



Navigating a just energy transition from coal in the Colombian Caribbean

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Cover photo: Cerrejón's railway on the way to Puerto Bolivar, La Guajira

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Abstract

The current Colombian government has helped centre the concept of a just energy transition in public debate, encompassing a broad range of questions and concerns. National, regional and local discussions have different frameworks and visions for a future beyond fossil fuels, particularly regarding coal, which is a major export commodity but not a major fuel for domestic use in Colombia. For thermal coal–producing regions in Colombia, this debate touches on the challenges of both the legacy of extractive activities and the repercussions of losing a significant industrial sector, affecting local and regional economies and communities. Drawing on a series of workshops, a literature review, and interviews around transitions from coal in the Colombian departments of Cesar and La Guajira, we identify different visions of a just energy transition put forward at the national and regional levels, as well as some of the interests and strategies leveraged by different actors and groups in pushing certain visions of such a transition. We provide insights into the power dynamics that shape resistance to phasing out coal and opportunities for transitions to more sustainable futures, with a strong emphasis on the efforts of civil society to create and achieve their visions of a just transition.

1. Introduction

Colombia is the lead exporter in Latin America of thermal coal, or coal meant for producing electricity, and historically among the top five worldwide (IEA, 2022). Nearly all of the volume of thermal coal extraction is concentrated in northern Colombia, especially in the subnational regions, known as departments, of La Guajira and Cesar, in the Colombian Caribbean. Coal is not a dominant fuel for electricity generation in the country but is instead a major export; the two regions are heavily dependent on coal extraction for regional employment and public budgets, generating unique vulnerabilities in the context of the global energy transition required under the climate crisis (López & Patzy, 2021; Strambo et al., 2018; Yanguas Parra et al., 2021).

According to the latest *Production Gap Report*, in order to meet the 1.5°C limit on global warming, the world's countries need to reduce coal production by roughly 97% between 2020 and 2050, but instead national government plans and projections worldwide would lead to 460% more coal by 2030 than levels consistent with the 1.5°C limit (SEI et al., 2023). In other words, to meet the 1.5°C target, countries should aim for a near total phase-out of coal production and use by 2040 (SEI et al., 2023). The Intergovernmental Panel on Climate Change also states that the consumption of fossil fuels for energy will need to be reduced to near zero by the end of this century (Rogelj et al., 2018). In other words, the future of coal is bleak, with implications for Colombia and other coal-producing countries and regions.

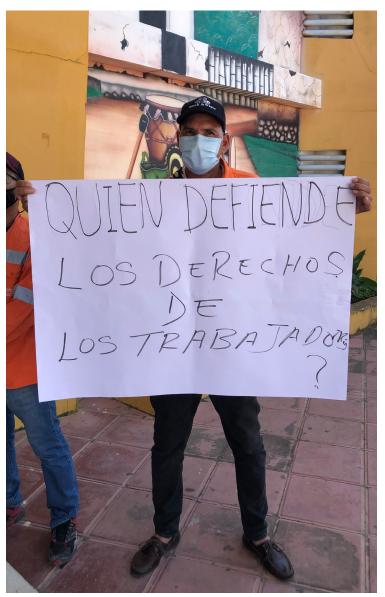
Colombia's first formal commitments to a just energy transition include a single reference in the latest update to the Nationally Determined Contribution (NDC); approved by the previous government in 2020 (led by then-President Ivan Duque), the NDC refers solely to a just transition of the labour force (Government of Colombia, 2020). At its minimum, a just energy transition encompasses an inclusive, supported transition of the fossil fuel industry labour force; more comprehensive definitions refer to an inclusive, democratic process toward decarbonization that helps establish diverse supports for fossil fuel-producing communities and regions, safe rehabilitation and closure of mines and contaminated lands, social protection and basic services, and support for alternative economic sectors and livelihoods beyond fossil fuels (Atteridge & Strambo, 2020; Stevis et al., 2020).

