

Outlooks from below for just energy transitions: Gender, territory and sovereignty





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Óscar Santiago Vargas Guevara Felipe Alberto Corral Montoya Andrea Cardoso Díaz Javier Omar Ruiz Arroyave Óscar Giovanni Bonilla Camargo Miguel Ángel Gómez Camargo Lorena Marcela López Orellano Laura Inés Brito Bouriyu Narlis Guzmán Angulo Naryelis Padilla Guzmán María Eusebia Soto Sierra Yaneth Patricia Ortiz Bouriyu Nicolas Malz

Friedrich-Ebert-Stiftung, Colombia Red de Iniciativas Comunitarias (RICO) Colectivo Hombres y Masculinidades Universidad del Magdalena Universidad Técnica de Berlín Transnational Centre for Just Transitions in Energy, Climate and Sustainability (TRAJECTS)



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We hope to be worthy of your struggle. September 2021

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Surroundings of Fundación (Magdalena), in the Caribbean region of Colombia, at sunset.



photograph by: Mateo Vega, march 2021

Dimas Castañés, la luchadora

Hace algunos años, habitaba en un pueblo llamado La Sierra una mujer que por nombre tenía Dimas, que significaba fuerza y valentía.

Dimas era una mujer guerrera y luchadora; siempre pensaba en cómo salvar a su territorio ante los terratenientes que la invadían. Una noche, Dimas iba caminando por la plaza de su pueblo cuando, de repente, escuchó a dos extraños hablar sobre una invasión.

Ella se alarmó y astutamente armó un plan.

A la mañana siguiente, los invasores ya habían cercado la mitad de La Sierra, e incluso se apoderaron del Manantial, que saciaba al pueblo y a los ríos cercanos. Los ladrones estaban muy felices y casi se salen con la suya, pero de un momento a otro apareció Dimas y les dijo, con voz fuerte y poderosa:

iSolo cuando se haya talado el último árbol, envenenado el último río, y pescado el último pez, solo hasta ese entonces dejaré de luchar!".

Los bandidos empezaron a reírse de ella, gritando que se largara. Ella, con una sonrisa, respiró profundamente y gritó con toda la fuerza del mundo: "¡Pueblo! ¡Pueblo! ¡Pueblo!"

De repente, de los pastizales emergieron las personas de la comunidad, con todo tipo de objetos: machetes, hachas, palos, y todo lo que pudieron encontrar, y empezaron a picar el alambre de la cerca, al son y ritmo de la tambora. Los terratenientes, asustados, huyeron despavoridos.

El pueblo estaba muy feliz y contento; Dimas lo estaba aún más. Cuando al fin cesó la celebración, se tornó hacia su pueblo y dijo con voz melancólica: "La mejor herencia que podemos dejarle a nuestros hijos es amor, conocimiento y un planeta en el cual puedan vivir todas y todos en comunidad".

> (Autoría colectiva: Mujeres Guerreras de La Sierra Producto radial: Experiencias asociativas para la soberanía comunitaria).

Dimas Castañés, a fighter woman

A few years ago, a woman lived in a town called La Sierra. Her name was Dimas, which means 'strength' and 'courage'.

Dimas was a warrior and a fighter. He always thought about how to save her territory from the invading landowners. One night, Dimas was walking through her town square when, suddenly, she heard two strangers talking about an invasion. She was alarmed and cunningly devised a plan.

The next morning, the invaders had already encircled half of La Sierra, and even seized the Water Spring, which satiated the town and the nearby rivers.

The thieves were very happy and almost got away with it, but from one moment to the next Dimas appeared and said, in a strong and powerful voice:

"Only when the last tree has been cut down, the last river poisoned, and the last fish caught, only then will I stop fighting!"

The bandits started laughing at her, yelling for her to get out. She, with a smile, took a deep breath and shouted from the top of her lungs:

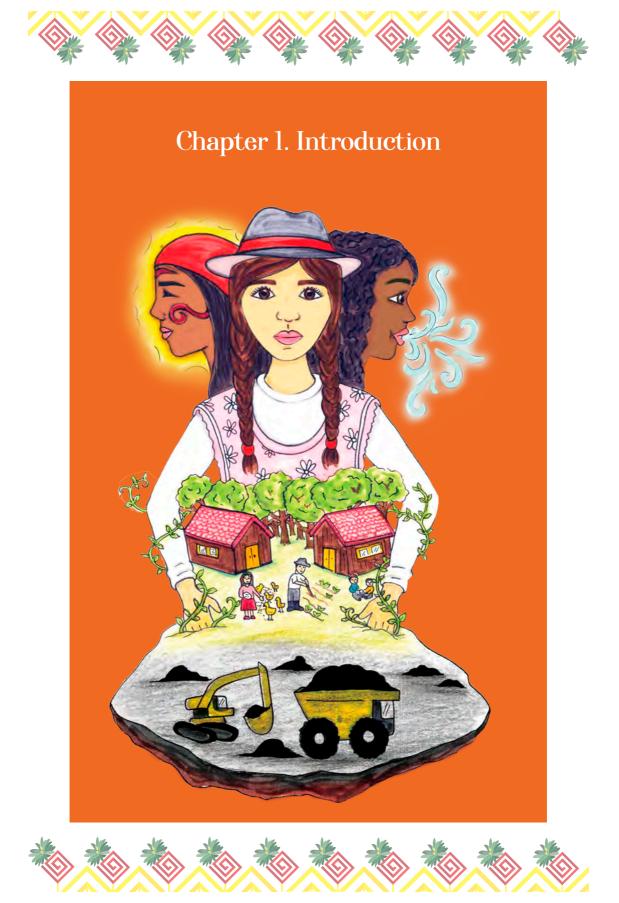
"People! People! People!"

Suddenly, people of the community emerged from the grasslands, with all kinds of weapons: machetes, axes, sticks, and everything they could find, and began to chop the fence wire, to the sound and rhythm of drums.

The frightened landowners fled in terror.

The people were very happy and gratified. Dimas was even more so. When the celebration finally ceased, she turned to her village and said with sorrow: "The best inheritance we can give to our children is love, knowledge and a planet in which each and every one of us can live together in community."

Collective authorship: Women Warriors in La Sierra Radio broadcast: Associative experiences for community sovereignty.



We have a climate crisis that has already upset the fragile ecological balances of life on the planet imposing a necessary re-understanding of the extraction and use of fossil fuels. Scientific consensus has emerged around the Intergovernmental Panel on Climate Change, which argues that fossil fuel use must be stopped as soon as possible (IPCC, 2014a; 2018), so that there is an urgent need to carry out a transition to other energy sources, especially renewable ones (IPCC, 2014b). Such a need is known as *energy transition* and constitutes one of the greatest environmental challenges faced by the world today..

In Colombia, as in many other places, the energy transition has been conceptualized from a mainly techno-economic point of view. In other words, the transition is restricted to a technological change from fossil energy sources, such as coal and hydrocarbons, to renewable energy sources such as solar, wind and hydroelectric energy. In fact, much of the public policy on energy transition focuses on megaprojects regarding solar or wind energy (Portafolio, 2019), the opening of new large mining operations (Ministerio de Minas y Energía, 2020) or to continue promoting hydroelectric energy megaprojects (Giraldo et al., 2018).

This vision, which reduces the transition to a technological dimension, tends to predominate in public discourse. However, there are various efforts to question the logic underlying the current model of extraction, transformation, commercialization and use of energy. Bertinat (2016), for example, proposes to "de-fossilize, de-privatize, deconcentrate, decentralize, de-commodify, democratize" energy systems. Soler et al.(2018) add that the logics of exclusion and appropriation inherent in the current model, which have historically led to unbridled extractivism, must be questioned. If the energy transition does not look beyond a technological change and does not propose alternative just energy models, the futures of our ancestral territories and its peoples are in danger. This is exactly what González and Barney (2019) as well as CENSAT Agua Viva (2020) criticize and anticipate in their analysis of the new wind, solar and hydroelectric megaprojects that are proposed in the framework of the energy transition in Colombia.

A limited understanding of the energy transitions, on the other hand, also subtracts attention to the struggles that emerge from the territories, which demand a comprehensive transformation from below, led by and for the local. Examples of these claims raised by the communities affected by extractive projects are about stopping the deviation or damming of rivers and streams, the expansion of open-pit coal mines —and the process for their immediate closure—, the dispossession of their territories caused by large-scale clean energies projects and the opening of new large-scale mining projects.

Figure 1.1 Youth leader of the Wayuu Indigenous Reservation of Provincial



Note. Photograph by Marco Perdomo (IG: @ikon_fotografia), january 2020

This work is one way of arguing about this problematic with different members of communities inhabiting the territories affected by coal mining in Colombia, such as the Afrocommunity of La Sierra, in the municipality of Chiriguaná, in the department of Cesar; the Wayuu indigenous communities of Provincial and Lomamato (Figure 1.1), respectively in the municipalities of Barrancas and Hatonuevo, in the department of La Guajira; and the peasant community of Monguí, in the department of Boyacá. We proposed an exchange of knowledge with them to discuss this question: How do local communities in coal-mining territories in Colombia envision just energy transitions at a local/national level, which are truly inclusive and democratic?

This work is the result of a collective reflection between academics, activists, and social and community leaders. It aims to share some ideas from the grassroots to demand and enact the changes in society, politics and economy that are necessary today to achieve energy transitions beyond fossil fuels in Colombia, which are also just and inclusive. Our work focuses on two main areas of coal extraction: the department of Cesar and La Guajira (Figure 1.2) where coal extractivism takes place, as well as the regions of small and medium-scale coal mining in the department of Boyacá.



Figure 1.2 Landscape in the indigenous community of Provincial (Barrancas, department of La Guajira, Colombia

Note. Photograph by Óscar Vargas, March 2021.

The study is based on two central ideas. Firstly, energy is simply one of many transitions that are required by the territories. Here we recognize at least three dimensions. We identify a mining-extractive transition in the first place, aimed at the permanent cessation, as soon as possible, of large-scale extraction of coal, in order to protect the life of local populations and the ecosystem, accompanied by the recognition and reparation of the damages caused by mining so far, as well as those anticipated from the aforementioned closure. After that, an energy democratization, aimed at fighting energy poverty and inequality of which the indigenous and peasant communities in the peripheries of the country have been victims. Finally, a broad and comprehensive transition that transcends the energy field and allows closing structural gaps and fixing historical injustices against vulnerable populations such as women and indigenous and peasant populations. We will discuss how an energy transition effort limited to the closure of mines and investment in large renewable energy projects —which do not consider the second and third dimensions—risks reproducing the prevailing dynamics of exploitation over the territory and local communities.

Secondly: better understanding and reacting to these demands requires a fundamental rethinking of modern Western logics of relationship with human beings and the ecosystem. This critique draws inspiration from the epistemologies of the South (Santos, 2010), which strongly questions the anthropocentric perspective that only recognizes the value of the natural environment from its relationship with the human being. We suggest three interdependent categories that can help guide the debate on energy transitions, emerging from feminist and decolonial literatures: (1) a relational gender approach, as alternative understandings of what it means to be 'a woman' or 'a man', and their relationships with 'another person' and the ecosystem; (2) the territory, as broad and comprehensive views of the physical and natural environment, on the basis of cultural, socioeconomic, political and spiritual meanings, specific to the communities inhabiting it; and (3) community sovereignty, as practices both of autonomy and resistance including open and inclusive decision-making, as well as the ability to implement these determinations, along with the responsibility and care of the territories and the peoples inhabiting them.

In this study we would like to bring forward other visions of what is possible and desirable and likely to happen, should political and economic will be mobilized around it — in other words, we want to expand the spectrum of alternatives that are currently being considered to achieve a new energy transition: we speak therefore of 'energy transitions' in the plural. It is time to listen to what the communities in the territory want. We trust that their hopes and aspirations can become the foundations on which to think and build a more just and genuinely sustainable future in those regions, which have been so harshly struck by extractivism.

We want this book to serve diverse actors. We want it to serve as a tool for policy-makers committed to implementing a positive change in the mining-energy industry at a local/national level; to inform civil society, academia and international cooperation actors about the priorities in the territory in regards to just energy transitions, motivating the steering of resources and capacities towards this sort of initiatives; and to equip communities and social movement actors with some inspiration for discourse and action, in order to strengthen and articulate their different struggles in defense of life and territory.

Suspiro por La Sierra

Tú, mi Sierra bonita, tú, mi Sierra querida. Respiro y siento tu aroma, ese aroma que me hace cantar. Me siento triste al observar cómo te explotan con la minería, desgastándote sin mirar. Hoy, tu gente afro quiere gritar: ;Basta, basta! Queremos vivir en paz. Sé que mis ancestros, que muchas cosas nos enseñaron, para todos nosotros muchos frutos conservaron, Tú, mi Sierra bonita, tú, mi Sierra querida. Respiro y siento tu aroma, ese aroma que me hace cantar.

I sigh for La Sierra

Ah, you're here, my pretty Sierra, you're here, my dear Sierra. I breathe and smell your aroma, that aroma that makes me sing. It's sad to see how they destroy you with mining, It's a scandal that you're wasting away! Today Afro-people cry for you: Watch out! Watch out! We want to live in peace. I know that my ancestors -who taught us many things for all of usmany fruits preserved. Ah, you're here, my pretty Sierra, you're here, my dear Sierra.

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Llevo tu tierra en mis venas, y con orgullo la voy a conservar, y aunque pasen los años, siempre te voy a recordar. Con tus grandes sabanales, esas montañas que me hacen llorar, ni contarte de tus lluvias y tus truenos, que el corazón me hacen paralizar. Esos vientos que mueven mi cuerpo, que siento que voy a volar. Tú, mi querida Sierra, tú, mi primer amor. Guerrera, luchadora, siempre majestuosa. Contigo quiero caminar, y albergarte en mi corazón. Quiero regresar al pasado, y tus paisajes adorar, tus ríos, tus tierras, tus siembras, tus virtudes que hoy día perdemos. Hasta tenerte viva y limpia lucharemos. Tú, mi Sierra bonita, tú, mi Sierra querida. Suspiro y siento tu aroma, ese aroma que me hace cantar. Te llevaré en mi vida, hasta que deje de respirar.

(Autoría colectiva: Mujeres Guerreras de La Sierra. Re-existencia comunitaria: transición energética, género y territorio).

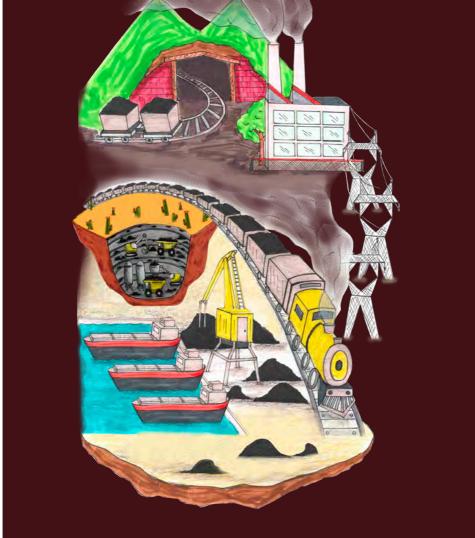
I breathe and smell your aroma, that aroma that makes me sing. I carry your earth within my veins, And with pride I will keep it, and although the years go by, I will always remember you. With your large savannahs covered with grass, surrounded by those mountains that make me cry, not to mention your rains and your thunders, which make my fast-beating heart paralyze. Those winds move my body and I feel like I'm going to fly. You're here, my dear Sierra, You're here, my first love. You're our Warrior and fighter Earth Mother, always magnificent. I want to walk with you, and hold you in my heart. I want to go back to the past, and adore your landscapes, your rivers, your lands, your crops, your public virtues that today we lose. We are fighting to keep you alive and clean. Ah, you're here, my pretty Sierra, you're here, my dear Sierra. I breathe and feel your aroma, that aroma that makes me sing. I will carry you in my life until I stop breathing.

Collective authorship: Women Warriors of La Sierra Community re-existence: energy transitions, gender and territory

Main Ideas in Chapter 1:

- This book discusses the question: How do local communities in coal-mining territories in Colombia envision just energy transitions at a local/national level, which are truly inclusive and democratic? To respond to this question, we carried out dialogues with local indigenous, afro and peasant communities in some of Colombia's coal-mining territories in the departments of La Guajira, Cesar and Boyacá.
- We speak of 'energy transitions' in the plural because we want to deal with different dimensions and understandings of the same problem: (1) a mining-extractive transition, aimed at putting an end to large-scale extraction of coal, and a transition towards sustainable industries and towards ancestral forms of community subsistence; (2) an energy democratization, which ensures equitable access to energy for historically excluded communities, both from consumption and from the control of generation sources; and (3) a broad and just transition, referring to the multiple transformations in the economy, culture, and politics that are necessary to ensure lasting change.
- Our commitment in this book is to address these energy transitions from the perspectives of different ancestral peoples of Latin America. In this way, we structured the analysis based on three categories: (1) a gender perspective approach, as alternative understandings of what it means to be 'a woman' or 'a man', and their relationships with 'another person' and the ecosystem; (2) territory, as broad and comprehensive views of the physical and natural environment, on the basis of cultural, socioeconomic, political and spiritual meanings, specific to the communities inhabiting it; and (3) community sovereignty, as practices both of autonomy and resistance including open and inclusive decision-making, as well as the ability to implement these determinations, along with the responsibility and care of the territories and the peoples inhabiting them.
- We want this book to serve diverse actors, so that it encourages and informs policy-makers committed to energy transitions at a local/national level; to raise public awareness and inform actors as diverse as civil society, academia and international cooperation to support just energy transition efforts on the territories; and finally, to offer some inspiration to communities and social movement actors to articulate their different struggles in defense of life and territory.







For more than thirty years, Colombia has developed around the extraction of minerals; among these, energy sources such as coal and hydrocarbons. Although it was used to satisfy part of the national energy demand, together with the energy produced by large hydroelectric plants, most coal was destined for export. In 2020 alone, almost 55 million tons of coal were extracted throughout the country, of which around 90% was destined for export to countries such as Turkey, Chile, Brazil and Israel, among others. Until just a few years ago, however, Germany was the main buyer of Colombian coal. The same year, coal contributed just over a trillion Colombian pesos in royalties (UPME, 2020a, 2021b).

Despite having firmly anchored itself to the economy and to the national political discourse, presenting itself as a fundamental engine for progress and development, the extraction of coal has been attacked from many angles: because of its effects on the immediate environment and the population, its profound impacts on the local economy and its links with illegal armed groups, which intimidate or assassinate social and community leaders who defend their territories. In the same way, the international coal economy seemed to have gone into decline in early 2021, responding to efforts to reduce the global greenhouse effect, in line with the 2015 Paris Agreement, and to the growing economic viability of renewable energies. However, in September 2021, the world saw the historically highest coal prices, generating deep uncertainty about the future of the industry. Numerous energy transition strategies are already being implemented, including massive investment in new renewable energy projects, especially in solar photovoltaic and wind energy. It is necessary to question whether these new energy models will actually represent a transformation in the way we relate to our environment or whether they will consist of reproducing old forms of exploitation taking advantage of new technologies.

Based on these first observations, this chapter seeks to familiarize the reader with the economy of coal in Colombia and on different energy transition projects promoted by the national government and multilateral organizations. Here we offer a macro view of this branch of public policy, which we will later criticize and aim to rethink from a dialogue with indigenous, afro and peasant communities in the coming chapters.

2.1 Coal: A Troublesome Energy Source

The prospects for coal as a primary source of energy were ambiguous, even before the COVID-19 pandemic. Most rich countries were taking note of its disastrous environmental consequences, its impact on the worsening climate crisis, added to the decrease in the profitability of coal as a source of electrical energy. In 2019, most of the countries of the Organization for Economic Co-operation and Development (OECD) were therefore decreasing their extraction and/or consumption of coal, although with mixed results, as in the cases of Germany and the United Kingdom (Steckel et al., 2015; Zhao & Alexandroff, 2019).

In a similar way, many countries in the Global South, economically and/or energy dependent on coal, continued to expand their operations. As several authors notice (Cardoso & Turhan, 2018; Oei & Mendelevitch, 2016), many coal exporting countries, such as Colombia, did not see economic reasons to cut extraction and export. They were counting on the growing demand for fossil fuels from other emergent countries to compensate for this decline in demand from the Global North, maintaining the status quo. Even during the first months of the pandemic, politicians and executives forecasted a 'V-shaped recovery', i.e. that the demand for coal would soon rise to pre-pandemic levels.

However, 2020 showed this to be an overly optimistic view, as demonstrated by Yanguas et al. (2021), whose quantitative research shows that economic activities dependent on the extraction and/or processing of coal, and especially its export, have entered a phase of structural decline, referred to as the 'Death Valley of coal'. It is in fact very likely that in the next 20 years we will see a precipitous fall in global demand for coal, more like a capital 'L' or the symbol '\' than a capital "V". Even the most optimistic scenarios foresee a fall in demand for coal exports of at least 37% in the next 5 years. In other words, there is no long-term glorious future for either coal mining or thermal electricity generation.

What to do in the face of the sector's decline? Scientific literature recommends two immediate measures for countries that depend on coal, mainly due to their economic dependence on its export or to an energy dependence, as in the case of countries where the biggest amount of electricity is generated in coal-based thermoelectric plants. Firstly, it is necessary to stop all kinds of investments that increase dependence on coal (mining and thermoelectric projects or coal-related infrastructure such as railways, ports, etc.); in this way, the risk of stranded investments can be reduced, i.e. investments that will soon be worthless (Unruh, 2019)^{1.} Secondly, these countries must invest in the development and strengthening of institutions, economic structures and technologies that diversify the economy and the electricity generation system.; for example, through renewable energy projects, such as wind or solar energy. These investments can create new jobs and contribute to the urgent mitigation of climate change.

It is important to mention that renewable energies can nowadays already compete in cost and revenue with large thermal power plants. Adjustments to standard costs for electricity² produced from solar and wind energy both on land (on-shore) and in the sea (off-shore), are already below those of fossil fuels in many cases. More than 800 GW of coal-fired thermal plants are currently already obsolete from an economic point of view compared to renewable energies (IRENA, 2021). These developments, together with new investments and the diversification of the economy beyond fossil fuels, contribute to the weakening of the dominant economic system of extraction and processing of fossil fuels, thus showing that there are economically viable and clean alternatives (Unruh, 2000).

^{1.} For example, a thermoelectric plant that seems profitable today could become unprofitable due to a rise in prices for emission certificates, turning the investment into unretrievable costs.

^{2.} Costs per kilowatt-hour of electric power that take into account installation, maintenance, weather costs, and the costs of eliminating the generation method.

This leads to the question: if this economic decline is so obvious and imminent, and if energy alternatives to coal are this viable, why don't we see a greater positioning of renewable energies around the world? *The Economist* (2021) identifies the lack of financing as the main cause of deficiencies for renewable energies in emergent countries. López et al. (2019) coincide with this evaluation for the case of Colombia, noting the absence of an economic boom around solar energy in the Caribbean region, despite its enormous energy potential. This under-financing of the sector, however, also responds to other factors.

Corral (2021) discusses the arrival and expansion of coal operations in Colombia during the last century, identifying the discursive patterns used by actors linked to large-scale coal extraction, among them an insistence on the link between coal and lofty social objectives such as progress, development, modernization or even peace. Among other elements, this discourse has achieved the entrenchment of coal in the country's mining-energy panorama, in such a way that, for many actors and decision-makers, it is almost impossible to conceive a future for Colombia without coal. This has contributed to the prevalence of coal in the extractive matrix of Colombia as the second largest export line and the first in extraction, as well as an important source of energy for the electricity sector (approx. 15% of electricity generated in 2019) and industrial (28% of thermal energy used in 2019) (UPME, 2021c). At the same time, renewable energies have been kept at bay in the Colombian public discourse, with the exception of large-scale renewable projects that also promise progress, development and modernization, without going into the detail of how they have to reach the territories that are to be intervened.

Coal, meanwhile, appears to be experiencing high volatility in the international market. Between January 2020 and September 2021, this has gone from a collapse in demand and prices to a boom with the highest prices on record (El Heraldo, 2021; La República, 2021b.). However, the forecasts for coal consumption in the medium and long term in the accessible markets for Colombia are negative (Yanguas et al., 2021). In this context, in Colombia some mines such as Prodeco or CNR (Figure 2.1), in the department of Cesar, have experienced great turbulence, having announced bankruptcies, return of mining titles, among other maneuvers (Ovalle, 2021; Portafolio, 2021b). This uncertainty has not discouraged companies such as Glencore or the Turkish capital company Best Coal Company (BCC). While the former decided to buy up stakes in the Cerrejón mine from partners BHP Billiton and Anglo American, the latter is preparing to start a new mining complex to be even larger than the Cerrejón mine itself (Portafolio, 2021a; Yildirim, 2021).

Figure 2.1 The main entrance to the open-pit coal CNR Mine Complex, in the department of Cesar.



Note. Photography Felipe Corral, March 2021.

Against that dismal background, it is crucial to start planning transitions beyond coal, integrating the populations most affected by these processes. This requires an in-depth analysis of the coal and energy transition scenarios in the country, detailed bellow.

2.2 Manifestations of the Coal Economy in Colombia

Several models of coal extraction, transportation (Figure 2.2), transformation and use coexist in Colombia. In particular, we differentiate between large-scale open-pit mining, which is carried out mainly in the departments of Cesar and La Guajira, in the Caribbean region, and small and medium-scale tunnel mining, which is carried out in the Andean region, in the departments of Norte de Santander, Boyacá, and Cundinamarca, among others. We argue that there are profound socioeconomic differences between these extraction models, without even mentioning geographical and cultural particularities, with important implications when considering energy transitions

Figure 2.2 Railroad tracks at Cruce de Chiriguaná, in the department of Cesar



Note. Photograph by Felipe Corral, March 2021.

In both cases, local populations have interpreted the arrival of coal mining in the territories as a historical turning point. In the words of Ramírez et al. (2015):

It marks a before represented in places that kept in its interior their daily lives and pleasant memories; shared spaces such as forests, rivers and roads that were part of a whole network of economic activities, leisure and fun, meeting, learning, customs and culture that made up that territory [...]. And an after, imposed by mining more than three decades ago, but which has deepened as exploitation expands under the logic of the world market. It manifests itself through the uprooting of whole communities from their territories, generating more and more social, environmental, economic and cultural conflicts (p. 18). It is thus not only a temporary milestone, but a problematic conflict with the community's own lifestyles, being the cause of a collision between ancestral cultures and the Western civilizing project of Modernity, which brings so much hardship to the territories and their inhabitants.

At all stages of the research process, the harmful effect on territories and public health caused by the mining operations were identified, negative impacts such as groundwater and farmland contamination were discussed in particular, as well as the increase in respiratory diseases – in Boyacá mostly limited to the miners themselves -. In addition, mining is associated with uprooting: entire communities in Cesar and La Guajira had to be relocated to build an open pit mine or a railroad; or the gradual displacement of local families near to a mining area in Monguí, due to the decreasing fertility of the soil, added to the landslides resulting from erosion caused by mining activity.

All groups also recognize the disastrous impacts that the mining project has had on the social fabric and community sovereignty, including the interference of mining in local decision-making processes. In the departments of Cesar and La Guajira, frequent attempts by mining companies to generate fear in the community are mentioned, through direct threats and the targeted killings of local leaders, in line with the panorama of social leader assassinations in the country. As a parallel strategy, these situations seek to create divisions in the communities, among other reasons, to obtain approval in prior consultation processes, for example, through bribery of leaders or local authorities. There are also efforts from the mining companies to appease the legitimate struggles of the communities through minimal gifts, which do little to solve underlying problems and generate or strengthen dependency relationships. In Monguí, on the contrary, this is evidenced in the collectivization of the miners as a result of the time they spend together in the mine, which they use to coordinate common positions in the face of local elections. In this way, they exclude all populations that do not work in the mines from the decision-making process, particularly women and the elderly, also aligning the administration with mining interests.

Finally, all groups attribute notions of masculinity and violence against women to the coal project. In all the contexts analyzed, the recurring motive of 'the miner' is identified, associated with traditional macho attitudes: "the one who has money", "the one who has all the women", "the envy of all the men", and so on, and that has profound effects on gender relations in the public and private spheres of the community. This is evidenced, for example, in popular music used in everyday situations such as the vallenato folk song 'El Minero del Sabor', by Gaby Luna, and the popular carranga song 'El Minero', by Marco Antonio Beltrán, address the theme in that same perspective

El minero

Marco Antonio Beltrán

Soy un minero, señores, que trabaja con mucho valor. No me avergüenzo de nada, trabajo en minas de carbón. Para ese trabajo soy experto, soy un famoso explorador. Muchos obreros a diario, nos arriesgamos la vida, dentro de esos subterráneos, no hallando otra salida. Por el nombrado dinero, nos arriesgamos la vida. Soy minero y no puedo negarlo, que me gusta vivir de placeres, que el dinero que a diario me gano, gasto en lujo, en licor y en mujeres, porque sé que la vida es muy corta, y en cualquier momento uno la pierde. The miner

Marco Antonio Beltrán

I am a miner, gentlemen, that works with great courage. I'm not ashamed of anything, I work in coal mines. For that job I am an expert, I am a famous explorer. Every day, many workers, just like me, risk our lives, inside those mineshafts, finding no other way out. For the coveted money, we risk our lives. I'm a miner and I can't deny it, It is true that I like to live with pleasures, that the money that I earn every day, I spend it on luxury, liquor and women, because I know that life is very short, and at any moment one loses it





El minero del sabor

Gaby Luna

Ay, soy el minero del sabor, ese que siempre está contento. Ay, trabajando de sol a sol, y soy un hombre muy correcto. A mí siempre me ha gustado saborear la vida siempre tomándome unos tragos al lado de una morena linda. Si la plata se me acaba, corro y vuelvo a la mina, porque un hombre como yo, sí sabe gozar la vida. Porque mi desdicha la paso yo sacando oro y tomando ron. Ay, mucha gente a mí me critica, porque me gasto mi platica. Ay, pero la vida es tan cortica, y hay muchas mujeres bonitas.

The happy miner

Gaby Luna

Hey! I'm a very happy miner I'm the one who always looks so joyful. Hey! I work from sunrise to sunset, and I am a very correct man. I've always liked to enjoy life always having a few drinks next to a pretty brunette. If the money runs out, I run and go back to the mine, because a man like me, really know how to enjoy life. Because I spend my misfortune mining gold and drinking rum. Oh, many people criticize me, because I waste my money. Hey! but life is so short and there are many pretty women.

Otherwise, women —particularly those of the communities in the Caribbean region— also recognize the danger to which women are exposed in these territories, under the risk of feminicide, gender violence and sexual exploitation, which frequently take place in public space. In Boyacá, by contrast, patterns of gender violence are recognized particularly in the private and family sphere, partly due to the predominant sexist conceptions as already stated in the aforementioned Colombian folk music. The murder of female environmental leaders is also recognized, and it is analyzed as an important factor of concern in all the communities, which often limits women in their desire to speak in defense of the territory.

The aforementioned similarities between large, medium and small-scale coal extraction justifies intercultural dialogues with and between ancestral communities in the departments of Cesar, La Guajira and Boyacá, and in particular those that have suffered the most from its impacts in recent decades. However, we insist on the importance of making a differentiated analysis for each of these contexts.

However, in spite of these marked differences, both the national government and some workers unions insist on treating both small and medium scale mining in Boyacá, and large scale coal-mining in Cesar and La Guajira as one and the same. In this way, for example, the Caribbean large-scale coal mining industry is justified with energy security arguments, under the formula: Colombia cannot stop the extraction of coal in Cesar and La Guajira because this coal is necessary for our generation and consumption of electricity. This argument is ambiguous because it does not correspond with the reality of the coal economy in these regions, since 92.5% of the coal extracted in Cesar and La Guajira is destined for export (UPME, 2020a). Conversely, the departments of Boyacá, Cundinamarca, Antioquia, Norte de Santander and Santander, are the main responsible for supplying the internal demand for coal, with 98% of the coal extracted in Boyacá, and between 70 and 78% of that extracted in Antioquia and Norte de Santander being destined for domestic consumption (UPME, 2020a).

Indeed, these regions present radically different mining-energy models in geographic, productive, labor, economic, political and even environmental terms. Therefore, proposals for energy transitions must recognize these fundamental differences, proposing solutions that respond to the conditions in the territories. Table 2.1 shows the main differences between the two exploitation modalities. Further details can be found below.

Table 2.1 Comparative differences between coal mining in the Caribbean		
region and the Andean region.		

	Large-scale coal mining	Small/medium scale coal mininga
Department	La Guajira, Cesar	Norte de Santander, Boyacá, Cun- dinamarca, Antioquia, Santander
Property	Transnationals such as Cerrejón Mincraft (BHP Billiton, Anglo American, Glencore), Drum- mond, Prodeco (Glencore), CNR (Murray), Caypa	National companies mostly
Extraction volume	Around 51 million tons in 2020 (UPME, 2020a)	About 3.9 million tons in 2020 (UPME, 2020a))
Destination	92.5% export (UPME, 2020a). Main destinations in 2019 and 2020: Turkey (25%), Chile (10%), Brazil (7%), Israel (7%), others (51%) (UPME, 2021a)	22% - 30% export in Antioquia and Norte de Santander; 2% export in Boyacá. 78% - 70% domestic consumption in Antioquia and Norte de Santander; 98% domestic consumption in Boyacá(UPME, 2020a)
Use	Electricity generation (abroad)	Industrial processes, electricity generation, steel and cement ma- nufacturing
Empleo generado	Alrededor de 20.000 empleos en 2020 (2,3% del total departa- mental en La Guajira; 1,25% en Cesar)* (DANE, 2021)	Alrededor de 50.000 empleos en 2020 (3,6% del total departamental en Boyacá; 0,2% en Cundinamarca; 0,7% en el Norte de Santander) (DANE, 2021)
Royalties	999,808.3 million COP in 2020 (UPME, 2021b)	32,639.82 million COP in 2020 (UPME, 2021b)
Share of GDP at the departmental and municipal levels (in main municipalities)	39.7% and 37.6% in Cesar and La Guajira respectively in 2019(DANE, 2020)	7.4% in Boyacá; 0.8% in Cundina- marca; 2.75% in Norte de Santan- der in 2019(DANE, 2020)

Note. Extraction volume regarding large/small/medium scale coal mining are authors' calculations based on UPME (2020a). Assuming small/medium-scale coal mining has suffered a production reduction similar to large-scale coal.

* Reflects total employment in the 'mining and quarrying' sector: 194,000 jobs or 0.88% of national employment in 2020 (DANE, 2021).

2.3 Large-Scale Coal Mining in the Caribbean Region: A Case of Extractivism³

In the Caribbean region, mining is carried out in large-scale operations, which extract tens of millions of tons of coal per year for export purposes (Figure 2.3). These operations belong to transnational companies such as Drummond (USA), Glencore (Switzerland), BHP Billiton (UK/Australia), Anglo American (UK) or Murray (USA), which concentrate more than 60% of national production. Given that these operations are highly technical, they do not require many workers, and employ less than 2.5% of the population of the departments of Cesar and La Guajira, using machinery in massive operations with very high repercussions on the territory. These operations, for example, remove waste material weighing more than the total of the country's agricultural production each year(Corral, 2021), consuming enough water to supply entire cities, with around 9.5 (Drummond) and 11.25 (Cerrejón) million cubic meters of water in 2019 (Cerrejón SA, 2020; Drummond LTD. Colombia, 2020).

In general terms, the coal from the departments of Cesar and La Guajira does not constitute an energy source for Colombia (Figure 2.4). In other words, it is not extracted for its energy, but to generate income (Martínez & Castillo, 2019). In addition, these incomes are of a particular type: they are incomes for which you do not have to work or invest but a minimum (Puerto-Chaves & Corral, 2021). In the case of La Guajira and Cesar, the coal rents are distributed among the mining companies, which are left with approximately 20 to 40 while the State keeps 20% and workers are entitled to 8% as remuneration for their employment. Less than 0,3% of the income generated by coal mining reaches the communities via corporate social responsibility of the mining companies (Corral et al., 2020, p. 18).

^{3.} According to Gudynas (2013) and Acosta (2013), "extractivism" is defined as a large-scale extractive industry of natural resources, with high social and ecological impacts and a mainly export-oriented approach. Since 96% of the coal from Cesar and La Guajira is exported unprocessed and carried out in large-scale open-pit operations (UPME, 2019), this activity corresponds to the definition of 'extractivism'.



Figure 2.3 Coal train, near La Jagua de Ibirico, department of Cesar.

Note. Photograph by Mateo Vega, March 2021

Figure 2.4 An aerial view of coal loading process on cargo ship in Puerto Bolívar, department of La Guajira, destined for export



Note. Wikimedia Commons License.

State income from coal mining comes in the form of royalties, local taxes, national taxes, and income from other compensation (López & Patzy, 2021). Although the sums that this mining rent brings together are

not small, it is important to put them in perspective (Corral et al., 2020). In 2018, the income received by the Colombian State from coal mining in Cesar and La Guajira did not exceed 1.25% of the central government budget. Furthermore, the income generated by coal for the Colombian State did not even exceed the budget of the Ministry of Mines and Energy. At the same time, it has been calculated that the socio-environmental liabilities of the coal mining in Cesar exceed 144.64 USD/ton, more than twice the value with which the country is left; that is, 71.22USD/ton (Cardoso, 2015; Corral et al., 2020).

Regarding the relationship with the territory and the communities that inhabit it, there is extensive literature produced by universities, civil society organizations and the communities themselves, drawing attention to the various damages generated by this activity, since the beginning of large-scale coal extraction in La Guajira and Cesar. This literature has denounced, for example, how mining companies such as Carbocol/ Intercor -operators of the Cerrejón Mining Complex towards the end of the 1990s-knew that the operation in La Guajira would have irreversible impacts on the social fabric of the Wayuu people, even reaching its cultural extermination (Pacini, 1984; Rivera, 1984). Such literature shows that large-scale coal mining is really problematic towards both the territories and their communities. Evidence suggests that the intervention and the deviation of water sources has similarly led to massive ecological disasters (Fuentes et al., 2019; Tostón, 2013); air pollution and its effects on the health of workers, communities and local flora or fauna (RLS & Sintracarbón, 2019); or the effect of massive displacement, often violent (Centro Nacional de Memoria Histórica, 2016; Moor & van de Sandt, 2014; Salinas et al., 2018), as a tool to create mining enclaves of hundreds of thousands of hectares. Likewise, evidence has shown that mining companies have tended to take advantage, often with the complicity of the Colombian State, of different asymmetries of information, financial resources or technical capacity to accelerate, weaken or co-opt control mechanisms and civil rights, such as prior consultation, environmental impact assessments, issuing of environmental permits and pollution monitoring, as exemplified by Montoya-Domínguez (2018).



Tierra mía, tierra querida, en lo extenso de tus sabanas verdes y llenas de árboles frondosos y sombreados, ricas frutas saboreados, con nuestra piel, morena y cálida representando nuestro territorio como afrodescendientes que somos.

(Participante, comunidad afro de La Sierra).

My dear region, my beloved Caribbean land, in the vastness of your savannahs covered with grass and trees that grow green and shady, and produces fruits of delicious taste, with our skin, dark and warm, that imitates our local grass, as the Afros, which we are proud to be.

Participant, Afro-community of La Sierra

2.4 Medium and Small-Scale Coal Mining in the Andean Region

Coal mining in the Andean region occurs entirely underground (Figure 2.5) owned by mostly national companies. In those underground operations, just over 50,000 employees extracted about 3.9 million tons of coal in 2020; that is, less than a tenth of what was extracted in the Caribbean area. In the departments of the Andean region, there are more workers than machines carrying out operations, in many cases informal, low-tech and lacking in industrial security or environmental, social or tax control.

As shown in Table 2.1, coal from the Andean region was used in 2019 mainly for consumption by the national industry. According to data from the Mining-Energy Planning Unit, industrial activities such as food processing, the manufacture of paper, cement or beverages used almost a third of the coal consumed in Colombia, followed by coking coal for steel companies and, lastly, thermoelectric plants that burn coal to generate electricity (UPME, 2020a).

In that case coal is the mainstay of various industrial processes in which it is mostly used to generate direct or indirect heat. Direct heat involves heating a raw material such as limestone, for example, used in the making of cement through a physical-chemical reaction. Indirect heat involves heating a 'medium', such as water, to change the temperature or the physical-chemical composition of a raw material, e.g. wood pulp, to transform it into a finished product (in this case, paper). Regarding this aspect, it is important to mention that almost all the industrial processes that use coal in Colombia, except for the manufacture of cement, iron or steel, do not require high levels of heat (that is, above 500 °C). This is why these processes can replace coal fired boilers with renewable alternatives such as electric boilers.

