQBPK7Nc



cense until 2034. Cesar and La Guajira departments produce and export more than 90% of Colombian coal, an activity that represents 42% of GDP in Cesar and 52% in La Guajira, making Colombia the fourth largest exporter of coal in the world. Mining titles are necessary to mine this coal, which, in some instances, overextends the exploitation areas granted and specified in the environmental licenses. According to studies carried out by Felipe Rodríguez Rodríguez and the Coal Study Center of La Guajira (2015), this department has enough coal to be exploited for another hundred years, which does not give much hope to communities affected by this activity and its externalities, or to those to which companies have not yet fully responded. Although coal is not as in-demand globally as it used to be, several countries have increased the amount of coal they use for energy purposes, like China, which consumes 4,000 million tons a year; India, which consumes around 1,000 million tons; and Turkey, the largest importer of Colombian coal. In the case of India, taking into account its high population growth rate and its significant dependence on coal for its energy system, it is estimated they could demand approximately 2,000 million tons of coal in the year 2020. Thus, it is evident that coal is not a thing from the past, as it is claimed, but still part of our present. Infante-Amate et al. (2020) show that Latin America has a crucial role in the global supply of natural resources since most of its countries export primary products with little added value while importing manufactured goods at higher prices; additionally, there is a tendency in the commercial specialization of these countries that imply negative externalities for their economic development, environment and well-being of the local population. Many of coal's impacts are related to climate change caused by GHG emissions, as evidenced by the rise in sea level, which carries a high risk of floods, cyclones, or hurricanes. The Kuna community in Panama could end up displaced because they have lived on islands


Transición Justa del Modelo Mir
DESCARBONIZACIÓN Y ALTERNATIVAS TRANSFORMADOR
En Latinoamerica siempre hemos sido proveedores de materias primas para el mundo y eso ha incentivado la desigualdad.
HAY UNA TRANSICIÓN ENERGÉTICA JUSTA?
sale el carbón y surge la busqueda de nuevos minerales
litio
EL CARBÓN NO ESTÁ EN EL PASADO, ESTA EN EL HOY
los unicos que pueden parar al extractivismo son los movimientos sociales
VENDEMOS BARATO Y COMPRAMOS CARO
Apoya:
ROSA LUXEMBURG STIFTUNG
OFICINA REGIÓN ANDINA
Organizan:

FIGURE 27. Digital graphic report of the second conversation, "Environmental and climatic impacts of coal mining.".
Source: Prepared by Liliana Deavila Pertuz.

since colonial times, and with the annual rise in sea level, their extensions of inhabitable lands have been reduced. In Alaska, where the sea level rises a little each year due to the melting of the glaciers, communities decided to fight judicially with the oil companies that operate there, seeking to have their housing relocations paid. Still, they lost the case. At the same time, the inventory of mining environmental conflicts registered in the Environmental Justice Atlas (EJ Atlas) for Colombia's case —which exports coal, oil, and palm oil— amounts to one-hundred-and-twenty incidents. This atlas records the abuse of the mining companies when violating the right to life and decent work of communities in La Guajira and Cesar and even in Venezuela. For mining companies, economic interests prevail over the well-being of extraction zone inhabitants. In Colombia, the Caribbean region leads in fueling exports in the world coal market —the so-called metabolism of the economy—. Although the amount of coal extracted in Colombia has decreased in the last five years due to changes in the global dynamics of coal disuse and implementation of renewable energies, it is inside this Colombian region where communities, mainly from Cesar and La Guajira, are directly affected by the extraction of eighty-five to ninety million tons of coal per year, which continues to cause irreversible damage to the environment.

For this reason, the market and some mining companies are signaling that the coal market must change —for example, a study by the company Prodeco on the closure of some of its mines due to low coal prices. By way of reflection, some questions arise: Why not better leave coal in the ground? Why not think of other sources of energy? What are we waiting for to take the definitive step towards the energy transition?

The mirages of the energy transition

Novel clean or renewable energies are classified as a way to reduce fossil fuel use, the impact

of which has been previously addressed. However, in the first discussion, a question arose that implies deep reflection: is the energy transition the solution to the problems currently suffered by communities living in the vicinity of the supply chain and commercialization of coal in the Caribbean region of Colombia? Will this be the end of environmental conflicts? Will the communities benefit from this change? Moreover, are renewable energies a valuable tool for a just energy transition? Sergio Uribe Sierra, a member of the Observatory of Mining Conflicts and the Mexican Network of People Affected by Mining, exalts that energy transition towards clean energy, strengthening electromobility, wind farms, and solar panels are methods of energy production less questioned and more accepted. This perception is because they imply reducing the use of fossil fuels, one of the leading causes of climate change and many of the socio-environmental conflicts unfolding today in Cesar, La Guajira, and Magdalena. However, for manufacturing the batteries used in electric cars, it is necessary to use elements such as cobalt, lithium, copper, molybdenum, and rare minerals, which, in recent years, have been positioned as essential for renewable energy technologies. Cobalt, for example, represents "one of those metals that define the modern world" or "blue gold" (Robertson, 2019). According to Jerez (2018), the principal lithium reserves are in Chile (50%), China (25%), and Australia (9%), and in the rest of the world, there are 16% of them. Of the world demand for lithium, 58% is destined for the production of electric batteries, of which South Korea (16 Mt), the USA (13 Mt), Japan (12 Mt), and China (11 Mt) represent the largest share. This growing increase in demand has caused the borders for the exploration and exploitation of lithium to expand to Latin American countries. According to Uribe Sierra, in Mexico, mining concessions have been awarded in Zacatecas and Sonora, areas that have historically presented the most significant mining conflicts. There are many more in Brazil,

Argentina, Bolivia, and Colombia, like this case. Lithium extraction produces severe environmental impacts. Forensic and environmental geologist Fernando Díaz,

> says it can be estimated that for every ton of lithium extracted, around two million liters of water evaporate, clear evidence that lithium mining in salt flats is actually water mining […]. These exploitations affect the ecosystem, its fauna, birds' migrations, camelid populations, and human populations, which, although not numerically high, have particular ethnic characteristics, and any exploitation that does not preserve these communities is ethnocide. (Cited in Gallardo, 2011, p. 29)

For the extraction of lithium by pegmatite rocks and molybdenum –used for the manufacture of wind generators– with open-pit mining, large areas of land, vast amounts of water and energy, the use of toxic substances, and deforestation in the extraction areas is required. For those facing this discussion, the term *energy polyamory* emerged, alluding to the emergence of new energy generation alternatives. This analogy references the film "Doña Flor and her two husbands" as a comical and successful way of explaining how *"new energies have been added, but there is no decrease in conventional energy,"* in the words of the ecological economist Joan Martínez-Alier. It is evident that every time new forms of generation of alternative and "environmentally friendly" energies are discovered, the rhetoric of energy transition continues, without genuinely having such a transition, since *"energies are being added, but there are no substitutions,"* As stated by Martínez-Alier.

> It is difficult to give up coal because, as an energy source, it is dominant and abundant. Many influential companies, backed by powerful governments, often through subsidies, rush to grow their markets before it is too late. Banks still make a profit from it. (…) Coal plants can be a sure way for politicians to provide cheap electricity –and retain their pow-

> er–. In some countries, it has been a significant source of bribery (Sengupta, 2018, n. P.)

. In short, the expansion of mining extraction transcends to protected ecosystems, ancestral and ethnic territories, towards the sea, the dunes, and the glaciers, and even towards the vicinity of urban areas, increasing the conflicts exploitation brings. Usually, various companies approach these areas with a "green" approach or an empty "sustainability" argument over mineral zones destined for renewable energy.

FIGURA 28. The energetic polyamory
Source: Digital graphic report prepared by Liliana Deavila Pertuz.