The current government (led by President Gustavo Petro) has made commitments to establish a just energy transition roadmap that takes a broader concept of a just energy transition and has begun to prioritize coal-producing regions in the Caribbean (Ministerio de Minas y Energía, 2022). At the same time, some policymakers, mining companies and other stakeholders have resisted efforts to plan for and accelerate the transition away from coal. A recent effort to prohibit new open-pit coal mines in Colombia's latest National Development Plan (2022–26) was blocked by Congress (Cambio, 2023b; DNP, 2023). Various local actors in Cesar are strongly interested in reopening the mines, the activities of which were paused during the Covid-19 pandemic, and to even open new mines in La Guajira and revive some stalled plans for new coal power plants in Colombia (Caracol Radio, 2022; López, 2022; Monsalve, 2023b). Low prices for coal during the pandemic dampened mining activities, but the Ukraine crisis lifted demand for coal again, with Colombian exports rising in the new global market climate (Cambio, 2022).

In this context, the findings reported in this paper provide insights into the power dynamics and distributional politics that shape resistance to phasing out coal and to opportunities for change, as part of a broader project comparing these lessons and experiences in Colombia, South Africa and Indonesia (Bößner & Fauzi, 2023; SEI, n.d.), aiming to understand challenges to a just energy transition in coal-producing countries in the Global South. In particular we sought to answer the following questions: What different concepts, framings or visions of a just energy transition from coal are being put forward in discussions at the national and regional levels, and by whom? What are the main barriers to a just energy transition from coal (social, environmental, economic, political, etc.)? What power relations, interests and strategies are

being leveraged by different actors and groups in pushing certain visions of a just energy transition, and where are opportunities for civil society to orient just energy transitions?

The analysis draws on the results of discussions at three workshops held in Riohacha, La Guajira; La Paz, Cesar; and Bogotá, in August and September 2022. In Riohacha, 28 people from diverse groups participated, including from trade unions, the regional public sector, a large industry association, academia, and Indigenous and Afro-Colombian organizations, as well as other communities directly affected by mining activities or their potential expansion. In La Paz, 24 people attended, including members of academia, the regional public sector, trade unions, communities directly affected by mining activities or the potential expansion of extraction activities, and the Chamber of Commerce of Valledupar (Cesar). Young people, both university students and local youth leaders, were also in attendance. In Bogotá, the workshop had the participation of representatives from two non-governmental organizations (NGOs), Censat Agua Viva (Censat) and *Pensamiento Acción Social* (PAS), which are leading instrumental work on the conceptualization and collective construction of territorial alternatives to extractive-based development.



"Who defends the rights of workers?" reads one of the signs from Prodeco workers protesting against the impacts of the suspension of mining operations in La Jagua de Ibirico, Cesar © JOSÉ VEGA-ARAÚJO / SEI

We intentionally designed the workshops so that private sector participation was limited to representatives from the large industry association and local chambers of commerce, with no direct participation by mining companies. Given the sensitivity of discussions around the extractive sector and its related conflicts in Colombia and in the region, we felt this was necessary to establish an environment of trust, enable a frank discussion, and protect the security of social leaders and other civil society participants. Our analysis also relies on a literature review of existing academic and grey literature on coal and a just energy transition in Colombia. The review included private and public sector documents, as well as statements and documentation from coal companies.

The following section introduces the historical and political-economic context of thermal coal extraction in Colombia and the region, to place the analysis in its historical national and regional context. Section three outlines key actors and networks within the evolving just transition debate. Section four delves into the recent debates around a just energy transition in the country, including identifying the principal framings or visions of such a transition advocated for by key actors and networks. Section five details some of the main challenges for just energy transitions from thermal coal in La Guajira and Cesar, as well as at the national level, and a brief discussion of an evolving case in Cesar, where serious impacts from the pausing of mining activities have already occurred. Section six brings these prior sections together with an analysis of the power relations and distributional politics shaping resistance to phase-out and opportunities for change, and how these relations and politics are being navigated or leveraged by different actors or groups. The concluding section points to remaining challenges, opportunities for impact, and further research avenues.