Figure 2.5 The outside of a coal mine sinkhole in San Mateo, department of Boyacá.



Note. Wikimedia Commons License.

The steel industry —which operates in municipalities such as Sogamoso, Paz del Río, Yumbo, Tuta, among others— uses coal both for thermal processes (melting scrap to recycle metal), and for physical-chemical processes that require coal from coke: a coal with higher carbon and energy content. In the latter processes iron ore is combined with coke to make steel, a process for which alternatives that do not require coal remain considerably more expensive and technically complex.

Finally, there are coal-fired thermoelectric plants such as TermoPaipa or TermoSochagota in Boyacá, TermoZipa in Cundinamarca, TermoTa-

sajero in Norte de Santander, TermoGuajira in La Guajira or Gecelca in Córdoba. Despite being one of the most polluting and expensive plants in the country, they still provide about 11% of the electricity in the system (UPME, 2020a). Given that in Colombia the vast majority of electricity comes from hydroelectric plants, thermoelectric plants, including those that run on coal, do not work all the time, for which they receive large subsidies from the electricity system —known as 'reliability charges'— so that they are available when the hydroelectric plants cannot satisfy the totality of the electrical energy required by the system. According to recent studies (Henao et al., 2019; Henao & Dyner, 2020), solar and wind renewable energies can now replace coal-fired thermoelectric plants, without putting in danger the stability of the Colombian electricity system. They can do so in fact at a lower price per unit of electricity than thermoelectric plants can offer.

Given that the coal value chain in the Andean region is considerably longer, its links with the social, political, cultural and ecological evolution are much deeper and more diverse. To begin with, coal mining is associated with air, water, and soil contamination from coal dust, mining drains, or extracted waste material, which end up affecting space or resources for crops, housing, or other activities. In addition, several mines have had problems of explosions, landslides, and they have been associated with erosion and damage to surrounding water sources (Roa, 2020; Zamora, 2020).

Perhaps one of the most complex aspects of this mode of exploitation is that no matter how polluting and increasingly expensive it is, it employs a relatively large number of personnel; in addition, it belongs mostly to local or national economic agents. In other words, not only does coal stay in Colombia, but a much larger percentage of the generated wealth does so as well. Without large union organizations present⁴ a much greater number of miners than those who work in the Caribbean region work in a value chain joined by transporters and industrial workers who can multiply the jobs associated with extraction by various magnitudes. Only Acerías Paz del Río (Figure 2.6), one of the most recognized steel compa-

^{4.} Interview with Fenalcarbón manager, January 2019 / Interview with Termotasajero manager, January 2019 / Interview with Sintracarbón manager, November 2019.

nies in the country, has 1,562 direct employees (Siete Días Boyacá, 2020), five times more than the jobs that CNR promises to generate, one of the largest mining companies in the Caribbean, which plans to extract more than 2 million tons of coal annually starting in 2022 (El Pilón, 2021).

2.5 Energy Transitions in Colombia: Reality vs. Discourse

In the public discourse, Colombia has one of the cleanest electrical matrices⁵, in the world, considering that almost 80% of the electricity generated in 2019 came from hydroelectric plants (UPME, 2020a). However, several points should be considered. Firstly, hydroelectric plants are called clean because they do not burn fossil fuels. Indeed, specialized literature questions and argue against this line of public discourse. It is enough to consider that large hydroelectric plants generate emissions of considerable volumes of methane, greenhouse gas (GHG) emissions up to 86 times more powerful than carbon dioxide, not to mention the effects associated with the transformation of ecosystems such as rivers (Oviedo-Ocaña, 2018).

Figure 2.6 A panoramic view over Acerías Paz del Río, in the vicinity of the municipality of Monguí, department of Boyacá



Note. Taken from Wikimedia Commons.

^{5.} An 'electrical matrix' is the mixture of different sources of electricity generation.

Secondly, before we move on, it is worth clarifying that this electricity only corresponds to 17% of the final energy⁶ consumed in the same year. Given that unconventional renewable energies have just begun to take off in Colombia, more than 86% of the final energy consumed in the country still comes from fossil sources, so that considerable GHG emissions are generated (UPME, 2020a). In this context, it can be argued that high levels of contaminants have been found in transport, industry and homes, causing concerns about pollution risks to nearby neighborhoods.

And thirdly, these numbers ignore the energy that is extracted for export: oil and coal as a whole is getting almost half of Colombian exports (OEC, 2019). From the primary energy sources⁷ extracted in Colombia, 60% is exported unprocessed, to which can be added the fact that almost 96% of the primary energy sources produced in Colombia comes from fossil fuels. In a situation like this, the last two governments have made various declarations and plans on the matter, some of which are highlighted below.

Both in the 2018-2022 National Development Plan and in different spaces for discussion, the Government has highlighted that the energy transformation will be advanced with a massive deployment of solar and wind energy, especially in the department of La Guajira (Figure 2.7). In fact, by 2022, almost an additional 10% of electricity generation capacity is expected to come from renewable projects in that region (Ministerio de Minas y Energía, 2020).

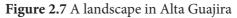
Meanwhile, the National Energy Plan (PEN) contemplates a less encouraging long-term vision. By 2050, when Colombia made a commitment to reach carbon neutrality ⁸ (Gobierno de Colombia, 2015; UN-

^{6.} The final energy consumed correspond to all the energy that, after different transformation processes, is used in the different sectors of the economy such as transport, industry, commerce, and so on.

^{7.} The primary energy extracted refers to all the energy sources (e.g. coal, petroleum, natural gas, etc.) that can be extracted, regardless of whether they are exported, transformed or used in some process.

^{8.} When biomass or fossil fuels are burned, or natural gas is extracted, different gases are released, among others, that generate what is known as the 'greenhouse effect'. As a result, these gases prevent the heat that comes from the sun from being reflected back into space, increasing the temperature of the planet. To prevent this increase in global temperature from leading to a socio-ecological collapse, more than 190 countries have given pledges to seek carbon neutrality by 2050,

FCCC, 2015) the PEN foresees that different fossil fuels such as coal, petroleum and natural gas will continue to play a leading role and that renewable energies will only be complementary (UPME, 2020b). A similarly worrying panorama is observed in the National Plan for Mining Development (UPME, 2017), which expects coal mining to continue to expand and remain well into the second half of the 21st century. With this in mind, there is no evidence to believe that the planned termination of fossil fuel extraction is a priority for the national government.





Note. Wikimedia Commons License.

More recently, the Congress of the Republic approved a law with the expectation of accelerating the energy transition in Colombia. New technologies are promoted in it such as geothermal —which uses the heat from the center of the earth— or green hydrogen —which divides water molecules into hydrogen and oxygen through renewable electricity— (La República, 2021a), but other technologies are also promoted nevertheless, such as carbon capture, transport and use, which tries to capture CO2 from processes energy, store it and/or use it (Jin et al., 2017; Vögele

within the framework of the 2015 Paris Agreement. This implies that greenhouse gases can only be released in the same amount that the planet's ecosystems can capture from the atmosphere.

et al., 2018; Hirschhausen et al., 2012), or blue hydrogen, which is achieved by dividing methane molecules into hydrogen, CO2, CO, among other elements, as well as dividing water molecules with non-renewable electricity (Brauers et al., 2021). Several studies suggest that these two technologies can be profoundly ineffective in reducing GHG emissions, as well as costly and risky: for example, the tanks in which CO2 is stored can increase the threat of earthquakes (Bui et al., 2018). In the same way, these technologies constitute a way to extend and even perpetuate the extraction and use of polluting fuels such as methane or natural gas, and coal (Gunderson et al., 2020).

Finally, it is also worth emphasizing two beliefs that predominate both in government discourse and in what is found in the press.

Firstly, one might hold that renewable energy can be included in the current energy matrix, without the need to deliberately reduce the role of fossil fuels for there to be a transition. We only have to look at the tangible results of the 2019 renewable energy auctions, as well as the wind megaprojects in La Guajira to understand that the national government intends to add renewable electricity to the matrix, without committing to reducing coal and gas extraction and combustion. Furthermore, one of the main documents on energy transition of the Government of Iván Duque claims that the extraction and use of natural gas will coexist with renewable energies for decades (Duque et al. 2021; UPME, 2021c). However, these two challenges cannot be harmonized, as shown the International Renewable Energy Agency (IRENA, 2021). This is requested by a large part of the affected communities and civil society. An effort to combat climate change and environmental pollution presupposes that there is a growing need for stopping the extraction of new hydrocarbon or coal reserves. In other words, it is crucial that the problem of extraction, transformation and use of fossil fuels is tackled immediately, since adding renewable energy to the matrix may not be sufficient.

Secondly, even if it was possible, the decision to reduce the role of fossil fuels would be enough to either change the technology or the energy source in order for a transition to be successful. To explain it more clearly: mining or petroleum mega enclaves can be replaced by mega-wind or solar parks. The stress of successive governments on energy megaprojects (e.g. Hidroituango, solar mega-parks in Cesar or wind mega-parks in La Guajira) reveals once more that the energy transition is conceived as a mere substitution of some technologies for others. There is no doubt that the underlying profit-driven business model is carried out in centralized agencies controlled by few interest groups that capture almost all of the profits. In addition, they both avoid socio-environmental costs and exclude consumers from decision-making. There are several indications that they are currently seeking to continue the extractivism model, as already evidenced by the developments in renewable energy in Cesar or La Guajira⁹. Extractivism in fact intervenes large territories to extract wealth, avoiding its redistribution among local populations and contributing to the degradation of the territory, so making multidimensional poverty worse, as well as inequality and the disintegration of the social fabric (Barney, 2020).

Then we are facing a situation in which new technologies facilitate the reproduction of a model of appropriation of natural resources, extraction and transformation of energy which had obviously been drawn up without consulting the affected communities (Figure 2.8). In the next chapter we will outline some first keys to think beyond this anthropocentric and extractive industry model based on the epistemologies of the South and Latin American feminisms, in order for us to identify some challenges on just energy transitions from below

^{9.} In the midst of the COVID-19 pandemic, several renewable energy companies tried to advance prior consultation processes at any cost, to such an extent that the Attorney General's Office had to intervene and completely stop this process. This is, after all, how these companies can avoid scrutiny, approaching communities with faits accomplis, instead of engaging in participatory planning, thus excluding communities from decision-making. According to recent reports, and as it happened with the arrival of coal, armed groups have begun to intimidate communities to accelerate prior consultation processes (see, for example, Vita, 2020).



"¿Qué es desarrollo? Cuando a mí me preguntan qué es desarrollo, yo siempre me voy al campo, me voy a mis ancestros.

No es que yo esté en contra del desarrollo social, del desarrollo político, del desarrollo económico, ni nada de eso [...]. Para mí lo que es desarrollo es sembrar una mata de plátano, sembrar yuca, sembrar una huerta, criar mis animales, comer sano, vivir sano, y que todos esos productos que yo me coma sean completamente frescos y sanos, y que no tenga que venir con ninguna clase de contaminante.

Para mí el desarrollo es vivir en un pueblo tranquilo en donde no exista tanto ruido, tantas contaminaciones, que generan las grandes empresas y la

minería". (Participante, comunidad afro de La Sierra). What is development? When they ask me about development, I always return to the countryside, where my ancestors lived a long time ago.

It is not that I am against social development, political development, economic development, or anything like that [...]. development for me is to plant a plantain, cultivate manioc fields, grow an orchard, raise my animals, eat healthy, live healthy, and that all those products that I eat are completely fresh and healthy, and that I don't have to come with no kind of pollutant.

Development for me is living in a quiet town where there is not so much noise, so much pollution, generated by large companies and mining.

(Participante, comunidad afro de La Sierra).





Figure 2.8 A landscape in La Jagua de Ibirico, department of Cesar

Note. Photograph by Felipe Corral, March 2021.

Main Ideas in Chapter 2

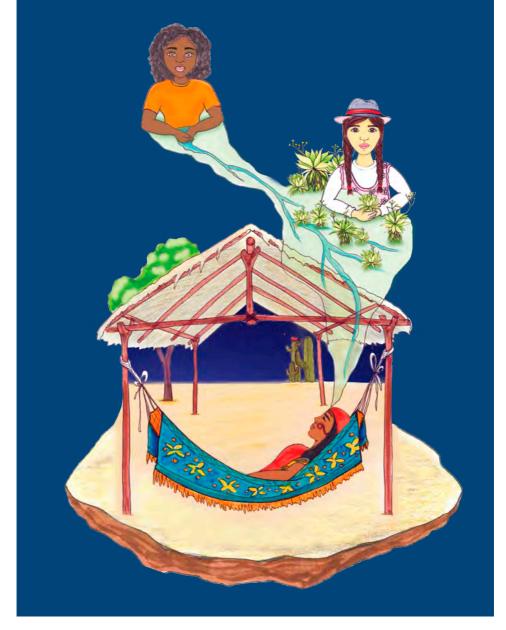
- The coal economy is in crisis. Both growing awareness of its environmental impacts and the greater viability of renewable energy alternatives have led many European countries to reduce or stop coal imports, the former main consumers of Colombian coal. While other countries such as Turkey and China have increased their demand for the mineral, trade trends for coal have continued to decline during the COVID-19 pandemic. For this reason, it is important to plan the closure of mines in a timely manner, to ensure that mining companies carry out work to restore the territory and repair the affected communities.
- n the studied territories, i.e. the Caribbean and the Colombian Andes, the coal mining boom occurred in the eighties and nineties, radically reconfiguring the economy of the departments. In all cases, the arrival of coal mining marks a before and after. In particular, the participants reported multiple impacts of coal mining on the social fabric and on decision-making at the community level. In the same way, all groups attributed notions of violent masculinity to the mining-extractive project, which takes different forms and is also evidenced in popular culture itself. This includes violence exerted by mining and its consequences on women and their bodies,
- However, a careful analysis of the forms that the coal economy takes in Colombia is also required. Large-scale coal extraction processes are being carried out on the Caribbean coast, mostly operated by multinational companies that reach very high extraction volumes. The vast majority of the coal extracted in these regions is destined for export, contributing around 1,000,000 million COP in royalties to the Colombian State and representing between 35 and 40% of the departmental GDP in Cesar and La Guajira. Its impact on job creation is modest, contributing 2.3% of the total departmental jobs in La Guajira and 1.25% in Cesar.
- On the contrary, the small-scale coal mining carried out in Boyacá, Santander, Norte de Santander and Antioquia did not reach 4 million tons in 2020. The vast majority of the coal extracted is destined for domestic consumption, destined for thermoelectric generation or industrial steel and cement companies, among others. Despite the fact that small-scale coal mining represented only around COP 32.6 billion in royalties for the Colombian State

and did not exceed 7.4% of the departmental GDP in Boyacá in 2019, the industry generated around 50,000 jobs in the 2020 (3.6% of the departmental total in Boyacá).

- These economic differences —together with the cultural, social and political peculiarities of each territory— require a specific approach when designing energy transition plans and policies.
- The energy transition has gained importance in Colombian public policy in recent years. Efforts have been made to diversify the country's energy matrix —depending mainly on hydroelectric and thermal energy—, encouraging the addition of other renewable sources such as wind and solar energy. However, this understanding of energy transition has been limited to 'adding' renewable energy sources to the energy matrix, rather than seeing them as replacing fossil fuels once and for all. Additionally, the new renewable energy projects maintain the same dynamics of land occupation and exclusion of local populations as former mining projects.



Chapter 3. Conceptual Referents from the Epistemologies of the South





Overcoming the underlying logic to the coal extraction mo-del, also present in the newer mainstream renewable energy projects, and thus achieving truly participatory and just energy transition models, requires us to rethink the anthropocentrism inherent to western modernity. Anthropocentrism is the belief that humans are the most important beings in the universe, thus having a natural dominion over all others. According to this perspective, plants, animals, and humans are not staged as equals: the natural environment, fauna and flora have value only if they provide potential benefits to humans. A close example of this argument often comes from the discourse of development and economic growth that legitimizes extractivism and the destruction of the environment, in the name of generating wealth, employment, industry, and so on (Gudynas, 2011, 2013). Even the environmentalist discourses of northern countries, which are understood from a 'cult of the wild' focused on conservation and climate action, fail to question the paradigm of economic growth and its patterns of production and consumption in a world with limited natural resources (Martínez-Alier, 2011)¹⁰. This anthropocentrism also offers the

^{10.} Another telling example of this anthropocentric logic is the concept of 'ecosystem services', popularized by the United Nations Millennium Ecosystem Assessment in 2005, and which today has become a standard in environmental public policy worldwide. Ecosystem services are the quantifiable goods or services that ecosystems provide for human enjoyment. On these, the Food and Agriculture Organization (FAO) details the following: "Ecosystem services make human life possible by, for example, providing nutritious food and clean water, regulating disease and climate, supporting the pollination of crops and soil formation, and providing recreational, cultural and spiritual benefits. Despite an estimated value of \$125 trillion, these assets are not adequately accounted for in political and economic policy, which means there is insufficient investment in their protection and management" (FAO, 2021). According to this perspective, the need to protect and safeguard ecosystems and the natural environment is justified only from

theoretical framework for other oppressive relationships; among them, patriarchy as the domination of men over women (and over other men considered less masculine).

This perspective radically excludes and makes invisible everything that does not fundamentally conform to this way of conceiving the world, everything that cannot be reduced to an economic calculation, such as the world view of the indigenous, Afro and peasant peoples of our America. We address here all these other worldviews by the name 'epistemologies of the South', in reference to Boaventura de Sousa Santos (2009), who states:

I understand by epistemology of the South the pursuit of knowledge and criteria of validity of the knowledge that give visibility and credibility to the cognitive practices of classes, peoples and social groups which have been historically victimized, exploited and oppressed by global colonialism and capitalism. The South, therefore, is used here as a metaphor for the human suffering systematically caused by colonialism and capitalism. (p. 12)

Hand in hand with these epistemologies of the South, we seek to create a dialogue of knowledge and consolidate transition alternatives towards another civilizing model. This transformation demands, following Escobar (2016), the rethinking of rationality, the individual, science, the market and the economy, looking beyond Western logic, allowing for the coexistence of different worlds.

With the aim of advancing this conversation in the fields of coal mining and energy transition in Colombia, we propose here three elements from the epistemologies of the South that could help guide the debate: (1) a relational gender approach, (2) territory and (3) community sovereignty. From our joint experiences in the academy, activism, pedagogy and community leadership, we identify that these three elements are constantly repeated and strengthened in the demands of communities and social movements in Latin America in the face of the injustices of the

the potential benefit —often economic— for human beings. This point of view exemplifies the anthropocentric perspective to which we refer here.

current socio-political and economic model. Of course, these concepts already have an important trajectory in discourse among the ancestral communities of the continent and in the literature of Latin American counter-hegemonic feminisms.

"Ahora todo viene empacado y la gente solo tiene que masticar. Antes la gente producía mucho sus propias cosas, y ahora nos hemos vuelto solo consumidores. [Acá era] tradición decir: 'vamos a sembrar y vamos a hacer esto o aquello'. Eso se está acabando. Es más fácil comprar que ponerse a cultivar; ya no es tan interesante o no hay tiempo [...]. Otro punto que quiero resaltar es que aquí hay una vereda en la que se cultiva mucha papa y cebolla. Allá le echan muchos químicos e insecticidas a la tierra y muchas personas de esa vereda han muerto de cáncer. Antes, la gente no le echaba nada a la tierra que fuera a dañarla o contaminarla, porque si no, no iba a dar sus frutos. Ahora la gente lo único que piensa es en producir, producir, y producir. Antes se cuidaba e incluso se dejaba descansar la tierra. Si

se producía siete años, un año se dejaba descansar a la tierra para que volviera a tener sus nutrientes. Así no tenía que echarles químicos".

(Participante, comunidad campesina de Monguí).

Now everything comes packed and people just have to chew. Before, people produced all the things they needed, and now we have become only consumers. [Here it was] traditional to say: 'Let's go to sow and do this or that'.

That is running out. It is easier to buy than to start cultivating. It is not so interesting or there is no time [...]. Another point that I want to highlight is that here there is a path where a lot of potatoes and onions are grown. Over there they throw a lot of chemicals and insecticides on the ground and many people from that village have died of cancer. Before, people did not throw anything on the earth that would damage or contaminate it, because if not, it would not bear fruit. Now their only thoughts are on producing without stopping.

Before, they cared for the earth and even allowed it to rest. If the land was worked for seven years, one year it was allowed to rest so that it would have its nutrients again. That way it was not necessary to use chemicals

Participant, peasant community of Monguí

3.1 Overview of Latin American Indigenous Feminism

Astrid Ulloa (2020) gives us a masterful cartography of several kinds of Latin American indigenous feminism, both in academic discourse and in the daily practices of women in resistance, which we take up here with the aim of placing the discussion of this book in the literature that precedes us (Figure 3.1). Ulloa makes a differentiated analysis between Latin American indigenous feminisms that are articulated particularly in academic spaces and those other indigenous perspectives of being a woman that are lived and practiced directly in the territories. Although these two spaces can enter into dialogue, and they do so with some frequency, Ulloa (2020) sets apart the social practices of indigenous women in the territories insofar as they are processes that "are not part of the debates of indigenous feminisms [...], but they do demand the recognition of their differences as women in political contexts within their organizations or in dialogue with external and non-indigenous actors" (p. 44). These are fundamentally anchored in ancestral traditions and the specific worldviews of women and their peoples, i.e. from their myths of origin and their subsistence economies, to the cultural role assigned to women and men in these areas. Several authors even refer to cases of women leaders in these local claim processes, who openly distance themselves from the term 'feminist' for various reasons.¹¹.

Among the Latin American feminisms of the first type, Ulloa (2020) proposes the autonomous, communitarian, and decolonial feminisms (p. 19). *Autonomous feminisms* are focused on the creation of their own subaltern theories and practices, starting from the critique of Western hegemonic feminism and the current economic model, based on the predation of nature. *Communitarian feminisms* analyze the different types of patriarchy already present in indigenous communities before the Colony. *Decolonial feminisms* aim to deconstruct colonial epistemological impositions that implied a patriarchal transformation in the culture, politics, economy and society of indigenous peoples.

Regarding the three other indigenous perspectives of being a woman in the territories, Ulloa (2020) includes *rebellious indigenous feminisms*, where demands for equality and justice for indigenous women are brou-

^{11.} Without being able to enter into an in-depth discussion on this point here, the motivations expressed by women in these contexts to distance themselves from feminism are varied. These include perceptions such as the fear of excluding men from a conversation and a struggle that is believed should them if it is to be successful (Ulloa, 2020) or even worldviews that hold the complementarity —and not difference or hierarchy— of women and men in high regard (Marcos, 2016).

ght together at the macro level, for example within the framework of a social movement, or even at the national and international level; *feminisms in daily practice*, which make claims in favor of the inclusion and participation of women in defined spaces, such as within specific professional, academic, family, organizational or institutional settings; and *territorial feminisms*, formed around indigenous, Afro-descendant and peasant women who fight against predatory practices and extractivism in their territories, such as mining, hydrocarbon extraction or monoculture.

Figure 3.1 Participants of the indigenous community of Provincial in the framework of the pedagogy 'Community re-existence: energy transition, gender and sovereignty'



Note. Taken from the Provincial community participants, August 2020

From this typology, we recognize that our research draws on decolonial feminisms and autonomous feminisms, while looking for a dialogue with territorial feminisms mainly and with feminisms in daily practice to a lesser extent. The latter as most of the women participating in the research process call themselves *guardians of life and territory* and are active in community struggles against coal mining in their region (Figure 3.2). However, not all participants enjoyed the same degree of involvement in this type of process, particularly in the group of peasant women in Boyacá, so the conversations also touched upon women's demands for equality and participation in punctual spaces such as family, employment and community.

Figure 3.2 Members of the Women Warriors of La Sierra working on a community mapping exercise within the pedagogy 'Community re-existence: energy transition, gender and sovereignty'



Note. Taken from the community of La Sierra participants. Warrior Women of La Sierra, July 2021.

As we seek to exemplify in the next sections of this chapter, the notions of *relational gender approach, territory, and community sovereignty* are common to all these variants of Latin American indigenous feminism, although with diverse understandings of their meanings and their practical implications. Even in reference to mining and the energy transition in Colombia there is a growing body of literature that takes these considerations into account, as do Bermúdez et al. (2011, 2014), González-Posso & Barney (2019), Múnera et al. (2014), Navas & Caro (2018), Puerta-Silva (2010) and Ulloa (2016). These works also carry out research on the im-

pacts of and alternatives to coal mining from one or more of the approaches proposed here, although in some cases using different names.

With this in mind, we do not intend to create or introduce new concepts into a long-standing discussion. On the contrary, we draw on decades of struggle and thought to articulate these perspectives under the three axes of the aforementioned discussion. In this way, we hope to actively contribute to build bridges between communities and social movements in conflict with mining-extractive projects, at the local, regional and transnational level.

"Algo que me gustaría llevar en mi equipaje de género es el autorreconocimiento y la esencia. ¿Por qué el autorreconocimiento? Porque es con lo que yo me identifico. Es lo que me hace a mí la persona en la que yo me quiero convertir. Estoy sobre todo hablando del autorreconocimiento como Negra. Eso no significa que yo tenga que tener los pelos completamente crespos, o que tenga que tener el color de la piel negro, o que tenga que tener una nariz perfilada, o que tenga que tener los labios gruesos, no. Ese autorreconocimiento está relacionado con la mujer con quien yo me identifico, con la mujer que yo quiero ser, con la Negra que yo quiero ser y de la cual me siento muy orgullosa. Cuando hablo de esencia que es una de las cosas que me gusta mucho, es porque es algo con lo que nacemos. Cuando vo me reconozco como Negra. Cuando uno escucha un tambor, uno enseguida empieza así, con el son [empieza a batir las palmas], con la música. Eso es parte de mi esencia".

(Participante, comunidad afro de La Sierra, Chiriguaná, Cesar).

As a woman, the most important thing that I would like to carry with me is self-recognition. Why self-recognition? Because it is what I identify with. I want to be that person. I'm just talking about self-recognition as a black woman.

That does not mean that I must have curly hair, or black skin, or a profiled nose, or thick lips, no. This self-recognition is related to the woman with whom I identify myself, with the woman that I want to be, with the black woman that I want to be and of whom I feel very proud. When I talk about essence, it is one of the things that I like a lot, it is because

it is something we are born with. When I recognize myself as a black woman, when one listens to a drum, one immediately begins to start dancing to the music like this... [She begins to clap her hands]. That is part of my essence.

Participant, Afro-community of La Sierra, Chiriguaná, Cesar In order to facilitate this exchange between diverse views, we refrain from giving a rigid definition to each of these concepts. Instead, we understand them as broad categories of discussion that cover a multiplicity of understandings and worldviews, and as starting points for a true knowledge exchange. We differentiate these three categories to facilitate the analytical understanding of phenomena and points of view, but we consider them deeply interrelated and interdependent, in such a way that they can hardly be considered in isolation. In the same way, we agree with Rita Laura Segato's commitment to mainstreaming gender as a fundamental axis of decolonial criticism, while also expanding this argument to the notions of 'territory' and 'community sovereignty'.

This is not merely a matter of introducing gender as one of the issues of decolonial critique or as one of the aspects of domination in the pattern of coloniality, but rather of giving it a real theoretical and epistemic status by examining it as a central category capable of illuminating all other aspects of the transformation imposed on the life of the communities as captured by the new modern colonial order. (Segato, 2016, p. 111)

Below we will address each of these three axes from within Latin American feminist literature. Instead of a comprehensive exploration of each of these axes in the literature —which far exceeds the scope of this writing—, we will detail some theoretical and practical clues that we hope will help contextualize the learning and co-research process carried out with the communities in Boyacá, Cesar and La Guajira.

3.2. A Relational Gender Approach

Our challenge begins at a criticism of the patriarchal order of gender, understood as,

[...] System of imaginaries and practices thought from a masculine logic, which assigns, according to sex, and in a differential way, to human males and females, that is, to men and women, certain identities and social roles at an advantage for men, meaning discrimination and many types of violence for women. (Ruiz, 2017, p. 27)

It is about a patriarchal and androcentric model, i.e. a vision of the world and human relationships centered on the male point of view (Bermúdez et al., 2014).

These gender logics take shape in macho practices, materializing in all dimensions of private and public life: couple relationships, upbringing, housework, appropriation of spaces for participation, games, and cultural, religious, sports work life, and other similar things. Masculinity, although frequently reproduced by men to extend their privileges over women, "is not an exclusively masculine issue, but on the contrary a relational issue" (Viveros, 2002, p. 48) or, in the words of the Men and Masculinities Collective, "masculinity is not a way of being in the world exclusively for men, but rather a system of ideas and practices that women also build in their lives" (Huertas et al., 2009, p. 47). In the same way, the logics of masculinity are translated into the forms of relationship of humans with their natural environment: these can emphasize reciprocity and complementarity between living beings, or justify the subjugation of nature and its inhabitants to favor the generation of wealth and accumulation of power¹².

The positions of many indigenous peoples question the ontological hierarchy between men and women and between the human and the non-human, typical of the Western point of view. On the contrary, many of these peoples tend to recognize an inseparable unity between both genders, as well as in nature, often irreconcilable with Western notions of gender difference.

In the worldview of most indigenous peoples, man and woman are part of a duality in inseparable and harmonious unity with the cosmos, nature and territory. The category of gender, as a suitable term in the West, validated in the sphere of international organizations, has no equivalence

^{12.} This relationship between the oppression of men over women and over nature, inherent in Western discourse, is visualized in an exemplary way in Carolyn Merchant's reading of Francis Bacon (Merchant, 1980), one of the fathers of modern scientific thought. Bacon justifies the transition from the magical worldview of nature to the experimental and mechanistic perspective, using multiple metaphors that allude to the femininity of nature, and to the need to dominate it. Merchant quotes a passage from The Masculine Birth of Time, "I am come in truth leading to you nature with all her children to bind her to your service and make her your slave" (p. 170).

or at least the same meaning in the indigenous or native languages of the American continent. The man-woman relationship, as well as the definition of their roles and responsibilities at the level of the family group, extended family or community, have been historically established by ancestral laws and values, not without recognizing that in many communities these values have been distorted gradually due to the influence of the wider environment. (Pancho, 2007, as cited in Ulloa, 2020, p. 37)

These notions thus enter into constant conflict with Western understandings of masculinity, which radically differentiate between man and woman, between human and nature, and which justify relations of power and exploitation. It is worth remembering, as community feminisms insist, that this does not mean that pre-colonial patriarchal dynamics did not exist among indigenous peoples, or that these are not reproduced today, even in isolated spaces. In fact, a prominent demand among indigenous women is the differentiation between their struggles for equal representation of women in social processes and the collective demands of the peoples to which they belong: Limiting oneself to a collectivist vision of indigenous peoples, risks making the injustices suffered by women invisible within and outside these decision-making spaces (Hernández, 2014).

Figure 3.3 Non-violent action organized by the Women Warriors of the Sierra and supported by RICO, on the occasion of International Women's Day



Note. Photograph by Óscar Vargas, March 2021.

Several analyses of the social reality of women in rural territories have been addressed by the Latin American feminisms (Figure 3.3). This has been differentiated in the showcasing of the diverse types of violence suffered by women with some elements of the current patriarchal system, on the one hand, as well as in the analysis of their role in the reconstruction of the social fabric and protection of the territory, for the other

"Somos berracas y si queremos, podemos. Apenas tengamos capacidad para apoyar a más mujeres, lo haremos. Podemos contarles y mostrarles nuestra historia, ¡motivarlas! Hacer lo mismo con los hombres es otro cuento porque ellos son muy tercos [...]. No creo que se pueda vincular a un hombre para que ayude a coser. Ellos querrían algún trabajo con mayor trabajo físico o incluso haciendo mercadeo. A los hombres les daría pena estar cosiendo o ser asociados con ese tipo de actividades".

(Participante, comunidad campesina de Monguí).

We are capable women, and if we want to achieve something, we will. As soon as we have the opportunity to support more women, we will! Just motivating them, telling our story, for example! Helping men in the same way, it's another story because they are very stubborn [...]. I don't think a man can be tied up to prepare him for sewing. They would want some job with more physical labor or even doing marketing. Men would be embarrassed to be sewing or to be associated with such activities.

(Participant, peasant community of Mongui).



In this sense, an exploration from a gender relational approach, applied to coal-bearing areas, must identify the differentiated effects suffered by women. Bermúdez et al. (2011) analyze, for example, the increase in political violence, product of the arrival of private security companies, army military units and paramilitary armed groups to the territory¹³, which have imposed terror regimes to guarantee the safety of the mining company. The paramilitary groups have attacked women in a particularly

^{13.} In a 2014 report, the PAX organization detailed the links that the mining companies Drummond and Prodeco, in the department of Cesar, had with paramilitary groups between 1996 and 2006, and the role that Drummond played in the constitution of the paramilitary front 'Juan Andrés Álvarez' United Self-Defense Forces of Colombia (AUC), to which no less than 2,600 selective murders are attributed, massacres in which more than 500 people died, added to more than 240 acts of enforced disappearance (Moor & van de Sandt, 2014).

cruel way, dismantling family and community bonds, and threatening female heads of households to deprive them of their territories for the expansion of the mining operation. Added to this are the growing numbers of femicides, sexual exploitation in mining territories, as well as the burden of care work due to the increase in respiratory diseases in children (Ulloa, 2016). These impacts contrast with the meager benefits in terms of job creation for women¹⁴.

In addition, it is essential to strengthen the actions of resistance and empowerment that women have carried out to defend the entire fabric of life in their territories (Figure 3.4). Bermúdez et al. (2014) trace arguments from four ways of thought to justify the preponderant role that women have played in these emancipatory processes, namely: (1) from the ecofeminism, where it is argued that women and nature have an intrinsic link, recognizing attributes immanent to the condition of women as harmony, sustainability and diversity; (2) from the perspective of women and the environment, which justifies this notion considering the role that women traditionally play in the daily management of natural resources, making them the ideal guardians of the natural environment; (3) from situated knowledge, which also integrates intersectional considerations regarding social class, ethnicity, sex and age; and (4) from *communitarian* feminism, which emphasizes the conscious recovery of one's own body as the first territory, rescuing plural and diverse ways of construction and healing. We will talk more about this concept of the body as territory in the next section.

This process of participation and struggle also has a positive impact on the condition and position of these women in their society (Figure 3.5). This is because through these demands, women are incorporated into the public sphere, redefining their social identities and opening the door to the redefinition of gender roles, as well as to the emergence of new mas-

^{14.} As an example, Bermúdez et al. (2011) point out that, according to figures from the National Administrative Department of Statistics (DANE), the employment generated by the mining sector went from 136,000 to 217,000 employed persons between 2001 and 2006, going from representing 0.78% to the 1.2% of the occupied population. At the same time, between 2001 and 2006 women went from representing 18.6% of the labor force in the mining sector to 19.8%, going from 17,000 to 43,000 female employees, denoting the low impact of job creation in this sector, especially for women.

culinities, while emphasizing the centrality of environmental struggles for the preservation of life and community.

Figure 3.4 'La Maruja', a poet and folkloric 'coplera' from Monguí, department of Boyacá



Note. Photograph by Marco Perdomo (IG: @ ikon_fotografia), january 2020

Yo me califico como una mujer positiva, una mujer responsable, una mujer con autocuidado; valoro lo que hay a mi alrededor, soy una mujer sensible, soy una mujer luchadora. Soy una mujer social porque aprendemos a escuchar a los que están a nuestros alrededores, a las personas de nuestra comunidad, como son los niños, qué dicen los adultos. Me valoro como una mujer comprensiva. Eso es para mí ser mujer.

> Participante, comunidad afro de La Sierra

I consider myself as a positive woman, a responsible woman, a woman with self-care. I value what is around me, I am a sensitive woman, I am a fighter woman. I am a social woman because we learn to listen to those around us, to the people in our community, both children and adults. I value myself as an understanding woman. That is for me to be a woman.

Participant, Afro-community of La Sierra.



Figure 3.5 Group of women in Monguí, Boyacá, in the middle of the process of sewing masks, an entrepreneurship supported by RICO in the framework of the COVID-19 pandemic



Note. Photograph by María Soto, August 2020.

We summarize the previous analyses on the nexus between indigenous women and extractive industry projects with a quote from Esperanza Martínez, member of Acción Ecológica and coordinator for South America of the Oilwatch network, on the initiative to "Leave the oil on the ground" in the Yasuní territory, in Ecuador.

Oil activity, on the other hand, exacerbates machismo: it builds needs and privileges for young men, isolates itself from the place, treats women as an object, forms enclaves to avoid any community dynamics that interfere with the work of the oil industry, generates aggressions against nature that are deeply painful for those who have been in contact with nature, either physically or spiritually, so that women are there to defend the territory. Women are therefore doubly affected: both by being victims of contamination, and by the conditions of greater work and greater violence imposed.

I do not know if there is a greater sensitivity to nature among women, this depends on many things, but I think that in general there is a greater understanding or ability to identify the links and the different reactions in bodies, in families, in nature. To this can be added a different rebellion, that of someone who cannot divide what is public with what is private, because they must combine them in everyday life. Nor can it break the rational with the emotional, since it has to maintain the balance in the family and the community, and the various reasons and emotions of the nucleus. (As cited in Colectivo Miradas Críticas del Territorio desde el Feminismo, 2014, pp. 43-44)

3.3 Territory

Our conception of *territory* is understood as "that place of social relations where cultures have taken root and the possibility of living with dignity is defended" (Bermúdez et al., 2014, p. 22). This concept is not limited to space and its physical elements, including the so-called 'natural resources'. The territory integrates a set of cultural, historical, religious, spiritual, socio-political and economic meanings assigned and constantly developed by the communities that inhabit it. Through manual labor, such as agriculture, and symbolic work such as rituals or oral history, the human beings transform their territory. At the same time, it has a profound impact on those who inhabit it, playing a fundamental role in the construction of community identity, as well as in the development of life experiences. In this way, there is a reciprocal relationship between the human beings and their territory.

"El territorio es el pasado, el presente y el futuro; es donde se nace, se crece y se aprende a ser [...]. El territorio no es el lugar en el que se está, es el lugar en el que se es".

(Participante, Comunidad wayuu de Provincial) The territory is the past, the present and the future; it is where you are born, grow and learn to be [...]. The territory is not the place where you currently are, it is the place where you get to fully be and exist.

(Participant, Wayuu community of Provincial)



Broadly speaking, Latin American indigenous feminisms —especially autonomous and community feminisms— coincide in the use of the category *body-territory*. This concept refers to the real and metaphorical connections between the human body itself and the natural and social territory inhabited by a person and a community (Figure 3.6). This concept starts from the vision of the body itself as the smallest territory that we all inhabit: a delimited space in which we develop as people from birth.

We think of the body as our first territory and we recognize the territory in our bodies when the places we inhabit are violated [...]. Through the senses we connect with the territories: we hear what the river tells us, we talk with the community farms, the cornfields, and we laugh with the birds, that is to say, the senses are what connect us with the territories (as cited in Colectivo Miradas Críticas del Territorio desde el Feminismo, 2017, p. 7).

Figure 3.6 El Jagüey, one of the most important places identified by the participants of the Lomamato Wayuu community, as a meeting place for shepherds, as well as a place for recreation



Note. Photograph by Yaneth Ortiz, September 2020.