Strengthening fossilized energy

The term *energy transition* has always been limited to changing the structures that make up the energy system, which undoubtedly includes a series of practices and customs associated, making it even more difficult to think about a significant rearrangement in the energy matrix. The energy transition supposes a discussion based on deeper terms than changes in the fossilized matrix or its technology: it also implies a shift in living. In Colombia, energy generation from hydroelectric plants leads the sector; as of December 2018, in the installed capacity of the National Interconnected System, "68.4% corresponded to hydraulic generation, almost 30% to thermal generation (13.3% with Natural Gas, 7.8% with liquid fuels and 9.5% with coal) and approximately 1% with Non-Conventional Renewable Energy Sources (NCRES) (wind, solar, and biomass) (Planas & Cárdenas, 2019, sp). Today, the energy supply outlook is bleak, which has caused the country to bet on alternative energy sources; however, energy is still generated from fossil sources, which is reflected in the government's National Development Plan of 2018-2022, called "Viability of new sources of hydrocarbons of the National Development Plan" (Departamento Nacional de Planeación [DNP], 2018), which leaves the door open for the implementation of *fracking* inside the country.

This implementation of the extractive model of non-renewable natural resources, promoted by recent governments, has largely resulted in the proliferation of mining titles and, consequently, in the increase in mining activities in much of the national territory. This situation has led different state entities to privilege these extractive activities over other productive activities and even over the communities' fundamental and collective rights; which has turned mining into an activity generating social, environmental, economic, and cultural conflicts in various regions of the national territory (Garay, 2013). The issu-

ing of decrees and regulations has strengthened fossilized energy. That is why Luisa Umaña, member of the Social Mining-Energy and Environmental Table for Peace, emphasized that decrees 342 of 2019 and 328 of 2020 are worrisome laws in terms of the participation of social actors in these extractive projects. The first one affects the participation of the communities and *"limits the possibility of their participation in terms of life plans; it ignores social participation."* The second one denies the constancy of social participation in each stage of the projects and does not guarantee consensus with the community.

All this occurs despite the serious environmental and social impact generated by mining. In Colombia, mining titles are granted without any technical or legal rigor. In many cases, environmental licenses do not recognize the magnitude of the impact caused by mining projects, especially for coal and metals, in which the removal of minerals is enormous. There is waste generation, copious use and disappearance of surface water, groundwater contamination, air pollution, soil loss, and decline and loss of biodiversity (Garay, 2013). The emissions of compounds and heavy metals can cause respiratory problems, asthma, lung cancer, heart problems, and strokes and affect crops because SO2 and CO2 can acidify soils. Burning coal produces more CO2 than other fossil fuels, which is why it has become one of the main causes of the climate crisis; However, coal companies argue that new technologies or thermoelectric plants use clean technology that will remove all the pollution generated by smoke and will reduce emissions through two technologies: 1) supercritical and ultra-supercritical, which consists of producing more energy with less carbon, and 2) scrubbers, filters or washers in the chimneys, which can remove pollutants before the smoke escapes.

Furthermore, these new technologies are more environmentally friendly than the previous ones because they can reduce GHG emissions into the atmosphere. However, they only reduce GHGs;

they do not eliminate them. These technologies are recognized for being very expensive and use filters that require the waste material to be removed and deposited in dams and wells, adding another source of contamination that affects soils, rivers, streams, groundwater, and aquifers.

Demonstrating that the government is perpetuating a fossilized matrix rather than devising serious strategies for diversification. Thus, one can see a trend towards strengthening conventional energies with offshore exploitation, raising concerns about their institutional capacity to monitor these practices, considering that they may represent risks to marine ecosystems. Conditions in other countries in the global south –colonized countries– are the same. The appeal of extracting the Earth's resources for "driving development" goes beyond the value of life. This extractivism reduces nature to a means of production and destroys all social, spiritual, or cultural traditions, which become commercial goods and private domains with a market price. Likewise, local communities' sustainable development and their ways of life are transformed, contributing to the advancement of climate change. Coal mining has become the main problem for La Guajira, especially for the Wayuu and Afro-descendant communities. Among the main problems which threaten the region are those related to water resources, deterioration of water quality, diversion of streams, and consumption of large parts of them, which prevent the population from having access to drinking water (Escobar et al., 2019).

Today, about ninety bodies of water are part of the list of missing water sources. The Tabaco, La Fuente, and La Chercha streams are examples of this. Likewise, the hydraulic plugging work started by Cerrejón also intervenes in the Bruno stream. However, thanks to the communities' struggle, the SU-698 ruling of 2017 was passed based on the rights to health, water, and food security of the indigenous communities, rights threatened by the diversion of the tributary stream project (Corte

Constitucional, 2017). On the other hand, forced resettlement affects communities, which implies uprooting the harmonious relationship between community and territory and the proper use of common goods. Families go from inhabiting vast territories to living in tiny social interest houses, transforming the agricultural, economic, and ancestral activities traditional to their culture and spirituality.

Questions for discussion

IThe following questions were discussed in small groups:

1. Faced with a post-extractivist panorama, what type of economic activities can be developed in the departments of Cesar, La Guajira, and Magdalena?

- Agricultural reactivation
- Tourism
- Trade strengthening
- Informal or illegal economies
- Other, which one?

2. I would agree that the new renewable energies be administered by:

- The Colombian State
- Community associations
- Multinationals
- Public-private alliances

3. Considering that for the development of photovoltaic and wind energy, the use of certain minerals is necessary, such as gold, copper, or lithium, can you propose alternatives to avoid large-scale mining? Regarding the first question, we found a clear trend towards agricultural reactivation and strengthening of trade, which we saw reflected in the responses of participants from the communities of La Jagua de Ibirico (Cesar), La Sierra (Cesar), and Provincial (La Guajira), where there was evidence of concern for the future of the economy and its communities in the face of a possible mine closure. Therefore, the attendees explained: *"We would like to reactivate the fields and tourism. Some mines still have ten years of operation left to go, and they ha-*

ven't submitted a closure plan. We ask to include the communities in the agricultural reactivation". They also stated that it is necessary to recover peasant customs and traditions and "the recovery of our own seeds" because they fear that non-native seeds will not produce adequately. They also affirmed that it is necessary to strengthen trade, where there is more work for the communities, and encouraged the commercialization of local products such as corn and cassava, among others. Regarding the administration of new renewable energies, they stated those should be under the administration of the Colombian State, along with a strong presence of community associations. Faced with this, they proposed that, both in rural and urban settings, there be community participation in monitoring how energy is generated and distributed. The main concern that followed was the need to recover public companies, for which they also suggested citizen participation and the creation of transcendent measures over time so that more participatory management of energy does not remain as a passing measure of changing governments. Regarding alternatives for avoiding large-scale mining, the debate allowed us to know different positions regarding renewable energies, which are less invasive for the territory, and deep reflection on how to guide the energy transition in a context where problems caused by extractivism are still unsolved. They asserted that the implementation of renewable energies should not affect the territory and emphasized that *"you have to leave the territory in peace."* The best way is the implementation of solar energy panels on the roofs of houses.

A representative of the community of La Sierra (Cesar) stated that the term *energy transition* is not to her liking and argued the following: *"How can you think about it without having solved the problems that extraction has left in the communities? What is the transition, and what has it become?"* She stressed that an alternative should be to "recover what was lost," that is, ancestral territories and agriculture for producing healthy

food. Similar opinions also emphasized that *"mining should go away and leave the land in peace"* and that we should *"stop and rethink"* around conventional and renewable energies.

Regarding all that was said, it is necessary to:

> It has been discussed and assured that the path is decarbonization and, although we seek it, there are no actual samples of a renewable energy matrix promoted by government entities. Although the world is talking about the urgent need for energy decarbonization, we have not fought the battle against coal to mitigate climate change, or as we should instead call it, the climate crisis.
>
> It is time to listen to the communities' needs and their cry facing an affectation that invades every plane of their existence: breakdown of their cultural traditions, ancestral economic activities, and forced cutting of the ties that unite them to their land.
>
> Local communities ask, looking back at the land and reactivating territories' economy, but not at the hands of companies, but their own. This economy should be led by products obtained from their land, a healthy land.
>
> Communities perceive the energy transition promoted by Colombian governments as *"more of the same or as the same people, but in different robes."* The energy transition must go hand in hand with genuine community participation.