2. Historical political-economic context

The history of the coal industry in Colombia can be roughly divided into two main periods, differentiated by an emphasis on domestic versus international markets. The first period, beginning around 1837 with the first domestic use of coal as fuel, focused on supplying the national market for power generation and other industries such as steel, cement and railways; the second period, from the 1980s onwards, shifted to prioritizing coal exports (Arias, 2015; INGEOMINAS, 2012).

No reliable data exist on production from the earliest part of that first industrial period, but since 1940, production of around 1.15 million metric tons (Mt) was reported, mainly from mines in the central Andean regions of Cundinamarca, Antioquia and Boyacá and in the Pacific Coast region of Valle del Cauca (Arias, 2015; UPME, n.d.). That coal fed the country's incipient industrial base – the boilers of locomotives, steamships, ironworks, cement and textile factories – as well as other minor uses (Arias, 2015; INGEOMINAS, 2012). From the 1940s on, the increase in coal production went hand in hand with the expansion of domestic industry and the electricity sector; in the latter half of the 20th century, coal use was especially tied to growing electricity demand and the 1970s energy crisis, which increased interest in oil substitutes (Viloria, 1998).

Discoveries of large thermal coal reserves in the Caribbean region kicked off the second historical period. The start of operations of the Cerrejón mine in La Guajira in 1983, then promoted by US-based Exxon Corporation and Carbocol, a Colombian state-owned company¹, marks the beginning of large-scale coal exploitation in Colombia and its entry into global export markets.² Cerrejón contributed to a significant increase in total coal production, from an average of 4 Mt in the period 1979–82 to nearly 21 Mt in 1990–94, of which about 85% was exported (DANE, n.d.; ECOCARBÓN, 1997; OCA, 2017; UPME, n.d.).

About a decade after Cerrejón opened, the mines in Cesar entered into operation (including those of the second largest Colombian coal producer, Drummond, in 1995). The region's coal production eventually made Colombia the second largest exporter of coal to Europe in the late 1990s and early 2000s; about 70% of Colombian coal exports in that period were destined for Europe (ECOCARBÓN, 1997; El Tiempo, 2001). Thermal coal from these mines was prioritized for exports due to its abundance, high calorific content, and low sulphur and ash content (El Tiempo, 1995), as well as due to favourable international prices and the perception that coal was susceptible to being replaced by other energy sources and therefore should be exploited sooner than later (El Tiempo, 1990).

The Cerrejón mine triggered regulations at the national level and sparked a heated debate regarding the contractual arrangements needed in the face of such unprecedented investment in the country (Restrepo, 1981). The national benefits emphasized in the contract between Exxon and Carbocol were primarily the rents generated (i.e. royalties and taxes); the contract was widely criticized for the limits of national participation and weak technical capacity to assess the mines' environmental and social risks. Other concerns were voiced over the so-called enclave economies often associated with mining projects, with an influx of residents and workers from outside the original communities, as well as over projections of limited broader economic benefits for the region (Acosta, 1982; CINEP/PPP, 2016; Semana, 1982). However, the contract was characterized by the President at the time, Belisario Betancur, as a model for the future (Restrepo, 1981).

¹ Carbocol was created in 1976 as a "Commercial and Industrial Company of the State" in order to manage the country's coal resources and, especially, represent the state in Cerrejón's contract. Over the past two decades, ownership of Cerrejón was shared by three foreign companies: BHP, Glencore and Anglo American plc. In 2021, Glencore acquired sole ownership of Cerrejón.

² Some previous modest attempts to export coal from the Pacific region to take advantage of limited reserves in Valle del Cauca were less successful (De La Pedraja, 1993).