This observation has profoundly significant implications for rethinking politics and action around the natural environment. Thus, the imperative to conserve nature does not arise here, as in the Western argument for sustainable development, from a desire to prolong the use of natural resources and their income indefinitely, nor is it solely based on preserving the conditions for human life on the planet. On the contrary, when the territory itself is understood as a subject of rights, whose corporality is closely related to ours, its care becomes an ethical obligation in itself. In other words: we protect and defend the territory because it has its own dignity ¹⁵. This challenge extends the 'ethics of care' (Boff, 2011) as a tool to dismantle patriarchy, from fair and equitable interactions between men and women to the relationship between the human and the non-human, between us and our territory (Figure 3.7)

In that sense, the patriarchal constructions that impose remoteness and disconnection with the social and natural environment, visible in the neoliberal economic model, with all its negative impacts, must be rethought. In other words

The invitation left by the body-territory proposal is to look at bodies as living and historical territories that allude to a cosmogonic and political interpretation, where our wounds, memories, knowledge, desires, individual and common dreams are alive; and at the same time, it invites us to look at the territories as social bodies that are integrated into the web of life and our relationship with them must be therefore conceived as an 'ethical event' understood as an irruption in front of the 'other' where the possibility of contract, domination and power have no place, where

^{15.} We see this vision reflected in the multiple struggles at the global level to recognize ecosystems as subjects of rights before the law, as it was achieved in 2016 before the Constitutional Court for the Atrato River. The Constitutional Court, through ruling T-622 of 2016, recognized the Atrato River, which runs through the departments of Chocó and Antioquia in Colombia, as a subject of rights, with a view to guarantee its conservation and protection. As Garavito (2016) points out, and as it was justified before the Constitutional Court at the time, there are environmental damages that to be compensated, it is not enough to be legally based on the protection of the surrounding communities, but it is necessary to restore the species and the ecosystem itself as a whole. Although this is a historic victory in Colombia, similar experiences have been achieved internationally, for example, around the Whanganui River, in New Zealand, and the Ganges River, in India.

there is acceptance, understood as co-responsibility and the only viable proposal to look at the territory and then to recognize us as women and men ourselves. (Cruz, 2016, p. 8)

Figure 3.7 Family orchards of the Warrior Women of La Sierra, one of the most important points of their territory



Note. Photograph by Narlis Guzmán, October 2020.

Based on this notion of 'body-territory', various arguments are developed to explain, for example, femicides as an act of war in highly masculinized contexts, such as Ciudad Juárez (Segato, 2016); make visible the corporal pain that the destruction of the territory implies, especially for women (Colectivo Miradas Críticas del Territorio desde el Feminismo, 2017); understand the consequences of land expropriation on the disintegration of indigenous communities and on the loss of memory as a continuation of 'epistemicide'¹⁶, as seen in the Mapuche people, in Ar-

^{16.} When we speak of 'epistemicide' [the destruction of knowledge and cultures], we refer to the process that occurs when the dominant epistemological canon results in a massive waste of social experience and, particularly, in the massive destruction of alternative ways of knowing. In the Latin American case, Santos (2010) relates epistemicide as a constitutive element of coloniality of the modern Western capitalist power: "The inquiry into the epistemological conditions can evidence the massive destruction of the popular knowledge caused by European colonialism —is what I call epistemicide— and, on the other hand, the fact that the end of political colonialism did

gentina, as well as the agency of women in the processes of rebuilding an indigenous identity (Valdez, 2020); detail the role of women in preserving memory and ancestral knowledge rooted in the territories (Figure 3.8), for example through the management of medicinal plants (Pérez et al., 2011); and justify and motivate the recovery of the social fabric through land care practices, such as community agriculture (Cantor and Juagibioy, as cited in Ulloa, 2020, p. 49). In general, these works, in addition to identify the various forms of gender violence and oppression, highlight the resistance efforts of indigenous women against projects of territorial destruction, claiming their voice as guardians of life and territory.

Figure 3.8 Working group in the indigenous community of Lomamato, department of La Guajira



Note. Photograph by Yaneth Ortiz, August 2020.

In the context of these insights and understandings of the idea of *body-territory*, the effects of coal projects on the territory and its peoples can be identified in all their extension and gravity.

Firstly, coal mining causes strong effects on the health of the miners and on the affected populations. Vega & Rodríguez (2018) detail the im-

not mean the end of colonialism in mentalities and subjectivities, in culture and in epistemology and that, on the contrary, it continued to reproduce itself endogenously." (p. 8)

pacts of prolonged exposure to substances derived from coal on the development of respiratory, cardiovascular, central nervous system diseases and cancer¹⁷. In addition to feeling these damages on their own bodies, women are forced to intensify their unpaid care work by looking after infants, children and older adults who more frequently develop health conditions related to the activity.

Secondly, the mine also has direct impacts on the surrounding nature, such as degradation of land and water sources due to the chemicals used in the extraction process or the deposit of dust. Even more aggravating is the fact that mining companies have also resorted to the deviation of rivers, appropriating the water resource to treat the extracted coal and deeply affecting the subsistence of surrounding communities, as the Cerrejón extractive industry did in recent years with the Ranchería river and the Bruno stream. All of this, even without taking into account the impacts on climate change inherent to the entire carbon value chain, from its extraction to its transportation and burning for power generation.

Thirdly, coal mining is synonymous with uprooting, either through contamination of the land and groundwater in medium and small-scale mining areas, added to the gradual displacement of its inhabitants to urban areas, or directly through policies and actions of relocation of entire communities to give rise to extractive industry projects. This is not only a geographical displacement, it also has profound repercussions on the cultural, historical, spiritual and emotional understandings of its inhabitants, disintegrating ancestral identities and the social fabric. (Múnera et al., 2014; Puerta-Silva, 2010)

On this account, these three observations are often inscribed through the concept of 'sacrifice zones', which refers to "geographic sectors of high industrial concentration, in which the establishment of industrial centers has been prioritized over the well-being of people and the environment" (Fundación Terram, 2021). In these places —which also include areas of coal extraction or fossil fuel burning— the residents are subjected to live in the midst of environmental harms related to air, soil and water pollu-

^{17.} The Inhalable Particulate Matter and Health (MP10 and MP2.5), the heavy metals and polycyclic aromatic hydrocarbons, generated during the extraction, burning, transport and use of the mineral, are particularly harmful.

tion, with strong health implications that especially affect the youngest and, by extension, women. Speaking about 'sacrifice' refers to the supposed need to geographically concentrate these highly polluting productive activities to achieve economic growth and development at a societal level, without questioning, of course, that those who must bear the cost of these operations are also those who benefit the least from this so-called 'progress', i.e the residents of those places such as indigenous, Afro and peasant communities, historically marginalized from decision-making processes. As has been observed in recent years (González-Posso & Barney, 2019; Scott & Smith 2017), specific logics are also identified for the sacrifice zones, in the framework of new renewable energy projects, as they expropriate the lands of their inhabitants and externalize their impacts on the surrounding populations.

For all these reasons, community leaders demand a 'vertical subsoil policy' (Ulloa, 2020, p. 51) that guarantees control over both large, medium and small-scale mining by the populations and communities that inhabit its immediate territory. Local communities are the best suited to manage these processes, not only because they know the territory, but because they have an interest and responsibility of their own in its safeguarding.

"Yo me quiero quedar en el pueblo. ¿Para qué debería irme si esto es un paraíso? Acá no hay contaminación y la gente es diferente, muy cálida. Acá sí hay cosas que transformar, pero esto es un paraíso. A pesar de todo vivimos bien [...]. Personalmente, yo vivo en arriendo y a mí me gustaría poder vivir en una casita propia, en el campo, con mis animalitos y mi huerta. El campo es más bonito y además usted puede ver más allá de lo inmediato. Vivir en la ciudad no permite tener lo suficiente para uno poder tener sus alimentos, y poder hacerse su changua o su comida con lo que da la tierra".

(Participante, comunidad campesina de Monguí).

I want to stay in my town. Why should I leave if this is a paradise? There is no pollution here and the people are different, very warm. Here there are things to transform, but this is a paradise. Despite everything, we live well [...]. Personally, I pay rent and I would like to be able to live in my own little house, in the countryside, with my animals and my orchard. The countryside is more beautiful and also you can see beyond the immediate. Living in the city does not allow you to have enough for you to have your food, and to be able to make your 'changua' [milk soup with eggs] or your food with what the land gives

Participant, peasant community of Monguí

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3.4 Community Sovereignty

When we use the concept of 'community sovereignty' we do so on the basis on similar ones in the literature such as 'autonomy', 'self-management', 'self-regulation' or 'self-government', which are proposed as processes of self-determination of collective and individual subjects of diverse origin, organized by the ability to reproduce life against the western views of capital and the Nation State, as unique forms of political life in society (Esteva, 2019). These concepts include therefore a broad spectrum of struggles and demands, which range from worker associations and indigenous youth to peasant communities and women who reject relationships of exploitation; hence the popular phrase 'we are all autonomy', recalled by Albertani (2011).

When we talk of 'community sovereignty' we emphasize self-management processes that meet two criteria: territory and conviviality. First of all, we return to the reflections of the previous section to refer in particular to communities that are in a territory and that live an identity and a common history in it. This notion then applies, although not exclusively, to indigenous, Afro and peasant communities in Latin America (Figure 3.9). Self-recognition as a community in its own territory is particularly strong in this type of collectives, even if its intensity varies from place to place. However, in a context of disintegration of the social fabric at the hands of systematic violence and the effects on nature in coal-bearing territories, these elements have been gradually lost in many of these populations.

We can also appreciate similar dynamics in other spaces; for example, between neighborhood associations in large cities, formed to protect their shared urban territory¹⁸. On the contrary, groups constituted only around a work occupation or a common class interest, without a shared roots and cultural identity, such as guilds, unions, or student groups,

^{18.} In the same way, we do not directly exclude communities that have been dispossessed of their ancestral territories, since many of them seek and find ways to continue living their collective identity, maintaining their link with the territory in their absence. Valdez (2020), for example, relates the ways in which Mapuce women, from southern Argentina, stripped of their territories, maintain their identity, reviving their relationship with the ancestral territory in mobility and even in urban spaces in which are housed.

although they frequently adopt self-management practices, will hardly be able to be recognized within the vision of community sovereignty that we expose here.

Figure 3.9 The Warrior Women of La Sierra in their bimonthly meeting, where they deliberate on the outstanding issues



Note. Photograph by Felipe Corral, March 2021.

Secondly, by 'conviviality' we mean the quality of human and non-human relationships that are actively and consciously developed within the group. This implies egalitarian structures that guarantee equitable participation in decision-making and in the enjoyment of collective benefits; for example, between men and women, or in regards to specific minorities within the community. Beyond this, however, we also want to refer to the processes of creation and strengthening of affective bonds and relationships of care within the community, following the feminist axiom of 'the personal is political'. In this reconstruction of the social fabric, women play a fundamental role, not only in the reestablishment of bonds of trust and collaboration, but also in the compensation of the damages perpetrated on the territory. It is in this aspect that Segato (2016) observes the innate potential of a 'feminine politics', based not on accumulation, but on the strengthening and multiplication of affective ties. Within the limits we have set for the axes of territoriality and conviviality, we understand community sovereignty as a set of practices through which a community decides and acts responsibly and carefully on its body-territory. When we speak of practices, we mean that community sovereignty is in a constant state of construction, and depends fundamentally on the daily actions and interactions of community members for its continued sustenance. This emphasizes the process by which this sovereignty is constantly being built and defended, which will never be finalized —and will often be in danger— echoing Bloch's Principle of Hope that understands utopia as something which is not yet, but already is there (Bloch, 2006). In the Wayuu, Afro-Colombian and Andean communities with whom we worked in the framework of this research, Esteva's observation could be applied: "They show in their current practices that conviviality is not a futuristic utopia, but that it is part of our present, although sometimes we have not been aware of it" (Esteva, 2019).

"El trabajo colectivo se ve reflejado en la lucha que cada día tiene la comunidad con las personas y empresas que afectan nuestro territorio y vulneran nuestros derechos. Se ve reflejado en aquellas actividades de limpieza del territorio, caminatas por la paz o por el medio ambiente. La soberanía comunitaria se ve reflejada en la manera de como la comunidad busca y crea estrategias para promover la economía y la producción sin afectar el territorio; la manera en como busca involucrar a toda la comunidad. a participar en capacitaciones, a incluir a las mujeres en las organizaciones con el objetivo de buscar el desarrollo de la comunidad. Esto es positivo ya que, de una manera, la comunidad busca el mismo fin en común, que es el bienestar del territorio y el cuidado de nuestras tierras".

> (Participante, comunidad afro de La Sierra, Chiriguaná, Cesar)

The collective work is reflected in the struggle that the community has every day with the people and companies that affect our territory and violate our rights. It is reflected in those activities to clean up the territory, walks for peace or for the environment. Community sovereignty is reflected in the way the community seeks and creates strategies to promote the economy and production without affecting the territory; the way in which we seek to involve the entire community, to participate in trainings, to include women in organizations with the aim of seeking community development. This is positive since, in a way, the community seeks the same common goal, which is the well-being of the territory and the care of our lands.

Participant, Afro community of La Sierra, Chiriguaná, Cesar).



In this way, community sovereignty is not a state that is acquired and maintained by itself, for example, through a resolution from the Ministry of the Interior that recognizes its status as an ethnic community; rather, it is created and reproduced only from the inside out. In the same way that a community can act sovereignly without any type of institutional support or recognition, another legally recognized community can surrender its sovereignty when it loses sight of a series of guiding elements such as:

- Open and inclusive decision-making processes: Community sovereignty must start from a rethinking of the problem of power, through the de-hierarchization of community dynamics, giving equal access to women and men in their wide diversity for decision-making. Part of this notion of community sovereignty is also that this process does not follow external Western patterns of 'equity', but emerges rather from an open and transparent dialogue within the community.
- **Implementation of the decisions taken:** In addition to inclusive internal processes, community sovereignty also requires the materialization of decisions adopted. This implies a series of human, material and technical capabilities such as land, water and food, as well as those that nourish the affective, emotional and spiritual dimension of its inhabitants, in addition to the absence of external limitations such as the threat or the use of force and violence against the community and the territory.
- **Responsibility over the body-territory and all its residents:** Once the bonds between the body-territory and sovereignty have been recognized, the notion of responsibility towards the territory becomes necessary. A community that decides and acts freely yet in detriment of its territory will not be sovereign, nor will it be a community for long. In the same way, a community that deliberately hurts, assaults or excludes a group of its residents cannot be considered sovereign.19

^{19.} The indivisibility of these three criteria finds expression in the Association of Indigenous Cabildos del Norte del Cauca, when they highlight: "Words without action are empty; action without words is blind, words and action outside the community spirit are death" (as cited in Esteva, 2008).

Another fundamental element to take into account is that community sovereignty practices are also acts of resistance against the projects of big capital, which legitimize the disintegration of the social fabric and the destruction of the natural environment in the territories, with the sole purpose of economic gain. Jaramillo (2018, pp. 71-72) observes that this resistance does not only manifest itself in a rejection of an act or policy from those who hold power. Beyond this, community resistance is also a positive effort to build the social fabric and exercise power from the grassroots. The struggle to maintain traditions, indigenous jurisdictions, ancestral forms of government and conflict resolution, the protection of language and traditional symbols are at the same time an active realization of the life and identity of the communities, being their own referents of resistance against the actions of domination and in favor of the construction of their own political project.

Finally, we take seriously the proposal not to conceive to autonomous or sovereign communities as self-sufficiency: "We need to free ourselves from the tendency to relate them as limited to scale coordinates (small and local are not necessarily isolated) and *self-sufficiency* (exchanging independence for interdependence)" (Brancaleone, 2019, p. 52). Community sovereignty also depends on external relations: the management of alliances strengthens the community's struggle against external entities, being therefore essential for its prolonged survival.

Thought out from all these angles, community sovereignty in extractive industry and energy transition contexts entails many central reflections: first of all, it is necessary to fully assess the impact that coal mining has had on the social structures of the affected communities. Violence at the hands of paramilitary armed groups and private security companies, related to the mining operation, on the one hand, has been responsible for sowing fear and silencing voices of resistance in the communities, diminishing their willingness to participate in public spheres of greater exposure. Speaking of the context in the Colombian Vaupés, Rossi (2020) also describes how violence limits the ability to mobilize in the territory —especially that of women—, making it difficult to strengthen networks of associativity and trust, fundamental elements in the fight against mining. In contrast, co-optation efforts by mine agents vis-à-vis community authorities are also visible, contributing to undermine the community's trust in its leaders.

Sierra, tierra hermosa, dulce morena, tus sabanas enaltecen los árboles y el cantar de los pájaros al amanecer. Brisas cálidas que acompañaron a los abuelos y antepasados en su siembra. Hoy en día no lo hacen más por causa de la minería, pero sin duda alguna, ahí está mi Sierra viva todavía. Forjando gente negra y bella, que lucha con alegría por mantener nuestra tradición, con entusiasmo de lucha y sin cobardía Sov de esta tierra. que con gusto defendería, mi Sierra, bella tierra mía.

(Autoría colectiva, Mujeres Guerreras de La Sierra. Producto radial: Repensando la productividad y la subsistencia)

O my Sierra, what a beautiful land! You're a sweet brunette! your savannahs exalt the trees and the singing of birds at dawn. Warm breeze cooled the ploughing and sowing of our grandparents and ancestors. Nowadays they don't do it anymore because of mining, but without a doubt. there is my Sierra still alive. You're always forging beautiful black people that fight with dedication and joy for maintaining our tradition, with fighting enthusiasm and without cowardice I'm from this land that I would gladly defend, because this is my Sierra, this beautiful land of mine.

Collective authorship, Warrior Women of La Sierra. Radio broadcasting: Rethinking productivity and subsistence..

Toda mi vida he vivido aquí [en el casco urbano], aunque mi padre tenía tierra donde sembrábamos. Parte de esa cultura la llevo aún, pero mucho de eso se ha perdido, porque no lo seguimos practicando. Ya no es como antes, que a uno de niño lo llevaban al campo. Mi madre falleció y como tenía una panadería, me tocó tomar las riendas de eso y desconectarme de la agricultura [...]. Parte de mi niñez la pasé en el campo y me gusta All my life I have lived here [in the urban area], although my father had land where we sowed. Part of that culture is still my way of life, but much of that has been lost, because we do not continue to live it. It is no longer the same as before, when one was taken to the countryside as a child. My mother passed away and since she had a bakery, I had to take charge of that and to disconnect from Outlooks from below for just energy transitions: Gender, territory and sovereignty

mucho, me hace falta. Si pudiera volver al campo, lo haría [...]. También podría ir a la ciudad porque hay más trabajo. Acá uno depende de la suerte y de los balones, o los tapabocas. A la ciudad me iría porque hay más oportunidades, pero si las hubiera aquí, me quedaría en el pueblo.

Participante, comunidad campesina de Monguí.

agriculture [...]. I spent part of my childhood in the countryside and I like it a lot, I need it. If I could go back to the countryside, I would do it [...]. I could also go to the city because there is more work. Here one depends on luck in selling balloons and face masks. I have to go to the city because there are more opportunities, but if there were more opportunities here,

I would stay in the village.

Participant, peasant community of Monguí

Figure 3.10 A letter written by a participant in the indigenous reservation of Lomamato, in the department of La Guajira, within the framework of the pedagogical process 'Community re-existence: energy transition, gender and sovereignty'.

Note. Photograph by Yaneth Ortiz, August 2020.

As a result, it will be critical to discuss the forms that community sovereignty should adopt when living alternatives to the current mining-energy model. In this sense, community sovereignty cannot be limited to prior consultation processes, carried out in advance of the opening of a new mining project; more than participating in these spaces for dialogue -- often exclusive and with little impact on public policy-, what is demanded is a true and comprehensive energy sovereignty, centered on the rights of communities to make their own choices regarding the forms, scales, and sources of energy as well as the organization of energy usage (Schelly et al., 2020, p. 109). With this community control, the defense of the territory and the preservation of life and tradition are sought (Figure 3.10), generating solidarity and subsistence economic alternatives, as well as ways of life based on ancestral knowledge such as traditional medicine and the management of native seeds. Through these practices, Ulloa (2020, p. 51) suggests new ways of living in harmony with the environment and other people can be studied to constitute new feminities and masculinities in community constructions of gender.

We conclude this chapter with a mention of some processes, collectives and communities in different parts of Latin America that for decades have lived by the principles set forth here, from whom we have learned to formulate the aforementioned analyses: the Indigenous Regional Council of Cauca, in Colombia, the National Agrarian Coordinator and the Wayuu Women's Force in Colombia, the network of agricultural cooperatives CECOSESOLA in Venezuela, and the different indigenous self-government movements in the state of Chiapas, in Mexico. These examples have already shown that community sovereignty is not a utopia: it is a real practice, always carried out by brave women and men. Anyone who wants successful and current examples of community sovereignty should only look at the territories.

We draw inspiration from these concepts and social practices to identify initial proposals for energy transitions that are truly just and inclusive in the next chapter.

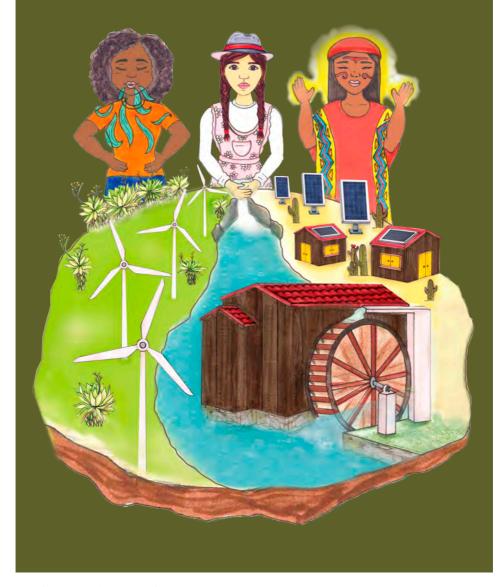
Main Ideas in Chapter 3

- To address the three aforementioned transitions (mining-extractive transition, energy democratization, broad and just transition) it is necessary to look beyond modern Western anthropocentric and androcentric arguments, in the sense that they focus only on the benefit of the human being and, in particular, of men. On the contrary, we want to promote a dialogue of knowledge with the ancient traditions of the continent, as well as with the emerging proposals from Latin American feminisms, which offer much more just and inclusive perspectives. These voices —female and feminist seek to vindicate the role of the collective, of the body itself and of the shared territory, which we believe are strong impulses when it is time to rethink mining-energy policy.
- We structured the analysis on three categories, namely (1) a relational gender approach, (2) territory, and (3) community sovereignty. These are not closed concepts with rigid definitions. We understand them more as spaces for dialogue that admit multiple interpretations according to the social and cultural contexts in which they take place. We will analyze coal mining and energy transition proposals in the investigated territories based on those three transversal axes.
- A *relational gender approach* means that gender, i.e. all men, or all females, considered as a group, depend on the cultural context in which we find ourselves and the ways in which we relate to others. Currently, the relationships between men and women are marked by patriarchal dynamics of power and oppression, of men over women, but which we also see in man's attempt to dominate other human beings and nature itself. Likewise, there are efforts to live alternative ways of being a man or a woman, guided by respect and care for the other and for nature. In particular, women from indigenous, Afro and peasant peoples have played a crucial role as guardians of the territory, opposing extractive projects and destruction of the natural environment.
- When we speak of *territory*, we refer to the search to redefine the territory. This is not limited to a physical and geographical space, or to a source of 'natural resources', as understood by the modern Western perspective. On the contrary, the territory integrates deep cultural meanings for the commu-

nities that inhabit it and is intimately linked with our survival as human beings and as a species. Indigenous feminisms even speak of 'body-territory' to refer to the transcendental link that the territory has with our own existence as living organisms: thus, the responsibility to care for the territory is born from our responsibility with our body.

• *Community sovereignty* refers to the social practices resulting from groups of people who share a territory and a historical and cultural link with it, i.e. they form a community. Community sovereignty is based on community own practices that guarantee its autonomy in the face of external actors, including elements such as food, water and energy sovereignty. These practices are guided by responsibility towards the shared territory and the people who inhabit it, so the creation and strengthening of affective ties, bonds of trust and equitable forms of decision-making are its key foundation. It is also important that these communities can perform the decisions made. Therefore, it is crucial to also have a series of basic conditions that guarantee the survival and a dignified life of their inhabitants. Finally, we do not conceive of community sovereignty as autarky. In other words, the objective is not to create isolated and completely self-sufficient communities, but rather to strengthen networks of interdependence between communities







Coal is going through unprecedented volatility at a global scale. Global coal phase-out must be completed before 2040, if we are to meet the goals of the Paris Agreement to reduce the risks and impacts of climate change. As a result, one of the first regions that must enhance planning for an early phase-out is Latin America by 2030 (Climate Analytics, 2019, p. 4).

With that in mind, the discussion that decision makers should approach is not whether to stop extracting coal or not, but how, when and who will bear the burden. In other words, who will be affected by the coal phase-out (e.g. loss of employment, continuous impacts of mining, lower tax revenues, etc.), how will this process take place (in months, years, decades? deliberately or by surprise?) and who will bear the costs (e.g. costs of renaturing the mining pits, training for former miners, damage to health or the environment) and reap the potential benefits (e.g. new jobs in other sectors, better air quality, new energy sources, etc.).



Figure 4.1 Graffiti on a zinc wall. It can be read in Spanish: "Water is life, and what about coal?"

Note. Photograph by Carlos Pardo, 2019.

As discussed in the first chapter, much of the academic literature and political discourse in Colombia has focused on limited understandings of energy transition²⁰. It is true that some organizations undertaking research in green technologies include aspects of justice, equity or sustainability in a broader sense, but all agree on technological change as the focus of the transition (Figure 4.1).

ImFigure 4.2 A Resident of the La Sierra community examines a photovoltaic solar system during an introductory workshop at the Second Cultural and Sports Festival in honor of our murdered leaders



Note. Photograph by Marco Perdomo (IG: @ikon_fotografia), January 2020..

^{20.} It is important to highlight, however, that this discourse draws on similar perspectives from the international context. From the Öko-Institut, which in the 1980s started the political movement for an energy transition in Germany, through the International Renewable Energy Agency (IRENA), to the International Labor Organization (ILO), for example, agreements have been promoted, to a lesser or greater extent, for a just energy transition from 'dirty' technologies (such as burning fossil fuels) to 'clean' technologies, which are enabled by renewable (solar, hydropower and wind) energy sources (ILO, 2015; IRENA, 2020; Öko Institut, 2020).

From our perspective, the concepts of energy transition that are confined to changes in technology (Figure 4.2) and that do not question more structural dimensions of the current mining-energy model, present several problems. On the one hand, in accordance with different authors (Bertinat, 2016; Soler et al., 2018; Soler, 2019), we criticize that vision that only conceives the energy transition as the replacement of fossil technologies by renewable ones, without fundamentally questioning the logics of exploitation and destruction inherent in the underlying extractive model.

On the other hand, we do not share the optimism of those who argues that it is through large-scale projects, generally controlled by the State or large multinational corporations, that renewable energies can be deployed and move towards an energy transition. Given that these two views predominate in public discourse, both large wind and solar parks and large hydroelectric power plants continue to be prioritized over self-generation or distributed generation community projects. In literature, although these arguments are not always explicit, they are part of the 'socio-technical landscape' (Geels, 2002); all of them embedded in discursive structures that cannot be influenced. Examples of studies in this approach are Henao & Dyner (2020), Henao et al. (2019) and Zapata et al. (2018). All of these papers analyze the Colombian energy system and propose reflections on some changes towards an energy transition. However, none questions structural variables of the current energy model.

hydroelectric power plants continue to be prioritized over self-generation or distributed generation community projects. In literature, although these arguments are not always explicit, they are part of the 'socio-technical landscape' (Geels, 2002); all of them embedded in discursive structures that cannot be influenced. Examples of studies in this approach are Henao & Dyner (2020), Henao et al. (2019) and Zapata et al. (2018). All of these papers analyze the Colombian energy system and propose reflections on some changes towards an energy transition. However, none questions structural variables of the current energy model.

As Feola points out (2020), it is problematic not to recognize capitalist logics as they apply hidden assumptions and idealized models of transitions. This risk is particularly evident in studies of sustainability transitions in the Global South, where there is imminent risk that the energy transition will reproduce the injustices that have occurred through the extraction and use of fossil fuels. At this time, as González-Posso & Barney (2019) argue, this is exactly what is happening with the megaprojects of wind parks in La Guajira: not questioning the appropriation of the territory by outside firms and their socio-environmental impacts, promises no better conditions for local communities from wind than coal.



"Yo sí tengo mucha familia que trabaja allá [en las minas de carbón], ellos se arriesgan todos los días entrando a la mina. Lo hacen por necesidad: es el trabajo donde más consiguen ingresos. Creo que, si tuvieran una alternativa, la gran mayoría haría otra cosa; son muy jóvenes y les gustaría algo menos peligroso".

(Participante, comunidad campesina de Monguí) I do have a lot of family that work there [in the coal mines], they take risks every day entering the mine. They do it out of necessity: it is the job where they earn the most income. I think that, if they had an alternative, the vast majority would do something else; they are very young and would like something less dangerous.

Participant, peasant community of Monguí..



Figure 4.3 Participants of the indigenous community of Lomamato, in the department of La Guajira



Note. Photograph by Yaneth Ortiz, July 2021

To combat this situation, we propose opening up the restricted understandings of energy transitions (Figure 4.3). That is why we speak here of 'energy transitions from below'. This means that there is not a single transition to consider, but several. We summarize below three of the transitions identified during the process in the coal territories.

Mining-extractive transition: Transition aimed at the permanent and timely phase-out of large-scale coal extraction in Cesar and La Guajira departments, in order to protect the life of communities and nature, without neglecting those who work in the sector or depend on the economic dynamics that this sector generates in the territory²¹. Besides a mining phase-out (as stated for example in CENSAT and Cordaid, 2016), for communities such as Provincial in La Guajira or Boquerón and El Hatillo in Cesar, among many others, it is important consider the impacts that will remain and emerge after the closure of the mines and decide what will happen with those impacts, ensuring the broad, effective and binding participation of the communities in the phase-out plans²². These knowledge exchanges on the technical technical phase-out plans of mining companies, should be articulated with a broader nation-wide discussion on how to fill the income vacuum left behind in public finance.

• Energy democratization: Transition aimed at fighting (Hernández et al., 2018) energy poverty and inequality of which the communities on the peripheries of the country have been victims. Despite being the origin of more than 90% of coal extraction (UPME, 2019), and therefore almost 40% of the primary energy produced in Colombia (UPME, 2020a), many rural areas and municipal capitals in the departments of Cesar and La Guajira lack reliable and reasonably priced access to electricity. They are territories abundant with energy, with communities that lack access to it. In accordance with Bertinat (2016), democratization combines the change in established practices

^{21.} See for example: CENSAT Agua Viva (2015), CINEP PPP (2016), Fuentes et al. (2019), RLS & Sintracarbón (2019), Tierra Digna et al. (2015), Tostón (2013).

^{22.} This has emerged in several of the Transition Forums of the mining-energy model in the Colombian Caribbean, organized by the Universidad de Magdalena since 2017. For more information, see Corral et al. (2020), Santamaría et al. (2021), Tierra Digna et al. (2015).

of energy use and management (for example, from rudimentary wood stoves to efficient stoves and even to electric or gas stoves) with changes in the way of managing energy, proprietorship of generation assets and the impact on affected people, among others. In the context of extractive spaces and/or energy poverty, it becomes necessary to support communities to meet their energy needs through self-managed projects (Vargas, 2020).

Broad and comprehensive transitions: Transitions that transcend the energy field and that seek to close structural gaps and redress historical injustices. The groups of women defenders of the territory have taught us that the energy transition in the mining territories must begin with a structural transformation, which allows gender equality in the creation of alternatives of food and productive sovereignty (CENSAT Agua Viva, 2020). In other words, these alternatives must involve changes in the social structure, breaking with inequities, especially towards women, in a context in which they have strengthened their role as a driven force of alternatives and struggles in defense of the territory. In the same way, these transitions imply a deep change in the relationship with the environment and the territory, surpassing the current vision that sees them as an unlimited deposit of natural resources and the communities that inhabit it as a replaceable object before external interests. Finally, this idea of broad transition implies a change in the economic structures that define how the benefits and damages are distributed in the name of *development*.

"¿Qué queremos mantener?

A mí me gustaría mantener el trueque, los cultivos orgánicos, las huertas orgánicas, las plantas medicinales, los productos de pancoger, todo lo que sea producto de pancoger; la cultura, los bailes, las danzas, los dulces, los juegos tradicionales; que se volvieran a hacer esas mudanzas que ancestralmente se hacían en nuestro territorio; que volvieran esas tertulias que hacían nuestros abuelos, cuando le contaban sus historietas a sus nietos. Me gustarían mucho esos juegos de los jóvenes, de los niños, What do we want to maintain?

I'd like to maintain that kind of barter exchange, as well as those organic crops, those organic gardens, those medicinal plants, those subsistence crops, and everything that are basic food crops for us; our culture, balls, dances, candies, traditional games. I'd like that those deep changes that were ancestrally made in our territory once again; that

we revive such conversations dating back to our grandparents' times, when they used to esa forma de vivir tan sana donde no existía la malicia, no existía la maldad. Esas cosas me gustaría que se rescataran en nuestro territorio.

¿Qué me gustaría cambiar?

La minería, que se fuera de nuestro territorio y que dejara todo lo que está debajo de la tierra... Los monocultivos también me gustaría que se fueran del territorio y que dejaran que en nuestro territorio solamente existieran los árboles nativos. Me gustaría que tuviéramos de nuevo la oportunidad de bañarnos en nuestras quebradas y en nuestras fuentes hídricas, eso me gustaría mucho, comerme mis productos sanitos, así como nosotros estamos acostumbrados a sembrarlos, sin contaminación, que no nos afecte la salud en nada. Me gustaría que La Sierra volviera a ser la comunidad tranquila, luchadora y guerrera de siempre".

(Participante, comunidad afro de La Sierra)

tell pretty stories to their grandchildren. I very much like those games of the youth, of children, that way of living so healthy where there was no malice, there was no evil. Those things I'd like to be rescued in our territory.

What would I like to change?

Mining, we want it to go from our territory and leave everything that is under the ground ... I would also like monocultures to leave the territory and allow only native trees to exist in our territory. I would like them to give us the opportunity to bathe in our streams and in our water sources once again, I would like that very much, eat my healthy food, just as we are used to plant them, without contamination that does not affect our health at all. I'd like La Sierra to go back to be that tranquil, fighter and warrior community it has always been.

Participant, Afro-community of La Sierra..

In addition, talking about energy transitions from below means that these transitions emerge from local and self-managed processes as a result and instruments of community resistance and resilience. These proposals are reached not from an abstract perspective, but from a vital relationship with the territory, a deep knowledge of it and the responsibility for its protection. For this reason, it is essential to see these efforts not only as a theoretical reflection, but as a proposal for collective action from the grassroots. The communities are not asking for change, they are already beginning to implement it and they demand that obstacles are not placed on their path, that they are supported and their efforts made visible (Cardoso, 2021).

These local community initiatives allow to see the importance of the alternatives and productive projects, from their own creative, productive

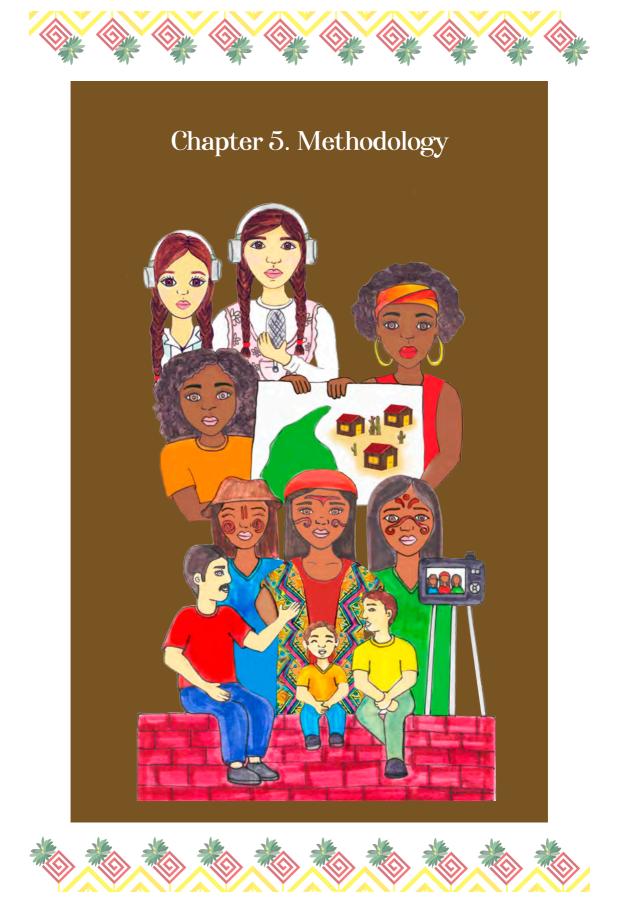
and associative capacities to recover the territory and the local economic fabric, where today mining companies predominate. Communities continue to fight for the reparation and recovery of their rights, for the implementation of inclusive and democratic post-extractive policies, for the assurance of a healthy environment and the closing of historical and structural gaps in access to social welfare (Santamaría et al., 2021).

Main Ideas in Chapter 4:

- We express disapproval of the understanding that the national government has of the energy transition as a mere addition of large renewable energy projects to the energy matrix. If these efforts do not stop the energy generation from fossil fuels, and encourage a fundamental transformation of the forms of relationship with the territory and the communities that inhabit it, the government does risk falling back into a vicious cycle of those forms of exploitation and destruction features of coal mining.
- In order to overcome these biased views, we propose an intercultural dialogue with different insights from the communities that inhabit the territories affected by coal mining in recent decades. We talked about several 'energy transitions' because they must respond to the particular characteristics of each cultural and socioeconomic context, as well as the priorities of its local residents. An energy transition challenge that tries to be really inclusive and just must start from a recognition of the demands of these communities.
- In order to emphasize the different dimensions of the transformation demanded from the affected communities, we speak of three types of interdependent energy transitions, that is to say: (1) a mining-extractive transition, (2) an energy democratization, and (3) a broad and just transition.
- The *mining-extractive transition* refers to the permanent and timely cessation of large-scale coal extraction in the Cesar and La Guajira departments, in Colombia, and the creation of labor and economic alternatives for small-scale coal mining in the Andean region. Thus, it is called to 'shut down the mining activities', at the same time that its impacts are considered and mechanisms are decided and implemented to mitigate and repair such im-

pacts, ensuring the participation of the communities. It will also be important to give a national discussion on how to fill the void that the lack of mining-energy income from fossil fuels will leave in public finances.

- The *energy democratization* is the transition aimed at fighting poverty and energy inequality of which several vulnerable communities in the country have been victims. Many rural areas and municipal capitals in the Cesar and La Guajira departments lack reliable and affordable access to electricity, while in Boyacá electricity is often too expensive for residents. The democratization of energy implies a change in the forms of energy use, seeking to increase efficiency and savings, while at the same time there are changes in the way of managing energy generation, prioritizing the incidence of local communities over the forms of generation, property and final use of the energy.
- The *broad and just energy transition*, finally, reminds us that these processes must include deep and structural changes, rethinking the injustice towards women and ancestral communities in the country



The reflections that are presented in the following four chapters are based on the pedagogical and research process 'Community re-existence: energy transition, sovereignty and gender', carried out with groups of both male and female social leaders in the Wayuu indigenous reservations of Provincial and Lomamato (Barrancas and Hatonuevo, in the department of La Guajira), the Afro-descendant community of La Sierra (Chiriguaná, in the department of Cesar), and the peasant community of Monguí (department of Boyacá), between June and October 2020. The project was funded by the Friedrich-Ebert-Stiftung Colombia (FESCOL), and the entire process was designed and facilitated by three members of the Red de Iniciativas Comunitarias (RICO) and the Colectivo Hombres y Masculinidades, being supported in turn by four women as local managers, one per community, and two researchers from the 'Semillero de Investigación en Transición Energética de la Universidad del Magdalena' (Research Seedbed on Energy Transition from the Universidad del Magdalena) and one from the Technische Universität Berlin.

Conceived from the perspective of popular education (Freire, 1992; Mejía, 2015), the pedagogy was thought as an exercise of intercultural dialogue of knowledge between both the experiences and needs of the participants and the proposal to articulate their reflections on what a just energy transition should be (Figure 5.1). Popular education is a pedagogical trend in which the knowledge process starts from the specific realities of the participants. Based on dialogues and exercises on everyday topics and scenarios, the facilitator incorporates ideas to stimulate critical reflections on people's experiences, depending on the topic that is being worked on. It is not an exercise of vertical transmission of information;

on the contrary, it is essential that those who participate feel represented in the process (Figure 5.2). Pedagogical practice must therefore be horizontal and conversational from categories within the reach of common knowledge and easily recognizable in everyday life. The exercise seeks to culminate in proposals for change and action that are close to the conditions of the participating group.

Figure 5.1 Participants from the community of Provincial, in the department of La Guajira, design the map of their community within the framework of the pedagogical process 'Community re-existence: energy transition, gender and sovereignty'.