Second and Third discussion: "Environmental and climatic impacts in the Caribbean region of Colombia"

Coal and climate change: a human rights issue

There is undoubtedly a relationship between carbon and climate change. Three important

points should be mentioned: 1) According to the latest report of the Intergovernmental Panel on Climate Change (IPCC), coal is the mineral that contains the highest level of carbon. 44% of the greenhouse gas emissions in the world can be attributed to it. 2) Coal is responsible for around 40% of sulfur dioxide emissions and 15% of nitrogen oxide and particulate matter. 3) Worldwide, only about 12% of coal reserves, two-thirds of oil, and about 50% of natural gas have to be burned before we fail the goal of limiting the temperature rise by 2°C compared to levels in the pre-industrial era established at COP21. Coal is the fossil fuel that releases the most greenhouse gas emissions into the atmosphere, especially CO2. Due to coal's high emissions of this gas, it becomes an aggravator of global warming and, therefore, one of the protagonists of the climate crisis. Climate change also plays a vital role in the violation of human rights worldwide, so much so that Michelle Bachelet, UN High Commissioner for Human Rights, assures that:

> Among the many challenges human rights have faced since World War II, perhaps the climate emergency is one of them, representing an even greater threat. Its effects on the right to life, public health, food, water, and housing, even our right to live without discrimination, development, and self-determination are already felt in all areas. (United Nations [UN], 2019, sp)

Regarding climate change, the situation is worrying for Cesar, La Guajira, and Córdoba, given they have severe precipitation deficits, with an average of 10 to 19% in what corresponds to the period from 2011 to 2100. Likewise, as a result of mining activity, it is expected that, in Cesar and Córdoba, the livestock and agricultural sectors will be significantly affected. At the same time, in the department of La Guajira, the forecast is a steep rise in temperature and diverse hydric affectations. Measures are urgently needed

for mitigating or controlling the increase in temperature, but how can this be achieved? Are there measures that can be taken at the regional and local levels? All of humanity will pay a high price for climate change; however, there is great inequality when paying for the damage caused to the planet since the poorest communities or countries will suffer the most from the consequences of global warming. These consequences are related to rising sea levels, natural disasters, forest fires, among others. The climate crisis is felt in all spaces of daily life, and it is urgently needed that in the global sphere, action for the climate is above the particular interests of a few.

FIGURA 29. Second and third discussion, "Environmental and climatic impacts of coal mining.
Source: Screenshot, July 15, 2020, https://youtu.be/Nscstzh-AU0

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ro-Energético:

S PARA EL CARIBE COLOMBIANO

Impacto del Carbón en la Región Caribe

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FIGURE 30. DDigital graphic report of the second discussion, "Environmental and climatic impacts of coal mining."
Source: Prepared by Liliana Deavila Pertuz.

Mining in Mexico in the state of Coahuila

CIn this line of analysis, Mexico's case is similar in the impacts suffered by communities of the Caribbean region. According to Rodrigo Olvera, trial lawyer, community educator, and human rights defender, although Mexico is not among the biggest coal-producers, it has a coal-producing region located in the north of the country in a state called Coahuila de Zaragoza, where socioeconomic activities in the area revolve around coal mining. It is relevant to specify that coal in Mexico is required for two specific uses: the production of steel, and most importantly, the production of electricity; coal purchased by a State company and for which the government has granted licenses for its exploitation in the area, which was exclusively a State activity (a state monopoly) for many years. However, the privatization process came, and large mining companies were created. In the beginning, other small mining companies were born to which endorsements were granted based on generating development and employment for the population, assuming that for each ton of coal, a contribution would be given in the form of taxes for the development of the community. In reality, this money always stayed with the government, political parties, and business people. The state of Coahuila had a mestizo migrant population, lacking an organizational tradition and resistance processes, which constituted a challenge for them when facing the mining company. The latter had the

support of various governments that had granted multiple concessions to privatize and expand the mine's borders without giving the needed importance to impacts generated on the communities and the environment. On February 16, 2006, one of the most dramatic accidents in the current mining sector occurred: the gas explosion in the coal mine at the site known as Pasta de Chonchos in Coahuila, which caused the death of 65 workers. As if that were not enough, two days after the explosion, banks approached the victims' families, offering investment advice on the death pensions they received, taking advantage of their vulnerability. Again in Coahuila, a mining company's extractive policies have impacted the well-being of the small mining town of Paláu by dumping their waste in an area close to the community, which has caused health effects on this population. Even though in 2015, Rodrigo Olvera's team filed a complaint with the National Human Rights Commission of Mexico. No solutions have been offered in this regard.

In the case of Nueva Rosita in the State of Coahuila, coal extraction is done adjacent to the houses: *"There aren't even 5 meters of distance between the houses and the toxic waste dumped by the company,"* said Olvera. These two cases evidence that interest in extraction precedes the communities' rights, thus affecting their health, right to a dignified life, territorial sovereignty, and enjoyment of a healthy environment. The San José Cloetes mining town experiences a similar to that of Nueva Rosita, where houses are located adjacent to the mine and min-

FIGURE 31. Digital graphic report of the third discussion, "Environmental and climatic impacts of coal mining.".
Source: Prepared by Liliana Deavila Pertuz.

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LOS HUESOS DE LA TIERRA
¡¡POR QUÉ VAMOS A PAGAR!!
HOY LAS MUJERES GUERRERAS ESTAMOS HACIENDO RESISTENCIA
¡VALE MAS EL IMPACTO!
Derecho Medio Ambiente Sano
Enfermedad
enfermedad
El carbón ser muy caro
JULIO
23
Impactos ambientales y climáticos de la mineria de carbón
TRANSICIÓN ENERGÉTICA
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ing activities have spread to the point of extracting coal within the town's streets and houses. To achieve this, the mining company has acquired the power to deprive inhabitants of their houses when the soil under their houses contains mineral reserves. In addition to this, they must live within a situation of *"established classism and racism,"* as Olvera emphasizes since these people are living in a town of mining operatives and mining workers, they do not enjoy the same public services and quality of life as the owners of the mines. The latter live in San Juan de Sabinas. Olvera also tells there are cases in which illegalities and injustices are common, so much so that one of the San José Cloetes community members experienced one of the most shocking cases known:

> They tried to buy his house to extract coal from the ground below. Despite his refusal against the company, they decided to mine under his house to make it collapse. However, as the man kept resisting, they sent a police shock group that kidnapped, tortured, and threw him into a coal pit, believing he was dead. Despite this, the man survived and dragged himself out of the pit as he could.

Based on the experiences narrated, we find similarities between the mining towns: they suffer from extreme poverty and inequality; they do not have access to essential resources for meeting their needs; the large multinational extractors promised them development, employment, and improvement in their quality of life, but in reality, these were empty words.

Effects of coal extraction and exploitation in Cesar and La Guajira

Coal mining has become the main problem for La Guajira, especially for the Wayuu and Afro-descendant communities. The high cost left by the mineral exploitation company has led the affected residents to file complaints against Cerrejón due to the increased droughts caused by the

diversion of important streams, as well as respiratory diseases, damage to the territory, cultural deterioration, and destruction to the environment. One of the main problems that threaten the department is the contamination of the water since this activity directly deteriorates rivers, streams, and other water resources available to the inhabitants, which prevents the population from having access to drinking water, without considering it is a fundamental right (Escobar et al., 2019). According to Rosa Peña, a lawyer with a scholarship from AIDA's Human Rights and Environment Program, impacts are generated in each phase of the coal chain (exploitation, transportation, shipping, and thermoelectric power generation). These usually vary according to their type, whether synergistic, cumulative, or residual. The first type occurs when the final impact is much more significant than the effects of activities carried out individually. The second refers to the sum of the past or present impacts. The third refers to the impacts that persist despite the prevention and correction measures applied. Coal mining has consolidated as one of the most polluting activities in each production phase due to its environmental implications, the damage it causes to the health of communities, and its impacts on ecological and global integrity.