— Production — Exports

100M metric tons

90M

80M

70M

60M

50M

40M

20M

10M

Figure 1. Coal production in Colombia

Source: DANE (n.d.), ECOCARBÓN (1997), OCA (2017) and UPME (n.d.).

1960

1970

1950

1940

Like that of Cerrejón, the most important contracts in the coal sector were made under the *aportes* ("contributions") contracting model, covering more than 90% of national coal production (Pardo, 2013). The *aportes* model was established by Law 61 of 1979 as the mechanism for exploring and exploiting coal in Colombia, through which areas reserved by the national government were handed over to public companies that could explore and exploit directly or through third parties, limiting direct access to individuals (Pardo, 2013; Zapata, 1988).

1980

1990

2000

2010

2020

This aportes model was further developed in the first national Mining Code⁴ (Decree 2655 of 1988), in which the national government could directly intervene in mining activity through public companies. Its main objective was to adequately respond to demand, promote investment in the sector, and enhance development in producing regions. Decree 2655 declared the mining sector of public utility and social interest, allowing the Ministry of Mines to proceed with expropriations if necessary for the development of the sector. It also defined the scales and types of mining titles: exploration licences, permits, concessions and aportes, and recognition of private property.

Since 2000, within the framework of the current Mining Code (Law 685 of 2001)⁵, the intervention of the Colombian government has been minimized and explicitly oriented towards regulation that ensures mining competitiveness and attractiveness to private investors (OCA, 2017; UPME, 2002; Vélez-Torres, 2014). Contracting shifted from the *aportes* model to the mining concession or title as the only means by which the national government can grant mining ownership to a third party in order to advance a coal project. The framework of the 2001 Mining Code also essentially eliminated a differentiated approach to the scale of mining operations and established generic procedures for small, medium and large-scale mining operations (Echavarria, 2014).

Cerrejón (contract 001/76, 081/91), Drummond (contract 078/88 and 144/97) and Prodeco (contract 044/89).

⁴ Previously, Colombia had adopted the Mining Code of the department of Antioquia (Poveda, 2017).

⁵ The 2001 Mining Code, which adjusts rules to better accommodate large-scale mining, was produced with technical assistance from the Canadian government, despite concerns raised by the Colombian General Comptroller's Office (Fierro, 2012; Ramírez, 2006).

While large-scale coal mining developed in Cesar and La Guajira concentrates 90% of national coal production, prioritizes exports and is mainly developed by foreign transnational companies, small- and medium-scale coal mining in the interior of the country represents 10% of national coal production, supplies domestic demand and is mainly operated by national and even local companies (López & Patzy, 2021; UPME, n.d.). These two models of coal exploitation have profound differences, not only in the technical aspects of extraction, but also in terms of their social, economic and environmental impacts on local communities, landscapes and territories.

The country's coal production volume eventually became weighted toward foreign international companies (e.g. Glencore and Drummond), even though at first, regional (e.g. COAGROMINERA, EMCARBÓN) and national (e.g. CARBOANDES, CARBOCARIBE, ECOCARBÓN, MINERCOL) companies also participated in the exploration, extraction and commercialization of coal. The national government's stake in Carbocol was privatized, and other national companies such as Prodeco and Carbones del Caribe were sold to private international companies such as Glencore. The liquidation of MINERCOL in 2004 marked the total privatization of the coal industry in Colombia (Nieves & Hernández, 2016).

This privatization process happened in parallel with public policy decisions made since 1990, beginning with the context of economic openness adopted by President Cesar Gaviria's government and continuing after, when subsequent governments gave priority to establishing legal security frameworks for foreign investment to promote the mining and energy sector in the country (Martínez et al., 2013; Semana, 2018). In the 2000s, President Alvaro Uribe's government deepened its legal security strategy by accelerating procedures for private investors and establishing long-term tax incentives to favour private capital. The coal sector grew substantially, and the relationship between the national government and the mining sector strengthened, establishing a strong coalition between the government and the mining sector that has been fundamental for the formation of incentives to the coal industry (Strambo et al., 2018).