Note. Taken from the participants of the Provincial community, august 2020

The latter is particularly important when considering the name of the pedagogy 'Community *re-existence*'. When we speak of re-existence, we mean that we want to go beyond reflecting on the world around us; reflection should be the engine of an active and transformative practice of reality. In the same way, we go beyond resistance. Although resistance against mining-extractive projects, for example, is an important element

in this process, the commitment to re-existence goes further, also focusing on positive efforts to promote and live new ways of existing. We will return to a more detailed debate on this political challenge in the following chapters.

Figure 5.2 Young members of the 'Colectivo Mujeres Guerreras de La Sierra' share the results of a workshop activity within the framework of the pedagogical process 'Community re-existence: energy transition, gender and sovereignty'



Note. Taken from the participants of the La Sierra community, september 2020

Within the framework of this process, a pedagogical program made up of five modules was carried out, starting from the three thematic axes, i.e., (1) a relational gender approach, (2) territory and (3) community sovereignty. Considering that coal mining at different scales has a presence in these communities, we sought to guide the reflection around a re-existence project, in which the proposed energy transitions take on a central place. During the process, the participants analyzed and reached conclusions on topics such as cultural constructions of gender (men/women); building, identification and belonging to the territory; experiences with energy generation and use; practices of resistance, resilience and community sovereignty; and possibilities of action for a just energy transition.

Due to mobility restrictions arising from the global health crisis as a result of COVID-19, the process was carried out remotely. For this reason, FESCOL ensured data plans for a local manager and five 'multiplier' women participants in each community. The local women managers —also authors of this work— were an active part in all steps of design, implementation and monitoring of this methodology, ensuring that the exercises were based on daily experiences in each community. The multipliers, also participants in the process, took on the responsibility of assuring communication with each of the working groups, socializing the pedagogical materials and collecting evidence from the exercises, especially supporting the participants who did not have internet access.

A WhatsApp group was set up in each community, given that this is the best known and most accessible messaging platform. Work instructions for each module contained in information sheets and videos were sent via WhatsApp. The participants from each community were divided into groups of no more than five people to carry out the exercises in each module. In a second instance, the results of each activity, together with emerging thoughts, were socialized with the rest of the participants via WhatsApp. In the communities of La Sierra and Provincial this way of proceeding was followed for the most part, while in Monguí and Lomamato it was necessary to adapt the process with one or two group-calls per module. Finally, the main inputs and results of the work were collected in groups and the discussion was carried out in plenary, where a general summary was given. In the next session, 15 minutes were devoted to provide feedback on the module. Table 5.1 gives an overview of the objectives and main activities undertaking in each module.

Table 5.1 Modular structure of pedagogy, 'Community re-existence: energy		
transition, gender and sovereignty'		

Module	Goals	Main activities
I. My being and my place in the community	The participants have a general understanding of the pedagogical process. The participants reflect on the mea- ning of being a woman or a man in the territory, identifying both harmful and positive practices. The participants identify ways to trans- form their understanding of being a woman or a man for liberation	Gender baggage The participants identify 10 objects that symbolize the ideas and behaviors that have constituted them in the wo- men and men they are today. Each participant thinks about the emotions that each object produces: sadness, happiness, anger, euphoria, fear, shame, etc. Thinking about an upcoming trip, each one must choose a maximum of five objects that they want to take with them, understanding that the other objects represent what we want to leave behind.
II. Body and territory: my places of struggle	The participants recognize themselves as territorial beings, on a personal/cor- poral/collective/ community level. The participants make material, socio-political, cultural and personal readings about the inhabited territory, identifying important and problematic places, as well as those in need of or conducive to a positive transformation. The participants begin to identify me- thods for the positive transformation of their territories.	Community mapping In groups, the participants draw a map of their community, answering the following questions, one by one: . What are the most important or symbolic places in my community? . What are the painful or troubleso- me places in my community? . What are the places in my com- munity that we want to transform?
III. Re-exis- ting with our knowle- dge	he participants reflect on the extractive logics in the territory (mining, agribu- siness, neoliberalism). The participants recognize and give visibility to subsistence experien- ces in terms of ancestral knowledge (production, nutrition, medicine, etc.), enhancing them through their own knowledge in the territories. The participants identify needs and opportunities for transformation, from the logic of productivity and subsis- tence.	Interviews Each group identifies an older person to interview about the history of the community, especially the moments in which there is evidence of a compa- rison between social and community practices, before and after the arrival of external entities that have altered the dynamics of production and subsis- tence in the territory: for example, large mining or livestock/agro-in- dustrial companies. The participants analyze each interview, identifying the alteration of community practices and popular knowledge

Module	Goals	Main activities
IV. Orga- nizational experien- ces and community sovereignty	The participants identify what have been the achievements or accomplish- ments obtained from joint activities in the community. Participants discuss the role of collective actions as starting points for strengthening local resilience and community sovereignty. Participants begin to develop guide- lines for joint work (e.g. standards of behavior, decision-making mechanis- ms, and conflict resolution).	Thank-you letterEach participant writes a letteraddressed to the community, remem-bering and thanking them for anycollective action that is considered tohave influenced the overcoming of anobstacle.DramatizationFrom the socialization of the letters,each group makes a dramatizationrepresenting one or more of themoments described, emphasizing howthe community reached a collectivesolution.
V. Our plan of thought and action	The participants give feedback on the four previous sessions, identifying the most important learnings from the three thematic axes. The participants identify and socialize dreams, resources, opportunities and activities, setting priorities for future work together. The participants establish a roadmap, specifying activities to be carried out in the short and medium term, as well as objectives to be achieved in the medium and long term	Appreciative inquiry Participants divide a sheet of paper into four quadrants, writing '(I) Dreams' in the upper left quadrant, '(II) Resources' in the next right, '(III) Opportunities' in the lower left quadrant, and '(IV) Activities' in the remaining quadrant. For each module, the participants look for at least one element for each quadrant: (I) What dreams do I have for the future of energy in my community? (II) What resources does my community have to make these dreams come true? (III) What external opportunities do I identify to make these dreams come true? (IV) What activities do we want to carry out as a community to make these dreams come true?

In addition, the work methodology 'Community re-existence: energy transition, gender and sovereignty' used in each module is explained in the flow chart shown in Appendix 1. It should also be mentioned that besides the results of research from the community workshops, several multimedia presentations and radio broadcasts were performed, with the proposal to create community workshop programs, which had a series of three episodes per community lasting between 10 and 15 minutes each,

that would involve reflections from the participants. These programs were transmitted in a podcast format under the name '*Voces Reflexivas: Sentipensando cuerpo y territorio*' (Thoughtful voices: Feeling-and-thinking the body-territory) by the University platform STEUnimagdalena, that stands for 'Semillero de Investigación en Transición Energética de la Universidad del Magdalena' (Research Seedbed on Energy Transition from the Universidad del Magdalena)²³, in the context of the pedagogical modules detailed in Table 5.1, that is to say: (1) our territory from a gender approach, (2) rethinking productivity and subsistence and (3) associative experiences for the community sovereignty.

Once modules II, III and IV had been completed, the virtual guides for each episode of the podcast radio programs were shared through the established channels, after which doubts were solved and the recording environment was adapted and those who would record every episode were prepared. After adapting the space, reflections were co-created based on a series of guiding questions suggested in the virtual guide and, immediately afterwards, the audios were recorded. Once the editing and assembly of each podcast was completed, it was shared with the community to receive feedback.

Only once the podcast radio programs had been approved by the community, would they be published. For this final part of the process, we had the support of the Hatonuevo Stereo radio station, with coverage in the Lomamato community, and the Utay Stereo radio station, with coverage in the Provincial community. In the case of La Sierra, it was decided to broadcast via a loudspeaker in a car that moved through the town, a traditional means of communication in the community named *perifoneo*. All radio broadcasts were published on the Soundcloud online platform for the publication of the radio podcasts and disseminated via WhatsApp. The process followed during the making of the radio programs are detailed in Appendix 2.

The conditions imposed by virtuality posed some difficulties. It was challenging to build trust and maintain the flow of communication required for these types of activities. However, we highlight here the wi-

^{23.} You can access online the podcast radio programs, on the STEUnimagdalena Soundcloud online platform https://soundcloud.com/steunimagdalena/sets/voces-reflexivas-sentipensando.

llingness and creativity of the participants to overcome these difficulties. On many occasions we saw how the participants appropriated the technology, making methodological proposals from their own conditions and using their immediate surroundings to narrate immersive stories.

In that order of ideas, this document is based on the analysis from different branches of academic research, as well as the following sources of primary information corresponding to each community such as (1) products of group work for each module, (2) radio products, (3) recording of conversations on WhatsApp and/or videoconferences, (4) notes from the three facilitators, (5) interviews with the four local managers and other members of the community, after the accomplishment of the workshops.

Figure 5.3 Plenary session during the Second Cultural and Sports Festival in honor to our leaders murdered in La Sierra, Cesar



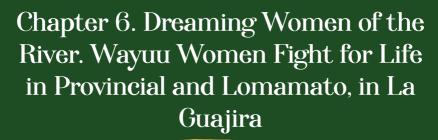
Note. Photograph by Marco Perdomo (IG: @ikon_fotografia), January 2020.

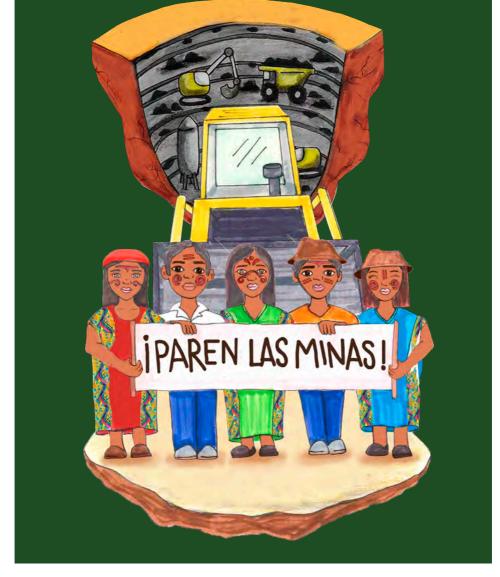
The results of the dialogues carried out with the communities in Boyacá, Cesar and La Guajira departments are presented below (Figure 5.3). It is worth mentioning that we do not pretend these chapters to be whole or self-contained case studies; on the contrary, they should rather be understood as an invitation for further research. Although we emphasize once again the importance of a differentiated analysis according to the socioeconomic and cultural contexts of each territory, we also highlight important elements from the experience with each community that may also play a role in other contexts. Thus, we hope to generate clues for reflection in general on coal mining and on its overcoming through just energy transitions, which could also inform struggles and comparable processes against other types of extractive industries.

We would like to finish with some thoughts on the self-understanding and purpose that we have adopted as authors of this book: our fundamental commitment as mestizo and white academics and social actors, close to the centers of power in Colombia and abroad is to help assure minimum conditions for those guardian women of the territory and its residents, addressing crucial subjects such as security and dignity for the dissenting voices that are defending their territory. We will spare no effort to disseminate far and wide their views of love, solidarity, and respect, aiming to leverage our privilege as best we can. The transformation that the country requires does not only go through social, economic and political development, but even through our very redemption as a society and civilization. That is why such transformation should be born from below, from the grassroots, from the communities and from those brave women and men who have risked their lives and made sacrifices in the defense of this planet that we all share since time immemorial. Outlooks from below for just energy transitions: Gender, territory and sovereignty

Main Ideas about Chapter 5

- This book is born from participatory research with four communities that inhabit coal-bearing territories in Colombia: the indigenous Wayuu communities of Provincial and Lomamato (municipalities of Barrancas and Hatonuevo, in the department of La Guajira), the Afro- community of La Sierra (municipality of Chiriguaná, in the Cesar) and the peasant community of Monguí (in the department of Boyacá). The working groups were made up, for the most part, by women, although some men also accompanied the processes in La Guajira.
- This research was carried out from the perspective of *popular education*, a pedagogical current in which the process of creating knowledge starts from the specific daily lives of the participants. Instead of being a process of vertical transmission of information, knowledge is created in a joint and participatory way from the realities and daily life in the territories. The exercise seeks to culminate with proposals for change and action that are close to the conditions of the participating group.
- Within the framework of this pedagogy, carried out mainly virtually, the participants developed exercises and reflections from inputs shared by a facilitating team. These reflections were condensed into radio products, later broadcast in the communities. In each community, a local manager accompanied the discussions and acted as a point of contact for the facilitating team and the participants.

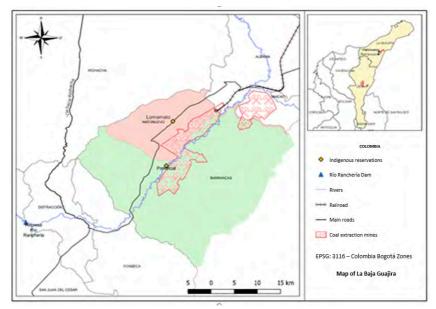






The Provincial and Lomamato indigenous reservations, belonging to the Wayuu ethnic group, are located in the municipalities of Barrancas and Hatonuevo, respectively, in the Baja Guajira region. The department of La Guajira has been historically one of the territories most affected by coal mining in Colombia, as exemplified by the fact that a few meters from the Provincial reservation, the Cerrejón coal mining complex is located. Figure 6.1 shows the immediate geography of the Provincial and Lomamato communities, and their proximity to the mining complex.

Figure 6.1 Map of coal extraction around the Wayuu communities of Provincial and Lomamato



Note. Desing by Lorena López.

The socio-environmental impacts of coal mining in La Guajira are associated with the deviation of water sources, land degradation, air pollution, respiratory diseases and the persecution of social leaders, among other global impacts, such as climate change. This has pushed the communities to resist in several ways, including sit-ins and legal actions against Carbones del Cerrejón, in tandem with Colombian civil society organizations such as the José Alvear Restrepo Lawyers Collective (CCA-JAR, in its Spanish initials).

Figure 6.2 Result of the community mapping exercise in one of the work groups in the indigenous community of Lomamato, in La Guajira, as part of the pedagogical process 'Community re-existence: energy transition, gender and sovereignty'.



Note. Photograph by Yaneth Ortiz, August 2020

In this context, the pedagogical process (Figure 6.2) was carried out separately in both indigenous reservations: there were 20 participants in each community —women and men, adults and youth— belonging to the Pushaina, Bouriyu, Epiayu and Uriana communities, around the aforementioned thematic axes and in order to generate proposals and initiatives aimed at a just energy transition. The results of the workshops in both communities are presented in a single section, recognizing important cultural and socioeconomic similarities and parallels between them.

6.1 Past, Present and Future —Learning to Be in the Territory

Figure 6.3 Resultado de ejercicio de mapeo comunitario en uno de los grupos de trabajo en la comunidad indígena de Lomamato, en La Guajira, como parte del proceso pedagógico "Re-existencia comunitaria: transición energética, género y soberanía".



Note. Photograph by Laura Brito, August 2020

For the Wayuu communities with whom we worked, the territory receives diverse associations; on the one hand, the local cosmogony attributes to nature its own autonomous corporality, according to which the entrails of the Earth are the uterus or the womb of all life on the planet. When it is opened, for example, by a mining operation, its energies begin to spill and waste, reducing its ability to generate life, resulting in a reduction in soil fertility. In the same way, the river occupies a fundamental place in the Wayuu world view. Traditionally represented as a woman, the river oversees the care and maintenance of the plant and animal life in its surroundings (Figure 6.3). These vital functions of the territory are also related to the reproductive work of women, as expressed by one female interviewee, "As women give life, so does the earth."

On the other hand, the territory is also a network of interactions between living beings and the spirits inhabiting it. According to a frequent interpretation of a Wayuu origin myth, living beings such as plants and animals were born from the relationships of Mma, Mother Earth, with Juya, the 'Great Creator Spirit' or the 'Lord of the rains'. From this union the plants (Mojuui) were first born, then the trees (Wunuui), the animals (Mürülü) and finally the first Wayuu. As a result, we human beings are the younger generation and we therefore owe respect and care to our older siblings, by their seniority and wisdom, and above everything else, to our Mother Earth.

Similarly, the territory communicates directly with women and men in different ways. The Ranchería River, for instance, has a particularly strong bond with the community's 'dreamers' or 'soñadoras', a very important ritual role chiefly performed by women. Through dreams, the spirit of the river communicates with them, informing them about the cycles of nature or guiding their actions in defense of the community and its shared territory. In this way, the deviation of the river —as El Cerrejón extractive industry has been doing with the Ranchería river and the Bruno stream during the last ten years— has direct effects on nearby populations, by cutting off their access to water for consumption, crops and water. However, this also distances the communities from the spiritual source that the river represents as well, contributing to the disintegration of the social fabric. "Uno de los lugares importantes en mi comunidad es el río Ranchería, ya que aquí Él nos regala el autosustento económico y alimentario, y es la conexión vital con la Madre Tierra y lo que lleva a su alrededor".

(Participante, comunidad wayuu de Provincial. Producto radial: "Nuestro territorio con enfoque de género") One of the most important places in my community is the Ranchería River, since here She gives us food and economic self-sustenance, and is the vital connection with Mother Earth and what she carries around her.

Participant, Wayuu community of Provincial. Radio broadcast: "Our Territory with a Gender Perspective



Finally, the territory is seen as a living environment that welcomes its occupants and where they weave their feelings of belonging and identity. It is where all generations meet there, those who are long gone, those who are alive today, and those yet to come; hence the territory is really the lively encounter between the past (foundational and settlement origins, and the flow of popular stories), present (biographies and current organizational processes), and future (the defense of the territory for coming generations). It is interesting, for example, that the most significant place in the Wayuu home, according to many participants, is the kitchen; in this space all the women of the family gather early to prepare the daily meals, while grandmothers tell the myths and stories of their traditions, as well as their own experiences and the history of the community. This means that, more than the place where one is at a specific time, the territory is the place where one comes to be: it is where one is born, where one grew up, and where one learned. Wayuu communities attribute the figure of the 'uterus' to the territory to indicate that it shelters life itself, it is the setting that harbors our life stories, and the seat of affective niches. According to matrilineality in Wayuu society, the mother's family's resting place indicates our belonging in a specific territory. Although mobility is frequent among Wayuu communities, the deepest rooting is felt towards this sacred passageway that allows a connection with their ancestors. The territory is in every way projected as the perennial body of the community, living through the generations.

From this point of view, the territory is truly understood as a body-territory, where each vital place receives a meaning, both intrinsic and from an intimate relationship with the identity of the community. These perspectives allow us to understand the cultural depth of the environmental effects on the Wayuu cosmogony including the resettlements of entire communities to make way for the expansion of the mining industry, not only representing impacts and economic costs for local administrations, but also destroying the social fabric through the uprooting of indigenous communities and their links with past generations. In addition, the mine pit itself or the deviation of rivers constitute a series of permanent absences such as forests, streams, valleys, grazing lands, that in fact were a fundamental part of the identity of the community and that will never be so again. Likewise, the lives lost due to the extractive industry, owing to respiratory or cardiovascular diseases, for example, can never be brought back.

"Por medio de nuestra lucha hacia nuestros derechos y autonomía y el amor hacia nuestro territorio y todo lo que habita en él, buscamos que los más pequeños tengan un mejor futuro".

Participante, comunidad wayuu de Provincial. Producto radial: "Nuestro territorio con enfoque de género" One of the most important places in my community is the Ranchería River, since here She gives us food and economic self-sustenance, and is the vital connection with Mother Earth and what she carries around her.

Participant, Wayuu community of Provincial. Radio broadcast: "Our Territory with a Gender Perspective



A just mining-extractive transition needs to confront these truths. Above all, the women demand the immediate closure of the mine. This is the only way to begin the work of healing the territory and rebuilding the community's bond with it, profoundly severed after more than 30 years of mining industry. In the immediate aftermath of extraction, it will be vital to accompany processes of environmental recovery, although not from a state-centric logic. Above all things, the leadership of those who know the territory best should be followed. The right to non-repetition will be assured in the real recognition of the control exercised by the communities over their territory and subsoil. However, the historical debt that the Colombian nation and the involved multinational companies owe to these indigenous communities and their territories will never be fully paid. From this discussion arises the need for both the mining industry and the state to commit to reparations in perpetuity to the affected communities.

Figure 6.4 Young Wayuu in front of one of the wind mills in Jepirachi park, in La Alta Guajira



Note. Wikimedia Commons License

It is critical to examine with a magnifying glass the emerging energy transition projects towards windmills (Figure 6.4) that are already being carried out in the department of La Guajira, to take advantage of the hi-

gh-speed winds in the region. These projects will require the enclosure of large portions of land, on the pretext of creating security zones around the wind turbines, which again will call into question the local control of the territory by resident communities. Added to this are concerns about the impact that the wind turbines will have on local fauna, especially birds, which are essential to the Wayuu cosmogony and tradition. In the words of one female interviewee, "There is also life above us that we must respect." The female participants are aware of these impacts and do not see these projects favorably. However, they made it clear that "Nothing compares to what El Cerrejón has actually done."

6.2 Dreams and Memory —Wayuu Women as Guardians of the Wisdom of the Ancestors

In Wayuu communities, traditional gender roles are identified, assigned under a functional logic, i.e. men are in charge of subsistence farming and grazing activities, although they have more recently adopted other tasks in the industries of the neighboring municipalities to subsist, while women take care of domestic duties and looking after children and the elderly at home. In addition to the positioning of women at the household level, which is also frequent in the other communities which participated in the process, we can also speak of specific roles traditionally associated with men in the community, such as the authority of 'palabrero'²⁴ or male orator, and women's occupations, such as those of the 'dreamer'. It should be clarified that these gender divisions are not absolute, as several participants refer to instances of 'palabreras' or female orators.

These different roles for women notwithstanding, the broader political functioning at the community level is still marked by a masculine logic, intensified by the presence of the mining industry in the territory, even if it has been challenged in recent years. In Provincial, for example, two of the nine traditional authorities are women and are important referents in decision-making. Although the communities have never had a female 'cabildo' – that is. a democratically elected representative of the commu-

^{24.} The 'palabreros' or Pütchipü'üi (orators) are local moral authorities in the Wayuu community that inhabits the Guajira Peninsula straddling Colombia and Venezuela. (Translator's note)

nity towards municipal and national authorities –, the ability of women to access these leadership positions is recognized, as is often evidenced in other communities of La Guajira, too. In addition, the participants report an important —although slow— cultural transformation in communities, which has allowed for more women to enter these decision-making spaces. Still, female participants describe an attitude of mistrust from the men regarding women's capacities, which frequently translates into a lack of attention to their interventions. The position of young women in the community is doubly precarious, whose ideas are explicitly dismissed on the basis that their gender and lack of experience make them 'too emotional'.

"Anteriormente, en nuestro resguardo indígena wayuu, todo se llevaba a una ley de origen basada en que la mujer sabedora es la que regía todos los comportamientos, costumbres que debe tener cada miembro a partir de sus conocimientos y experiencias vividas".

> (Participante, comunidad wayuu de Provincial. Producto radial: "Nuestro territorio con enfoque de género")

In other days, in our Wayuu indigenous reservation, everything was brought back to a Law of Origin, based on the fact that the wisewoman was the person that governed all behaviors and customs that each member of the community should have, using their knowledge and lived experiences.

Participant, Wayuu community of Provincial ⁷ Radio broadcast: "Our Territory with a Gender Perspective. 7

"Me decían que, por mi edad, yo estaba en una etapa en que yo estaba acelerada, y que era una niña. Me sentí muy irrespetada [...]. El Cerrejón nunca ha querido nada con mujeres ni con jóvenes, y peor si son las dos cosas".

(Participante, comunidad wayuu de Provincial).

They told me that, because of my age, I was in a stage where I was accelerated, and that I was a girl. I felt very disrespected [...]. El Cerrejón has never wanted anything with women or youth, and it is even worse if they are both young and female.

(Participant, Wayuu community of Provincial)

The exclusion of women from the political sphere is also reproduced by actors outside the community such as the municipality and Cerrejon's representatives. Both actors have shown a clear preference for negotiating with older men, making efforts to marginalize women and female youth from the conversations. Participants attribute this to the masculinized perception that 'women block specific only on the grounds that women are very quarrelsome'. In addition to the reproduction of gender stereotypes in Western culture, we think that this resistance by external actors to dialogue with indigenous women is based on the abysmal difference between the conceptual references of the 'alijuna'²⁵ and the Wayuu woman. While indigenous men have become acculturated to a greater degree, due to their interaction with mestizos in the workplace, the relegation of women to the domestic sphere has allowed them to keep their understanding and feeling of the fundamental values of the Wayuu cosmogony, especially those related to their own body-territory (Figure 6.5). For this reason, while a Wayuu man can more easily translate socio-en-suitable interlocutor for the interests of multinational mining companies-, the Wayuu woman feels in her own flesh the inexorable loss of the territory. These damages cannot be compensated or repaired in the short term; the only alternative is to immediatly put an end to conditions that continue to degrade the territory, such as the mining industry. It is for this reason that the Wayuu woman is the most authentic representative of the ancestral culture and any effort of just energy transition must begin with them (Figure 6.5).

Along these lines, women have adopted the banner of the fight against El Cerrejón. The 'Fuerza de Mujeres Wayuu' Collective and the Committee of Defenders of Human Rights and the Environment, both of mixed composition although with female leadership, have achieved international prominence in this fight, resorting to legal proceedings before the Constitutional Court in Colombia and legal entities in Europe, as well as non-violent actions in the territories. Although it is undeniable that many men have also been active in this fight, it is women who have achie-

^{25.} In the Wayuunaiki language, *alijuna* refers to a person who is not Wayuu, especially a person from Western culture.

ved a greater role abroad. This is even against the differential limitations that weigh on their shoulders, such as the passive exclusion from decision-making in the community spaces that we discussed above, the systematic violence exercised against them. Regarding the latter, it should be noted that several participants in the process, many recognized activists, have received death threats for their political work.

Figure 6.5 Result of the exercise of gender baggage in one of the working groups in the indigenous community of Provincial, within the framework of the pedagogy 'Community re-existence: energy transition, gender and sovereignty'.



'Note. Photograph by Laura Brito, July 2020.

Faced with these barriers and risks, how do women achieve their level of motivation to exercise this leadership? Several female participants mention their own sons and daughters as their major source of inspiration to resist against El Cerrejón: air and water pollution, direct results of the mining industry, affect children under five years of age to a greater extent, causing and worsening respiratory, cardiovascular and skin diseases. Many mothers say that their entry into the fight against coal mining occured shortly after the discovery of these diseases in their children. Thus, these impacts on the health of minors create an unsustainable condition for women that leads them to mobilize against the mine 26

Figure 6.6. Participant from the Provincial Wayuu community interviews an older woman about the transformations that the community and the territory have undergone in the framework of the pedagogical process 'Community reexistence: energy transition, gender and sovereignty'.



Note. Photograph by Laura Brito, September 2020.

^{26.} This was the case of Luz Ángela Uriana, from the Provincial community. At the end of 2015, Luz Ángela filed a court action before a judge from Barrancas, in the department of La Guajira, arguing that the Carbones del Cerrejón company was seriously affecting the health of her son Moisés. In particular, she claimed that coal extraction in the mine was responsible for the respiratory conditions suffered by her son. The 'Moisés case', as it became known at the national level, reached a positive ruling for Luz Ángela, through which the judge ordered Corpoguajira, the Ministry of the Environment and the National Environmental Licensing Authority (ANLA, by its initial in Spanish) to implement an action plan to reduce the levels of contamination by particulate matter in the area of influence of the mine. It also ordered the Health Promotion Entity (EPS, by its initial in Spanish) Indigenous Association of Cauca to accelerate the provision of health services to Moisés.

6.3 Tradition, Confidence and Social Fabric for Community Sovereignty in La Guajira

For the participants, in addition to defending the territory, a critical component of the community's long-term struggle and subsistence is the reproduction of cultural identity. According to them, the defense of the territory will be sustainable over time to the extent that the identification of its members with the territory and with its people is strengthened through their own traditions, such as spirituality (religiosity, relationship between the dead and the Wayuu world), celebrations and recreational activities (wrestling, for example), formative and deliberative spaces (such as the arbor or '*enramada*'), productive practices (such as weaving and grazing), as well as the vital link with water, the stories of struggle for the defense of the territory, among other important aspects.

Against these elements several problems arise. Participants refer to acculturation processes through education, work, commerce, administrative procedures, and the media, which are mostly represented in the school, a foreign institution of basic education. They express feeling that their culture is constantly under attack, from the symbolic representations that are observed in the media, to the economic pressures they suffer when they are forced to migrate to the cities.

From subsequent dialogues in the community of Provincial (figures 6.7), advanced by the Community Initiatives Network (RICO, by its initials in Spanish), two action proposals emerged in separate working groups, whose links were immediately recognized when they were socialized in plenary. Firstly, they express their wish to create a space of their own for the development of their artistic craft, with a focus on transmitting the knowledge associated with weaving to new generations; this was promoted by a local collective of female artisans. Secondly, they want to a museum in the community to educate on the effects that the mining industry has had on nature and the surrounding populations, as well as to commemorate the actions that the community has carried out against it in defense of the territory. All this was socialized by a prominent leader in the fight against Carbones del Cerrejón company **Figure 6.7.** Members of the Provincial indigenous community planning the distribution of emergency health supplies obtained to respond to the COVID-19 crisis.



Note. photograph by Laura Brito, June 2020.

Both projects place an emphasis on intergenerational dialogue, whether from the transmission of knowledge about the Wayuu fabric or within the framework of an exercise in memory and collective resistance. These two projects also seek to educate children and youth about the history of their own traditions and culture, and in general about the meaning of life in community.

In this way, the community is preserved through the safeguarding of both its ancestral traditions and their shared territory. It is in these practices that the members of the community feel and reproduce a bond with their ancestors, and in which they prepare the ground for their offspring. The defense of the territory and the intergenerational reproduction of a collective spirit are then inseparable and integral elements for a commitment to community sovereignty among indigenous peoples from La Guajira.

This collective spirit takes shape in the different spaces for deliberation in the community. Most decisions that involve the community in general are achieved in spaces open to the entire community, including the prior consultation processes carried out by mining companies in the region.

In these spaces, traditional authorities —the heads of each family in the community— enjoy special respect and their interventions carry additional weight. However, the representation of the community towards the municipal, departmental and national administration bodies, as well as towards external private actors, rests entirely on the shoulders of the 'cabildo gobernador', The cabildo is elected by popular vote and operates in accordance with the processes and conditions that each indigenous reservation determines autonomously. It is expected that this traditional authority exercises a position in representation of the interests expressed by the ancestral authorities of each indigenous community, serving as a regular conduit between the community and the outside world. The participants say that although the communities have had good experiences with their cabildos in recent years, the lack of community control over their actions has sometimes led to attempts of co-optation by external actors such as El Cerrejón, promoting deals behind closed doors. In addition to exposing the community to unprofitable deals with the mining industry, with the municipal administration or even with the new renewable energy operators in the territory, these dynamics cause political divisions in the community, deepening mistrust in the face of decision-making bodies and negatively affecting participation in these spaces.

Additionally, the masculinization of decision-making, that we referred to earlier, is also reflected in the reduced presence of women in these conversations and in the active dismissal of their contributions. This not only impacts women and their demands. By excluding them from the conversation, their knowledge of the territory and its residents are made invisible, missing out on contributions which are in many ways more faithful and closer to the traditional Wayuu worldview. When observing the importance of intergenerational learning for these indigenous peoples, one can appreciate the severity of excluding women from the political process, as they are the guardians of the wisdom and teachings of their ancestors.

In the face of energy transition processes in the territories, these observations highlight the need to fundamentally transform the patterns of interaction between external public or private actors and the indigenous communities. It will not be enough to change coal for wind turbines if the relationship continues to be based on the appropriation of ancestral territories and on negotiations without transparency or true participation from communities. On the contrary, it will be necessary to integrate local populations in the design and implementation of mining phase-out plans, looking beyond a simple prior consultation process. Communities must be a fundamental part of this dialogue, and their local epistemologies and cosmogony must be considered, on the one hand, to honor the right of these communities to organize themselves according to their own value system, but additionally to assure the correct management of the territory and its recovery. Wayuu women will play a fundamental role in this regard, due to their deep understanding of the territory and their connection with it.

"En el sentir, tengo a la enramada. Comparto lo [que dice] la compañera de que el cementerio es un lugar sagrado, pero la enramada la veo como el lugar donde nosotros interactuamos, las personas con vida. Hoy en día se ha vuelto algo negativo, que está sufriendo los conflictos internos y conflictos entre familias. Hoy día, me da mucha tristeza que yo no me veo muy involucrada, o veo que entre dos familias están en discordia. Yo quisiera que llegáramos a acuerdos por medio del diálogo y así vivir en paz".

> (Participante, comunidad wayuu de Lomamato)

In my feeling, I have the "enramada". I share what [my female partner says] that the cemetery is a sacred place, but I see the arbor as the place where we interact, those people who are alive. Today this place has become somewhat negative, suffering from internal conflicts and conflicts between families. Today, I am very sad that I am not very involved, or I see that two families are in disagreement. I would like for us to reach agreements through dialogue and thus live in peace.

Participant, Wayuu community of Lomamato

As a long-term process, it will be vital to rebuild the social fabric in these communities, in addition to strengthening local and ancestral industries such as weaving (figures 6.8), crops and grazing, which assure the subsistence of the members of the community. It will be critical to create processes of dialogue and reconciliation for the safeguarding of collective identity. The memory of the ancestors and their teachings, as well as the

pedagogy on the processes of struggle of the community are at the center of these efforts to educate the new generations.

Figure 6.8. Wayuu bag, made by artisans from the Colectivo Tejemos Historia, from the Provincial community (Barrancas, La Guajira)



Note. Photograph by Laura Brito, May 2021.

Main Ideas in Chapter 6

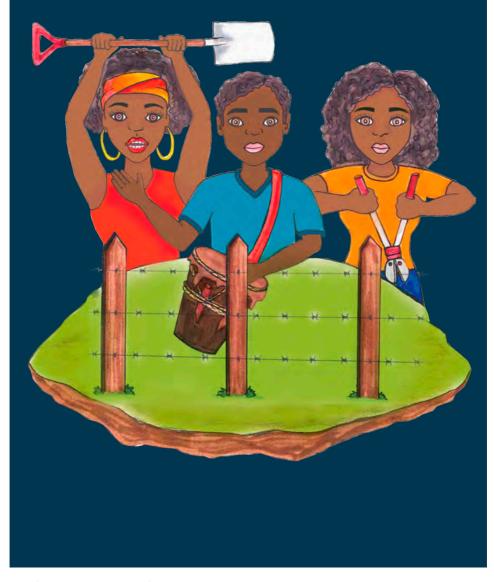
- The Provincial and Lomamato indigenous reservations, belonging to the Wayuu ethnic group, are located, respectively, in the municipalities of Barrancas and Hatonuevo, in La Baja Guajira. Historically, the department of La Guajira has been one of the Colombian territories most affected by coal mining. A few meters from the reservations is the Cerrejón complex, one of the largest open-pit coal mines in the world. These impacts include the deviation of water sources, land degradation, air pollution, respiratory diseases and the persecution of social leaders, among other impacts that are also global in nature, such as climate change. This has pushed the communities to pursue resistance alternatives, including sit-ins, international campaigns and legal actions in Colombia and internationally.
- For the Wayuu culture, territory and nature have their own and autonomous corporality: the entrails of the Earth are the womb of life on the planet, while the rivers are in charge of maintaining life in their environment. These vital functions are intimately related to the care tasks of women: "As we women give life, so does the earth." The territory is also a meeting point for the Wayuu generations: the link with the ancestors —and, therefore, with the Wayuu identity itself— is intimately linked with this shared territory. From these perspectives, the impacts of mining take on a much deeper meaning: restoring ecosystems and the bond of its residents with it will last not years, not decades, but generations, for which reparations are demanded in perpetuity. In the same way, it is critical to examine how the emerging proposals for energy transition —for example, megaprojects of wind turbines— reproduce similar dynamics of territorial appropriation.
- Wayuu women have historically played an important role in decision-making, in part because of their manifest link with the territory and with the world of dreams, fundamental to the Wayuu worldview. However, the participants —especially young women— express feeling excluded from many decision-making processes in the community, a phenomenon aggravated even by social actors from the mine and the public administration who demonstrate a clear preference for male interlocutors. This is problematic perhaps because Wayuu women are the most authentic guardians of the world view and the Wayuu territory. Most of the initiatives in defense of

the territory in La Guajira have been led by women; many of them speak about their children —the main victims of respiratory and cardiovascular diseases caused by the mine— as their major motivation to continue their fight against the mine. Women should then be central actors in the efforts to recover the territory after a mine phase-out.

• For the participants, a critical component of the community's long-term struggle and subsistence is the preservation of cultural identity, so that it is crucial to advocate for different expressions of spirituality, traditions, productive practices, pedagogical and deliberative spaces, as well as the history of the struggle of the Wayuu people in defense of their territory. The productive tasks of a community sovereignty should therefore be related to its worldview and history, favoring the activities of herding and weaving. In the same way, it is critical to rebuild bonds of affection and trust that have been eroded as a result of the interventions of the mining industry and the government in the territory. In the short term, it will be necessary to include communities in mine phase-out plans.



Chapter 7. People! Afro-Women protect the Commons in La Sierra, in the Department of Cesar

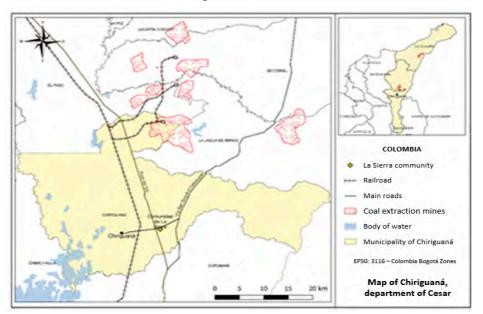




La Sierra is a hamlet of the municipality of Chiriguaná, and Lit is part of the mining corridor of the department of Cesar. The hamlet has a population of about a thousand people, most of it self-identifying as Black or Afro-descendant. In recent years around 150 Venezuelan refugees and immigrants have settled there. La Sierra is officially recognized by the Ministry of the Interior as an Afro-community, represented in the La Sierra, El Cruce and La Estación Community Council (CONESICE by its initials in Spanish). The community is located just 15 kilometers from the Pribbenow mine, owned by the multinational company Drummond, and less than a kilometer from the 'Ruta del Sol', the main corridor that connects the geographic center and south of the country with the Caribbean coast. The Figure 7.1 summarizes these geographic elements around the community of La Sierra, locating the different open-pit coal mining in its vicinity.

The aforementioned pedagogical process was carried out with 20 members of the local group The Warrior Women of La Sierra, with which RICO and the Universidad del Magdalena have cultivated a close relationship for two years. The Warrior Women originated in 2013 after a series of visits to organizational processes in Cauca and since then, the group has gone through different moments, although always being a strong voice from the territory against the Drummond mining company, articulated with environmental movements throughout the country and even in Germany and Poland. The pedagogical process takes place within the framework of other dialogues and parallel projects in the field of solar energy, community orchards and installation of water filters.

Figure 7.1 Map of coal extraction around the Afro-community of La Sierra, in the department of Cesar



Note. desing by Lorena López, 2021.



La Sierra

En 1789, un grande hato existía, llamado el Alto del Dividivi, que Negros evadidos protegía; ellos buscaron sus rumbos para subsistir en su vigía. Así fundaron el Carmen, donde grandes árboles crecían; con una sierra muy vieja, que como empleo tenían [...]. Con el paso de los tiempos, el Carmen ya no existía. Quedó La Sierra por nombre, el pueblo que ellos querían,

La Sierra

In 1789, a great community existed, called the 'Alto del Dividivi', that fugitive Slaves protected. They sought their courses to survive on their watch. This is how they founded El Carmen, where great trees grew; with a very old saw, they made it their employment. [...].As time went on, El Carmen no longer existed.

As La Sierra it was renamed.