Similarly, there are direct and indirect relationships in each production process. There is a correlation between environmental impacts and damage to the public health of neighboring and distant populations caused by air pollution (Acosta, 2016). In the central area of the Cesar department, the main environmental impacts are observable since it has been an area of atmospheric contamination since 2007.

To all this must be added the loss of the dry forest and the effects on surface and groundwater that harm ecological functions, such as flood control (Montoya, 2018). Against this background, attorney Rosa Peña says, *"in addition to environmental impacts, there is an environmental institution with many weaknesses and a lack of*

awareness by the State in the face of these weaknesses in environmental control and monitoring, which, in turn, is one of the main challenges for decarbonization." The Ranchería River is a vital river artery in the department of La Guajira. However, it cannot fulfill the ecological and supply functions that characterize it since its waters are contaminated with heavy metals discharged by the mine. Therefore, in places like Barranca and Albania, people cannot consume their waters or use them for other tasks because it could cause them gastrointestinal diseases and skin conditions. Social leader Misael Socarrás also states:

> Before the diversion of the Bruno stream, there was an attempt by the multinational to divert the Ranchería river, something that united the community in defending it. Since they could not achieve it, they began a campaign to finish it by destroying its arteries and veins that supply it and, little by little, drying it out this way.

Fourth conversation, "displacement for development: forced displacement"

Displaced stories

The centuries between 1550 and 1810, called the colonial era, were characterized by Spain's presence and dominance in the American continent. During this time, a society was formed where the Spanish's customs, language, and religion were mixed with the indigenous culture and, later, with the African one. Thus, what is now Hispanic America was formed.

The colonization process implies that a human group undertakes the task of dominating and controlling a territory other than its traditional territory and its inhabitants, systematically and permanently, with the primary objective of appropriating the wealth of the new territory.

In this way, an exploitation system was generated that could be characterized as an extractive economy, and the customs of the indigenous people were radical-

ly transformed, which provoked struggles to defend their rights and wars to preserve their culture (Rodríguez & Gil, 2006). Three fundamental pillars acquire value in the face of excesses of violation of the human rights of the communities by companies and the State:

I. Protect
II. Respect
III. Remedy

The guiding principles for so-called *development displacement* should apply to all states and businesses, regardless of size, sector, location, owners, and structure. These principles must be understood as a coherent whole and be interpreted, individually and collectively, in terms of their objective of improving standards and practices concerning business and human rights, in order to obtain tangible results for affected individuals and communities and contribute to socially sustainable globalization. They must be applied in a non-discriminatory manner, paying particular attention to the rights, needs, and problems of people belonging to groups or populations with more significant risks of vulnerability or marginalization, and duly considering the various threats that women and men may face (UN, Office of the High Commissioner for Human Rights, 2011). In this way, resettlements are presented as a "remedy" or compensation for the damage to health, environment, and ways of life caused by physical, economic, social, and cultural displacement as a consequence of large-scale mining operations dubbed "development," which provokes the collection of entire populations in other places but ultimately becomes a favorable scenario for the abuses of extractive activities. Dr. Emma Banks, an anthropologist at Tennessee State University, said concerning resettlement: *"It is like some telling you, we are going to amputate an arm, but you can choose which arm you want to lose,"* referring to the fact that such models do not take into account the will of those who live in the territories or their spiritual

and cultural importance to them. However, they are decided by the powers at be and then socialized locally. For the communities, as one inhabitant of the municipality of La Jagua de Ibirico put it:

> Uprooting entails a marked case of extreme poverty. There are multiple traumas in displaced communities for the rest of their lives. There will always be that mark of "they displaced us"; they

FIGURA 32. Poster made by the Fuerza Mujeres Wayuu organization
Source: Fuerza Mujeres Wayuu.

> took away our space for being, the exercise of being, the option of the future for being, and the land. Because when you start to think, you visit the territory with your thoughts, and it's painful. There is the constant stress of watching the situation we have suffered due to this poor development without having a definite differential approach, affecting the social dynamics of ethnic communities. One more nail adds to the cross of extreme poverty that we live on because if we were here today, the territory would be different; we could exercise food sovereignty and enjoy the beautiful landscape before the arrival of mining.

On the other hand, another inhabitant of the municipality of La Jagua de Ibirico pointed out that *"the cultural damage caused in the territory by the appearance of mining companies is incalculable because for them only money matters and the territory becomes insignificant."* A study carried out by the Center for Popular Research and Education (Cinep, 2016) describes

> how at the start of the eighties, lands currently used for mining were properties awarded by the State to beneficiaries of the agrarian reform as National Vacant Lots, which meant these lands had to be destined for farming production. Despite this obligation, they were traded into the companies' assets and were allocated for large-scale extractive coal mining projects. (p. 17)

Because of this, four decades of extractive mining operation have had profound consequences in the territory. What used to be ancestral territories used by Afro, Wayuu indigenous, mestizo, and peasant communities were given in concessions to multinationals. This displacement generated severe social and economic effects since these communities used the land for their subsistence (grazing, planting food, fishing) and social development (meetings, rituals). However, as the mining project expanded, the communities began to remain locked within their territory due to the privatization or hoarding of

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DESCARBONIZACIÓN Y ALTERNATIVAS TRANSFORMADO

Desplazamiento por Desa

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FIGURE 33. Digital graphic report of the fourth discussion, "Displacement due to development: forced displacement."
Source: Prepared by Liliana Deavila Pertuz.

lands and natural assets. A member of the resident families of the Tamaquito II resettlement project asks the Colombian government to take greater control and participation in the resettlement process, taking into account the human rights of the communities and communities which may be violated and remembering that the territory is the center of the space-being relationship, full of spirituality and tradition. Likewise, through images and voice

FIGURA 34. Fourth discussion session, "Displacement for development: forced displacement.".
Source: Screenshot of event, July 24, 2020, https://www.youtube.com/watch?v=SW_6eCItInM

recordings, another member of these families conveyed the impacts on culture and memory that can affect community members at the time of resettlement. In summary and based on the contributions and experiences shared by community members, it is essential to take these aspects into account in terms of *development displacement:*

> Resettlements must be understood as part of the logic of capitalist accumulation that mining companies have. These are deliberate and respond to the control or appropriation of the territory and the natural assets found there.
>
> The dispossession of the communities' land is consolidated according to the capital.
>
> The role of the State and public institutions is essential in achieving fair treatment in the resettlement process of communities

Problems in resettlement processes

In his intervention, Stephan Suhner, historian and coordinator of the Switzerland-Colombia Working Group, exposes some key points: *"involuntary resettlements always have a great impact on the people who must be reassigned."* Therefore, it is necessary to consider the following questions before extracting: *"Where is it done? How is it done? For whose benefit?"* These reflect the leading causes of problems in the relocation of villages. In Colombia, mining companies impose their vision of living by establishing resettlement projects from rural to urban communities, turning producers into consumers, ending local economic development, social welfare, and their future. There is an inequity in the bargaining power: companies have expert advice, technical experience, money to provide and buy, while communities do not have entities that exercise oversight and genuinely support their rights. The State must be a neutral actor in resettle-

ment processes, if necessary, one that watches over the well-being of the communities.

Testimonials

"The lands of the village of El Hatillo were used for agriculture, fishing, and livestock. However, with the advent of mining began the contamination and destruction of their livelihoods. For this reason, it is considered that mining in the department of Cesar led to poverty, division, and misery instead of offering economic and social development. Aguilar also relates that the forced displacement of the community of El Hatillo occurred as a result of contamination by mining exploitation. To begin with, the National Environmental Licensing Authority (ANLA) ordered two resolutions for the resettlement of this community due to the health problems and lack of opportunities in the development of work activities that its inhabitants faced. Once this happened, the Colombian State left the process at the Drummond mining company's mercy and did not conduct an appropriate follow-up to comply with applicable regulations and community requests.

Questions to discuss

In small groups, attendants discussed the following questions:

1. What self-protection strategies have been effective in defending defenders and communities?

• Sandra Maestre, leader of the Kankuamo reservation:

> I want to emphasize that, in the Kankuamo indigenous territory, we have established a women's group for decision-making because woman means territory. We must demand through them because women do not participate. The woman's strength and knowledge can achieve appropriation in defense of the territory.