All these dynamics have made Colombia one of the top five coal exporters worldwide. Coal is the country's second most exported product, at around 13% of the total value of Colombian exports (Ministerio de Minas y Energía, 2021). Coal represents some 60% of all mineral exploration, followed by gold, nickel and emeralds. In terms of employment, the coal industry is estimated to generate around 130 000 direct and indirect jobs nationwide (ANM, n.d.).

However, coal production in Colombia declined in the past few years, from an average of 88 Mt in the period 2012–19 to 59.6 Mt in 2021, then holding steady at 60.9 Mt in 2022 (DANE, 2023). This reduction began prior to the Covid-19 pandemic as markets for Colombian coal shifted; it deepened during the economic crisis associated with the pandemic, as well as with Glencore's suspension of Prodeco's coal mining operations in Cesar (Prodeco, 2021), labour strikes at Cerrejón, and lower investment by the two main companies, Glencore (Cerrejón) and Drummond (UPME, n.d.; Yanguas Parra et al., 2021). While production volumes did not increase dramatically in 2022 with the resurgence of demand for Colombian coal in the face of the Ukraine crisis, the value of Colombian coal exports hit record highs and more than doubled from 2021 to 2022 (DANE, 2023). This apparent contradiction, of maximizing coal export value at the same time as the government positioned just energy transitions as a key policy priority, highlights some of the challenges facing just transitions from coal in Colombia.

3. Key actors and networks in just transitions from coal

In contrast with some other Latin American countries, public discussion on a just energy transition in Colombia is already under way at different scales, with involvement from multiple sectors. These discussions have been pushed in particular by labour organizations, community groups, local and national NGOs, and academia; the national government has only more recently engaged explicitly in calls for a just energy transition. The private sector, and coal companies themselves, have also recently begun to take on a narrative of a just energy transition, often strategically, to highlight their role in providing public finance (through royalties and taxes) to fund the transition.

Civil society organizations have been pushing for debate at the local, regional and national levels for several years, especially in parts of the country more heavily dependent on fossil fuel extraction, such as Cesar and La Guajira; these areas also have borne the brunt of coal mining's negative impacts (especially social and environmental). Visibility of these debates increased over the past three years especially, due to extreme market volatility, the local impacts of suspensions of mine operations, pauses in production, and labour reductions. While the previous national government of former President Duque (2018–22) initiated the first national policies on energy transition, generating some public attention, the focus of official political discourse around energy transition has since shifted under the current administration of President Petro (since 2022) towards a broader and more active public promotion of a just energy transition, including around coal specifically.

As mentioned above, Colombia's latest NDC, developed and submitted under Duque's government, included a commitment to develop a just energy transition strategy, though limited to a focus on the workforce (Government of Colombia, 2020). Planning documents under Duque's administration also promoted just energy transition narratives linked to the continuation of coal extraction and the use of existing coal resources, coal-related human capital and infrastructure (Congreso de la República, 2021; CONPES, 2022; Hoja de Ruta Del Hidrógeno En Colombia, 2021). The logic of continuing coal extraction as part of an energy transition is mainly based on the argument that while coal still has a market, it should be exploited to maximize revenues (taxes and royalties) and contribute to paying for the cost of an energy transition.

At the congressional level, in response to demands by local communities, an ad hoc congressional commission on coal was established in 2021 by a set of concerned senators, to investigate and raise public attention to the economic, social and environmental crises facing communities in the coal-producing areas of La Guajira and Cesar (Portafolio, 2021). This commission focused some public attention on coal extraction problems and challenges but did not result in any specific policy actions; however, it helped to further galvanize some local and national organizations around the affected regions and issues.

For its part, the Petro government proposed a new climate and energy policy that includes pushing for a gradual energy transition and developing a comprehensive just energy transition roadmap. A working group was established to deliver the roadmap in February 2024. The roadmap will be based on a set of principles that address gender and diversity concerns, and it should include (i) equity and democratization, (ii) graduality, sovereignty and reliability, (iii) binding social participation and a (iv) knowledge-intensive transition (Ministerio de Minas y Energía, 2023).