Outlooks from below for just energy transitions: Gender, territory and sovereignty

y así llegaron los Negros a formar la vida mía. Con tambores, cuernos, caracoles formaban sus melodías y bailaban con sus Negras, esas que ellos querían. Así pasaron los años, en una gran armonía, con cultivo, pesca y caza, ¡Qué felicidad tenía! Llegan los terratenientes, acaban con la puebla mía, labrando las sabanas con engaños y mentiras, y hasta una santa le entregan! ¡Ay, qué pobre cobardía! rdiendo el pueblo con 6.000 hectáreas, ¡ay, mi Dios, quién lo diría! Llegan Vilma y Vito Angulo con tambor y valentía, revolucionando el pueblo pa' pelear la tierra mía. Con cantos, tambor y gritos, la Pica se hacía, llevándose presentes, a mucha gente mía. Luego llega el patriarcado, mostrándonos su poder, en donde el hombre es quien manda, anulando a la mujer. Esta no muestra sus luces. porque no se sabe defender, pero hoy se ha empoderado, y ha tomado su papel. En la década del noventa, ya las minas existían, con campesinos y negros, trabajando todo el día. De pronto aparece el monstruo, acabando lo que había, travendo muchas masacres, muertos, desplazados, desaparecidos y afectaciones, que sufría la tierra mía. Hay pobreza, hay miseria, la salud, ¿dónde está? Elefantes blancos tenemos, no lo podemos negar.

the town they loved, and so, these Black folks arrived to form my life. With drums, horns, and 'caracoles' they formed their melodies and they danced with their Black women, those whom they loved. So, the years went by in great harmony, with crops, fishing and hunting, What happiness the town had! The landlords arrived, they destroyed this dear town of mine, cutting down the trees in the savannahs with such deceptions and lies, And even a female saint they gave them! Oh, such great cowardice! Burning down the town with its 6,000 hectares, Oh my God, who would have thought it! Vilma and Vito Angulo arrived with drums and bravery, revolutionizing the town to fight for my land. With songs, drums and shouts, the 'Pica' was made, and they brought to participate many people of mine. Then the patriarchy came, showing us its power, where the man is the boss, annulling the woman. Women don't show their lights, because they don't know how to defend themselves, but today they have empowered themselves, and they have taken up their role. In the 1990, the mines already existed, with peasants and Black people, working all day long. Suddenly the monster appeared,

Outlooks from below for just energy transitions: Gender, territory and sovereignty



Educación, ¿usted la ha visto? ¿Quién sabe dónde andará? Los caños y las quebradas, ¿será que paseando están? En los lugares en que estaban, ya nadie los puede encontrar. Hay iglesias y organizaciones de mujeres que luchando, han sacado compasión, y aún se dan la pelea, por una vida mejor.

(Autoría colectiva: Mujeres Guerreras de La Sierra)

destroying what there was, bringing many massacres and death, displacements, disappearances and upheavals, that my land suffered. There is poverty, there is misery, health, where is it? White elephants we have, we cannot deny it. Education, have you seen it? Who knows where it is? The creeks and streams, have they walked away? In the places where they were, no one can find them anymore. There are churches and organizations of women fighting, they have drawn compassion, and they still fight, for a better life

Collective authorship: Women Warriors of La Sierra

7.1 Maroon Echoes: Struggles for the Freedom of the Territory

As can be seen in the previous poem, the Warrior Women identify the roots of their community in the Maroons – former slaves, who escaped their masters, back in colonial times –. This text shows how the history of their community has been framed as a struggle to find and build a space to inhabit collectively and in freedom, first against the Spanish and Creole slavers, then against large landowners, and finally against 'the monster' —the coal mine (Figure 7.2)

In comparison with the worldview of the Wayuu people, discussed in the previous chapter, who understand the territory as a living organism, with which they have a relationship from birth, the understanding that these Black women have of their territory is closely linked to its defense against enclosure attempts, as well as to the protection of its residents from external harm. While for the female indigenous participants interviewed in the department of La Guajira, the defense of the territory is a vital device to maintain a pre-existing spiritual bond, for the Black women of La Sierra the territory is itself constituted through these protective actions. In other words, to the Warrior Women the territory is their territory (Figure 7.3) precisely because they defend it, not only for themselves, but for all those who want to enjoy it with respect, in freedom and under equal conditions

Figure 7.2 In the vicinity of La Loma, in the department of Cesar, a hill of sterile material stands in the background, around one of the Drummond open-pit coal mine



Note. Photograph by Felipe Corral, March 2021

This quest to keep the territory healthy and accessible to women and men is reproduced through various practices. Two recurring examples of this struggle are the ancestral practice of 'La Pica' and the cry 'People!' La Pica is a long-standing traditional event in the community, in which women and men go out into the fields, brandishing machetes and playing drums, to destroy —or 'picar'— the fences built by large landowners. In addition to avoiding the enclosure of the grounds, this is a festive activity, as the community shares music, dances and food, while the fences are torn down, marking an occasion to strengthen the internal cohesion of the community. La Pica was widespread throughout the 20th century, although it began to decline with the arrival of the Drummond coal mine, monocultures, and paramilitary violence. Although La Pica still takes place occasionally, female participants express nostalgia for the times when this was a frequent event. The verses of La Pica, some of which are reproduced in the textbox below, are sung by the community while destroying the fences. These verses refer to a confrontation between the local landowners, the municipal authorities and the police —named as Julio, Morroco and Chería—, who come to stop a Pica, and the residents of the community, who brandish machetes and 'socos' —pieces of machete—, and use shouts, songs, and drums.

Figure 7.3 Working group of the Women Warriors of La Sierra explaining the map of their community, prepared within the framework of the pedagogy 'Community re-existence: energy transition, gender and sovereignty'



Note. Photograph by Narlis Guzmán, August 2020.

On the other hand, the cry 'People!' is a current practice in the La Sierra community, whose origins are identified in the time of paramilitary violence in Cesar, especially in the late 1990s. When a community resident shouts 'People!', the entire community leaves their homes, brandishing any weapon within their reach —usually machetes, although occasionally even firearms— to help. This practice prevented at least three murders of community leaders and even one attempt of sexual abuse. When the paramilitary presence was at its peak in the department of Cesar, even a system of communal surveillance by turns was instituted at the main entrances of the community, thanks to which the paramilitary groups largely avoided La Sierra in the framework of their operations, gaining the community considerable comparative peace and tranquility, in the midst of a bloody and painful time for the entire department of Cesar.

Versos de La Pica

Julio salió de Turquía con papeles por delante, con prisa salió a La Sierra con título y comprobante. Ahí viene Julio, ahí viene Chería, Ahí viene Morroco con la policía. Alisten las hachas, alisten los socos. Vamos a cortarle la línea a Morroco. Julio le dijo a Fredy: "¿dónde está Morroco?". Pero como él era familia, le dijo: "no lo conozco". Luis Mariano estuvo preso, pero no porque robaba. Los que deben estar presos es Julio Asá y sus agregados. Faustino estaba comiendo y una congestión le dio. Los que deben de estar presos fue por culpa de Morroco. Ahí viene Julio, ahí viene Chería. Ahí viene Morroco con la policía. (Recopilados por las Mujeres Guerreras de La Sierra).

Verses from La Pica

Julio left Turkey with papers in hand, He hurried into La Sierra with property titles. Here comes Julio, here comes Chería, Here comes Morroco with the police. Get the axes ready! Bring out the 'socos'! Let's block the way of Morroco. Julio said to Fredy, "Where is Morroco?" But since he was family, he said, "I don't know him" Luis Mariano was imprisoned, but not as a burglar. Those who should be imprisoned are Julio Asá and his cronies. Faustino was eating and became congested. Those who were imprisoned owe it to Morro-CO Here comes Julio, here comes Chería. Here comes Morroco with the police. Compiled by the Warrior Women of La Sierra.

A similar level of organization was demonstrated by the community in the face of the recently defunct company Electrificadora del Caribe

-or Electricaribe-, the company responsible for the distribution and commercialization of energy in the region until 2019, when it was liquidated and fragmented. For years, the company faced financial problems and corruption scandals, as well as constant complaints about the poor quality of the electricity service, particularly in rural areas. This was evident in the frequent power outages, which occurred up to multiple times a day and which led to the constant need to repair or replace electrical appliances, demanding additional expenses. Despite this, households in La Sierra had to pay exorbitant prices for energy, amounting to 600 thousand Colombian pesos per month for each household²⁷ In response to the this, the residents of the community began to withhold payment for electricity service: every time the company staff came to cut off access to the electricity network, the community organized to prevent it. According to the female participants, this act of daily resistance is not born from the desire not to pay, but from the demand for a dignified and decent electrical service.

Thus, by understanding the depth of the struggle to maintain the territory as a common and accessible good, and to safeguard life, dignity and its people, the mining operation allows it to be understood as the maximum form of expropriation (Figure 7.4). The mining industry does not only exclude communities from the use of land within their own territory since its upheavals extend over the entire surrounding territory and its residents. These are also impacts in perpetuity, which are leaving permanent scars on the territory and its people, which will remain even after a mining phase-out, echoing similar perspectives from the female participants from the Wayuu community in the department of La Guajira.

On a smaller scale, renewable energies have also made their first incursions into the territory, offering few alternatives to this form of enclosing the territory. In this regard, the female participants commented on a recent prior consultation process in the community, carried out by the company Black Orchid Solar Management for the 'Pétalo del Cesar' [A Petal for Cesar] project, i.e. a solar park to be built in the CONESICE area.

^{27.} In comparison, a home in Bogotá of the same size and with higher electricity consumption could be paying about 150,000 pesos in the same period.

The consultation²⁸, described by one of the female participants as a 'half consultation' due to its speed and lack of rigor, concluded with the approval of the project by the Community Council, in exchange for minimal concessions, including the promise to hire workers from the community, reforest surrounding areas with native species and a unique contribution of 10,000,000 COP to a community project. The consultation excluded energy purchase and sale negotiations with the community, doing little to alleviate the energy poverty of the community.

Figure 7.4 Outside fence of the CNR company's mining complex, in the vicinity of La Loma and El Paso, in the department of Cesar



Note. Photograph by Felipe Corral, March 2021.

^{28.} The aforementioned prior consultation process (Code: SI-G-01-F-01; Certification No. 0340 of April 6, 2017) was carried out on January 31, 2018. As of the date of publication of our work, the construction of the solar park had not yet started. According to the assertions of the Women Warriors, Black Orchid Solar mentions the poor quality of the electrical network in the area that makes it impossible to connect the solar park to the National Interconnected System (SIN, by its initial in Spanish), the latter being a responsibility of the company Electrificadora del Caribe, liquidated and fragmented in 2019 due to financial problems and failures in the provision of public service for many years.

As an alternative to these renewable energy projects, the Women Warriors propose self-generation from photovoltaic solar systems installed on the roofs of homes and other buildings in the community. On the one hand, this would eradicate the problem of having to occupy, enclose and pave large portions of the territory, required in the framework of large solar parks. The lands could be kept for the exercise of the ancestral economic activities of the communities, while taking advantage of the existing infrastructure for power generation. Self-generation also responds to the demands for a quality electrical service, while assuring a certain level of autonomy for the community, which we will discuss later. In the best of cases, the community itself will own its photovoltaic systems. However, even when this is not feasible due to technical or financial criteria, it is suggested that companies take advantage of the roofs of local communities, negotiating sales contracts with their residents, in order to assure access to an economical and quality electricity service.

7.2 Women Warriors —Seeds of Re-Existence

Women identified traditional gender roles and attributions that relegated them to the domestic sphere. It is worth clarifying that, although men play a much more active role in raising children compared to other accompanied communities, this is still a task culturally associated with women. However, the female participants describe ancestral dynamics much more equitable than those seen today: agricultural activity, for example, was a work shared by men and women, and it was even perceived as an occasion for the consolidation of affective bonds and for the transmission of knowledge through generations. To this day, interviewed women demonstrate this agricultural vocation in their skillful handling of native seeds in community and family orchards.

In addition, the women of La Sierra have occupied a historical role as healers, long before the hegemony of Western medicine. The Warrior Women (Figure 7.5) fluently explain the properties and ways of preparing medicinal plants and today are a reference of knowledge in the region. Similarly, midwifery was an extended activity reserved for women. Today it is a threatened practice, considering that the last midwife in the community is over 80 years old. In the absence of a dedicated recovery of this ancient knowledge, this wisdom will be lost with her death.

"En nuestra comunidad no se ven reflejados [los beneficios de la energía eléctrica] por el mal servicio de energía que tenemos actualmente, que daña nuestros electrodomésticos. Además, en varias ocasiones los cables han quedado expuestos a la comunidad, creando un iesgo de electrocución. Por eso creemos importante buscar otras alternativas que nos suplan un mejor servicio y una energía más limpia y sana para nuestro territorio [...]. La energía es importante porque es útil para nuestro hogar, pero en nuestra comunidad contamos con mal servicio, por lo que queremos aplicar páneles solares en nuestro territorio, ya que nos proporciona[n] una energía más limpia para el planeta".

(Participante, comunidad afro de La Sierra).

In our community, [the benefits of electricity] are not reflected because of the poor energy service we currently have, which damages our electrical appliances. In addition, on several occasions the cables have been exposed to the community, creating a risk of electrocution. That is why we believe it is important to look for other alternatives that provide us with a better service and cleaner and healthier energy for our territory [...]. Energy is important because it is useful for our home, but in our community, we have poor service, so we want to apply solar panels in our territory, since they provide us with cleaner energy for the planet

Participant, Afro-Community of La Sierra

As to the arrival of large-scale coal mining in the region, it should be reiterated that it is displacing agricultural activity as the main source of subsistence of the communities, which occurs, in part, through the enclosure and exploitation of territories previously used for crops, the contamination of water sources and land degradation. With the decreasing viability of agricultural work, jobs are positioned in mining and construction, particularly in the Yuma concessionaire, which manages projects on the Ruta del Sol, and in the commercial sector concentrated in the urban area of Chiriguaná. However, local hiring in the mine or in construction projects is limited, for the most part, to positions for operators, related to characteristics culturally attributed to masculinity such as strength and physical resistance, excluding women from these jobs. In the same way, the recent expansion of the 'Ruta del Sol' required the demolition of commercial posts next to the highway, at the height of the 'Cruce de Chiriguaná', many of which were operated by women from neighboring communities —including La Sierra—, worsening the precariousness of the labor force and the relegation of women to the domestic sphere.

Figure 7.5 Three generations of members of the Warrior Women of La Sierra in their community orchard (Chiriguaná, in Cesar)



Note. Photograph by Narlis Guzmán, May 2021.

Likewise, the consolidation of economic, political and cultural power around mestizo elites in the municipal seat, also a consequence of the ill-gotten appropriation of public resources²⁹, has influenced the spread

^{29.} The municipality of Chiriguaná has seen numerous cases of corruption in recent years. As an example, the former mayor of Chiriguaná, Zunilda Toloza Pérez, did not end her term due to a dismissal in 2019 by the Attorney General's Office, due to irregularities in the election of the local representative —event for which six councilors of the municipality were also disqualified—, as well as to multiple processes and accusations for acts of corruption. In addition, the mayor Carlos Iván Caamaño is currently facing a process of fiscal responsibility carried out by the General Comptroller's Office, before a possible patrimonial detriment of more than 24 million pesos in the execution of a contract for the supply of humanitarian aid (Barrios, 2020).

of racist visions against the Afro-populations of Cesar. Especially the ancestral activities related to healing, developed by women, have been stigmatized as witchcraft, worsening the continuous discrimination of these populations and discouraging practices that contribute to their cultural survival.

"Los nuevos trabajos que han surgido han sido con Drummond, que son pocas personas que trabajan ahí en nuestro territorio. También con Yuma, que es una concesionaria que llegó y nos desplazó y que acabó con una de las fuentes de empleo que teníamos en El Cruce. No solo íbamos los serranos a vender nuestros productos del campo, sino que venían personas de La Jagua, de Rinconhondo, de Curumaní; de todas partes venían a vender sus productos al Cruce. Yuma concesionaria nos desplazó de forma muy discriminada y nos dejó sin esa fuente de empleo, que era una de las más grandes que teníamos sobre todo las mujeres".

(Participante, comunidad afro de La Sierra, Chiriguaná, Cesar).

The new jobs that have emerged have been with Drummond, there are few people who work there in our territory. Also with Yuma, which is a concessionaire that came and displaced us and ended up with one of the sources of employment that we had in El Cruce.

We, people from La Sierra, not only were going to sell our products from the fields, but also people from La Jagua, Rinconhondo, and Curumaní came. They came from everywhere to sell their products in El Cruce. Yuma concessionaire displaced us in a very discriminatory way and left us without that source of employment, which was one of the largest that we had, especially as women.

Participant, Afro-community of La Sierra, Chiriguaná, Cesar.

From the participants' point of view, this exclusion has had a series of differentiated impacts on the women of the community. On the one hand, these dynamics have relegated women to the domestic sphere (Figure 7.6), strengthening relationships of economic dependence on their husbands and reducing their visibility in places of deliberation. Economic precariousness has, on the other hand, forced many women into prostitution, particularly affecting women heads of households and minors. This position of double vulnerability has led to a marked increase in femicides and an intensification of gender-based violence since the arrival of the mine. Likewise, women identified the additional burden of care work, especially in the context of increasing respiratory diseases and genetic malformations in children, as also detailed by the female participants in the department of La Guajira. In addition to this are the accidents related to the deplorable state of the electrical connection, frequent in the community, as well as the increasing number of cases of drug dependence, especially among youth (attributed by the female interviewees to mental health conditions, related to reduced life prospects in the territories).

Faced with this situation, women position themselves as the main voices in defense of the territory, without ignoring important male resistance figures against mining and its impacts on communities, such as Néstor Martínez and Naimen Lara, murdered in 2017 and 2016, respectively. However, it is women who organize themselves and who articulate the process of collective resistance in a more comprehensive way, as demonstrated by the Warrior Women.

Figure 7.6. Cocina de una de las Mujeres Guerreras de La Sierra (Chiriguaná, Cesar), tradicionalmente asociada a la esfera de responsabilidad de las mujeres.



Note. Photograph Narlis Guzmán, agosto de 2020

7.3 Doing School: An Intergenerational Commitment to Subsistence and Sovereignty

Several members of the Warrior Women collective understand themselves explicitly as leaders fighting against coal mining in their territory, although this is an issue in which many of its members are still learning. However, the common element that brings them all together is the desire to build forms of local autonomy, collectively, led by black women (Figure 7.7).

This desire has taken different forms over the years such as a self-managed savings banks, a bakery, a native seeds bank, family and community orchards, a cultural and sports festival, the installation of water filters in the homes of the community, the construction of a House for the Warrior Women and the installation of photovoltaic solar systems. Of these initiatives, the collective fund, the family orchards, the installation of water filters and the Cultural and Sports Festival have been consolidated to date, while the others are in different stages of reflection and/or implementation. Although the Warrior Women have received support in the execution and planning of these projects from different allied organizations, they are proud of the leadership they have adopted in each one of them.

In their way of looking at things, these initiatives seek to strengthen the community —not only the Warrior Women or their families — to transform the relationships of dependency with the mining company and the municipal administration. One of the main obstacles for the continued resistance against the Drummond's operation is identified in the company's efforts to appease legitimate demands through minimal handouts, such as the so-called "white elephants". These are infrastructure projects carried out by the company or the municipality, frequently related to electoral aspirations or with the approval of prior consultation processes, and which demonstrate a high initial investment. However, once the objective of the external actor has been achieved, the financing of the project ceases.

The Warrior Women offer several examples of this practice, most of which occur in four-year intervals, largely coinciding with local election campaigns. They include the construction, in 2011, of a health center — which was left unfinished due to a shortage in funding— and a com-

puter center for the local school, which was abandoned due to lack of personnel and the gradual theft and rust of equipment, two large parks in 2015 —unnecessary, underutilized and maintained only by the community— and the paving of some streets in 2019 —also unnecessary and even risking the collapse of some houses due to the use of heavy machinery—. Another example is observed at the end of 2020, when the channeling of a stream that runs through the community began, with the argument of mitigating the risk of flooding, even though the stream had never overflowed.

The canal, which has walls almost three meters high, does not have a safety railing, posing a significant risk for children in the community. Since its construction, participants report the stagnation of the water, causing bad smells and the presence of mosquitoes, as well as the development of related diseases. All the above occurs in a community that does not have access to a central gas or drinking water service, or a quality electricity service

Figure 7.7 The Warrior Women of La Sierra open their savings box as part of one of their bimonthly meetings



Note. Photograph by Óscar Vargas, March 2021

Mire, vea, la obra esa que están haciendo [señala un canal en construcción, con paredes de 3 metros de altura y sin barandas de seguridad], le dije. Son casi seis mil millones de pesos, ese fue el beneficio que dejó a los negritos. Lo que están haciendo ahí es un río que cualquiera se ahoga ahí, es un peligro. Con los niños, con cualquiera, pierde el equilibrio... Porque al parecer no le van a poner barandas. Eso es una bomba. Viene un niño, una vaca, que se hava venido de Rinconhondo, de allá de Santa Isabel, vienen ahí y se matan. Bueno, seis mil millones...".

(Entrevistado, comunidad afro de La Sierra, Chiriguaná, Cesar).

Look around and see the work they are carrying out [points to a canal under construction, with 3-meter-high walls and without safety railings], I told him. It took almost six billion pesos to build, that was all they left for us, black people. What they are doing there is a river where anyone can drown, it is dangerous. Children, or anyone, could lose his balance... Because apparently, they are not going to put railings on it. That is a social time bomb. A child comes, a cow, which has come from Rinconhondo, from there Santa Isabel, they come there and kill themselves. Well, six billion...

Male interviewee, Afro-Community of La Sierra, Chiriguaná, in Cesar



In this context, several of the projects developed by the Warrior Women aim to unmask the false promises of the white elephants, subverting the logic of dependency through the self-managed provision of basic community services. For example, in 2020, during the height of the CO-VID-19 pandemic and in the most intense period of mobility restrictions in the country, the Warrior Women led an international fundraiser to buy and install 250 EKOFIL water filters in households in La Sierra, covering more than 80% of the community's population (Figure 7.8).

Manufactured from ancestral technologies, the filters remove microbes and heavy metals from the water efficiently, assuring access to drinking water. Individually, the complete structure of the filter costs around 250,000 Colombian pesos (around 70 USD in 2021), requiring its replacement every three years, at an approximate cost of 30,000 Colombian pesos (around 8 USD in 2021). Although the initial installation required external support, low cost in the long term allows for families themselves to take care of their renovation and for the community to receive discounts for bulk purchases. Of 250 water filters installed in July 2020, a year later, La Sierra still has 247 in operation, demonstrating the high level of ownership they have enjoyed in the community.

Figure 7.8 Arrival of 250 EKOFIL filters to the Afro-community of La Sierra (Chiriguaná, in Cesar), in May 2020, after an international collection led by the Warrior Women of La Sierra and supported by RICO



Note. Photograph by Narlis Guzmán, May 2020.

Likewise, a project to install photovoltaic systems in the community is being discussed, and several questions have emerged in regards to the purpose of these systems: will they be used for personal or family consumption? Will they focus on expanding public lighting in the streets and in the central park? Will they be used to support productive initiatives by the Warrior Women and the community? This last alternative has emerged as the most viable option because it allows prioritizing investments towards projects that truly strengthen the community in general. Currently, RICO and the Universidad del Magdalena are supporting the design of a photovoltaic solar energy project to feed a common space for the Warrior Women, which serves both as a space for the development of a common enterprise around the Afro-bakery, as well as for a self-managed Women's House, providing care and training opportunities for women in the territory. In other words, solar photovoltaic systems are not seen as an objective in themselves, but as a mechanism to assure the viability of other community sovereignty initiatives.

Once these external limitations caused by poverty, exclusion and even systematic violence have been overcome, the Warrior Women recognize the need to strengthen internal decision-making structures, extending their struggle and integrating the rest of the community, even men. Although the group has been very successful in positioning its activism outwards, even establishing international solidarity networks, it has had difficulties making itself known within the community itself, in addition to the disagreements with CONASICE, particularly about its position against mining. In this way, the objective of this process must be to break the internal hierarchies that have been fed by unilateral and unbalanced relationships with the mining industry and the municipality, to ensure that the entire community can access the spaces for deliberation and negotiation, currently limited to a few people. Although the Cultural and Sports Festival, as well as the installation of the water filters, have been important turning points, there is still a long way to go. A last element that the Warrior Women attribute to their commitment to community sovereignty is the inclusion of boys and girls in all spaces of education, deliberation, and action. This is what they call 'doing school'. This innovative commitment manages to harmonize the care tasks imposed on each member with their desire for participation and leadership in the group, while integrating young men and women into the struggle, guaranteeing its permanence through time.

"Los líderes comunales se reunían, se hacía una consulta general, lo que hoy día no se hace.

Hoy día quieren cuatro personas, los líderes, que son los presidentes de negritudes, presidentes de Juntas de Acción Comunal. Se reúnen, por decir, vamos a hacer tal obra, cualquier vaina del municipio... Yuma... Se reúnen los presidentes con los que vienen de Yuma. Ellos no son la comunidad, ellos no son el pueblo, y tampoco le dan la información a la comunidad. Eso está pasando aquí, y anteriormente no se daba eso. Aquí antes las cosas se hacían con conocimiento de todo el pueblo, marchaba mejor en ese sentido".

(Entrevistado, comunidad afro de La Sierra).

The community leaders met, a general consultation was held, which is not done today.

Today they want four people, the leaders, who are the presidents of Community Action Councils. They meet, to say, we are going to do this or that work, anything in the municipality ... Yuma ... The presidents meet with those who come from Yuma. They are not from the community, they are not the people, and they do not give the information to the community. That is happening here, and previously that was not the case.

Here before, things were done with the knowledge of the whole town, it was better in that sense.

Male interviewee, Afro-Community of La Sierra

Main Ideas in Chapter 7:

La Sierra is a village of the municipality of Chiriguaná, part of the mining corridor of the department of Cesar. La Sierra is officially recognized by the Ministry of the Interior as an Afro-community, represented in the La Sierra, El Cruce and La Estación Community Council (CONESICE by its initials in Spanish). The community is located just 15 kilometers from the Pribbenow mine, owned by the multinational company Drummond, and less than a kilometer from the Ruta del Sol, the main corridor that connects the geographic center and south of the country with the Caribbean coast. The Warrior Women of La Sierra, with whom this research was developed, are a local group that originated in 2013. They have been a militant voice against the mining industry and have articulated with environmental movements in Colombia and Europe. The Warrior Women want to implement self-generation projects based on solar panels installed on the roofs of their homes, to be independent from the poor electricity service in the region, while taking

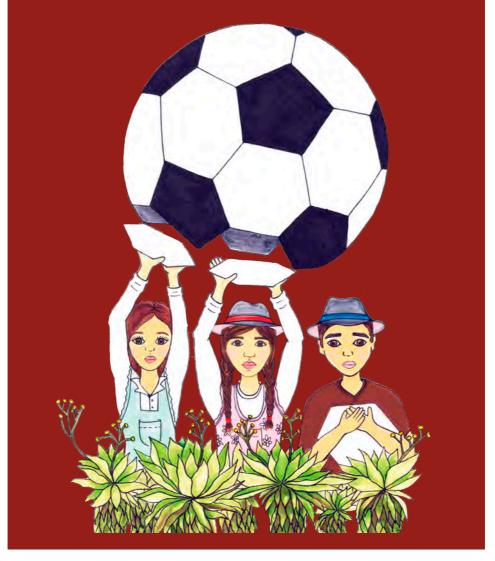
advantage of existing buildings and infrastructure so as not to occupy extensions of territory.

- The Warrior Women identify the roots of their community with the evasions of maroon former slaves since colonial times. The vision that they present of their territory is linked to their defense against privatization attempts, as well as to the protection of their residents from external aggressions. These understandings also have manifestations in practice that include community and celebratory instances dedicated to the destruction of landowners' enclosures and community security schemes. The coal mine and the new megaprojects of solar parks are interpreted as the maximum expropriation of the territory, excluding nearby communities from their free enjoyment in present and in perpetuity, because of their destruction.
- The participants report a worsening of the conditions of women since the arrival of mining in their territories. Traditionally, women participated in agricultural work like men and worked in the commercial sector of the municipality, as well as on the main roads, with important cultural practices, among which the healing and midwifery activities stand out, which were highly respected in their communities. Coal mining made agricultural activity less viable, while the construction of the Ruta del Sol demolished many commercial positions owned by women, and the consolidation of political power in the municipal seat influenced racist conceptions that stigmatized the ancestral knowledge and healing practices. All of this put women in a precarious position, forcing many -even female minors- into sexual exploitation to support their families or abuse of narcotics. This in turn had a negative impact on the prevalence of violence against women and femicides in the territory. A central axis of the mining-extractive transition should be the accompaniment of victims of sexual violence and abusers of psychotropic substances in the vicinity of the mines. Women also position themselves as the main voices against the destruction of the territory. A central axis of the mining-extractive transition should be the accompaniment of victims of sexual violence and abusers of psychotropic substances in the vicinity of the mines.
- The Warrior Women want to build forms of local autonomy, led by black women. They have pursued this ambition through numerous own initiatives

focused on food sovereignty through community orchards and native seeds, spaces for cultural integration, collective savings schemes, solar power, and others. These efforts seek to transform the dependency relationships of the communities with the mining companies and the Government, while they solidify the autonomy of the community, offering opportunities for the strengthening of bonds and the consolidation of equitable decision-making dynamics, as well as the inclusion and teaching of children and young people, who will be able to maintain the defense of the territory in the long term.



Chapter 8. Between the Páramos and the City: Peasant Women Create Alternatives to Coal Mining in Monguí, Boyacá





Monguí is a municipality located in the Sugamuxi region, in the department of Boyacá, with a historically agricultural vocation and with a total population of more than 5,000 inhabitants. Monguí is part of the Network of Heritage Towns of Colombia, for its artisanal technique in leather balls manufacturing, and is known by the nickname 'the most beautiful town in Boyacá', for its colonial urban area and for its proximity to the Ocetá-Siscunsí páramo, also known as 'the most beautiful páramo in Colombia.".

According to DANE, in 2018 more than 77% of the economic activity occurred in the tertiary sector, which includes the provision of different services (e.g. banking, commerce, tourism, education, etc.), throughout which is added the manufacture of balls, in addition to the soccer balls manufacturing, among other activities that in 2018 represented almost 13% of the economic activity of the municipality. Coal mining in the sinkhole also stands out, although it is slowly being displaced by extensive farming and, more recently, by tourism. Figure 8.1 shows a map of Monguí, highlighting important natural points such as its páramo zones, as well as neighboring industrial zones and the mining titles in force in its vicinity.

The pedagogical process in Monguí was developed with an initial group of 20 women heads of household, most of whom worked in the manufacture of soccer balls, an emblematic industry of artisan women. The group was consolidated four months before starting the process to carry out a project for the production of antibacterial solution and face masks, supported by RICO, with the aim of donating sanitary supplies to the community and offering an alternative to women when the soccer ball factories were closed in March 2020, on the occasion of COVID-19

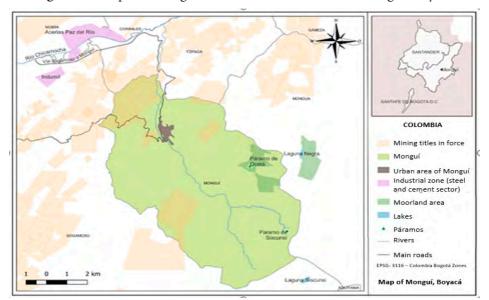


Figure 8.1 Map of mining titles and industrial zones in Monguí, Boyacá

Note. design by Lorena López.

In contrast to the communities in La Guajira and Cesar, which have long histories of struggle and collective work, and a well-established ethnic and cultural entity, many of the female participants in Monguí met for the first time during the pedagogic process. Due to this, it was much more challenging to reach deep discussions on the thematic axes, denoting a lack of confidence among the women, but also towards the facilitating team. It should be noted that the three facilitators of the pedagogic process were men. Although this fortunately did not have serious consequences in the Caribbean communities, it is possible that it has limited the discussions in the case of Monguí.

Finally, due to the lack of a pre-existing collective identity among the female participants, the vast majority of reflections during pedagogic process are given from an individual or family perspective, and discussions from the 'community' were hardly achieved. However, we observed several valuable clues in this first approach, which may inform future processes of dialogue with these and other groups of women and peasants in Boyacá and, in general, in the Andean region. In the same way,

we note that it is essential to deepen and multiply these explorations, when observing the comparative scarcity of literature on the impacts of sinkhole mining in Colombia, excluding analyzes of illegal mining.

8.1 Female Entrepreneurship as a Commitment to Autonomy

In Monguí, gender divisions appear to be much more marked than in the other accompanied communities. In addition to the relegation of women to do housework, the female participants report that the abandonment of children and the home by men is very frequent, adding even more pressure on women. Likewise, women recognize gender violence as a very relevant problem in the community. In particular, they report different instances of domestic violence, also related to the substance abuse such as alcohol and the machismo prevalent among miners as a cultural appropriation, so that the 'miner' is known as one who 'has money', is 'a drunk' and 'quite a womanizer'.

Initially, women viewed gender-based violence only within the domestic sphere. From this perspective, the participants in the pedagogic process, who are all female heads of household, said that they 'do not suffer from machismo' since they became independent, although they do recognize it in the case of married women in their community. However, later on, the female participants began to recognize other instances of violence in which they were victims and participants. Specifically, they recognized that the conservative culture and the practice of gossip affect women more strongly. Women who do not marry or divorce are stigmatized through labels such as 'whore' or 'easy to get', forcing an inconvenient relationship with their partners, even in risky cases. These expressions even apply to single or married women who are alone in public space, without the company of their father, brother, or husband. These obstacles to mobility also limit the actions of women in their communities, impeding their access to forums for participation and decision-making, as well as to workplaces. This violence escalates to other scenarios in which environmental leaderships are compromised, with several women who have been threatened because of their complaints regarding the burning of the páramos.

"La mayoría somos cabezas de hogar, y la verdad, [la iglesia] es nuestro refugio. Todas opinan lo mismo, porque todas nos vamos para allá cuando algo nos pasa. '¿Por qué no vamos un ratico a la iglesia?' [...]. Para nosotras, es porque somos el grupito, siempre hemos estado unidas. Por lo menos yo hago parte de la Junta de Acción Comunal. Siempre he tenido mi grupo de madres cabeza de hogar. Tenemos un grupito con quienes siempre hemos trabajado. Si alguna está mal, pues ayudarse. Lo que uno siempre le recomienda a una amiga o a una compañera de trabajo es: '¡paguemos una misa' y, si necesitamos plata para pagar una acción de gracias, lo reunimos. Siempre hemos tenido nuestro grupo de madres cabezas de hogar porque la mayoría de mamitas son casadas. Ellas viven en su entorno, en sus hogares, entonces no comparten mucho como nosotras, que somos más liberadas, porque no tenemos quién, entonces nadie nos molesta. Nosotras con nuestros niños nos reunimos y salimos con los niños, pero entonces a las mamitas casadas no las podemos invitar porque hay conflicto. ¡Es machismo!".

(Participante, comunidad campesina de Monguí).

Most of us are heads of household, and to be truthful, [the church] is our refuge. They all think the same, because we all go there when something happens to us as women. 'Why don't we go to church for a bit?' [...]. There we met, because we are indeed a cozy huddle, and we have always been united. At least I am part of the Community Action Board. I have always had my huddle of mothers who are heads of household. We always huddle together to work. If somebody is in trouble, we help each other. What one always recommends to a friend or a coworker of our huddle is: 'Let's pay for a mass' and, if we need money to pay for thanksgiving, we gather it. We have always had our huddle of mothers who are heads of household, because most of the mothers are married. They live in their environment, in their homes, so they don't share much like we do, because we have more freedom, and we are women without husband, so nobody bothers us. We huddle together with our children and go out with them. That's why we cannot invite married mothers because there would be conflict. That is machismo!

Participant, peasant community of Monguí

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These limitations were explicitly manifested in the course of the pedagogic process, as well as in the project for the production of face masks and antibacterial solution (Figure 8.2). On the one hand, many women reported conflicts they were having with men in their family environments, who were calling them 'drunks' for leaving the home to meet regularly with other women in the community. These pressures even led some to withdraw in the first weeks of the process. Later, however, some women even reported that they were being pressured by the soccer ball factories to return to work, as a result of a management carried out from the municipal administration. They tried to convince them by saying that promoting a women's entrepreneurship would never be successful in Monguí and that the soccer ball industry would be the only secure employment for them.

Figure 8.2 Delivery of biosafety supplies such as antibacterial gel and face masks manufactured by female heads of household, within the framework of a project supported by RICO in September 2020.



Note. Photograph of María Soto.



"Aquí, estamos nosotras emprendiendo ahorita, pero es que aquí las mujeres somos más emprendedoras que los hombres. Para los hombres, su fuente de empleo es eso, y de ahí no van a salir. Nosotras, las mujeres, somos más pujantes. A los hombres no les gusta eso; no les gusta que una los opaque. A mí me enseñaron a trabajar en lo que

Well, right now we are starting up, the fact is that here women are more entrepreneurs than men. For men, their source of employment is mining, and they are unwilling to leave the mine. We, women are more vigorous. Men don't like that; they don't like to be overshadowed by women. My parents taught me to work in whatever comes, whatever comes out.

venga, lo que salga. Si nos toca irnos a sembrar en mi campo, no importa. Nos toca ir a vender el cultivo, vamos y lo vendemos. Si nos toca hacer tapabocas, vamos y los hacemos. Si nos toca ir a una casa o apartamento, o si nos toca ir a cocinarles a mineros y obreros, pues ;lo hacemos! [...]. La mayoría de hombres que trabajan en las minas son personas que no tuvieron estudios, que no terminaron quinto de primaria. Si [en la mina] se ganan un sueldo de 600 mil y van a salir a jornalear para ganar 200 mil, pues ellos dicen 'no me sirve'. Ellos donde ganan más, pues allá se quedan. Allá están porque no se quieren salir. La mayoría de los hombres acá son mineros. A ellos les parece injusto tener que salir de allá para trabajar, por ejemplo, en la construcción, que es otro sector fuerte. Allá les pagan como 25 mil al día, que tampoco les sirve. Muchos tienen familias de cinco o seis personas, deudas bancarias que tienen que pagar, o que están pagando la casa, o tienen los niños estudiando [...]. Ellos ya se acostumbraron a ganarse ese dinero, porque con eso saben que su familia va a tener qué comer, con eso ellos enfrentan todo".

(Participante, comunidad campesina de Monguí).

If we have to go and sow in my field, it doesn't matter. If we have to go sell the crop, we go and sell it. If we have to make face masks, we go and make them. If we have to help with the housekeeping of an apartment, or if we have to go cook for miners and workers, well, we do it! [...]. Most of the men who work in the mines are people who did not have schooling,

who did not finish fifth grade of primary school. If [in the mine] they earn a salary of 600 thousand and they are going to go out to work to earn 200 thousand, then they say, 'it doesn't work for me.' If they earn more, then

they stay over there. They are in the mine because they don't want to leave it. Most of the men from here are miners. They think it would be unfair to them to leave the mine to work, for example, in construction, which is another strong sector. There they earn about 25 thousand a day, which doesn't help them either. Many of them have families of five or six people, bank debts that they have to pay, or they are paying for the house, or they have children studying [...]. They are used to earn as miners, because with that money they know that their family will have something to

eat, and cover all their expenses.

Participant, peasant community of Monguí

Although it will be necessary to contrast the real employment statistics in the mining sector in these municipalities to determine the economic dependence in the municipality and in the region, the mining phase out plan must consider training plans and job transition for miners to other industries. In the process of identifying these employment alternatives, it will be essential to consider and include women, due to their unique experience in the development of local enterprises. To this must also be added the opening of the labor market to women; especially women heads of households who are at a comparative disadvantage in contrast with men and other households when it comes to provide for their children, as well as married women, forced to live under economic dependence on their husbands for lack of work alternatives. Finally, a wide-ranging dialogue should be promoted with the residents of the territory, aimed at transforming the existing preconceptions about women, allowing them to enter fully and with full rights into the workforce.

8.2 Work and Territory: Making Agriculture Viable to Overcome the Mining Industry

Contrary to the female participants from the other accompanied communities, the female participants from Monguí rarely refer to their territory at a community scale. Most of them refer to specific spaces, important for themselves or for specific groups of people. Their first point of reference to the territory as a collective space and co-responsibility is not the community or the natural environment, but the private or family space: home. Female participants perceive this place as a safe space, destined to the care of themselves and their children, related to notions of independence and self-sufficiency. A recurring element in the conversations is the desire of many women to be able to buy their own house, since many of them live in rent.

Even so, the female participants show a certain longing for the rural territory, articulated particularly from the agricultural work carried out by their ancestors. The women from Monguí highlight this way of life for the capacity to produce everything that is consumed, including food or clothing, such as the ruanas from Boyacá. While a vague desire 'to return to the countryside' was expressed, for almost all women this is understood more as a fantasy than a realistic prospect, taking into account the high price of land and the economic unfeasibility of small-scale farming, in addition to the high price of chemical fertilizers and pesticides. Despite these limitations, the vast majority of the female participants said that they would like to live in the countryside, on a small piece of land they owned, if the right conditions were given.