• Leonardo Díaz, coordinator of the Indepaz Human Rights Observatory:

Risk factors have forced communities to organize themselves into safeguards. I believe that spiritual and collective self-protection exercises play a fundamental role in protecting the territory. Also, legal training for the protection of the territory, training in legislation harmful to communities, but, although the fight is hard, legal scenarios can help. Another fundamental issue is social mobilization, protection plans, protection protocols.

• Cristina Lux, lawyer and co-founder of the NGO Defensoría Ambiental de Chile:

Since the social outbreak, we have experienced an increase in threats; an environmental activist has died. The Mapuche community is linked to the forest's conflict. This conflict has been going on for about 500 years; it has ended in Mapuche deaths. We believe that jumping and saying explicitly the organizations are to blame has not worked for us in energy conflict. It's not the same for those people who make the threats.

• Amanda Romero, regional representative for South America of the Information Center on Business and Human Rights:

We have 181 cases of people affected by opposition to mining projects from the human rights information center. One strategy is international visibility or denunciation, and we go through when we get to the front to deal with the organization. The prosecution is not a secure environment; therefore, the legal option is not a good solution for protecting the people who denounce.

• Liliana Ávila, an attorney working for the Human Rights and Environment Program of the Inter-American Association for the Defense of the Environment (AIDA):

It is possible that whatever works in one place will not work in others because all risk situations are different. However, it is vital to analyze local contexts, make situated examinations, figure out how

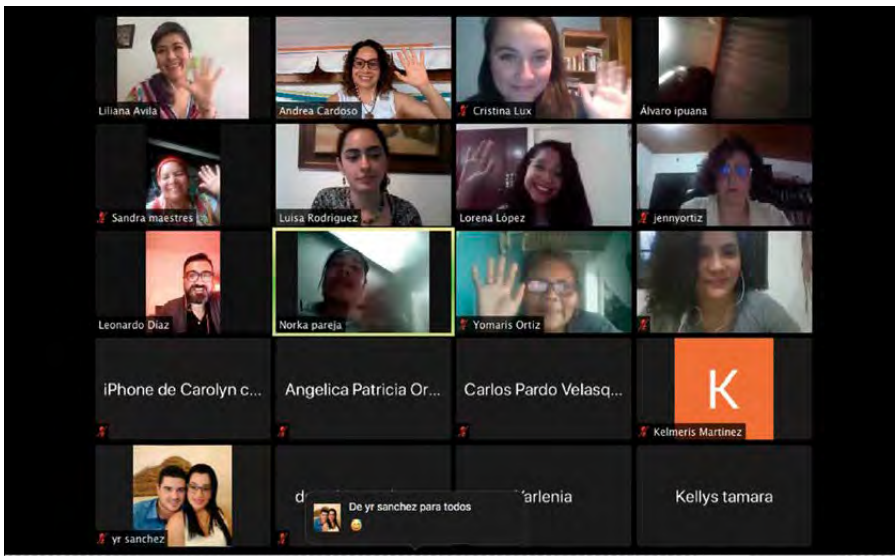
to connect leaderships, and map allied organizations for risk situations. Protection and self-protection are priorities; territorial defense and struggle are linked to protecting individuals' lives.

2. What way is there to make development compatible with the rights of the populations?

• Aviva Chomsky, professor, and coordinator of Latin American, Latino and Caribbean Studies at Salem State University, Massachusetts:

We must redefine what development means, that is, since the last century, the classic definition of development is the ability to consume and produce more. Co-

FIGURA 35. Fifth wFifth discussion "Mobilization and resistance from different latitudes: reflections and tools for collective action."
Source: Screenshot of the event, July 29, 2020, https://youtu.be/2XBL9YAxuW4



lonialism helped the colonizing countries hoard resources to produce and consume more until they reached completely unsustainable consumption levels, calling this "development." We have to start by rejecting this definition of sustainable or unsustainable development because it is inherent, so we must redefine it towards human well-being and peoples' rights. We have to elaborate on what we mean to say by development. It has to be the basis of communities for a fair relationship with the State, companies and it has to be reciprocal with nature.

Fifth discussion "Mobilization and resistance from different latitudes: reflections and tools for collective action."

Socioterritorial conflicts associated with the coal operation

The beginning of the industrial revolution in the 19th century caused the use of high volumes of fossil minerals, while at the same time, produced altercations generated by industrial processes due to pollution coming out of the trains, loud explosions, excess of smoke and dust –of significant risk to the environment– and terrible craters from excavations which destroy the vegetation. In Colombia, there are several areas of coal exploitation, among which we find the departments of Córdoba, Antioquia, Valle del Cauca, and Cauca, characterized by producing low thermal quality coal. In contrast, in the case of Cundinamarca, Boyacá, Santander del Norte, Cesar, and La Guajira, high-quality coal is produced, a good part of which leaves the country in order to feed various thermoelectric plants and a little remains for a few national industries. The departments of Cesar, Magdalena, and La Guajira have been seriously affected both by coal mining, transportation, shipping, and bridge construction as well as by socio-environmental and territorial conflicts that, on some occasions, have occurred jointly, since there a dispute not only for the right to own land but for the defense of one's own space. That is, the community considers that the territory does not belong

to them, but that they belong to the territory by having built it and by having given it material, symbolic, cultural, and spiritual meaning, where they weave their identities, ways of life and ways of relating to the environment. Consequently, Martha García Velandia, a sociologist and researcher for the Cinep Social Movements Team, affirm that the goal of these conflicts is territoriality, that is, a correlation of social, economic, and political interests, in which different reasonings such as that of occupying and using a specific portion of land over which its occupants still consider having exclusive rights to.

These socio-environmental conflicts caused by the coal industry's operations have motivated different social actors in the Caribbean and Andean regions to speak out through strikes, cessation of activities, roadblocks, marches, sit-ins, the takeover of public entities, civil actions, hunger strikes, and riots. They intend to claim their rights over the territory.

Experiences of resistance in the Wayuu territories

a Wayuu inhabitant commented: "Fuerza Mujeres Wayuu is an exercise of resistance by women and men, established in the department of La Guajira, which was born in response to the armed conflict situation and the social, economic, and environmental problems that brought with them local victims for having faced the "monsters" -the term used by the communities to refer to the transnational extractive coal companies." For her, it is necessary to be clear about a series of strategies if one wants to resist:

> Organization: focus on the components necessary for developing their ways of life, that is, the preservation of sacred sites, spirituality, culture, traditional medicine, and food, because when all this is affected, the collective develops an interest in defending their rights.
>
> Political formation: if the community does not know their rights, they have no way

to defend themselves; popular or community knowledge must be exercised.

Accompaniment: this strengthens the feeling of solidarity within the community and passion for the defense of the territory.

Incidents: communication tools (images recordings) are necessary because they are an excellent way to transmit the community's struggle and infect others with their cause.

Social mobilization: it ensures the reconstruction of social ties. The critical points for mobilization are to have hope in possibilities for change, to recognize differences, to share a feeling of exclusion, to have the perception that a social or cultural good that is socially necessary is lacking, and becoming aware of the denial one's rights.