The Petro government has started a set of public dialogues around the country to support the development of the just energy transition roadmap, as well as a specific stakeholder dialogue process in Cesar focused on the coal-producing municipalities (the so-called Coal Corridor that was also renamed a "Life Corridor" by Petro's government). The latter process is meant

⁶ See, for instance, Colombia's Hydrogen Roadmap, which highlights coal-produced "blue hydrogen" as an "enabler of a Just Transition" (Hoja de Ruta Del Hidrógeno En Colombia, 2021).



Cerrejón's railway on the way to Puerto Bolivar, La Guajira © EDUAR MONSALVE / SEI

to develop a regional just energy transition plan. In the framework of those dialogues, the government committed financing from the National Development Plan to initial activities such as ecological restoration and economic transfers, to support economic diversification and labour reconversion within areas impacted by coal exploitation (Caracol Radio, 2023; Ministerio del Trabajo, 2022), including using royalties to finance other economic sectors (Presidencia de Colombia, 2023). Current transition efforts also include the reconversion of coal-related electricity generation starting with the plant Termoguajira, which is partly supplied with coal from Cerrejón (ANDEG, 2021).

A long-term plan for a just energy transition is yet to materialize. The stakeholder dialogues have been criticized for the quality of participation and representativeness. The broader energy transition proposals of the government have been subjected to fierce public debate, including between ministers of the same government, for example, between the previous ministers of Finance and of Mines and Energy, the latter of which was tasked with leading the transition (Cambio, 2023a; López, 2023). As of May 2023, nearly a year into the current administration, progress on developing new policies and actionable commitments was still limited, as the government has struggled to translate the stated commitments, including the necessary articulation across and between ministries and levels of government, into feasible technical programs.

In the context of strong economic dependence on the mining sector, subnational governments have generally continued to protect the interests of large-scale mining (Weber & Cabras, 2021). Maintaining the flow of revenue was a decisive criteria for aligning regional leaders with the mining-energy agenda in their territories, based on the expectation that coal mining can boost other sectors and social programs (CONPES, 2022; OCA, 2017). For example, Prodeco's suspension of operations in Cesar has led municipalities to publicly request the reopening of the mines to prepare for a just energy transition (Caracol Radio, 2022).

Although some 2020–23 regional development plans⁷ recognize the decline of coal as a threat to subnational economies, concrete actions have been limited. Despite the national

See for example the development plans of the department of Cesar and the municipality of Barrancas (La Guajira).

government's financial commitments to coal-producing municipalities in Cesar (Caracol Radio, 2023; Ministerio de Ambiente y Desarrollo Sostenible, 2022), workshop participants raised concerns regarding to what extent the use of those funds have actually been aligned with criteria for a just energy transition.

The large-scale thermal coal sector, made up largely of transnational companies and also represented through industrial associations, had been mostly silent on the discussions of a just energy transition. Yet recently these entities have started to adapt their own discourse to include just energy transitions and carbon neutrality as part of the justification for their continuing extractive activities, or to find business opportunities in the process of mine closure and decarbonization (Drummond, 2023; Patria Energética, n.d.). For example, the company CNR has pivoted to become Patria Energética (which translates loosely to Patriotic Energy), "working for a Just Energy Transition in which coal mining supports new, profitable models of sustainable development that benefit communities and workers" (Patria Energética, n.d.).

Also, coal mining companies operating in other regions of Colombia have started to advance copper exploration activities in La Guajira, reflecting the identification of copper by the previous government as a strategic mineral for the energy transition; in 2021, the government granted several copper mining titles in the region (Pastrán, 2021; Semana, 2022). Local communities have expressed concerns regarding the quality of consultations with local communities, protection of social leaders and guarantees to the right to prior consultation, also considering the environmental performance of these companies' coal mining operations in other regions of Colombia (Cuello, 2023; Valero, 2021).