In addition to private spaces, women indicate other important places for the community such as the church, the school, and their workplace. In both cases, the participants see these places as spaces for interaction, friendship, and camaraderie. In general, they are crucial places for the establishment of affective bonds. The church has a special relevance for women because, in addition to being a cornerstone for their spiritual life, it offers an opportunity to share with other women in the community, without having to face prejudices and rumors. In particular, the female heads of household meet every Sunday and spend the afternoon together, as well as with their children, in the town square after the mass.

The female participants also began to identify with the workplace that they were sharing by groups for making face masks: in addition to represent their livelihood, they associated this space with a channel of socialization with other women. In an unfavorable context that seeks to isolate women, these meeting spaces are rare and highly appreciated by the participants. In the same way, the school is understood as a collective space to which many participants look with melancholy, in front of which they recognize that it continues to be a fundamental place for their children, and young people in general, to learn to live together in community.

Figure 8.3 Community mapping carried out by one of the working groups in the peasant community of Monguí, within the framework of the pedagogy



'Community re-existence: energy transition, gender and sovereignty'

Note. Photograph by María Soto, August 2020..

In the same way, they recognize specific elements of the natural environment, such as the waterfall, the Otí well or the Ocetá-Siscunsí páramo, which once more they relate to instances of camaraderie or religious celebrations (Figure 8.3). However, they also point out the importance of these ecosystems —especially the páramo— for the subsistence of the people, as they are the main source of water for several surrounding municipalities. For this reason, they expressed concern about the forest fires that were reported throughout 2020, although many attributed it to 'the unconsciousness' of some residents of the municipality or tourists, a few others associated it to deliberate actions by actors related to the extensive farming.

Figure 8.4 Ocetá-Siscunsí páramo, in the municipality of Monguí, at more than 3,200 meters. In recent decades, the páramo has been affected by deforestation actions and by soil degradation due to extensive farming and mining in the sinkhole



Note. Photograph by Óscar Vargas, May 2021

"Lo que decíamos de la zona minera: es una zona peligrosa, donde ya perdimos una escuelita. Hay unas casas que ya también se derrumbaron porque el suelo está ya demasiado averiado. Cualquier cosa se hunde. Por lo menos ya perdimos una escuelita que llevaba muchos años educando. Ya tocó reformarla en otro lado. Y esa zona es muy contaminada. Allá ya no hay agua. La poca gente que vive allá, no sé cómo hará para vivir allá. Yo creo que si les llega agua dos o tres días a la semana para vivir, es mucho. Allá ya no hay agua, y me imagino que debe ser por la misma contaminación del agua que sale de las minas [...]. Prácticamente esa zona es casi como un desierto. Eso es algo que a uno lo doblega. En nuestra infancia, mi mamá nos llevaba allá a sembrar fríjol y trigo, que se daba mucho allá, pero ahora no crece nada. Entonces sí, es porque uno recuerda su infancia, cuando a uno lo llevaban por allá a esos cultivos [...], más que todo la gente cultivaba. Ahora de cultivos ya nada; es una zona perdida para cultivos".

(Participante, comunidad campesina de Monguí).

This is what we were saying about the mining zone: it is a dangerous zone, where we have already lost a little school. There are some houses that have already collapsed and fell because the land is already too damaged. Anything sinks. At least we have already lost a little school that had been educating for many

years. It had to be located somewhere else. And that zone is very polluted. There is no water there. The few people who live there, I don't know how they should live there. I think that if they get water two or three days a week to live, it is a lot. There is no water there anymore, and I think it must be due to the same contamination of the water from the mines [...]. That zone ended up as mere desert. That is something that really saddens one. In our childhood, my mother used to take us there to plant beans and wheat, which were widely grown there, but now nothing grows there. So, yes, absolutely this is a cause for concern because you remember your childhood when you were taken there to grow those crops [...]. The soil is not fertile and cannot be planted again.

Participant, peasant community of Monguí

Regarding coal mining in the sinkhole, it is worth noting that no new mining operations have been opened at altitudes greater than 3,000 meters above sea level in accordance with the provisions of the Páramos Law approved in 2018 (Páramos for Life), and that existing ones are in an accelerated phase out process, with the exception of illegal operations (Figure 8.4). However, the mines still affect various ecosystems of sub-paramo and high Andean forest in the vicinity of Monguí, as detailed by several participants. In the mining area of the municipality, the land has been slowly degraded, reducing its agricultural productivity and leading to gradual erosion of the land. The buildings - and even an old school -

have fallen over the years; This, added to the low productivity of the soil, has led many of its inhabitants to migrate to the urban area or to other municipalities. The few people who still cling to this territory suffer under precarious living conditions and a constant state of risk of collapse.

When reflecting on these impacts in the context of local understandings of the territory in relation to work, especially land, community building, and even religious and spiritual contemplation, the true extent of these effects on the population is appreciated (Figure 8.5). Without excluding other important socio-economic reasons, coal mining is responsible for instigating processes of uprooting and loss of knowledge and ancestral practices of agricultural work. Furthermore, this exodus does not end in the urban area of Monguí; the high prices of housing and consumer products, high due to tourism, as well as the lack of social cohesion and solidarity bonds, make the only realistic perspective for young people is to move to Tunja or Bogotá. The participants painfully relate the cases of young people who do not manage to emigrate —many begin to suffer addictions to alcohol and narcotics, this being another of the major problems identified in the municipality, by putting the very survival of the community in question.

Figure 8.5 Result of the community mapping exercise in one of the working groups in the peasant community of Monguí, carried out within the framework of the pedagogy 'Community re-existence: energy transition, gender and sovereignty'



Note. Photograph by María Soto, August 2020



"Por una parte, [la zona minera] es dolorosa porque ya no se puede sembrar nada, pero la otra es que ahí trabajan muchos hombres. Muchos hombres que de ahí ganan su sustento a su casa para sus familias. También a uno por ese lado debe darle alegría ver que allá hay trabajo; ¡aquí como no hay trabajo! Allá por lo menos encuentran 200 mil o 30 mil pesos al mes. Eso para ellos es una fortuna en este momento [...]. ;Cómo se puede transformar? Terminando la minería, pero igual el terreno ya está infértil, muy seco. Igual hay muchas personas que dependen de ese sustento, entonces no se puede acabar la minería. ¡Dependemos de ella! No se puede acabar la minería".

(Participante, comunidad campesina de Monguí).

On the one hand, [the mining zone] is painful because nothing can be planted anymore, but on the other hand, many men work there. Many men earn their living at home for their families from mining. Then, in that respect one should be happy to see that there is work over there. It's becoming harder and harder, because there is no work here! They can find at least 200,000 or 30,000 pesos a month over there. That is a fortune for them at the moment [...]. How can the situation be changed for the better? By stopping mining, but the soil has already become infertile and too dry. In addition, there are still many people who depend on that livelihood, so mining cannot be ended. We depend on it! Mining cannot be ended.

Participant, peasant community of Monguí.

Despite the above mentioned, there is no consensus among the female participants regarding the relevance of a mine phase out, although they do recognize the importance of formalizing illegal mining operations. Female participants lament the health and environmental impacts of coal mining. However, some argue that being linked to the employment of so many local miners, an immediate mining phase out is not feasible or desirable. In their words, it is not viable to leave the miners' families without sources of subsistence and, even if it were possible to relocate them to other productive sectors, they believe it is unlikely that the miners would agree, due to their lack of training in other areas and because of the substantial financial benefits of working in the mine.

An important point here may be the rethinking of agricultural work as a source of subsistence, with a view to both a mining-extractive transition and a broad and comprehensive transition. In this sense, it will be important to train miners and invest in properties so that they can carry out these tasks and support their families. However, in the long term it will be equally important to work under fairer market conditions, such as dialogue on ancestral planting practices without agrochemicals, among others

Additionally, it is key to assure access to affordable electricity in their homes. Although the electricity service in Monguí is comparatively good, its cost is high, particularly for female artisans who had to move their main activity to their homes during the COVID-19 pandemic, having to personally pay the cost of electricity for their sewing machines. For this reason, the possibility of installing photovoltaic systems for self-generation was discussed. However, several obstacles to its implementation were also identified. On the one hand, the reduced solar radiation -still considerable since it is found in the tropics, but not comparable with that present in the Cesar and La Guajira departments— would have a negative impact on the amount of energy produced and, therefore, on the investment required. On the other hand, as they do not yet have their own production processes that can take advantage of this energy, these systems would only be used to supply the consumption of individual households, subtracting comparative advantage. For these reasons, it is considered that it is more viable to work towards more equitable electricity prices, although in the long term it is worth considering these tools within the framework of ambitious efforts to strengthen organizational and productive autonomy in the municipality

8.3 Sorority, Savings and Inclusion for Local Autonomy

A commitment to community sovereignty is identified, incipiently, in the desire expressed by the female participants to produce their own, including food, clothing, fuel, etc., through their many entrepreneurships, as well as their aptitudes for textile work. Indeed, the participants express the will to move away from the consumption model in order to be self-sufficient when working the land.

Within the framework of this life project, the female participants allude to the ways of life and work of their ancestors, focused on subsistence from agricultural work and in the community in large households with numerous members. Particularly noteworthy is the figure of the respected older woman, the 'Matrona', a reference of the traditional culture of Boyacá who, to a large extent, structured life in the family and in society, assigning roles and obligations to each member and maintaining a longterm vision for the collective. Without ruling out sexist dynamics of different kinds in this type of household, it is true that women occupied a more prominent place in private decision-making than today. One of the participants infers that this is due to the role of women in managing the domestic economy. In those times, despite having limited income in addition to little access to banking schemes—, saving was a common practice among families in the region. In a few years of work, households could afford to expand their farmland to accommodate growing families. Why, then, are homes today —and especially the homes of male miners condemned to make a living daily?

On the one hand, it is true that, although the income of miners is higher today in relation to what agricultural households earned in past decades, the prices of consumer products are also higher than what a family required to subsist at that time. Consequently, mining transformed the productive dynamics of the community, but it is not accurate to affirm that it has brought with it better living conditions (Figure 8.6).

Figure 8.6 Coal mining in a sinkhole on the slopes of the Ocetá-Siscunsí páramo, in the municipality of Monguí (Boyacá)



Note. Wikimedia Commons License

On the other hand, a possible answer to this question can be found in the many examples of popular culture in the region, such as the folk music El Minero. This carranga talks about the dangers experienced by the miner in the sinkholes and are interpreted as a justification for spending the salary 'on luxury, on liquor and on women'. These cultural symbols, together with deep-rooted practices of excluding women from deliberation and decision-making spaces, lead to a kind of uprooting in miners (if not geographic, at least in terms of self-perception and life plan). Contrary to their ancestors, who lived and worked to provide for supporting the collective —the family or the community— miners tend to focus, first of all, on their individual satisfaction, tending to western and urban lifestyles (Figure 8.7). The aforementioned does not exclude the fact that there are undoubtedly many miners dedicated to the sustenance of their children and families. However, these productive logics do not cease to have important impacts on the capacity of households to think beyond the daily, making long-term plans, oriented in such a way that the man can one day leave the mine and dedicate himself to a profession safer and closer to his family.

Figure 8.7 Photograph taken on the ascent to the Ocetá-Siscunsí páramo in the municipality of Monguí, where coal mining in the sinkhole is debated as one of the major mining industries. In the background, in the valley, you can see the urban area of the municipality



Note. Photograph by Óscar Vargas, October 2019.

In contrast, the female participants recognize the deep relationship that their own spaces of labor and economic emancipation have for women with the strengthening of bonds of solidarity and community. Towards the end of the pedagogic process, they expressed their desire to continue working together, recognizing the contributions that each one made to the pedagogic process, both from a material logic versus the production process, and from a socio-emotional perspective regarding the functioning of the working group. In addition, these spaces provided opportunities for strengthening relationships of confidence, through learning and joint decision-making.

Having said that, it is essential to mention that the pedagogic process also went through different moments of internal conflict among the female participants, demonstrating the lack of confidence relationships in the community, beyond the family circle itself. From an initial group of 20 female participants, only seven successfully completed the pedagogic process; the other participants withdrew at different points, because of economic, social or family pressures to return to work or home, or even the inability to continue in the work group due to conflicts with other colleagues. The lack of articulation among the women from Monguí poses serious challenges when thinking about the consolidation of a group with an impact on the local political process. This is the case for (1) the economic pressures faced by women heads of households for the sustenance of their families and the time constraints that this entails; (2) the pressure exerted from the companies and the municipal authorities to avoid the consolidation of a work group, using the logic "why risk a safe job in the soccer ball factories?"; and (3) the implicit and explicit violence to which women are subjected.

The latter issue refers both to the aforementioned violence inherent in the culture of gossip, and to the physical violence exercised in private and public spaces. The women expressed indecision in consolidating themselves as a group in order to seek visibility and political influence in the town, for fear of receiving threats. One of the participants in the process, a nationally known tourist guide and local environmental leader, related that she has received more threats in recent years related to her work to denounce and defend the páramo, and how —in 2018— unknown men burned her workplace at night.

"Trigo, papa, haba, arveja, zanahoria, cebada, hortalizas; hay mucho para sembrar, pero los químicos, los abonos, los fungicidas matan la tierra [...]. A nosotras de chiquitas nos enseñaron a trabajar el campo. Nosotros hicimos una vez un derecho de petición al Banco Agrario para que llegara un recurso, que llegaran unas regalías a nuestro municipio: la ayuda principal que es para empezar. Yo creo que si nos ayudaran un poquito con el apoyo económico, yo creo que todos emprenderíamos porque no tenemos eso para invertir o, si tenemos, nos da miedo. Necesitamos un Gobierno que nos apoye, porque Boyacá está mal con eso. A uno le da miedo ir a sacar un préstamo porque, ;cómo lo vamos a pagar? Si tuviéramos un apoyo y nos dieran un kilo de arvejas y abono orgánico, ya sería mucho más fácil, o la parte de los terrenos. ¡Casi ninguna tiene terreno propio y no hay plata! Lo que ganamos es para comer cada día [...]. En mi caso, yo sí tengo donde sembrar, pero lo mismo, no tengo cómo invertir. Me gustaría llevarme a mis amigas para que sembraran conmigo, pero tampoco tienen cómo invertir. Queríamos sembrar papa, pero no se puede. Estamos en el proyecto".

(Participante, comunidad campesina de Monguí).

There is a lot to plant —wheat, potato, broad bean, pea, carrot, barley, vegetables; but chemicals, fertilizers, fungicides kill the soil [...]. As little girls they taught us to prepare the soil. With a petition once we asked the Agrarian Bank for a resource to come, for royalties to come to our municipality. The main aid is to be able to start up. I think that if they helped us a little with financial support, we could be more entrepreneurs, but unfortunately, we do not have the necessary funds to invest or, if we get some money, we are afraid

of starting up. We need a government that supports us, because Boyacá is very bad with all that. One is afraid of taking out a loan because, how are we going to make payments? If we had support and they gave us a kilo of peas and organic compost, it would already be much easier, or a parcel of arable land. Almost none of us have our own land -there is no money! What we earn is to eat every day [...]. In my case, I do have a parcel to sow, but it's all the same, I don't have a way to invest. I would like to take my huddle of female friends to plant with me, but they don't have the way to invest either. We wanted to plant potatoes, but we can't, that is an intention. We are in the project.

Participant, peasant community of Monguí

Although these instances of violence were more related to struggles against extensive farming than coal mining, an additional mechanism was also identified, through which mining exercises power over decision-making at the municipal level. One of the female participants explained how the miners, when meeting at their lunch hours, have informally collectivized. In these spaces political support is discussed and decided at times of elections. Being such a large group, it is understood in the community that, in coordination or not, miners are a fundamental constituency for municipal elections. Although it is positive that the community in general, not just a few elites, have that level of political influence, it is highly problematic that these spaces almost always exclude women..

"Eso da tristeza: subir a los páramos y ver que todo se está muriendo, que se está quemando. Nadie es consciente, no denuncia. Las personas que viven cerca no denuncian de pronto por miedo de meterse en problemas, que alguien los amenace. Entonces la gente se queda callada, no hay esa confianza de denunciar, de comentar, hablar. Acá no se hace nada, acá es un pueblo que... a pesar de ser un pueblito muy lindo y todo, pero además es un pueblito bastante problemático; le da miedo hablar a uno, la verdad. Por ejemplo, a uno le da como miedo salir a los medios... Recibe amenazas... Como nuestra líder en el grupo, que es buena líder, pero a pesar de todas sus denuncias recibió fue amenazas. Eso lo obliga a uno a quedarse callada. No hay apoyo de la comunidad, más que todo de las cabezas principales, de las principales autoridades del pueblo".

(Participante, comunidad campesina de Monguí).

What sadness to go up to the páramos and see that everything is dying and burning. Nobody is aware, and no one says a word. People who live nearby do not dare to make any denounce for fear of getting into trouble, that someone threatens them. So, people prefer to be silenced, there is no confidence to denounce, discuss, or say something. Here no one does anything about it. This little town could be very nice, and everything you want, but it is also a quite problematic town; one is afraid to speak out, really. For example, one is afraid of going to the media... You receive threats... This happened to the leader of our huddle —she is a good leader in fact; but despite all her denounces she received threats. That forces one to keep quiet. There is no support from the community, especially from the main heads, from the main authorities of the town.

Participant, peasant community of Monguí

A commitment to community sovereignty, within the framework of a broad and comprehensive transition in Monguí, will therefore require hard work to reintegrate women into participatory and decision-making processes in the municipality. Beyond this, it will be essential to strengthen their own self-managed initiatives and entrepreneurships, not only from an argument of equity, but also in order to take advantage of their creative and innovative potential, essential to successfully move towards sustainable and fair production models.

We emphasize that we do not intend to generalize the observations made with this group of women to all populations in the Andean region, in Boyacá or even in Monguí. We are aware that there are several groups of peasant women and guardians of the territory in the region, many of them may have different or more elaborate perspectives on the issues discussed in this research. This analysis is, therefore, only a first step in the discussion about coal mining in from the epistemologies of the south underground.

Main Ideas in Chapter 8

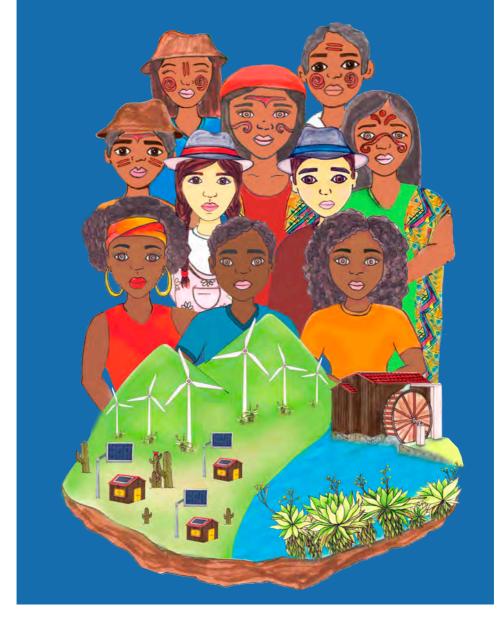
- Monguí is a municipality located in the Sugamuxi region, in the department of Boyacá, with a historically agricultural vocation and with a total population of more than 5,000 inhabitants. The most important industry in the municipality is coal mining in the sinkhole, although it is slowly being displaced by extensive farming and, more recently, by tourism. Most of the participating women were dedicated to the artisan manufacture of soccer balls, which stopped due to COVID-19, so that they were forced to undertake the creation of face masks and antibacterial solution.
- Women recognize gender violence as a very relevant problem in the community. In particular, they report different instances of domestic violence, also related to the abuse of substances such as alcohol. However, also in the public space, the female participants identified cultural pressures to abandon the pedagogic process —at failing to move freely for fear of gossip— and even by pressure from the soccer ball factories and municipal authorities to return to their jobs and leave the idea to start their own entrepreneurships. Despite this, all women recognized themselves as the only born entrepreneurs in the municipality, noting how men —most of them employed in the

mines— hardly conceive themselves in other productive activities. Having these perspectives will be crucial when planning a job transition for miners.

- In contrast to the other communities, the female participants understand their territory more from the domestic and family space than from the community and natural space. A recurring element in the conversations is the desire to buy a house of their own and, in several cases, to be able to cultivate the land to produce their own. For other women, however, it is more important to assure decent living conditions in urban areas, for example, through women's entrepreneurship. The impacts of mining - soil degradation and erosion, landslides, contamination of water sources, and displacement of the inhabitants- are understood through the lens of the impact on the inhabitants' own space for housing and subsistence. Despite this appreciation, there is no consensus in the group on the need to close the mines: some women argue that, since they are linked to the employment of so many local miners, an immediate cessation of operations is not feasible or desirable. It is important here to rethink agricultural work as a source of subsistence, with a view to both a mining-extractive transition and a broad and comprehensive transition.
- A commitment to community sovereignty is identified in the desire expressed by the female participants to produce their own, including food, clothing, fuel, etc. Through these activities, family consumption expenditures can be reduced, making possible labor transitions to industries with lower wages than the coal mining, which would otherwise be unlikely. In these processes, savings schemes and practices should be encouraged at the family and community level (frequent in the region before the arrival of mining). At the same time, efforts must be made to repair the social fabric and community bonds. It is crucial to establish solidarity among the community women, as a protection mechanism against gender-based violence and as the starting point for the creation of new key industries for a mining-extractive transition and for a broad and just transition.



Chapter 9. Outlooks for Energy Transitions from the Territory





We know the coal mining industry is declining globally, while energy transitions are gaining ground (Figure 9.1). Even though many actors aim to perpetuate the extraction industry and its underlying economic models based on fossil fuels for extracting the last possible income, it becomes critical to think and act in sustainable decarbonization strategies at all levels. For departments such as La Guajira, Cesar, and Boyacá, mining phase-out implies significant restructuring that has to be planned as soon as possible not to generate trauma. It is also an opportunity to abandon the logic on which extractivism is based so that renewable energies do not reproduce the same dynamics of appropriation of the territory and destruction of the social fabric

With that in mind, the discussion decision-makers should approach is not whether to stop extracting coal or not, *but how*, *when*, and *who will bear that burden*. In other words, who will be affected by the coal phase-out (e.g., loss of employment, continuous impacts of mining, lower tax revenues), how long will this process take (in months, years, decades?) will it happen deliberately or by surprise? Moreover, who will bear the costs (e.g., recovering the mining pits, retraining former miners, recuperating damage to people's health or the environment) and reap the potential benefits (e.g., new jobs in other sectors, better air quality, new energy sources).

From dialogues with the communities of Provincial, Lomamato, La Sierra, and Monguí, we detailed different outlooks and recommendations for relevant actors in this sector. This chapter will present and establish the general outlooks for energy transitions based on what was discussed within the communities Figure 9.1 Participants in the workshop 'Associativity and community energy' —offered during the Second Cultural and Sports Festival of La Sierra— design solar energy projects for their communities



Note. Photography by Marco Perdomo (IG: @ikon_fotografia), January 2020.

We structure these reflections according to the three types of energy transition exposed in chapter 4: (1) a mining-extractive transition, (2) energy democratization, and (3) a broad and just transition. We do this to facilitate their reading and subsequent implementation. However, we recognize that these three transitions are interrelated and not exclusive. The dimensions of analysis used in the previous chapters, i.e., (1) a relational gender approach, (2) territory, and (3) community sovereignty, will be found transversally throughout all these recommendations.

We will differentiate between outlooks aimed at actors related to large-scale mining in the Caribbean region and those focused on the small and medium-scale mining industry in the Andean region of Colombia, recognizing the profound differences in the mining-energy panorama in both contexts. Finally, for each subject, we will give recommendations to public policymakers at the national, regional, and local levels; communities, groups, activists, and local leaders dedicated to coal mining phase-out and stopping the destruction of the territory.

We do this with the conviction that these transformations' creative force emerges from the grassroots base, from communities organized around a common purpose of emancipation. All of us will build together these energy transitions. At the same time, a positive change may require a certain level of approval and support from public policy instances for it to be implemented without hesitation or limitations. In this way, we agree with Acosta and Brand (2018) in the sense that:

The task is to reverse the current capitalist domination, create power from the interests of the whole society and rethink the State from the community's perspective by democratizing democracy. This mission demands a direct democracy in all possible spheres of society, the direct intervention of organized society itself, especially from the community's level. All this raises the need to create spaces for self-management. In short, the solution does not lie with the State, but it could help —without being a tool for domination— to construct a society that is not hierarchical or authoritarian, as long as the community controls it. This endeavor requires significant effort and much creativity (p. 127).

9.1 Mining-Extractive Transition

Considering the global coal economy is in complete decline, and its environmental consequences are increasingly occupying public discourse, it is fair to assume that we are in the midst of an extractive industry transition. Given this scenario, a priority expressed by the communities is not to wait for markets, fate, or luck to cause what is expected to happen. If one wants to fight effectively against the climate crisis and prepare for an inevitable downturn in the coal economy, coal mines have to close. This phase-out process must occur as soon as possible, in agreement with communities historically affected by mining, mining workers, companies, and the government. In addition, responsibilities must be assigned and clarified so that compensations for the socio-environmental liabilities of mining activities remain with the people affected. Many hands share the process of structural transformation; with the role of communities and workers being critical, they must effectively influence labor alternatives with the new structures that will follow coal economies.

9.1.1 Strengthening Critical Voices from the Territories

It is a unanimous impulse from all the communities —before, during, and after the transitions described here. It will be necessary to strengthen the voices in defense of the territories and their inhabitants, human and non-human.

Firstly, a minimum of security conditions for community and social leaders who protest against mining must be assured, especially for women, who have been priority targets of this violence in the past and present. This strategy applies to all three types of energy transition described here, although the particular violence that coal mining has exerted, which varies by context, merits particular attention.

Secondly, it is essential to guarantee a decent standard of living for the communities leading this fight which allows them to dedicate part of their time and energy to these struggles in defense of the territory. Although we elaborate some of the central elements for the satisfaction of these needs in the later sections —especially for community sovereignty—, we reiterate their importance for all processes of social transformation described.

Thirdly, we must multiply the public spaces of critical discussion around coal mining and, in general, around the current system of appropriation and exclusion, amplifying the voices of activists and community leaders in these spaces. It will be crucial to facilitate a wide-ranging discussion from the alternative world views of ethnic peoples and peasants affected by mining. At the same time, it will be crucial to base these perspectives on technical and scientific arguments that, on the one hand, position these voices on the global agenda and also undermine the credibility of arguments from the prevailing discourse. The latter will be achieved to the extent that, for example, coal's false international commercial potential in the long term is demonstrated, emphasizing the economic competitiveness of renewable energies —and, in particular, community self-generation projects—while discussing the costs of mining on the territory.

9.1.2 Publicly Realizing the Danger Caused by the Extraction of Coal

For decades, local communities, social leaders, and activists have denounced the impacts coal mining has had on their territories at all scales of operation. However, they face complex knowledge production processes operated by multinational coal companies, elites, and local actors with influence over State and local politicians who have access to vast resources and capabilities. Universities and other national and international think tanks are often at the center of this contest. Although the communities identified cases of the academy being committed to them and their demands against mining, experiences of epistemic extractivism were also observed. That is to say, occurrences where external researchers worked with communities to diagnose the various impacts of mining and then sold their research to the mining industry without previously socializing it with locals.

Figure 9.2 Aerial view over Cerrejón open-pit coal mine, in the department of La Guajira.



Note. Wikimedia Commons license.

In this regard, we suggest a process of clarifying and acknowledging the truth related to the violence against the communities; both direct paramilitary violence against their leaders and violence against their territories and sacred places. This process should even include criteria of violence against the natural environment and its non-human inhabitants for mapping the true extent of the effects on the territory (Figure 9.2). Again, in this process, these actions must be implemented hand in hand with the communities to integrate practices from their own epistemologies. Women, in particular, as guardians of their oral traditions will be essential in building a comprehensive view of reality before, during, and after coal mining. In the best of cases, this process should culminate in a public acknowledgment of responsibility by the principal actors of socio-environmental damage —the mining industry, the national government, and locals who benefited from mining— accompanied by a commitment to restore their victims —human and non-human.

We are aware that this proposal criticizes the current country model for Colombia by analyzing the impact of violence against humans and non-human entities. Violence exercised under the justification of colonial and post-colonial appropriation of the territory and its natural resources. Even though this proposal is not directly executable from the national government, we consider it critical that civil society and communities themselves make efforts of this depth. These commitments can be strengthened from an academy involved with the comprehensive mapping of the environmental, cultural, economic, and social destruction caused by the current mining-energy model, with the visibility of other forms of life promoted by communities from the territories

9.1.3 Repairing the Damage Done to the Territory and its Residents

Once the historical impacts of coal mining on the territory have been identified —and, in the best of cases, publicly recognized—, it will be necessary to assume responsibility for these damages and commit to restoring the territory and repairing communities that have suffered under different coal extraction schemes. First, we considered that whoever executed the damage should pay for it.

However, as the communities in Cesar and La Guajira pointed out, the effects of mining industry on the territory and its people are incalculable, so the comprehensive restitution work needed is not measured in years or decades but generations. We can then talk about reparations in perpetuity, which must be arranged, planned, and implemented with the participation of the communities that know their territory and will continue to inhabit it for years to come. Indeed, this notion of reparations did not emerge with the same force in Monguí, Boyacá. However, the significant impacts mining has had on the natural environment, and its residents were recognized and must be addressed.

Some specific actions (each with a different time horizon) which will be important in this process of comprehensive reparation are reforestation and cleaning of water sources, accompaniment of victims of sexual violence and abusers of psychotropic substances in the surroundings of the mining enclaves, and programs for the return of previously resettled communities to restored ex-mining zones. Specifically, it will be essential to promote and strengthen women's leadership in these processes —considering their intimate connection with the territory— and cultivate their respective peoples' ancestral knowledge and practices.

Since the restoration of the territory and its social fabric must have sufficient resources to function, it is essential to create relevant funding sources. Although the legislation can be modified so that a percentage of revenues or royalties goes to finance a Territory Reconstruction Fund in a coal phase-out period, this is not recommended to be its only source of income. If that were the case, more coal would have to be extracted to compensate for the damage caused by coal extraction —a contradiction in terms.

In this sense, just as the state historically facilitated large-scale coal extraction, it must facilitate the reconstruction of the territory that extractivism destroyed. First of all, the State must overcome the paradigm of coal extraction as an activity of public interest. After a process of recognizing socio-environmental impacts and damages, the State must ensure those who have profited from the depredation of the territory and its people contribute materially to this process of compensation and reconciliation. This action may take the form of diplomatic negotiations to demand climate reparations³⁰ to past consumers of Colombian coal, strategic national or international litigation for bringing multinational companies to court for damages, income taxes, and assets associated with large-scale coal mining³¹ are among other options to explore.

With these different flows of income that feed a Territory Reconstruction Fund, soft loans could be given to high-impact investments in the communities, to territories affected by mining, compensating in perpetuity for the costs with which mining territories will have to live with for years to come. Similar to the work undertaken in Germany by institutions like the RAG Stiftung or the LMBV in West and East Germany, respectively. These organizations receive support from the federal government to finance the arrangements and costs in perpetuity of underground coal mining (RAG) or open-pit mining of lignite (LMBV).

We reiterate that this fund must integrate communities affected by coal mining in every step of its design and implementation, favoring processes oriented to self-management, self-sufficiency, and community sovereignty. This effort should also be thought of in terms of gender, giving special weight to local women's voices.

9.1.4 Creating and Improving Conditions for Job Alternatives Beyond Coal

The mining industry has been an integral part of the labor landscape in the country's coal regions for many years. Today, unions, associations, and in general, workers in the sector are some of its primary defenders. First of all, the actual contribution of coal mining to the labor market should be put into perspective based on facts and statistics. Here we have already given some examples of how the real impact of coal mining on

^{30. &}quot;In this way, climate reparations refer to compensation mechanisms to former colonized and marginalized developing countries that address historical and ongoing injustices of disproportionate impacts of climate change." (Perry, 2020, p. 3).

^{31.} It is crucial to investigate what judicial mechanisms exist or need to be established to enforce national and international judicial instances in counter-actions by companies. In terms of human rights and environmental effects, Ecuador's experience can illustrate the trials carried out in the United States on the occasion of the ATCA Law, which served to take Drummond to court for their alleged collusion with paramilitary groups in the murder of coal unionists in Cesar (Observatorio de Conflictos Ambientales, 2007).

job creation is highly overvalued in public discourse —more in the case of the Caribbean coast than in the Andean region. It is therefore vital to help demystify the mining industry as a rich source of well-paid work, and it will be crucial to socialize possible productive alternatives for current mine employees, as well as for those people who provide goods or services to associated companies, the mining industry, and their employees. Miners can play a significant role in diversifying local industries.

With this support, a priority of the extractive industry transition must be creating new local employment and subsistence opportunities for these miners, other workers in the sector, and their families. In the case of Monguí, where mining plays a much more critical role in the labor market and the cultural imaginary than in the rest of the participating communities, significant challenges are expected when it comes to motivating the miners. The secure income —comparatively higher than what other industries offer—, together with their low level of schooling, will lead the miners to hold on to their current job.

With this in mind, it is recommended that special programs be created by existing institutions at the national level, such as the Fondo Emprender and the Servicio Nacional de Aprendizaje (SENA), to prioritize job training in coal-mining municipalities, creating calls for the development of ideas of entrepreneurship and followed by the provision of seed capital to start such businesses. Also, at the local level, the creation of groups or savings banks is already instructed, through which inhabitants can gather resources for future projects or joint entrepreneurship. In the case of Monguí, a clear focus was observed on the artisanal textile industry, tourism, gastronomy, and agricultural production, among others.

In this effort, it will be essential to integrate women within the community when envisioning and making alternatives viable. The historical exclusion they have had to face in the labor market has led them to innovate, especially women heads of household. Although many want to stay in the urban area and start new businesses related to clothing, gastronomy, or tourism, others also mention their desire to return to the countryside and live like their ancestors. Some still keep and practice the ancestral knowledge of planting but recognize the need for better training. They also require initial financial support to obtain land, the first batch of seeds, and technical and financial support to advance their projects sustainably. The reintegration of women into deliberative spaces, on the one hand, will be an opportunity to reorient life plans at the family level towards schemes based on savings, as well as collective and longterm planning.

Communities in La Guajira and Cesar, on the other hand, would greatly benefit from training and support in the design and implementation of enterprises. In this regard, Lomamato, Provincial, and La Sierra communities prioritize handcraft sale businesses such as Wayuu bags in the case of La Guajira and palm leaf-based products and gastronomy in Cesar, taking advantage of various traditional foods of the Caribbean kitchen. However, it is also requested to prioritize the return to ancestral subsistence activities based on agriculture and pasture. Adding to the fact that these communities and many of their residents already have land for these practices, agricultural vocation is still deeply rooted in their self-image as a people.

In the same way, technical and professional training opportunities in different areas of work and knowledge should be increased due to future high demand given the needs of energy transitions —such as renewable energies. In the case of photovoltaic energy in the department of Cesar, it was noted that large solar parks, being highly automated, contribute little to industry or local employment in the medium and long term. However, there is significant potential in self-managed solar energy projects as a potential source of employment. The Warrior Women of La Sierra see themselves as potential multipliers of this type of community projects throughout the department and the region, for which they want to receive comprehensive and certified training. In addition to supporting local entrepreneurship, technical training in these aspects would again strengthen just energy transition processes from the base in other territories. Although this issue was not discussed with the other communities, we also consider it a field of exploration with high potential in these territories, both for public policymakers and local communities.

Other areas with potential for technical training that would enhance these energy transitions include recovery and rehabilitation of soils in mining zone, construction of community aqueducts, irrigation systems, water purification, agroecology tools, dry toilet installation and maintenance, and compost preparation, among others.

9.2 Energy Democratization

Almost all electricity consumers connected to the National Interconnected System (SIN) network are currently supplied by a combination of economic agents that include network operators, marketing companies, generators, and transmission companies. Many of these companies are privately owned, some are public, and others are mixed capital. In this system, there are almost no generating companies, operators of distribution or transmission networks in the hands of the communities; for example, through cooperative schemes. The situation is slightly different in the so-called "non-interconnected zones" (NIZs), generally remote areas in La Guajira, the Pacific coast, and the Amazonia/Orinoquia, where a few cases exist of local and self-managed electricity provision. In the areas connected to the SIN and the vast majority of electricity users in ZNIs, many perspectives agree that communities, consumers, and other 'small' actors do not play any role beyond paying the electricity bill.

In the case of female and male participants, the situation varies like in communities in which there is no electricity service, and the rest of the energy comes from biomass and liquid fuels such as in Wayuu communities in La Guajira, through La Sierra, where service is bad, expensive and usually informal and illegal. In Monguí, electricity and fuel availability are not an issue, but their high cost greatly hinders their use. Some proposals arose from diverse contexts for promoting energy democratization processes that respond to differentiated needs and conditions.

In addition to overcoming the dependence on coal, the participating communities express their will to find and develop new relationships with energy. They insist it is a basic need, in many cases unsatisfied, such as reliable access to affordable, clean, and sufficient electricity, which contrasts with statistics at the national level —more than two million people still do not have access to electricity (UPME, 2020b). Covering this need will be the main course of imminent energy transition processes. The notion of 'energy democratization' responds to achieving a broad and reliable

coverage, which opposes centralized generation schemes in hydroelectric plants or wind and solar parks megaprojects (Figure 9.3).

Figure 9.3 Solar Park operated by Celsia, in the municipality of Yumbo (Antioquia).



Note. Wikimedia Commons license

"— ¿Si pudiera tener un electrodoméstico adicional en su hogar, ¿qué tendría? —No sé… No necesito nada… De pronto, me gustaría poder arreglar mi licuadora, para poder hacerle el jugo a mi marido en las tardes, pero nada más".

(Mujer entrevistada, comunidad afro de La Sierra, Chiriguaná, Cesar) If you could have an additional household appliance, which one would it be?
I don't know... I don't need anything...
Maybe, I would like to fix my blender to be able to make juice for my husband in the afternoons, but nothing more.

Interviewed woman, Afrodescendent community of La Sierra, Chiriguaná, Cesar.



On the other hand, a critical issue for communities relates to electricity's "what for." Especially for communities of the Caribbean coast, the participants identified limited electricity needs in the domestic space. In La Sierra, most families interviewed (Figure 9.4) mainly have a refrigerator, two or three electric fans, and a television. Although a similar diagnosis was not made in La Guajira, the lack of access to electricity indicates that this number will be even lower.

Figure 9.4 Participants of the Second Cultural and Sports Festival in honor of their assassinated leaders enjoy the afternoon at La Mula River with residents of the community of La Sierra in January 2020



Note. Photograph by Oscar Vargas. january 2020

Against this background, communities are used to saving energy and living on essentials for survival, so when we talk about 'energy democratization,' we do not mean installing more appliances in homes and increasing energy demand; we do not seek to generate new needs or dependencies in the territories. Nor do we intend to impose the frugality or restrictions given by the context of multidimensional poverty that characterizes large areas of Colombia. This challenge seeks, on the contrary, to identify —based on an informed, inclusive and participatory conversation— the best uses for electrical energy (e.g., for household appliances), motive power (e.g., for transportation), or thermal energy (e.g., for cooking or heating), when strengthening processes of community sovereignty.

9.2.1 Enhancing capabilities within the community to operate renewable projects

For the communities we worked with, the ideal solution for energy access problems is the installation and operation of community energy self-generation projects; by this, we mean,

the study, financing, construction, maintenance, and eventual dismantling of a generation asset that produces electricity for the [use] of a specific community and is managed mainly by it. Alliances with public and private sectors, civil society, and international cooperation actors can be part of these projects, as long as the primary leadership during all project phases resides in the community (Vargas, 2020, p. 28).

To the previous, we add: community self-generation projects may be intended for the community and its residents' consumption, for selling electricity generated —either in the national energy market or to neighboring actors— or the economic use of the entire community, following the model of micro-networks.³².

Although all the communities expressed interest in implementing this type of project, we focus here on La Sierra, Provincial, and Lomamato, due to the depth this conversation reached and the extremely high potential for solar and wind generation in Cesar and La Guajira. Although interest was expressed in Monguí in photovoltaic systems and small runof-river hydroelectric plants, due to the reduced solar radiation in the Andean region and the difficulty of taking advantage of riverbeds, we will later consider other options for this community. However, the reflections presented below can inform processes of community self-generation in other contexts of the national territory.