Factors with the highest in risk and threat incidence for defenders of the territory and the environment in Colombia

Leonardo Díaz, the coordinator of the Indepaz Human Rights Observatory, stated:

> The neoliberal and capitalist economic model triggers the most significant risks to those who take on the defense and care of the territory, including the environment. In Colombia, becoming a leader, a human rights defender, brings problems. Violence ceased to be a marginal tool for social repression and became a normal mode of production, a particular cycle of capital accumulation

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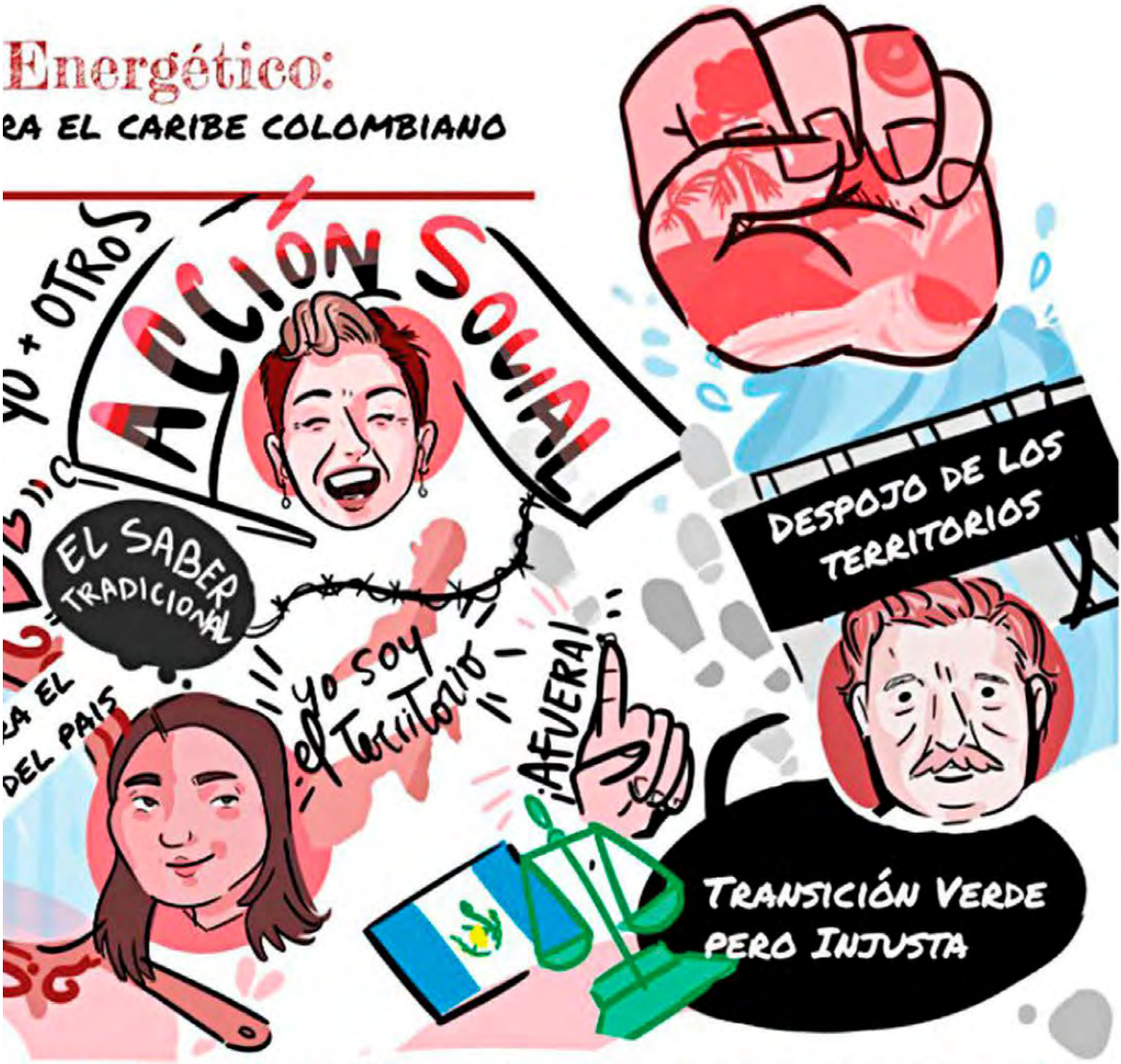
FIGURE 36. Digital graphic reportage of the fifth discussion "Mobilization and resistance from different latitudes: reflections and tools for collective action".
Source: Prepared by Liliana Deavila Pertuz.


Las Comunidades Son
FUNDAMENTALES
PARA EL CAMBIO
ACCIONES
contra
LA VIDA
ASESINATO DE
LIDERES
RIOS
LA GUAJI
REFLEJO
ZONAS DE SACRIFICIO
RESISTENCIA
Julio
29
Apoya:
ROSA LUXEMBURG STIFTUNG
OFICINA REGIÓN ANDINA
Organizan:



La Movilización y La Resistencia Desde Distintas Latitudes : Reflexiones Y Herramientas Para La Acción Colectiva

FIGURA 37. Presentation "Territorial conflicts associated with the coal operation," carried out by Martha García Velandia in the fifth discussion, "Mobilization and resistance from different latitudes: reflections and tools for collective action.".
Source: Screenshot of the event, July 29, 2020, https://youtu.be/2XBL9YAxuW4

He also pointed out risk factors such as monocultures, privatization, diversion of water, extractivism in its broadest scope, the modernization of life, dependence on the amplitude of fossil fuels, the adequacy of the normative referents, and the hiring of private armies. For him, the public does a wrong reading concerning drug trafficking, since the actuality of related criminal activities is not limited to smuggling and drug production, but ranges from murder, kidnapping, blackmail, and prostitution to labor exploitation and excessive extractivism of natural assets such as gold, coal, and oil, among others. Another critical issue is violence against social leaders and illegal mining. This production model is supported

by political elites that appear as guarantors of a State with a broad focus on social law when their actions are contrary to life. All this condensed into a phenomenon of macrocriminality, which has plagued Colombia for several decades, to which the government does not give the required reading or attention

The functionality of crime and the relations of production in Marx

"In recent years, the State has been an expert in handling a guaranteeing narrative towards the international community, but internally it is absolutely the opposite, it perpetuates criminal and corrupt behavior," explains Leonardo Díaz about the functionality of crime concerning Karl Marx's critique on production, where a comparative exercise is done on how vital crime is to an economy. He highlights that "crime produces criminal law," which promotes the industry that produces the codes, the prison justice system, becoming an institutional apparatus that finally generates large percentages in GDP for any country. Colombia is no stranger to these reflections more than one hundred years old: the inadequate implementation of peace agreements has been a trigger to maintain the indicators of violence in the country and contribute to the redistribution of land or the reappearance of illicit crops. Such is the case of threats and assassinations of social leaders that benefit illicit economies. The departments of Cesar, La Guajira, and Magdalena have particularities associated with the corruption of local political clans' power, some of which have stood out for promoting "development" through the exploitation of shared and natural wealth, such as gas, electricity, coal, and oil; promoting deforestation, massive human displacement, persecution of social leaders or unions, labor exploitation and the increase of private security groups. The armed groups that persist in Cesar, La Guajira, and Magdalena established "pacts of silence" with politicians in the face of opponents' murders, land grabbing, feudal policies, land-

owners, and forced displacement, among others

Experiences from other latitudes: struggle in Chilean territories

Chile receives 11% of the coal exported by Colombia; Therefore, the problems surrounding the extractive operation are not limited to national ports but also affect all the places where this resource is sent, generating resistance struggles and global mobilization in different communities. In her intervention, the lawyer Cristina Lux shares that, although Colombia and Chile are physically and geographically far away, they are linked by the exploitation route that generates shared impacts. In this regard, she considers that the nature of the environmental conflict has many components that make it impossible to address it from the law. However, she states that *"the struggle that the territories give is fundamental and legitimate to generate empathy in people and achieve citizen interest."* To address this conflict in Chile, the support of communities that suffered environmental devastation and violation of human or constitutional rights concerning participation and historical struggle in resistance zones was of great importance. In this sense, alliances were made with people fighting to rescue the environmental territory and put together legal strategies to defend the interests of indigenous communities. The Chilean social outbreak has affected this struggle; many environmental defenders and activists were threatened and had to leave the country because they could not find support from the government, reflecting the macro-reality problem from different latitudes.

Experiences of community hydroelectric plants in Guatemala

Community turbines, a term used by people in Guatemala to refer to small hydroelectric plants, are considered injustices that led to the dispossession of large rivers in the territories of indigenous peoples. José Cruz, civil engineer, sociologist, and ecologist member

of the Madreselva Collective of Guatemala, expresses his view of the energy transition in one sentence: "*that it is green does not mean that it is good,*" since a fair transition model should not exclude its rights to people or carry out forced displacement to indigenous peoples. There is an excess of extractivism around nature's assets in Colombia and Guatemala. Although Guatemalan soil does not have coal, it is rich in gold, silver, and nickel, which concentrates the interest and money of the hydroelectric companies. Cruz compares this business with drug trafficking because both are exempt from paying taxes and dispossessing the communities without resettlement. The only difference is that this type of violence from energy companies is legal.

A fair alternative to the current dispossession model

Ownership and social benefit: built operated and managed by communities

Environmental sustainability: sustainable use and protection of ecosystems

Results: participation with community equity, transparency, accountability, environmental awareness and construction of social capital

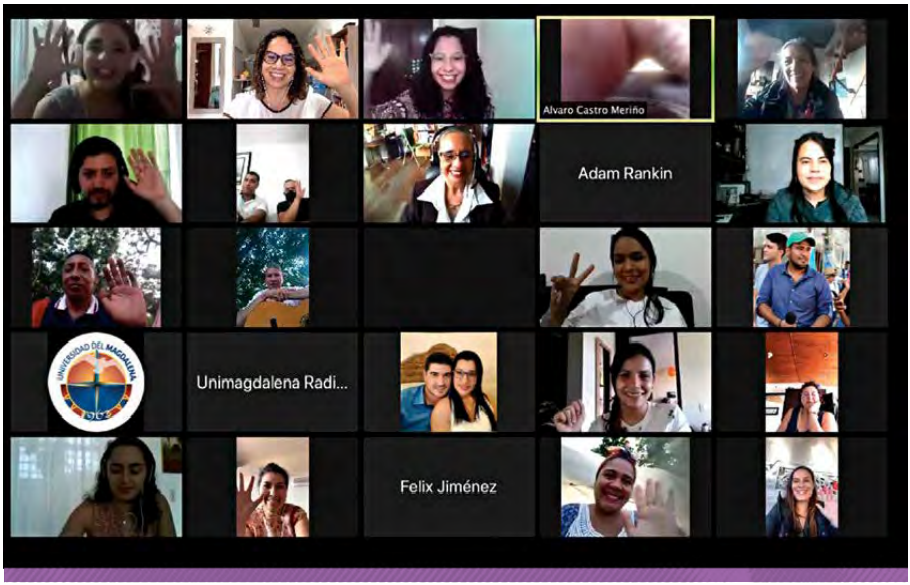
Sixth discussion "The energy transition from the south.

Transition: a change that goes beyond the energy matrix

The term energy transition is frequently limited to the change of the structures that make up the energy system, which constitutes a systematic trap. According to Tatiana Roa Avendaño, environmentalist and coordinator of Censat Agua Viva, there are five elements of discussion around this concept:

1. The energy transition requires cultural transformations and rethinking from everyday life.
2. It requires a change in power relations; that is, since

FIGURA 37. Presentation "Territorial conflicts associated with the coal operation", made by Martha García Velandia at the fifth conversation "Mobilization and resistance from different latitudes: reflections and tools for collective action".
Source: Screenshot of the event, July 29, 2020, https://youtu.be/2XBL9YAxuW4



there is an energy transition, it must imply sovereignty of resources and not total control by transnational companies.

3. Articulation processes between autonomies and sovereignties are necessary, such as food, water justice, energy sovereignty, and ecological sovereignty.

4. Do not dispense with participation and democracy, that is, that social participation guides the transition and energy system.

5. There must be a human rights perspective, from which the rights of the people subject to new projects for the energy transition are respected, taking into ac-

count that the transition will continue to need minerals for the construction of energy generation technologies.

Roa explained that these five discussion elements of the energy transition are linked to the four d's necessary for the transition: **decentralization, deconcentration** of power, **de-commodification, and democratization**, to which those attending the discussion added two d's more: **diversification and deprivatization**.

Diverse energy transition experiences

Adam Rankin, an engineer from Fundaexpresión, shares his experience at a school for peasant promoters and with a group of peasant reserves project. According to him, the group and the peasant school have managed to conceptualize what the energy transition is for them and represent it in different ways:

> The transition is a process that articulates the good living of the communities, defense of the territory and the issues of the peasant economy, water management, food sovereignty, rescuing of Creole seeds, and use of local resources.
>
> A diverse and energetic proposal depends on the communities' organizational process. A strong sense of autonomy is needed, articulating knowledge between communities and understanding cultural transformations.
>
> Energy management is not only about its consumption but also about learning

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FIGURE 36. Digital graphic report of the fifth workshop "Mobilization and resistance from different latitudes: reflections and tools for collective action". Source: Prepared by Liliana Deavila Pertuz.

Transición Justa del Modelo

DESCARBONIZACIÓN Y ALTERNATIVAS TRANSFORMADORAS PARA

Transición Energética Desde El Sur

how to use it rationally and how it is generated.

The integrality of energy is necessary for water justice, territorial defense, and the active linking of groups. There is space for communal education complementary to the energy transition from which a dialogue between the countryside and the city results.

The energy matrix acts as a hegemonic model

What do we think when we talk about energy transition? We refer to confronting the hegemonic model since, if we fail to understand it, we will repeat the cycle and fail to achieve any transition. The hegemonic model of economic liberation, better-called neoliberalism, based on the exploitation of natural resources and capitalist domination, imposed a vision of development on the world, especially for third-world countries. It practically turned them into suppliers of inputs and cheap prime materials. This model has two main characteristics for Edgar Mojica, the Central Unitaria de Trabajadores de Colombia (CUT) secretary-general. It disrupts life and attacks human dignity. Indeed, we can see it in the growing inequality in our country, the destruction of the environment, rural exclusion, the violation of human rights, marginalization, and poverty.

The global energy system is a war model or rivalry competition for determining who takes or controls natural resources. An example of this is Venezuela, where we can see the dispute or intention of some powers to appropriate their resources. For the secretary of the CUT, this war model applied in our territory has a name: accumulation by dispossession. As its name indicates, it refers to the displacement of communities so that the hydrocarbon industries can carry out their activity and increasingly grow their wealth, massively impoverishing local territories. On the other hand, the plane of permanent individualism allowed the creation of a human being in the image and likeness of

the development model. That is, conditioned to the model's needs, where people are valued by the capacity to accumulate and purchase; If we do not understand this at the individual level, the transition will be very complex. Another critical level is the community social level, highlighting communities' role in protecting the territory and defending their rights. On behalf of the Colombian labor unions, Mojica proposes that the energy model that will replace the current one must prioritize the life of humans and of all living beings that inhabit Earth. Likewise, it must be a model of cooperation between societies and countries, where we all participate in decision-making. If this is not fulfilled, the transition will end only in a change of energy sources and will continue to be controlled by a handful of individuals. The transition plans suggest a cultural change because our economic system is based on a wasteful economy of natural resources that pushes us to a consumer culture, where consumption and production play a fundamental role in the economy's success. Consequently, natural reserves, water sources, ecosystems, the atmosphere, people, and animals are destroyed.

Discussions and reflections of the virtual seminar "Just transition of the mining-energy model: decarbonization and transformative alternatives for the Colombian Caribbean"

• Forced displacement is a violation of human rights to vulnerable communities caused by "development" as defined by the capitalist system, which causes socioeconomic crises, traumas, and suffering in displaced people, who must learn to live lacking opportunities or land to develop economic, social and spiritual activities for prolonged periods. This cycle generates more poverty, inequality, and racism.

• It is necessary to strengthen international and national standards associated with resettlement processes to achieve fair agreements between mining companies and communities.

• The State must support these processes and become a watchdog of prosperity and shared development; likewise, it must commit to creating infrastructure, economic, physical, and mental health plans that meet the needs of the communities to develop their ways of life stably.

• It is vital to broaden the concept of just transition in rich or consumer countries, as well as redefine what development means since the energy transition must hap-

pen with harmonious relationships between all (companies, communities, State and nature), not only to improve the welfare of the affected or violated communities but to change the relations of extraction or exploitation in colonized countries (developing countries).