^{32.} Micro-networks refer to small electricity networks possibly connected to the primary network but are often independent. These are usually supplied with small distributed generation assets (e.g., diesel generators, solar panels, small windmills, etc.) and supply a small number of homes and businesses. Micro-networks are generally characterized by having a low voltage level.

As we mentioned above, the processes must consider the purpose of the energy to be generated. In the case of small community projects, especially, it will be essential to consider the final use of this energy —will it be used for household consumption, public lighting, energizing new productive or cultural processes, or even for selling? This task requires a proper and self-managed diagnosis of the community's energy needs and initiatives that could make the best use of the electricity. In particular, we suggest focusing efforts towards initiatives that strengthen the social and productive fabric in the territory, avoiding generating new dependencies; for example, by installing appliances in private homes without a specific purpose of community empowerment beyond consumption.

Among the first clues offered by the communities in this direction, the installation of photovoltaic systems for public lighting in the urban area stands out, a vital element for guaranteeing the safety of women at night; or the operation of an open wireless internet system, which would become an essential tool for supporting the education of the youngest. It should be noted that not all self-generation projects must be dedicated to providing public services or goods. Private entrepreneurship can also be prioritized, such as those projected by the Warrior Women of La Sierra or the We Weave our history group. Critical processes here can be the provision of electricity for one or two devices to facilitate accounting, designing advertising materials, building web pages and social network presence, or maintaining distribution cold chains for perishable gastronomic products. Another option here is the establishment of energy cooperatives, focused on the generation of electricity for sale to neighboring communities or private actors. However, the legislative landscape in Colombia has begun to open up to community self-generation projects (see Vargas, 2020), and further research is required in this field.

When more private collective initiatives are encouraged to develop, we recommend determining how these projects will strengthen community sovereignty from the outset, even if they are managed and used mainly by private groups. This precaution will assure a level of appropriation, legitimacy, and support from the entire community, which is essential for business sustainability and stimulating the development of similar initiatives throughout the territory. For communities of La Sierra and Provincial (Figure 9.5), this is clear: entrepreneurship projects are not intended for their enrichment; they are just a mechanism to assure their survival and a minimum living standard with which they can face their various struggles for the preservation and defense of life and territory. Faced with the latter, even in Monguí, women expressed their willingness to allocate part of their incomes for reforestation efforts in snowy mountain ecosystems.

Figure 9.5 Sunset in the Wayuu community of Provincial (Barrancas, La Guajira)



Note. Photograph by Laura Brito, May 2021.

In the same way, we suggest discussing the project's scale, ownership model, and decision-making processes. In the case of self-generation projects, it will be crucial to determine the project's size and owner: if solar panels will be installed in each home for the exclusive consumption of its residents —operated and maintained by each household— or if the property will remain with existing actors such as the community council or specific businesses that use electricity in their production process. New legal entities may even be established for this purpose, especially when the objective is to sell the energy generated in the market, as in the case of energy cooperatives. We reiterate here a maxim that emerged during the process: "Associativity before money"; that is, before managing technical and financial resources for the installation of energy systems and, in general, for any community project or initiative—, it is critical to establish consensus around the form of decision on these resources and their subsequent economic benefits.

These projects must contemplate the technical and technological criteria to acquire and install the appropriate systems for the conditions in the territory, making it necessary to strengthen technical capabilities in the territories, for example, through training managed by universities and other institutions committed to renewable energies. They will also have to look for ways to mobilize financial resources for their implementation: on the one hand, government actors -along with international cooperation or civil society— will be able to provide fundamental support for the attainment of these resources, provided that their implementation and follow-up is done with the direct participation of the community. On the other hand, we also recommend considering community financing schemes, against which organizations such as Tierra Grata have made incredible progress on this front.³³. Finally, we reiterate the need for self-management and project design training to emphasize serving the communities, following their vocation to defend the territory, for example, by prioritizing rooftop or mixed-use projects over large solar or wind farms.

^{33.} Tierra Grata is a non-profit organization in Cartagena, Colombia, dedicated to providing clean energy, safe water, and sanitation solutions to rural communities through decentralized, affordable, and non-polluting solutions. They accompany their processes with social intervention and capacity-building programs and seek to empower local technical teams for monitoring and repairing installed systems for ensuring long-term sustainability. In addition, Tierra Grata innovates through its community financing scheme. Users subscribe to its services and, through interest-free credit, acquire the different solutions through monthly payments adjusted to their income (Tierra Grata, 2020).

9.2.2 Rethinking the Interactions Between Communities and External Actors from the Energy Sector

Throughout this work, we wanted to emphasize the potential of transitioning from large power plants to small self-managed and distributed projects. However, we understand that this will not always be feasible for communities due to technical or technological criteria or limited access to the necessary financial resources. We even admit that a large part of energy generation will remain concentrated in a few hands in the years to come. However, we insist that there is room to move towards energy democratization that is truly just and inclusive, even in this scenario. We offer some insights below about this democratization, both from community self-generation projects and larger-scale projects that seek to include these populations in their decision-making.

Figure 9.6 Road to the Ranchería River in the Provincial indigenous reservation (Barrancas, La Guajira).



Note. Photograph by Óscar Vargas, March 2021.

Considering the incursions of large renewable energy projects on the Caribbean coast and the adverse effects manifesting in the territories is of particular value. Like in the case of the large wind parks in La Guajira, many close to Provincial (Figure 9.6) and Lomamato (Figure 9.7); or the solar parks in Cesar, such as the El Paso Park; or the recent Black Orchid Solar project, in the neighborhood of La Sierra. Until now, these projects have been characterized by reproducing some of the harmful dynamics of coal mining, like the appropriation of large extensions of territory through accelerated and opaque prior consultation processes with communities. This territory appropriation affects both the natural environment —through the irreversible paving of large areas in the case of solar parks or the affectation of aerial fauna in the case of windmills—, as well as communities that inhabit it, by enclosing and restricting important spaces for their ancestral subsistence activities such as agriculture and animal husbandry.

Figure 9.7 Closing activity of the pedagogical process 'Community reexistence: energy transition, gender, and sovereignty' in the indigenous community of Lomamato, in La Guajira.



Note. Photo by Yaneth Ortiz, September 2020.

From the outset, it will be essential for external actors to define their participation policy transparently, according to the relevant national and international regulations. However, we recommend rethinking the prior consultation processes so that they are not merely a moment to inform or notify the communities about projects meant to be executed in their territory, but that also serves for enabling communities to influence the scale, form, destination, and management of the resources to intervene, and the projects' economic and socio-environmental burdens.³⁴. In the same way, it will be essential to extend this resource to peasant communities, considering that currently, only indigenous and Afro-descendent populations can request it. Communities must have technical support independent from the mining companies financed by the State.

In other words, the State has to balance the resource asymmetries inherent in the relationship between transnational companies and communities in which they want to carry out mining-energy projects. Suppose the interest is to bring well-being to the communities with renewable energy projects. In that case, entities such as the People's Advocacy office or municipal authorities could develop or request technical capacities to accompany, for example, the Wayuu indigenous communities in prior consultations for wind projects in La Guajira. Resources can also be made available so that civil society or academy entities can become advisors to communities to give them the information and technical knowledge they need to make free and informed decisions that a genuine prior consultation implies.

However, this relationship should not be reduced solely to prior consultation processes. There are other ways in which external entities can generate forms of collaboration or association with communities oriented towards local well-being through open processes. This path can be the case for companies that want, for example, to install solar panels in residents' homes which can be financed with mobile money or microcre-

^{34.} This change can be done, for example, through a legislative process and its subsequent administrative implementation where the concept of 'prior consultation' gives way to a 'prior, free and informed consent.' Seen this way, a regulatory process in Congress, with the participation of the Ministry of the Interior and, of course, with the effective participation of ethnic peoples, could change the current paradigm of interaction in mining-energy megaprojects. However, it is something that has not been achieved and, at the moment, it seems very unlikely that it will.

dits, as they did in East Africa³⁵ or in Bangladesh.³⁶. In turn, associative schemes can be inserted in which the same 'prosumers' (producers and consumers of electricity) can trade it in the market.³⁷.

Finally, energy purchase schemes can also be considered through which private companies agree with communities or private households to install photovoltaic systems on the roofs of existing buildings in exchange for cheap, reliable, and quality energy.³⁸. These alternatives have in common the conviction of addressing energy businesses not only from private profit as a final objective but from the well-being of the territory and the communities' sovereignty.

9.2.3 Reformulating the Economic Scheme of the Energy Market

In the cases in which communities must remain clients of the National Integrated Energy System, it will also be essential to work for more accessible prices and higher quality and reliability of the energy service. In Monguí, for example, the participants complain about extremely high electricity prices in the municipality, which have particularly affected women heads of household in times of the pandemic. In addition to having to stay at home and increasing their energy consumption, many of them had to move their workplaces in the textile industry to their residence, forcing them to bear the price of the energy consumed by the sewing machines they use. Also, in Cesar, the Warrior Women of La Sierra experience a terrible energy service, with exorbitant prices and power outages

^{35.} There, M-Kopa has successfully implemented the pay-as-you-go scheme where the user buys a photovoltaic installation for his home and then pays a monthly fee deducted from his cell phone credit (see: https://m-kopa.com/products/).

^{36.} There, an alliance among multilateral banks, civil society, financial institutions, and solar energy companies, with the support of the local government, led to the installation of solar home systems by more than 4 million households between 2003 and 2018, each one being able to supply between 2 and 4 people, through microcredit schemes, subsidies and technical support (Cabraal et al., 2021).

^{37.} Also, in Bangladesh, Sol-Share generated a model that allows different home solar systems to be connected, allowing micro-networks to be organically built-in so that prosumers can exchange and store electricity according to their respective load and generation profiles (see: https://me-solshare.com/what-we-do/).

^{38.} In legal terms, these advances were allowed with the enactment of the CREG Resolution 030/2018.

several times a day —incurring additional costs for repairing or replacing appliances. Similarly, in La Sierra, several cases have been reported in which community residents —especially children— have suffered injuries, some even fatal, due to poor electrical services.

One option in this regard is to explore, together with State entities such as the Mining-Energy Planning Unit (UPME), the Energy and Gas Regulation Commission (CREG), the Superintendence of Residential Public Services, and municipalities, a change in the current system of cross-subsidized energy. This system consists of households in the lowest economic strata —strata 0 to 3— receiving subsidies from the State to cover their gas and electricity bills, which are, in turn, financed by households in high strata —5 and 6—, commerce, industry, and the State itself. These subsidies do not cover the entire electric service, so households still have to pay the differential, representing a significant economic sacrifice. In addition, given that the share of the subsidies covered with contributions from strata 5 and 6, commerce, and industry is decreasing, the State spent between 2003 and 2017 around 9.6 billion Colombian pesos in subsidies (Vanegas, 2018).

We suggest that this cross-subsidization scheme be modified to include the massive promotion of solar solutions in vulnerable households. This path may not only have more significant positive impacts on vulnerable households but may also be cheaper for the State in the long term. A possible scheme, devised by the Climate Initiative of Mexico (2017) for contexts similar to those explored in this research, proposes to consolidate a Fund for Energy Sovereignty for the installation of photovoltaic arrays (Figure 9.8) on roofs of vulnerable households —corresponding to strata 0 to 3—. The principal capital of the fund comes from the resources previously allocated to the cross-subsidization scheme, considering —at first— that additional funds from the national budget or international cooperation can be integrated. The first pilot, for which an indicative value is selected (for example, one million USD) to be distributed among several households, would follow this way. **Figure 9.8** Group work on photovoltaic solar energy with inhabitants of the community of La Sierra and students from the Energy Transition Research Seedbed of the University of Magdalena.



Note. Photograph by Oscar Vargas, november 2019

- 1. According to the average annual consumption of each home, the generation capacity that solar solutions would have to cover can be estimated. The photovoltaic system would be oversized by 110 or 120% to allow the household to generate surpluses to sell to the network or use in other activities.
- 2. Then, a feasibility study would be carried out to verify that the quality of the electrical installations and roofs is adequate. Otherwise, an infrastructure adaptation component would be added to the project.
- 3. Once it is clear that the residence's roof and electrical installations are adequate, a contract will be signed between the fund, the network

operator, and the user. The fund would provide the resources to install the photovoltaic array, while the network operator agrees to buy the surplus and supply energy to the home when it does not generate electricity —for example, on days of high cloudiness or at night—. For his part, the user agrees to pay his electricity consumption, no longer to the network operator, but to the Fund for Energy Sovereignty, until the settlement has been paid.

4. Depending on the particular characteristics of each case (e.g., capacity, additional investments, consumption, etc.), the investment would pay for itself in a peri almost always less than ten years. After that period, the state does not have to give more subsidies (in perpetuity), and the household does not have to pay more electricity bills (also in perpetuity). The network operator has the advantage of receiving electricity directly at the consumption centers without the need to transport it long distances, also assuming an economic gain. So that the renovation of the installation can be financed after the end of its useful life (25-40 years); You can set a mandatory savings percentage that makes it easier for the user to replace the installation without any problem.

9.2.4 Strengthening energy surveillance and control capabilities within the territory

Poor electrical network quality —especially in the Caribbean region impacts the energy security of the population; power lines in rural areas have not received maintenance in years due to Electrificadora del Caribe's —the local energy company— precarious financial and legal status. An instability that poses risks to locals' health, such as in fires or electrocutions, substantiating a series of claims by local communities from years back and which were not addressed by the national government until 2019 with the company's intervention.

While the effects of the fragmentation of Electricaribe into various energy transportation and marketing companies remain to be seen, it will be necessary to strengthen local communities' mechanisms and channels for monitoring the energy system. This change will include control over the final use of energy, the condition of power lines, generation assets, home installations, and other elements to prevent related accidents

9.3 A Broad and Comprehensive Energy Transition

Finally, we speak of a broad and comprehensive energy transition to recognize that the mining-extractive transition and energy democratization are just some examples of the many transformations that must take place in our society in the medium and long term. The far-reaching processes that we describe here are essential to ensure these transformations take root —based on the premise that just energy transitions are not simply historical events with a punctual beginning and end, nor are they limited to the moment of economic and environmental restructuring—, by promoting the transition from dependence on coal to models based on renewable technologies. On the contrary, these transformations must be continuous processes and practices that we choose to adopt every day as communities and as a society, even in the face of alternatives that could bring greater returns in the short term but are based on the expropriation and destruction of our shared territory.

The broad and comprehensive transition advocates this philosophy by a conscious change in the system's structure as a whole. Of course, this goes far beyond the scope of this document, which is why we leave here only the first few clues for future reflection and research.

9.3.1 Identifying and Reaching Net-Zero Emission Economic Alternatives

It will be vital to find an alternative to fill the fiscal vacuum that the mining-energy transition will leave in municipal, departmental, and national finances in the medium and long terms. The question of replacing coal rents and revenues requires a broader discussion of the country's fiscal policy and therefore goes beyond this work. However, a profound tax reform linked to a policy of structural cohesion and ambitious regional strengthening will be critical to ensure a successful mining-extractive transition. In the same way, it is convenient to consider the specificities between regions, as observed in the Andean region, where coal is used as an energetic material in industry or in electricity generation. Thus, the decline in coal extraction in these departments also demands its own roadmap, independent from the Caribbean's and must be agreed upon

with miners, national industry, government, and affected communities, while focusing on guaranteeing security —and, in the best of cases, the energy sovereignty of communities and the country.

In this process, we consider it crucial to determine in a transparent, participatory, and inclusive manner what the energy needs from coal will be, where it makes sense to extract it, how its use can be replaced, and how long this process will take. In this way, all parties can be ensured of when and how to overcome coal extraction. This transparency is essential when it comes to transforming perceptions about the true economic potential of coal among municipal authorities, companies, miners, and households in the region; instead of clinging to an obsolete industry, these actors must take steps towards an economic and labor transition. Thus, it is expected to call upon local governments to invest in other sectors such as agriculture and services and retraining the mining population.

In the medium term, this implies including in the mining-energy and fiscal planning the increasingly imminent possibility of having to stop consuming and extracting fossil fuels. This task can be done, for example, by generating a carbon neutrality scenario in all sectors, together with the other planning scenarios. Decarbonization begins by changing 22% of electrical energy —which, according to UPME (2020a), was generated with fossil fuels in 2019— to renewable energies to replace all fossil energy or generate GHG emissions with renewable sources. That is, replace 85% of the energy currently consumed in Colombia, which comes from fossil fuels (UPME, 2020b). This undertaking implies much more significant challenges than those posed by the national government, content to add a little renewable energy to the national energy matrix instead of extending it to fossil fuel exports. The challenge is, without a doubt, enormous, and it must be assumed as such

9.3.2 Building Education Systems Based on Respect for the Human and the Non-Human

In the framework of relations that are often asymmetrical and exclusive between communities in the country's urban center and those located in extractive peripheries, a significant problem prevails as there are no appropriate channels for communication, confidence building, and the establishment and multiplication of affective ties. The relationship that exists —often in antagonistic terms— must be improved if the fundamental changes we propose here are to be achieved. This feeling resonates with one of the most prevalent demands from communities: to carry out dialogues and workshops with young people to transmit ancestral knowledge about the territory and their identity.

Figure 9.9 Members of the indigenous reservation of Provincial identifying problematic elements of their tools as men and women in the framework of education 'Community re-existence: energy transition, gender, and sovereignty'.



Note. Photograph by Laura Brito, August 2020

For the indigenous participants of Provincial (Figure 9.9), this is expressed in the desire for their own self-managed space where they can transmit the practice of weaving as a vehicle for the Wayuu nation's history and cosmogony while informing young people of coal mining's im-

pacts in the territory and the community's struggle against Cerrejón. In the same way, Afro-descendant women from La Sierra (Figure 9.10) seek to integrate new generations into community processes; for example, through the participation of young people —even from childhood— in decision-making spaces and in their savings box, which they call "making school." These experiences demonstrate the benefits of expanding limited notions of education, integrating community practice as a fundamental learning space, and becoming a pillar for the prolonged maintenance of these collective identities, under constant attack by acculturation processes from Western peoples, which disintegrate the social fabric of communities..

Figure 9.10 Woman dressed as a "leñatera," symbol of the Afro-descendant women of the Caribbean coast for the ancestral work of collecting firewood and cooking, within the framework of the Second Cultural and Sports Festival in Tribute to our Assassinated Leaders, in the community of La Sierra (Chiriguana, Cesar)



Note. Photography by Marco Perdomo (IG: @ikon_fotografia), January 2020

In contrast, women in Monguí focus their demands on transforming schools into attractive spaces for children and young people to keep them away from criminality and addiction to alcohol and psychotropic substances. This issue is prevalent in the region's communities, where local women mostly attribute it to the lack of father figures in many households, the burden of care work on single women, the many cases of orphanhood in the territories.

In both cases, however, the desire to educate young people and adults in new forms of masculinity and relationships with the human and the non-human is reiterated. First, this answers the need to address gender-based violence in these territories from the root, building more inclusive and safe spaces for diverse women and men. In addition, this contributes to the women's desire to integrate their communities' men gradually into their different struggles. Inside the four communities, the women emphasized the need to understand these transformation processes as an enterprise by many hands, which requires men and women to function. Nevertheless, they also emphasize the need for men who join these dynamics to do it with an attitude of humility and equality towards women.

Profound reform of the education system and the curricula at all levels is also required on a macro scale. Instead of leaning towards training in a single and rigid scheme of thought —the western scientist—, schools and colleges are the right places to promote knowledge exchanges and dialogues with other southern cosmogonies. The previous, accompanied by a conscious training in new masculinities, promises to prepare these new generations to continue this work of positive transformation, respectful of the territory and its inhabitants

9.3.3 Decentralizing State Functions and Working for the Empowerment of Local Communities

Once we take seriously the commitment to community sovereignty emerging from the territories and ancient peoples' voices, it is necessary to reexamine the central premise of our modern political system, that power and authority are exercised from the 'center' outwards, and that the functioning of human groups depends on the government's centralized decisions, be it legitimate or not. With 'community sovereignty,' we do not mean only that the national government's authority is redistributed in regional or municipal units, as it happens in federal systems. In these cases, although the actuation and decision-making units are smaller geographically and in terms of population, power continues to be centralized in single figures.

Community sovereignty turns this assumption on its head, with a political praxis that does not begin with the seizure of power but with the fundamental rethinking of the power problem, recognizing multiple nodes of its exercise. According to this approach, authority and responsibility are distributed equally among all community members. We talk here about co-responsibility: responsibility for ourselves and others, human and non-human. This notion is essential for the active reconstruction of the social fabric and creating relationships of confidence and conviviality. Women play a fundamental role in reestablishing and maintaining collaboration dynamics after the onslaught of mining and violence, compensating for the damages perpetrated on the territory. In his work, Segato (2016) observes the innate potential of "feminine politics," based not on accumulation but the strengthening and multiplication of affective bonds. Based on these considerations, it will be essential to think about and advance in a transformation of the current political structures in Colombia, which grants genuine authority to communities in the management and protection of their territories.

These processes arise and are sustained from below, from communities and social movements seeking to recover or strengthen ancestral forms of coexistence. However, the public sector can also support these initiatives, implementing decentralization mechanisms and equitable policies regarding land tenure. On the one hand, it is vital to strengthen the mechanisms contemplated in the Organic Law of Territorial Planning to facilitate independent management and the creation of alliances between local governments. In addition, this instrument must also contemplate authorities and communities outside the frameworks established by the institutional framework, such as municipalities and even local organizations such as community action boards and local action boards. On the other hand, it will be necessary to accompany these legal resources to create community capacities for their operation, including the most crucial element historically in the face of political and socio-environmental conflicts in the country, such as land tenure. In this way, agrarian reform is outlined as a fundamental need when it assures the sovereignty of ancestral and peasant communities and aids their ability to continue their work in defense of life and territory.

We recognize the fundamental task of exploring models of community sovereignty in detail and whatever shape they may take in urban and rural areas; however, this is a necessary and imminent transformation. In this regard, we also say to the skeptics that community sovereignty is not a utopia —it is an actual practice carried out perpetually by brave women and men. Whoever wants successful and current examples of community sovereignty should only look at territories whose communities "demonstrate in their practices that conviviality is not a futuristic utopia, but rather forms part of our present, even if we have not realized it" (Esteva, 2019).

Table 9.1 summarizes the main points of the outlooks for energy transitions in a few words.

	Recommendations for 1	ninin-extractive transitions	
tion, and implementation of coc communities and the general put these impacts in perpetuity. In the	al mines phase-out plans becomes critico ublic, recognizing responsibility for the so he same way, this just mining-extractive	al. The mines phase-out must be ocio-environmental damage can transition must ensure the crea	in energy sources, the country's design, adop- e planned and agreed upon openly with local used by the extractive industry and repairing tion of job alternatives for those employed by engthening of ancestral subsistence practices.
	I. Strengthening cri	tical voices from the territori	2S
	Action dimensions		
General recommendation	Public politics	Communities in the territories	NGO, Academy, International Coop
Ensure the safety and phy- sical integrity of social and community leaders, avoiding instances of coercion, threats, assault, and murder at the hands of armed actors.	Assure minimum security condi- tions for social leaders —especially women— both from strengthening the institutional presence in rural areas and providing security sche- mes for recognized leaders.	Design security schemes within each community, opening and making use of communication channels —traditional or supported by new technologies—, as surveillance and alert me- chanism for guaranteeing the security of the inha- bitants against external agents (e.g., surveillance by shifts, WhatsApp/Telegram channel, community alarm system, use of shouts or code words)	Civil society Denounce and make visible instances of murder and threats to social and community leaders on local, national, and international platforms, demanding the security of social leaders by state authorities

Table 9.1 Recommendations for just energy transitions

		·		
Assure minimum standards of decent living for social and community leaders, allowing them to continue their stru- ggle without suffering from hunger, with access to health and education services for their families.	Implement entrepreneurship pro- grams promoted by the SENA, the Fondo Emprender, and other State entities to improve income and strengthen community autonomy.	Guide activities for pro- moting solidarity economy in the community and practices such as bartering towards maintaining the fight in defense of the territory.	Support con then the loc financing o	ty, international cooperation mmunity initiatives to streng- al solidarity economy, such as r relationships with potential uyers at a fair price
Amplify the voices critical of mining from the territories, generating spaces for socialization and discussion within the communities and at the national, regional, and transnational levels.	Allow and encourage the participa- tion of local communities in spaces for deliberation at the departmental and national levels related to mining-energy policy; for example, plenary sessions or working groups in Congress.	Develop internal dialogues in the communities about coal mining and its effects to strengthen collective positions against mining and educate the communi- ty's youngest members to defend the territory.	Offer spac tional proje particula struggle as national gov visibility t and celebrat	ivil society, academy es for dialogue with interna- ction to community leaders, rly women, to discuss their gainst mining actors and the rernment, giving strength and o their demands. Recognize e the otherness of visions and vledge in these spaces.
	II. Publicly recognizing the	effects caused by the extraction	on of coal	
		Action dimensions		
General recommendation	Public policies	Communities in the ter	ritories	Other actors
Develop initiatives to clarify the truth and build historical memory at all levels for establishing responsibility for violent acts — against the natural environment and the population — and highligh- ting and commemorating the communities' struggles in defense of life and territory.	Carry out clarifying processes and acknowledge the truth from State institutions related to the violence exerted by mining (both direct paramilitary violence against social leaders and violence suffered by the territory itself). This process must culminate with a public ack- nowledgment of responsibility by those liable for socio-environmental damage —mining companies, the national government, and local actors who benefited from mi- ning — with a serious commitment to repairing the victims —human and non-human.	Develop local initiatives to preserve community memor of the struggle to defend th for example, through self- community memory house ms. An essential part of th be recovering local versions before coal for rethinking n living after the closure o	ry in the face te territory, -managed s or museu- is task will s of realities new ways of	Academy, civil society Advance processes of clarification and recognition of the truth when this is not feasible from State institu- tions. Although this process may not have the capacity to demand reparations from the actors involved, acknowledging the history and effects suffered by the communities and the terri- tory will already be a step in the right direction.
Guarantee free access to in- formation, especially related to energy projects and their socio-environmental im- pacts, ensuring access to new research in the mining-ener- gy field to the general public and, in particular, to affected communities.	Collect and reproduce scientifica- lly-based information on the so- cio-environmental impacts of coal mining in open access platforms while delivering and socializing im- partial studies on the social and en- vironmental viability of new energy projects with local communities so they can make informed decisions in prior consultation processes or other participation instances.	Demand legal guarantees or ship of research results carri territory itself. Also, implen tion processes towards exter specifically from the acaden allowing their entry into the carry out research pro-	ed out in the nent evalua- nal actors — ny—, before e territory to cesses.	Academy Adopt missions and processes of the committed academy, placing the most affected and vulnerable populations at the center of the process of generating knowledge. Research should first aim to improve conditions in these contexts, maintaining strict codes and ethical criteria for using research results.
	III. Repairing the effects of exploitation on the territory and its inhabitants			
General recommendation	ommendation Action dimensions			
	Public policies	Communities in the ter	ritories	Other actors

Based on identifying socio-environmental impacts and those responsible, carry out actions at all levels to repair the effects of mining on the territory and its in- habitants, with local women and communities' support and unique perspectives.	Carry out far-reaching actions to repair the perpetual impacts of coal mining in the territories, including reforestation actions and cleanup of water sources, accompaniment to victims of sexual violence and abu- sers of psychotropic substances in areas neighboring mining enclaves added to programs for the return of communities previously resettled into restored mining areas. All of the above must be done in concert with the affected communities, particularly women.	Start small-scale activities for recovering the territory or gathering community support for victims of different impacts of coal mining. While communities can hardly be expected to address these impacts without support, these efforts may provide first lessons for subsequent larger-scale exercises while increasing public pressure on those in power.	Civil society, international cooperation Support local processes to recover the territory and care for victims of mining impacts; for example, through financing or the creation of networks with other similar experiences at a national or international level to promote the exchan- ge of good practices and construction of solidarity networks.
Search and create innovative financing schemes to repair the perpetual impacts of coal mining while generating inputs from the territories for prioritizing actions.	Establish a Fund for Reconstructing the Territory from contributions demanded from mining companies, the public treasury, and interna- tional cooperation to provide soft loans for high-impact investments in communities and territories affected by mining operations and perpetually compensate the costs with which the mining territories will have to live. This fund should favor self-managed processes from communities, with a view towards the continued protection of the territory.	Carry out comprehensive diagnoses of repairs required by the community, covering all the impacts of mining on the territory and its inhabitants. A com- prehensive action plan for intervention may also be proposed based on this diagnosis. These inputs will support the community's demands against the national government and the mining companies while preparing the ground for carrying out the associated tasks.	Academy, civil society Support diagnostic processes and prepare comprehensive action plans for communities and municipal and national authorities, mobilizing their technical knowledge to support analyses carried out by communities.
	IV. Creating and strengthe	ning labor alternatives beyond coal	
General recommendationl		Action dimensions	
	Public policies	Communities in the territories	Other actors

Create financing and savings mechanisms at the national and territorial levels for new entrepreneurship and initia- tives from the communities affected by mining.	Create a fund supervised by different sectors of local society, especially the communities that inhabit the mining corridors, to offer seed capital to local enterprises in sectors beyond mining. Such a fund should be considered a differential gender approach that strengthens women's organizations and community sovereignty, aiming to generate self-management and self-sufficiency processes, more resilient to the ups and downs of markets and economic cycles.	Establish local and self-managed savings banks, through which the inhabitants can gather resources for future projects or joint entrepreneurship. In addition, to provide initial financing for these initiatives, the collective exercise of savings can help strengthen affective ties and relationships of confidence, which is crucial for these processes in the future.	International cooperation and civil society: Support the creation of financial instruments or savings schemes at the national and local levels to support entrepreneu- rship through resources, consultancies, or technical training.
	Recommendations for	r energy democratization	
sumption, and decision-making megaprojects or solar parks run is critical to propose decentraliz tioned. Instead of increasing en poverty, an open and inclusive	around power generation. An energy tra is the risk of reproducing extractive indu ted generation models that include local ergy demand by installing unnecessary a dialogue must be carried out to determin	from fossil fuels, it also raises the need to reth instition that is limited to changing centralize, stry dynamics and land expropriation typica communities in decision-making. The purpos- ppliances or imposing energy frugality from t ie the highest priority uses for the use of ener imunities to operate renewable energies pr	l generation from coal for wind l of mining. On the contrary, it te of energy itself must be ques- he context of multidimensional gy.
General recommendation	Public policies	Action dimensions Communities in the territories	Other actors
Encourage and support the design, financing, imple- mentation, and operation of self-generation projects based on renewable energies, particularly those led and used by communities.	Modify existing legislation and regulations regarding renewable energy to extend and multiply tax incentives to understand the develo- pment of community self-genera- tion projects. Strengthen and increase the resources allocated to the Fund for Non-Conventional Energies and Efficient Energy Management (FE- NOGE) and the Financial Support Fund for Electrification in Non-In- terconnected Zones (FAZNI), modifying their processes to admit massive financing of community projects of self-generation.	Carry out internal conversations to determine the uses, ownership, decision-making, and conflict resolution mechanisms around a potential com- munity self-generation project based on renewable energies. Explore internal community financing schemes for the execution of self-ge- neration projects based on renewable energies (for example, through a common fund) or external ones, such as microcredits or low or zero-interest loans.	International cooperation and civil society Mobilize technical and financial resources to implement community self-generation projects in communities; for example, exploring microcredit sche- mes or low or zero-interest loans
Determine priorities for energy use in advance of the development of energy projects. Instead of multipl- ying demand unnecessarily (for example, encouraging	Integrate or strengthen analysis of the priorities of the end-users in the planning processes of new energy projects, to maximize the impact on the socio-economic well-being of the population and beneficiary	Carry out self-managed diagnoses with community members to determine the most prominent uses of energy in the territories (electric: e.g., lighting and appliances; thermal: e.g., cooking; mo-	<i>Everyone</i> Support local and national processes for diagnosing end uses of energy, and develop actions to motivate energy saving and efficiency

Generate and strengthen technical capacities in the territories to design and implement community renewable energy projects.	Integrate technical training programs in renewable energy into existing SENA schemes.	Motivate the participation of inhabitants in training sessions on the design, implementation, and operation of self-generation systems based on renewable energies. Once the knowledge has been developed and respective per- mits have been obtained, socialize and teach in neighboring communities about self-generation's benefits, challenges, and opportunities.	Academy Establish agreements between higher education institutions and communi- ties affected by mining to offer training programs on the design, implemen- tation, and operation of generation systems based on renewable energies. Local communities described the development of certified training as a priority
VI.I	Rethinking the interactions between co	ommunities and external actors in the ener	rgy sector
General recommendation		Action dimensions	
	Public policies	Communities in the territories	Other actors
Redesign and imple- ment processes of prior consultation and effective participation that allow communities to influence the scale, form, destination, and management of spaces to intervene on economic gains and socio-environmen- tal responsibilities of new energy projects	Strengthen prior consultation and participation procedures, ensuring their systematicity and transparency, and create safeguards to prevent external actors from speeding up negotiations or unduly co-opting community members, to the detriment of local deliberation mechanisms. A principle to follow must be that decisions are made in an informed manner and openly discussed by consensus or by a qualified majority, with the full knowledge of the entire community.	Ensure that all community members have access to quality information on prior consultation processes and effective participation in communities' rights within these contexts. Above all, negotiations must be within the consultation framework and other instances of participation and respect the community's internal decision-ma- king rhythms.	Academia and civil society Accompaniment and comprehensive training for communities on prior consultation processes and other environmental participation mechanis- ms, including technical components such as the calculation of socio-envi- ronmental effects and the national and international legal panorama, as well as complementary elements such as leadership skills and assertive negotiation, so that communities can exercise their rights in an effective and informed manner
Explore energy purchasing schemes, through which private companies use the roofs of existing infrastruc- tures in communities to install photovoltaic systems in exchange for cheap and quality service.	Expand the existing legislation regarding distributed generation projects, particularly regarding energy purchasing and selling schemes, contemplating protection and control mechanisms for communities that wish to establish this type of agreement with private sector actors.	In cases where community self-gene- ration is not feasible for technical or economic reasons, it is recommended to explore with different private actors interested in selling schemes, using existing buildings and infrastructure for installing generation systems and avoiding the occupation of more significant land extensions. In return, they can demand benefits following the community's priorities, such as enjoying cheap and quality electrical service.	International cooperation Support the design and implementation of power purchase agreements, for example, through reim- bursable cooperation or exchange of experiences at the international level. <i>Civil society</i> Accompany communi- ties that develop energy purchase agreements and control compliance with commitments acquired by the company.
	VII. Adapting the econ	omic scheme of the energy market	
General recommendation		Action dimensions	
	Public policies	Communities in the territories	Other actors

Redesign the current cross-subsidized scheme in the energy market or replace it with the massive promotion of initiatives for installing renewable solutions in vulnerable hou- scholds, with greater benefits and even lower costs in the long term	Initiate study processes of the socio-economic potential and the long-term costs of redesigning the cross-subsidization scheme in the energy market to promote renewable energy projects in vulnerable homes and communities, generating institutional learning processes based on good internatio- nal practices.		Academy and international cooperation Make public policy propo- sals, through own research or exchanges of good practices with other interna- tional actors, to redesign the current cross-subsidized scheme in favor of massive financing of renewable solutions in vulnerable ho- mes and communities (see Mexico Climate Initiative experience)
	VIII. Strengthening energy survei	llance and control capacities in the territo	ry
		Action dimensions	
General recommendation	Public policies	Communities in the territories	Other actors
Generate spaces and mecha- nisms so that inhabitants and communities exercise effective control over the different actors responsible for distributing and commer- cializing energy.	Strengthen institutional control mechanisms and integrate channels for issuing and addressing consu- mer complaints about the electrical service provision.	Create local teams, adequately trained, in charge of supervising the network in the community, focusing on risk mana- gement and the presentation of claims before the relevant actors or authorities.	Civil society Amplify local demands for a better energy service before companies and competent authorities
	Recommendations for a co	nprehensive and just transition	
medium and long term. Addit	on and energy democratization are just ionally, much more profound and far-ro	one of many transformations that must tak eaching processes of dialogue and change ar	e required to ensure that these
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Outlooks from below for just energy transitions: Gender, territory and sovereignty

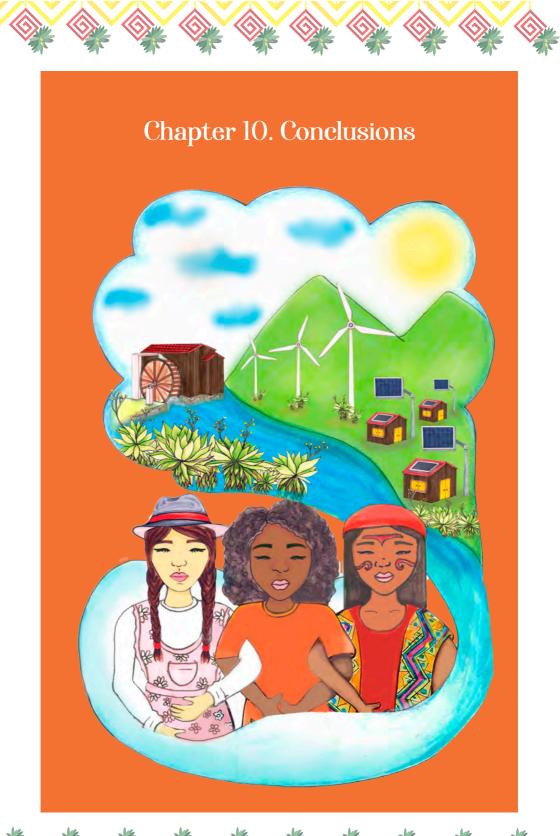
Reform the educational cu- rriculum at the national level to integrate discussions from different epistemologies, encompassing notions of masculinity and femininity, territoriality, and relations- hip with the human and the non-human.	Make a profound reform of the national educational curriculum, which starts from the dialogue of knowledge with ancient cultures, promoting the construction of new masculinities based on equity and respect for the human and the non-human	Seek spaces for dialogue and negotiation with local educational institutions and the Ministry of Education to integrate ancestral knowledge into the curriculum. In addition to generating safeguards against acculturation pro- cesses in these contexts, preserving this ancestral knowledge in new generations.	Academy Support the design of educational reforms based on the dialogue of knowledge, education in new masculinities, and respect for the human and the non-human.
XI. Advancing dialogues around the decentralization of State functions and the empowerment of local communities			
General recommendation	Action dimensions		
	Public policies	Communities in the territories	Other actors
Explore alternative forms of government and governance, beyond the centralized exer- cise of power, as a central premise of the modern State model.	Adapt the Organic Law of Territorial Planning to recognize community leadership outside the current institutional schemes, such as the department, municipality, and even community action boards. Advance agrarian reform efforts to promote equitable land tenure as a fundamental element of any com- mitment to community autonomy and sovereignty.	Strengthen local processes of commu- nity sovereignty, establishing networks of solidarity and collaboration between communities, for improving their negotiation and demand skills with the national government. Explore ways to satisfy the core needs of the community's inhabitants, internally or interdependently with neighboring communities, through strategies related to food, water, and energy sovereignty, for assuring their autonomy from private and State actors.	Civil society Support intercommunity organization processes by creating solidarity networks at the national and interna- tional levels. Mobilize resources and knowledge around communities, developing food, water, and energy sovereignty processes.

Main Ideas in Chapter 9

- Within the framework of a mining-extractive transition, it is demanded that plans begin to be processed for the mining phase-out, with communities and local women at the center of decision-making. Specifically, it is suggested to (1) strengthen critical voices from the territories, (2) publicly recognize the effects caused by coal extraction, (3) repair the effects on the territory and its inhabitants, and (4) create and strengthen alternative jobs beyond coal mining.
- Energy democratization is also requested for guaranteeing equitable access to energy, both from consumption —achieving an affordable and quality electricity service for all— and from the control of energy generation sources —giving control to communities on the forms of generation—, and on the final use of energy. Specifically, it is recommended (1) to strengthen the capacities of communities to operate renewable energy projects, (2) to rethink the interactions between communities and external actors in the energy sector, (3) to adapt the economic scheme of the energy market to guarantee

greater equity and (4) strengthen surveillance and control capacities in the territory on energy.