• The current energy reality involves adding more energy sources, but not a genuine energy system transformation. The same extractive system is being reproduced, enabling privatization and a multinational system where the communities do not benefit.

• Coal is more active than ever, despite the climate crisis in which it is the protagonist; This reflects the mirages of the energy transition.

• It is necessary to question the work of mining companies and governments.

• Climate change is a human rights issue tied to coal mining.

• The coal chain generates impacts in all its production and commercialization stages, causing community struggles at every stage.

• We rescued the 6Ds for the transition: democratization, deconcentration, decentralization, decommodification, diversification, and democratization

• Oppression of the territory destroys traditional cultural sources and threatens the territorialization of the communities.

• Mining imposes its vision for these communities' lives when carrying out relocations and dispossession.

• The carbon chain is so long that it links the entire continent and even the whole world, and, therefore, the struggle and resistance must belong to everyone.

CONCLUSIONS AND GENERAL DISCUSSIONS

At present, different countries are joining the clean energy change. Their experiences show us the path or the model that we should follow. However, in Colombia, this change is faced with several difficulties, such as our high dependence on fossil fuels, especially coal. This further highlights the lack of economic diversification that the country has and the little interest in leaving this sector. The extraction and use of coal for energy production is not only a local problem; it is a chain of social, cultural, and economic impacts that transcends borders and generates a collective feeling of mobilization for claiming the right to have land and egalitarian development. It must be taken into account that not all countries have the same characteristics; therefore, the transition must be designed and structured according to the conditions of each territory, community, and society as a whole. Not by imposing or hegemonizing identical commitments or objectives, which can disadvantage some when compared to others. Instead, these goals must be tailored to each population's demands to achieve actual benefits and a genuinely just transition.

For this reason, each country must project a governance model that corresponds to its particular needs and, in this way, facilitate a social and economic transformation for all. Throughout the local forums and talks on energy transition, disparities and disagreements were evident between different actors. For this reason, community participation plays a crucial role in building the transition agenda from the local level, in response to a reality of dependence on coal, the need to recover territories, economic diversification, and the generation of productive projects for the community.

In this sense, the energy transition is how the different paths that should be followed to achieve a low-carbon economy are established. This is a radical transformation process in which energy sources and the entire system are modified. This energy transition must face customs, imaginaries,

and symbols. We must question how we mobilize, how we feed ourselves, how we grow our food, what we buy, how and when we buy, how we plan and build our villages, how we build houses, how we relate to nature. Based on the energy transition, we must rethink and reexamine the current production, distribution, and consumption modes. This allows us to modify what, we as a society, had determined as unchangeable. The energy transition must consider energy a fundamental human right for all people. The path we seek towards the transition requires taking into account the loss of direct and indirect jobs in the mining-energy sector; guaranteeing the rights and participation of both the workers in this sector and their union organizations, and ensuring excellent working conditions and appropriate salaries both for the workers linked to this activity and for those who will work in the new unconventional energy sources. In this context, employment alternatives must be generated according to each territory's productive vocation, especially those still highly dependent on mining exploitation. In terms of energy justice, a transition implies guaranteeing communities access to electricity and respect for all their rights, among which are the right to breathe healthy air, access to drinking water, and enjoyment of soils clean of carbon traces, their constitutional right to land, decent work, collective rights, human rights and the rights of nature. This transition is the kind that communities and territories in the Caribbean region of Colombia deserve: a just transition.

COLLECTION OF TESTIMONIALS FROM COMMUNITY MEMBERS

The communities have been a fundamental piece in understanding the impacts or affectations left by coal mining since they are the ones who experience the reality of this activity a few meters from the mine. Some testimonies and accounts of their experiences are compiled below:

Years ago, everything was happiness; we were all one family. I wish that Cerrejón did not exist in Provincial; the only thing they've brought us was destruction.

There has been cultural extermination. We no longer have a GOOD LIVING because when we want to talk with our elders, the train arrives with its strident noise and makes us lose focus. We have suffered an imbalance in the life project we had. We must make joint efforts and fight so that mining does not exist.

The most significant changes within the territory caused by mining exploitation are the displacement of communities, disappearance of social leaders, rupture of the social fabric, cultural losses, unemployment, political corruption, loss of territory, water scarcity, drug addiction, prostitution, and child exploitation.

Remembering the expedition of the Ranchería river in 2012 and one of the interventions of the governor's council of the Tamaquito community, they said that we would run out of where to hang the chinchorro (type of hammock). Where do we go to live if everything is squared? In La Guajira, if you don't ask for gas, you ask for oil; if not, for gold, barite, or coal.

I am an employee of the Prodeco group. I am a victim and, at the same time, a victimizer. My position is as a blasting assistant. I have that feeling as an employee that I need to earn to support my family, but I am also a citizen who hurts with what they do to my people.

We must never negotiate our territories with transnational corporations because it means giving our lives.

(In this testimony, allusion was made to ruling T-849 of 2014, by which the Constitutional Court ordered the Ministry of the Interior to carry out a mandatory prior consultation with the indigenous communities that inhabit the sacred territory called the Línea Negra in the Sierra Nevada of Santa Marta, for mining exploitation, since these consultations are not carried out adequately taking into account the entire population or ancestral assets.)

.

Wind farms are not parks; they are a way of appropriating the territory— Concessions for wind power generation are skipping the consultation stage with their communities– .

The right to prior consultation is violated; They do not issue a query until the company has already gotten the concession. In Colombia, the legal focus of prior consultation is lost. It is only reduced to a requirement of the company; they run a crude scam with the signing of documents to legalize the consultation process.

We are concerned that wind power generation will continue to take advantage of us regardless of the prospects of populations. We will go from coal to wind power, and we will continue in the same way. This forces us to organize ourselves since we can not do much when facing the companies while being few and split up.

Therefore, regarding the new extractive and renewable energy projects for these communities, the International Seminar "Just Transition of the Mining-Energy Model" exalted the importance of the need to respect the fundamental right to consultation and consent. Prior, accessible, and informed.

Please don't leave us alone. We need solidarity now more than ever. We want land to live as we did before the mine arrived.

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Towards a post-coal mining Colombia is a series of publications from the Andean Regional Office of the Rosa Luxemburg Foundation that collects research, reflections, and proposals for the co-construction of a just social and environmental energy transition. We invite you to read the previous issues of the series, available on our website www.rosalux.org.ec.

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Perspectives on Colombian Coal Exports.

Number 1

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Political ecology of the new geographies of coal.

Number 2

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How to get out of dependence on coal? Elements to debate a socio-economic transition in Guajira.

Number 3

•

Community energy: Challenges and opportunities for non-conventional renewable energies from below in Colombia.

Number 4

Throughout its production and marketing chain, the coal industry generates a series of impacts and damages on ecosystems, communities, local territories, and the environment. Coal is the most polluting energy source and one of the leading causes of the rise in the planet's temperature, and it is one of the greatest threats to life and the environment. In this way, since 2017, the Semillero de Investigación en Transición Energética de La Universidad del Magdalena (Energy Transition Research Seedbed of the University of Magdalena) has been jointly studying the impacts and realities of mineral coal exploitation in the Caribbean region in Colombia, in order to build, together with different actors in the region an energy transition agenda. This document brings together the results and reflections of the four Decarbonization and Transition Forums from the mining-energy model.

Chapter 1 briefly introduces the global coal chain, its history, commercialization, and implications. Chapter 2 incorporates the concepts of climate justice and climate change into the coal production and consumption chain. Subsequently, Chapter 3 addresses the impacts of the extraction and transportation of coal in Colombia, and then, in Chapter 4, we provide approaches to a just transition within local territories. Finally, Chapter 5 explores the co-creation methodologies of the Transition Agenda and the development of co-creation spaces. By way of conclusion, regional autonomy, the guaranteeing of leaders' rights, economic resources and investment, fair and sustainable alternatives, health and social reparation, participatory closure plans, and territorial perspective were, from the communities' point of view, six crucial points which should be considered in the process of transition from coal-based economies to a productive reconversion within the departments of Cesar, La Guajira, and Magdalena.

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