• Finally, we talk about a broad and comprehensive transition to recognize that the mining-extractive transition and energy democratization are only one of many transformations that must take place in our societies in the medium and long term. We describe these far-reaching processes, essential to ensure that these transformations take lasting roots. It is required (1) to identify and develop non-carbon and zero-emission economic alternatives, (2) to build an educational system based on respect for the human and the non-human, and (3) to advance dialogues around the decentralization of the state and the empowerment of local communities.





The coal economy is going through an unprecedented crisis worldwide, in part motivated by a growing awareness of the impacts of burning fossil fuels on climate change and the dangers it brings to life on Earth. Large-scale coal mining in Colombia is slowly but surely in a phase-out process. Against this background, it becomes urgent to initiate transition processes towards renewable energy sources. However, a strictly technological change is not enough. The process of dialogue and research (figure 10.1) carried out within the communities of La Guajira, Cesar and Boyacá demonstrated the need to think beyond the mining phase-out and to work towards various just energy transitions in search of ever broader and more comprehensive transformations.

The insufficiency of the modern Western model was discussed when thinking about these transitions due to the anthropocentric logic that underlies it, which only recognizes the value of the natural environment from its usefulness for human beings. Given the above, three interdependent notions from feminist and southern epistemologies were suggested to guide the debate on energy transitions: (1) a relational gender approach, as new relational understandings about what it truly means to be 'a woman' and 'a man' and about their relationships with the other 'human' and with the 'non-human'; (2) territory, as broad and comprehensive visions of the physical and natural environment, charged with cultural, socioeconomic, political and spiritual meanings; and (3) community sovereignty, as practices of autonomy and resistance from the communities that must be strengthened.

In dialogue with the communities of Provincial and Lomamato (La Guajira), La Sierra (Cesar), and Monguí (Boyacá), valuable insights were generated for three types of energy transition that are being sought from the territories. Firstly, a *mining-extractive transition*, aimed at the permanent coal extraction phase-out, as soon as possible, to protect the lives of the communities and ecosystem, accompanied by the recognition and repair of the effects after this phase-out. Secondly, *energy democratization*, aimed at fighting poverty and energy inequity of which the ethnic and peasant communities in the country's peripheries have been victims. Thirdly, a *broad and comprehensive transition* that transcends the energy field allows closing a series of structural gaps and redressing historical injustices against vulnerable populations such as women, ethnic and peasant populations.

Figure 10.1 Members of the Women Warriors of La Sierra and the Network of Community Initiatives, during a visit in March 2021.



Note. Photograph by Felipe Corral, march 2021

Based on these reflections, we identify eleven recommendations relevant to public policymakers, communities defending the territory, and external actors from the Academy, civil society, and international cooperation.:

1. Strengthening critical voices from the territories, assuring that both female and male community leaders can live without fear of violence

and intimidation, live in decent conditions, and have spaces for dialogue and advocacy at the national and international level

- 2. Publicly recognizing the effects caused by coal extraction, including independent and transparent investigation efforts on the scope of the impacts on the territory and public health, as well as the clarification of instances of violence against social and community leaders.
- 3. Repairing the effects of coal mining on the territory and its residents, designing innovative schemes for its financing, and integrating local communities, especially women, in all implementation phases.
- 4. Creating and strengthening labor alternatives beyond coal, taking advantage of existing programs at the national level, and the local initiative to ensure job training, jobs, and decent occupations for miners and people dependent on mining, where possible returning to ancestral subsistence practices and autonomy.
- 5. Strengthening the capabilities of the communities to operate renewable energy projects so that they can implement and multiply this type of initiative within the region, assuring its sustainability over time.
- 6. Rethinking the interactions between communities and external actors in the energy sector, cementing, for example, prior consultation processes and extending them to the peasant population.
- 7. Adapting the economic scheme of the energy market, replacing, for example, the current model of cross-subsidies with a model that finances self-generation solutions based on renewable energies and that takes advantage of community financing schemes.
- 8. Strengthening the surveillance and control capacities in the territory on energy, allowing greater transparency on prices and a greater incidence on the quality of the energy service at the municipal and regional level.
- 9. Identifying and developing economic alternatives with zero emissions allow reducing the demand for fossil fuels and greenhouse gas emissions.
- 10. Building an educational system based on respect for the human and the non-human allows us to overcome anthropocentric and mercantilist logic in favor of alternative visions based on gender equality and harmony with planet Earth.

11. Advancing dialogues around decentralization of state functions and empowerment of local communities, in such a way that these communities are the ones who decide on the use that is given to their territory, in turn promoting a vertical policy of the subsoil.

Any transition effort must start from a constant reflection and practice which questions and seeks to transform oppressive relations in our societies. A continuous struggle for the deconstruction of relations of power and domination between men and women, breaking down walls so that all of us can flourish, between humans and ecosystem, recognizing ourselves as an intrinsic and co-responsible part of a whole, likewise, between humans and humans, building a space "where many worlds fit."

This mission is a colossal task and may seem impossible. However, we can begin looking at the territories and promoting the countless initiatives building possible futures since now (figure 10.2). Above all, it is about not losing our political imagination

Figure 10.2 "La Mula" stream in the municipality of Rinconhondo (Cesar), a popular meeting point for the surrounding communities, including the Afro community of La Sierra

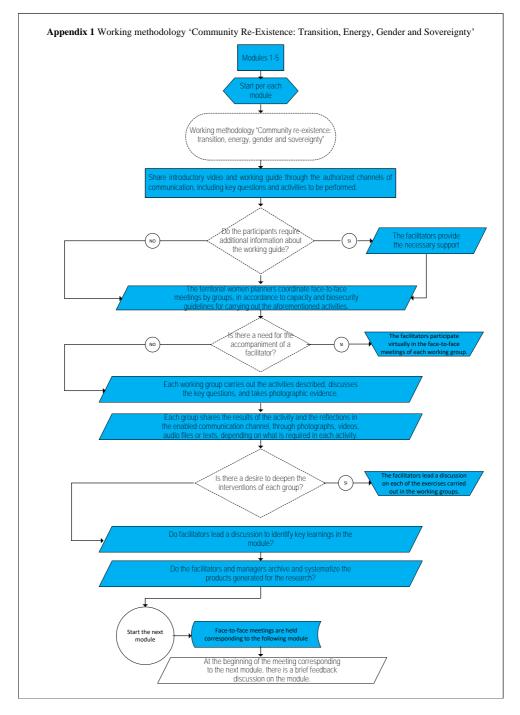


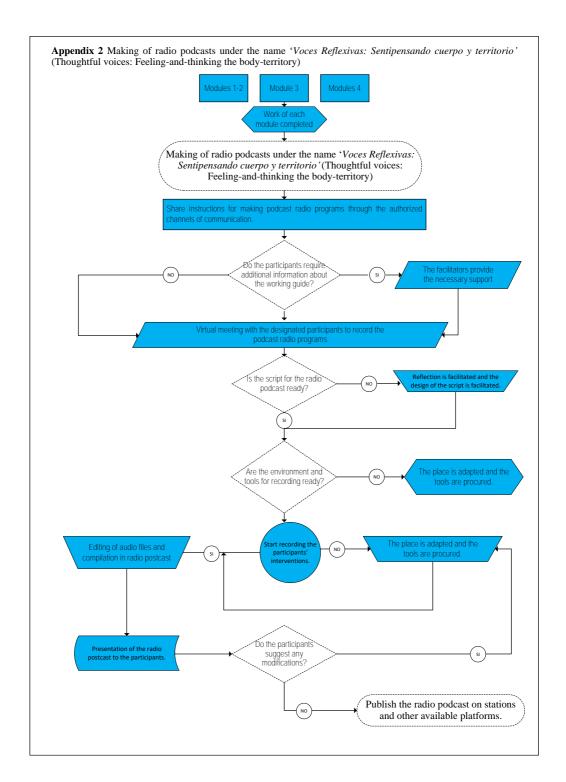
Note. Photograph by Óscar Vargas, June 2019

The dispute is not only in the territories, the economy, political institutions, or knowledge systems. The dispute is also in the ability to imagine. The system of power, in addition to police, judicial structures, bureaucracies, and exclusive markets, establishes taxes on thought, colonizes desire, and dries up the imagination —see the phrase that has become popular: 'Today it is easier to imagine the end of the world than the end of capitalism'—installing the impossibility of thinking in something different from this system. One thing is a vision that realistically weighs our civilizational course. Another is pure pessimism, which is the spirit of the dominant power in the body. We need to exorcise it. Let us imagine —political imagination as a fighting tool— life outside those walls. And let us invite others to imagine it (Teran, 2021).

Thus, we invite the reader to imagine with us, women and men, in the face of definitively overcoming coal mining, energy transitions that are indeed just and inclusive, and in general, a transformation towards ways of existing in unison with Mother Earth and all her inhabitants. Let us imagine and fight, following the slogan of Narlis Guzmán, Warrior Woman of La Sierra, so that "the bad turns good, the good turns better, and the better becomes excellent."

Appendix





References

- Acosta, A. (2013). Extractivism and neo extractivism: two sides of the same curse. In: M. Lang, & D. Mokrani (Eds), Beyond development: alternative visions from Latin America (pp. 61-86). Fundación Rosa Luxemburg & Transnational Institute.
- Acosta, A., & Brand, U. (2018). Salidas del laberinto capitalista: decrecimiento y postextractivismo. Fundación Rosa Luxemburg.
- Albertani, C. (2011). Flores salvajes. Reflexiones sobre el principio de la autonomía. Pensar las autonomías: alternativas de emancipación al capital y el Estado. Sísifo Ediciones.
- Barney, J. (2020). Colombia: transición, descarbonización, retórica. Indepaz. http://www.indepaz.org.co/wp-content/uploads/2020/08/ARTICULO-DESCARBONIZACION11AGOSTO2020.pdf
- Barrios, M. (2020, julio 20). Abren proceso al alcalde de Chiriguaná por posible detrimento. El Heraldo Cesar. https://www.elheraldo.co/cesar/ contraloria-abre-proceso-al-alcalde-de-chiriguana-por-posible-detrimento-735570
- Bermúdez, R., Rodríguez, T., & Roa, T. (2011). Mujer y minería: ámbitos de análisis e impactos de la minería en la vida de las mujeres, enfoque de derechos y perspectiva de género. CENSAT Agua Viva (Memorias). Encuentro Latinoamericano Mujer y Minería. Bogotá, Colombia.
- Bermúdez, R., Zambrano, K., & Roa, T. (2014). Los territorios, la minería y nosotras: las mujeres nos preguntamos. Guía de Trabajo. CENSAT Agua Viva.
- Bertinat, P. (2016). Transición energética justa: pensando la democratización energética. Friedrich-Ebert-Stiftung Uruguay.
- Bloch, E. (2006). El Principio Esperanza. Trotta.
- Boff, L. (2011). Ecología: grito de la tierra, grito de los pobres. Trotta.
- Brancaleone, C. (2019). Bajo el signo de la autonomía: aportes desde una teoría política anarquista. In G. Makaran, P. López, & J. Wahren (Eds.), Vuelta a la autonomía: debates y experiencias para la emancipación social desde América Latina (pp. 47-81). Bajo Tierra.

- Brauers, H., Braunger, I., & Jewell, J. (2021). Liquefied natural gas expansion plans in Germany: The risk of gas lock-in under energy transitions. Energy Research & Social Science, 76, 102059. https://doi.org/10.1016/j. erss.2021.102059
- Bui, M., Adjiman, C. S., Bardow, A., Anthony, E. J., Boston, A., Brown, S., Fennell, P. S., Fuss, S., Galindo, A., Hackett, L. A., Hallett, J. P., Herzog, H. J., Jackson, G., Kemper, J., Krevor, S., Maitland, G. C., Matuszewski, M., Metcalfe, I. S., Petit, C., ... Dowell, N. M. (2018). Carbon capture and storage (CCS): The way forward. Energy & Environmental Science, 11(5), 1062-1176. https://doi.org/10.1039/C7EE02342A
- Cabraal, A., Ward, W., Bogach, V., & Jain, A. (2021). Living in the light: The Bangladesh solar home systems story. International Bank for Reconstruction and Development & World Bank Group.
- Cantor, L., & Juagibioy, L. (2013). Mujeres indígenas del pueblo kamëntsá biyá y sus conocimientos en torno al clima y el jajañ (municipio de Sibundoy). Veredas: Llano Grande, San Félix, Sagrado Corazón, La Menta, La Cocha, El Ejido. In: A. Ulloa (Ed.), Informe final. Proyecto: Perspectivas culturales y locales sobre el clima en Colombia (pp. 155-180). Universidad Nacional de Colombia-Colciencias.
- Cardoso, A. (2015). Behind the life cycle of coal: Socio-environmental liabilities of coal mining in Cesar, Colombia. Ecological Economics, 120, 71-82.
- Cardoso, A. (2021). Iniciativas comunitarias locales que abren el camino a la transición amplia, democrática y sostenible en Colombia. Transición Posextractivista: Una propuesta por una democracia participativa, una sociedad equitativa y una economía resiliente en armonía con la natura-leza. Heinrich Böll Stiftung.
- Cardoso, A., & Turhan, E. (2018). Ecología política de las nuevas geografías del carbón: la cadena de carbón entre Colombia y Turquía (Serie: Hacia una Colombia post minería de carbón: aportes para una transición social y ambientalmente justa. No. 2). Fundación Rosa Luxemburg, Oficina Región Andina.
- CENSAT Agua Viva. (2015). Informe de verificación Arroyo Bruno, posibles impactos de su desviación. CENSAT Agua Viva.
- CENSAT Agua Viva. (2020). ¿Cómo salir de la dependencia del carbón? Elementos para debatir una transición socioeconómica en La Guajira. Hacia una Colombia post minería de carbón: aportes para una transición social y ambientalmente justa. CENSAT Agua Viva (No. 3).
- CENSAT, & Cordaid. (2016). Mapa parlante: la Guajira le habla al país. http:// guajira.extractivismoencolombia.org/mapa-parlante-guajira/

- Centro Nacional de Memoria Histórica. (2016). La maldita tierra: guerrilla, paramilitares, mineras y conflicto armado en el departamento de Cesar. https://centrodememoriahistorica.gov.co/la-maldita-tierra/
- Cerrejón S. A. (2020). Informe de sostenibilidad Cerrejón 2019. https://www. cerrejon.com/es/sostenibilidad/informes-de-sostenibilidad
- CINEP PPP. (2016). Informe especial: Minería, conflictos agrarios y ambientales en el sur de La Guajira. CINEP-Programa por la Paz. https://www.cinep. org.co/publicaciones/PDFS/20160501.informe_especial_mineria.pdf
- Climate Analytics. (2019). Coal phase-out: Insights from the IPCC Special Report on 1.5°C and global trends since 2015. Climateanalytics. https:// climateanalytics.org/publications/2019/coal-phase-out-insights-fromthe-ipcc-special-report-on-15c-and-global-trends-since-2015/
- Colectivo Miradas Críticas del Territorio desde el Feminismo. (2014). La vida en el centro y el crudo bajo tierra: El Yasuní en clave feminista. Autor.
- Colectivo Miradas Críticas del Territorio desde el Feminismo. (2017). Mapeando el cuerpo-territorio: guía metodológica para las mujeres que defienden sus territorios. Red Latinoamericana de Mujeres Defensoras de Derechos Sociales y Ambientales, Instituto de Estudios Ecologistas del Tercer Mundo, CLACSO GT Cuerpos, Territorios y Feminismos. https://miradascriticasdelterritoriodesdeelfeminismo.files.wordpress.com/2017/11/ mapeando-el-cuerpo-territorio.pdf
- Corral, F. (2021). Hacia una transición amplia, sostenible y democrática. Diagnóstico inicial y algunas perspectivas. In: L. Á. Pardo Becerra (Ed.), Hacia una transición amplia, sostenible y democrática (pp. 11-51). Heinrich Böll Stiftung.
- Corral, F., Santamaria, R., Mejía, A., Sánchez, Y., Cardoso, A., & Malz, N. (2020). Hechos, realidades y perspectivas de la minería de carbón a gran escala en los departamentos Cesar y La Guajira. Technische Universität Berlin, Universidad del Magdalena y Colectivo de Abogados José Alvear Restrepo.
- Cruz, D. (2016). Una mirada muy otra a los territorios-cuerpos femeninos. Solar, Revista de Filosofía Iberoamericana, 12(1), 35-46.
- Departamento Administrativo Nacional de Estadística. (2020). Cuentas Nacionales. Anexo Actividad Económica para el 2019. Dane. https:// www.dane.gov.co/index.php/overeignty-por-tema/cuentas-nacionales/ cuentas-nacionales-departamentales
- Departamento Administrativo Nacional de Estadística. (2021). Gran encuesta integrada de hogares. Mercado laboral por departamento. https:// www.dane.gov.co/index.php/estadisticas-por-tema/mercado-laboral/ empleo-y-desempleo/geih-historicos

- Drummond LTD. Colombia. (2020). Informe de sostenibilidad 2019. https:// www.drummondltd.com/noticias/informes-de-sostenibilidad/
- Duque Márquez, I., Mesa Puyo, D., Lotero Robledo, M., & Valderrama Sandoval, S. (2021). Transición energética: un legado para el presente y el futuro de Colombia. Ministerio de Minas y Energía. https://idbdocs.iadb.org/ wsdocs/getdocument.aspx?docnum=EZSHARE-1868633671-3
- El Heraldo. (2021, September 7). Producción de carbón en Colombia se recupera y sube 39,9%. El Heraldo. https://www.elheraldo.co/economia/ produccion-de-carbon-de-colombia-aumento-399-848179
- El Pilón. (2021, August 31). La minera CNR reactivará sus operaciones en el Cesar. Elpilon. https://elpilon.com.co/ la-minera-cnr-reactivara-sus-operaciones-en-el-cesar/
- Escobar, A. (2016). Autonomía y diseño: La realización de lo comunal. Editorial Universidad del Cauca.
- Esteva, G. (2008, November 17). Eshora de minga. La Jorna da MX. https://www.jornada.com.mx/2008/11/17/index.php?section=opinion&article=014a2pol
- Esteva, G. (2019). Caminos de autonomía bajo la tormenta. In: G. Makaran, P. López, & J. Wahren (Eds.), Vuelta a la autonomía: debates y experiencias para la emancipación social desde América Latina (pp. 21-47). Bajo Tierra.
- Feola, G. (2020). Capitalism in sustainability transitions research: time for a critical turn? Environmental Innovation and Societal Transitions, (35), 241-250.
- FILCO. (2018a). Estadísticas Laborales Departamentales-Cesar. http://filco. mintrabajo.gov.co/FILCO/faces/overeignty.jsf
- FILCO. (2018b). Estadísticas Laborales Departamentales-Guajira. http://filco. mintrabajo.gov.co/FILCO/faces/overeignty.jsf
- Food and Agriculture Organization [FAO]. (2021). Servicios ecosistémicos y biodiversidad. http://www.fao.org/ecosystem-services-biodiversity/es/
- Freire, P. (1992). Pedagogía de la esperanza. Siglo XXI Ediciones.
- Fuentes, G., Olivero, J., Valdelamar, J., Campos, D., & Phillippe, A. (2019). Si el río suena, piedras lleva. Sobre los derechos al agua y a un ambiente sano en la zona minera de La Guajira. Indepaz. http://www.indepaz.org.co/wp-content/uploads/2019/02/Si-el-rio-suena-piedras-lleva-Indepaz-2019.pdf
- Fundación Terram. (2021). Zonas de sacrificio. Terram. https://www.terram.cl/ carbon/zonas-de-sacrificio/
- Garavito, C. (2016). Los ríos tienen derechos. DeJusticia. https://www.dejusticia.org/overei/los-rios-tienen-derechos/

- Geels, F. (2002). Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. Research Policy, 31(8-9), 1257-1274.
- Giraldo, M., Gómez, J., & García, D. (2018). Las energías renovables en Colombia: problemática social, ambiental y jurídica desde una perspectiva territorial. https://foronacionalambiental.org.co/wp-content/uploads/2018/10/ Politica-publica-50.pdf
- Gobierno de Colombia. (2015). Colombia's INDC. UNFCCC.
- Gómez, M. y Trentini F. (2020). Mujeres mapuches en Argentina: acciones colectivas, formas de resistencia y esencialismo estratégico. In: A. Ulloa (Ed.), Mujeres indígenas haciendo, investigando y reescribiendo lo político en América Latina (pp. 105-157). Universidad Nacional de Colombia.
- González-Posso, C. y Barney, J. (2019). El viento del este llega con revoluciones. Multinacionales y transición con energía eólica en territorio wayúu. Indepaz.
- Gudynas, E. (2011). Debates sobre el desarrollo y sus alternativas en América Latina. In: M. Lang, & D. Mokrani (Eds.) Más allá del desarrollo (pp. 21-54). Fundación Rosa Luxemburgo y Abya Yala.
- Gudynas, E. (2013). Extracciones, extractivismos y extrahecciones. Un marco conceptual sobre la apropiación de recursos naturales. Observatorio Del Desarrollo, CLAES, 18(18), 1-17.
- Gunderson, R., Stuart, D., & Petersen, B. (2020). The fossil fuel industry's framing of carbon capture and storage: Faith in innovation, value instrumentalization, and status quo maintenance. Journal of Cleaner Production, 252, 119767. https://doi.org/10.1016/j.jclepro.2019.119767
- Henao, F., & Dyner, I. (2020). Renewables in the optimal expansion of Colombian power considering the Hidroituango crisis. Renewable Energy, 158, 612-627.
- Henao, F., Rodriguez, Y., Viteri, J. P., & Dyner, I. (2019). Optimising the insertion of renewables in the Colombian power sector. Renewable Energy, 132, 81-92.
- Hernández, M., Aguado, L., & Duque, H. (2018). Índice de pobreza energética multidimensional por regiones para Colombia. Economía Coyuntural, 3(3), 35-71.
- Hernández, R. (2014). Entre el etnocentrismo feminista y el esencialismo étnico.
 Las mujeres indígenas y sus demandas de género. In: Y. Espinosa, D. Gómez,
 & K. Ochoa, Tejiendo de otro modo: feminismo, epistemología y apuestas decoloniales en Abya Yala (pp. 279-295). Editorial Universidad del Cauca.

- Hirschhausen, C. von, Herold, J., Oei, P.-Y., & Haftendorn, C. (2012). CCTS-Technologie ein Fehlschlag: Umdenken in der Energiewende notwendig (No. 6). https://www.diw.de/documents/publikationen/73/ diw_01.c.392564.de/12-6-1.pdf
- Huertas, R., Ruíz, J., & Feliciani, S. (2009) De machos a hombres: violencia de género y desplazamiento forzado. Promotoría Juvenil Campaña Lazo Blanco. ACNUR, Colectivo Hombres y Masculinidades.
- International Labour Organization. (2015, October 5-9.). Guidelines for a just transition towards environmentally sustainable economies and societies for all. International Labour Organisation.
- Iniciativa Climática de México. (2017). Análisis de costo beneficio del Programa Bono Solar Fase 1. http://www.iniciativaclimatica.org/wp-content/ uploads/2018/04/Bono-Solar-ICM.pdf
- Intergovernmental Panel on Climate Change. (2014a). Climate Change 2014: synthesis report. https://www.ipcc.ch/report/ar5/wg3/
- Intergovernmental Panel on Climate Change. (2014b). Renewable energy sources and climate change mitigation. http://www.ipcc.ch/report/srren/
- Intergovernmental Panel on Climate Change. (2018). Global Warming of 1.5 °C. An IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change. http://ipcc.ch/report/sr15/
- International Renewable Energy Agency. (2020a). Energy transition. https:// www.irena.org/energytransition
- International Renewable Energy Agency. (2020b). Renewable power generation costs in 2019. https://www.irena.org/publications/2020/Jun/ Renewable-Power-Costs-in-2019
- International Renewable Energy Agency. (2021). Renewable power generation costs in 2020. https://www.irena.org/publications/2021/Jun/ Renewable-Power-Costs-in-2020
- Jaramillo, D. (2018). Resistencia comunitaria. La Carreta Social.
- Jin, S. W., Li, Y. P., Nie, S., & Sun, J. (2017). The potential role of carbon capture and storage technology in sustainable electric-power systems under multiple uncertainties. Renewable and Sustainable Energy Reviews, 80, 467-480. https://doi.org/10.1016/j.rser.2017.05.230
- La República. (2021a, July 10). Gobierno sanciona la Ley de Transición Energética para "seguir consolidando su uso". La República. https://www. larepublica.co/economia/gobierno-sanciona-la-ley-de-transicion-energetica-para-seguir-consolidando-su-uso-3199294

- La República. (2021b, September 28). "La escasez de carbón en China significaría precios más altos para el resto del mundo". La República. https://www. larepublica.co/globoeconomia/la-escasez-de-carbon-en-china-significaria-precios-mas-altos-para-el-resto-del-mundo-3239232
- López, A., Krumm, A., Schattenhofer, L., Burandt, T., Corral, F., Oberländer, N., & Oei, P. Y. (2019). Solar PV generation in Colombia. A qualitative and quantitative approach to analyze the potential of solar energy market. Renewable Energy, 148, 1266-1279.
- López, S., & Patzy, F. (2021). Carbón térmico en Colombia: implicaciones para la economía de La Guajira y Cesar. National Resource Governance Institute.
- Marcos, S. (2016). Para teorizar el género en Mesoamérica: dimensiones ontológicas del quehacer feminista descolonial. In: K. Bidaseca (Ed.), Poéticas de los feminismos descoloniales desde el Sur (pp. 35-80). Red de Pensamiento Decolonial.
- Martínez-Alier, J. (2011). El ecologismo de los pobres. Icaria Editorial.
- Martínez, V., & Castillo, O. L. (2019). Colombian energy planning. Neither for energy, nor for Colombia. Energy Policy, 129, 1132-1142.
- Mejía, M. (2015). Educación Popular en el siglo XXI. Ediciones Desde Abajo.
- Merchant, C. (1980). The death of nature: women, ecology and the scientific revolution. Harper & Row.
- Ministerio de Minas y Energía. (2020). La transición energética de Colombia. Memorias al Congreso. https://www.minenergia.gov.co/documents/10192/24226685/MemoriasCongresoMME-2020.pdf
- Ministerio de Minas y Energía. (2021). Transición energética: un legado para el presente y el futuro de Colombia. https://www.minenergia.gov.co/ libro-transicion-energetica
- Montoya-Domínguez, E. (2018). La extracción de carbón en el centro del Cesar, Colombia: apuntes para la comprensión del conflicto ambiental. Gestión y Ambiente, 21(2), 62-73.
- Moor, M., & van de Sandt, J. (2014). El lado oscuro del carbón: la violencia paramilitar en la zona minera del Cesar, Colombia. PAX Países Bajos.
- Múnera, L., Granados, M., Teherán, S., & Naranjo, J. (2014). Bárbaros hoscos. Historia de resistencia y conflicto en la explotación del carbón en la Guajira, Colombia. Opera, 14(14), 47-69.
- Navas, L., & Caro, C. (2018). ¿Cómo salir de la dependencia del carbón? Elementos para debatir una transición socioeconómica en La Guajira. Fundación Rosa Luxemburg Oficina Andina, CENSAT Agua Viva.
- Observatorio de Conflictos Ambientales. (2007, March 7). Dan vía libre a juicio contra Drummond en EEUU (Minería Carbón, Cesar). https://conflic-tos-ambientales.net/oca_bd/actions/view/627

- Observatory of Economic Complexity. (2019). What does Colombia export? (2017). https://atlas.media.mit.edu/en/visualize/tree_map/hs92/export/ col/all/show/2017/
- Oei, P., & Mendelevitch, R. (2016). Perspectives on Colombian coal exports on the international steam coal market until 2030. Rosa Luxemburg Stiftung.
- Öko Institut. (2020). Energiewende in Deutschland: definition, ziele und geschichte. start. Energiewende. https://www.energiewende.de/start
- Ovalle, L. (2021, September 7). Prodeco cierra definitivamente su operación minera en el Cesar. El Tiempo. https://www.eltiempo.com/colombia/ otras-ciudades/prodeco-cierra-definitivamente-su-operacion-minera-en-el-cesar-616229
- Oviedo-Ocaña, E. (2018). Las hidroeléctricas: efectos en los ecosistemas y en la salud ambiental. Revista de la Universidad Industrial de Santander Salud, 50(3), 191-192.
- Oyeronke, O. (1997). The invention of women: making an African sense of Western gender discourse. University of Minnesota Press.
- Pacini, D. (1984). Resource development and indigenous people: The El Cerrejon coal project in Guajira, Colombia. Cultural Survival, Inc.
- Pérez, P., Cheuquelaf, I. & Cerpa, C. (2011). Del cuerpo a las raíces: Uso de plantas medicinales para la salud sexual y reproductiva. Testimonios de mujeres de la Quinta Región de Valparaíso. Las picadoras de papel.
- Perry, K. (2020). Realising climate reparations: Towards a Global Climate Stabilization Fund and Resilience Fund Programme for loss and damage in marginalised and former colonised societies. United Nations Association of the United Kingdom.
- Portafolio. (2019, Octuber). Siete empresas entregarán energía renovable desde 2022. https://www.portafolio.co/overeig/ siete-empresas-entregaran-energia-renovable-desde-2022-534860
- Portafolio. (2021a, June 28). La multinacional Glencore se convirtió en dueña absoluta de Cerrejón. https://www.portafolio.co/negocios/empresas/ glencore-es-la-nueva-duena-absoluta-de-la-mina-cerrejon-553428
- Portafolio. (2021b, August 31). Lo que se sabe de la compra de la carbonera CNR por Key Industries. https://www.portafolio.co/negocios/empresas/ cnr-reanuda-su-produccion-de-carbon-en-el-cesar-555736
- Puerta-Silva, C. (2010). El proyecto del Cerrejón: un espacio relacional para los indígenas wayuu, la empresa minera y el Estado colombiano. Boletín de Antropología, 24(41), 149-179.

- Puerto-Chaves, L. M., & Corral, F. (2021). The political economy of coal in light of climate and mineral-energy policies: A case study from Colombia. In:
 M. Jakob & J. C. Steckel (Eds.), The political economy of coal: a cross-country perspective on obstacles to clean energy transitions. Routledge.
- Ramírez, R., Ustate, R., Arregocés, S., Múnera, L., Granados, M., Teherán, S., Naranjo, J., & Rodríguez, L. (2015). Bárbaros hoscos: Historia de la (des) territorialización de los negros de la comunidad de Roche. Centro de Investigación y Educación Popular CINEP/Programa por la Paz.
- Rivera, A. (1984, June). Exxon and the Guajiro. Cultural Survival Quarterly Magazine.
- RLS, & Sintracarbón. (2019). Carbón tóxico: daños y riesgos a la salud de trabajadores mineros y población expuesta al carbón. Evidencias científicas para Colombia (Vol. 2). Fundación Rosa Luxemburgo. https://rosalux. org.ec/pdfs/FRL_Carbon_toxico_WEB_compressed.pdf
- Roa, C. (2020, February 11). La minería de carbón en Boyacá y las propuestas del movimiento social. Periferia Prensa. https://periferiaprensa.com/ index.php/component/k2/item/2410-la-mineria-de-carbon-en-boyacay-las-propuestas-del-movimiento-social
- Rossi, M. (2020). Íntimo y público: mujeres indígenas como sujetos y como asuntos políticos. In: A. Ulloa (Ed.), Mujeres indígenas haciendo, investigando y reescribiendo lo político en América Latina (pp. 63-105). Universidad Nacional de Colombia.
- Ruiz Arroyave, J. (2017). Nuevas Masculinidades y Feminidades Rurales. Una experiencia en el caribe colombiano. Colectivo Hombres y Masculinidades y Swissaid.
- Salinas, Y., Hoyos, M. P., & Cristancho, A. M. (2018). Tierra y carbón en la vorágine del Gran Magdalena - Los casos de las parcelaciones de El Toco, El Platanal y Santa Fe. Centro Nacional de Memoria Histórica. http://www.centrodememoriahistorica.gov.co/informes/publicaciones-por-ano/2018/ tierra-y-carbon-en-la-voragine-del-gran-magdalenahttp://www.centrodememoriahistorica.gov.co/informes/publicaciones-por-ano/2018/ tierra-y-carbon-en-la-voragine-del-gran-magdalenahttp://www.centierra-y-carbon-en-la-voragine-del-gran-magdalen
- Santamaría, R., Cardoso, A., Pardo, C., Caselles, C., & Martínez, K. (2021). Co-creación de la Agenda de Transición del modelo minero-energético en el Caribe Colombiano. Fundación Rosa Luxemburgo.
- Santos, B. (2009). Una Epistemología del Sur: la reinvención del conocimiento y la emancipación social. Siglo XXI.

Santos, B. (2010). Descolonizar el saber. Reinventar el Poder. Trilce.

- Schelly, C., Besette, D., Brosemer, K., Gagnon, V., Arola, K., Fiss, A., Pearce, J., & Halvorsen, K. (2020). Energy policy for energy sovereignty: Can policy tools enhance energy sovereignty? Solar Energy, 205, 109-112.
- Scott, N., & Smith, A. (2017). "Sacrifice Zones" in the green energy economy: toward an environmental justice framework. McGill Law Journal, 62(3), 861-898.
- Segato, R. L. (2016). La Guerra contra las Mujeres. Traficantes de Sueños.
- Siete Días Boyacá. (2020, May 21). Acerías Paz del Río desmiente que haya despedido a trabajadores. https://boyaca7dias.com.co/2020/05/21/ acerias-paz-del-rio-desmiente-que-haya-despedido-a-trabajadores/
- Soler, J., Aristizábal, J., & Roa, T. (2018). Transición energética en Colombia: aproximaciones, debates y propuestas. Ideas Verdes, (7), 1-39.
- Soler, J. (2019). Transición energética en América Latina. Propuestas de transición energética en América Latina: agua y energía para nuestra soberanía. CENSAT Agua Viva, Movimiento Ríos Vivos y MAR.
- Steckel, J. C., Edenhofer, O., & Jakob, M. (2015). Drivers for the renaissance of coal. Proceedings of the National Academy of Sciences, 112(29), E3775-E3781. https://doi.org/10.1073/pnas.1422722112
- STEUnimagdalena. (2020-2021). Voces reflexivas: sentipensando cuerpo y territorio [Podcast]. https://soundcloud.com/steunimagdalena/sets/ voces-reflexivas-sentipensando
- Terán, E. (2021, August 11). La política en el Antropoceno: tiempo de desbordamiento e imaginación. Observatorio de Ecología Política de Venezuela. https://www.ecopoliticavenezuela.org/2021/08/11/la-politica-en-el-antropoceno-tiempo-de-desbordamiento-e-imaginacion/?fbclid=IwAR16cdfiUa5NzrAtjpjVMA2RTBO424g7jXvHEufiH1igkWNF-86j28UnZSzo
- TheEconomist.(2021).Missingingredients.Thebottleneckswhichcouldconstrain emission cuts, 16-18. https://www.economist.com/briefing/2021/06/12/ the-bottlenecks-which-could-constrain-emission-cuts
- Tierra Digna, Melo, D., Peña, R., Rocha, J., & Torres, A. (2015). El carbón de Colombia: ¿quién gana, quién pierde? Minería, comercio global y cambio climático. http://tierradigna.net/pdfs/informe-carbon.pdf
- Tierra Grata (2020). Informe de Gestión 2020. https://tierragrata.org/
- Tostón, M. (2013). El Río Ranchería. Perdido en el desierto. Indepaz.
- Ulloa, A. (2016). Feminismos territoriales en América Latina: defensas de la vida frente a los extractivismos. Nómadas, 45, 123-139.

- Ulloa, A. (2020). Mujeres indígenas haciendo, investigando y reescribiendo lo político en América Latina. Universidad Nacional de Colombia.
- United Nations Framework Convention on Climate Change. (2015). Paris Climate Change Conference-November 2015, COP 21. Adoption of the Paris Agreement, 21932 (December), 32. https://doi.org/FCCC/ CP/2015/L.9/Rev.1
- Unidad de Planeación Minero-Energética. (2017). Plan Nacional de Desarrollo Minero con Horizonte 2025. Minería responsable con el territorio (Vol. 1). Upme. https://www1.upme.gov.co/simco/PlaneacionSector/Documents/ PNDM_Dic2017.pdf
- Unidad de Planeación Minero-Energética. (2019). Carbón. Producción desde 2012. In SIMCO. Upme. http://www1.upme.gov.co/simco/Cifras-Sectoriales/Paginas/carbon.aspx
- Unidad de Planeación Minero-Energética. (2020a). BECO. Consulta. In BECO. Balance Energético Colombiano. Upme. http://www1.upme.gov.co/ InformacionCifras/Paginas/BECOCONSULTA.aspx
- Unidad de Planeación Minero-Energética. (2020b). Plan Energético Nacional 2020-2050 (documento de consulta). Upme. https://www1.upme.gov.co/ DemandaEnergetica/PEN_documento_para_consulta.pdf
- Unidad de Planeación Minero-Energética. (2021a). Carbón. Producción, regalías y comercio exterior. https://www1.upme.gov.co/simco/Cifras-Sectoriales/Paginas/carbon.aspx
- Unidad de Planeación Minero-Energética. (2021b). Carbón-regalías. https:// www1.upme.gov.co/simco/Cifras-Sectoriales/Paginas/carbon.aspx
- Unidad de Planeación Minero-Energética. (2021c). Plan Energético Nacional 2020-2050. La transformación energética que habilita el desarrollo sostenible. Gobierno de Colombia.
- Unruh, G. C. (2019). The real stranded assets of carbon lock-in. One Earth, 1(4), 399-401. https://doi.org/10.1016/j.oneear.2019.11.012
- Unruh, G. C. (2000). Understanding carbon lock-in. Energy Policy, 28(12), 817-830. https://doi.org/10.1016/S0301-4215(00)00070-7
- Valdez, M. (2020). Cuerpoterritorio: territorios de conocimiento. Memoria y movilidad en el agenciamiento de pu zomo mapuce en el sur del actual territorio argentino. In: A. Ulloa (Ed.), Mujeres Indígenas haciendo, investigando y reescribiendo lo político en América Latina (pp. 157-195). Universidad Nacional de Colombia.
- Vanegas, A. (2018). Cambios en los conflictos ambientales generados por la construcción de las Centrales Hidroeléctricas en Betania y El Quimbo (tesis de maestría). Repositorio Institucional de la Universidad Nacional de Colombia.

- Vargas, O. (2020). Energía comunitaria: retos y oportunidades para las energías renovables no convencionales desde abajo en Colombia (Serie: Hacia una Colombia post minería de carbón: aportes para una transición social y ambientalmente justa, No. 4). Fundación Rosa Luxemburgo, Oficina Región Andina.
- Vega, M., & Rodríguez, L. (2018). Carbón tóxico: daños y riesgos a la salud de trabajadores mineros y población expuesta al carbón - Evidencias científicas para Colombia. Sintracarbón & Fundación Rosa Luxemburg.
- Vita, L. (2020). Freno a proyecto de energía eólica en La Guajira por problemas con la consulta previa. Asuntos Legales Colombia.
- Viveros, M. (2002). De quebradores y cumplidores: sobre hombres, masculinidades y relaciones de género en Colombia. Editorial Universidad Nacional de Colombia
- Vögele, S., Rübbelke, D., Mayer, P. & Kuckshinrichs, W. (2018). Germany's "No" to carbon capture and storage: Just a question of lacking acceptance? Applied Energy, 214, 205-218. https://doi.org/10.1016/j.apenergy.2018.01.077
- Yanguas, P., Hauenstein, C., & Oei, P. (2021). The death valley of coal Modelling COVID-19 recovery scenarios for steam coal markets. Applied Energy, 288, 116564.
- Yildirim. (2021). Projects-Best Coal Company. http://yilmaden.com/projects
- Zamora, G. (2020). El sector carbonífero en Boyacá: Impactos de la política de decarbonización de sus socios comerciales. Crudo Transparente. https://crudotransparente.com/2020/10/28/el-sector-carbonifero-en-boya-ca-impactos-de-la-politica-de-descarbonizacion-de-sus-socios-comerciales/
- Zapata, S., Castaneda, M., Garces, E., Franco, C. J., & Dyner, I. (2018). Assessing security of supply in a largely hydroelectricity-based system: The Colombian case. Energy, 156, 444-457. https://doi.org/10.1016/j. energy.2018.05.118
- Zhao, S., & Alexandroff, A. (2019). Current and future struggles to eliminate coal. Energy Policy, 129, 511-520.