Grass-roots organizations, such as Consejos Comunitarios (Afro-Colombian community councils), Indigenous organizations, and local community groups, have come together to discuss the impacts of the suspension of mining operations and risks of new mining projects and to voice their needs in the public sphere. National organizations, universities and think tanks have contributed through research, courses for labour retraining, and establishing relations with the government to support systemic planning for an energy transition in these regions. Tensions have emerged as external organizations engage locally, replicating what is often referred to as "academic extractivism", or the instrumentalization of local communities to fulfill academic or research projects/objectives without involving them, their needs or their interests. Local communities claim that they are not being acknowledged in the provision of information used for academic or advocacy work and that they do not receive benefits from such efforts (Colectivo Mujeres Guerreras de La Sierra y Red de Mujeres del Municipio del Paso, 2023).

Coalitions and networks that bring together local, regional and national actors such as the Coalición Caribe (Caribbean Coalition), La Guajira le Habla al País (La Guajira Speaks to the Country), Cesar Sin Fracking y Sin Gas (Cesar Without Fracking and Without Gas), and the Consejo Permanente para la Transición Energética Justa (Permanent Council for a Just Energy Transition) have also been actively participating to coordinate actions and enhance their advocacy capacity.

Representatives from the main mining and energy trade unions also have been active in just energy transition discussions. Five unions - Sintracarbón, Sintracerrejón, Sintradrummond, Sintradem and Sintraminenergética - established the Colectivo de Trabajadores por la Transición Justa (Workers Collective for a Just Transition), with support from an international union organization, CNV Internationaal (CNV, n.d.). In May 2022, three unions - Sintracarbón, the Unión Sindical Obrera (USO) and Sintraelecol - launched the Centro de Innovación e Investigación para el Desarrollo Justo del Sector Minero Energético de Colombia (Centre for Research and Innovation for a Just Development of the Mining and Energy Sector in Colombia), with support from CNV Internationaal, IndustriALL Global Union, and the Friedrich-Ebert-Stiftung en Colombia (FESCOL).

4. Framings and visions of a just transition from coal

Although Cesar and La Guajira are both thermal coal-producing territories with high dependence on revenues generated by coal mining, the workshops highlighted some key differences in the proximity, threat and urgency of a transition from coal. These also corresponded to some differences in the likely future scenarios and visions of a just energy transition.

In La Guajira, many workshop participants questioned the existence of an incipient energy transition, since the Cerrejón mine - currently the largest open-pit coal mine in Latin America - continues to operate despite difficulties associated with blockades and protests against the company's infrastructure (El Tiempo, 2021; Forbes, 2021; Portafolio, 2022). In fact, some anticipate a future scenario marked by continuity of the current extractive model, shifting from economic dependence on coal to dependence on copper extraction.

The suspension of Prodeco's mining activities in Cesar has created a different context for discussions of just energy transitions. In Cesar, communities have already experienced massive layoffs and the slowdown of economic activities as consequences of the suspension of mine operations. This situation accelerated discussions on the regulation of mining closure, environmental liabilities, and demands for the management of historical debts for resettlements, which is an ongoing legal battle by communities displaced or similarly affected by mining operations, framed within a narrative of a just energy transition.

The different experiences in these two regional contexts led to differences in the direction of workshop discussions of just energy transitions. In both cases, there was an explicit call for greater participation in regional and local discussions of the future of coal, especially participation by local communities. However, in the case of La Guajira, the discussion focused more heavily on the existing social and environmental impacts of coal mining, while the discussion of transition was more hypothetical, about what was expected to happen. In contrast, in Cesar, there was a deeper engagement with proposing visions of a just energy transition for the region, especially focused on the issues of justice, fairness, ecological compensations, labour reskilling and upskilling, and economic diversification, given that transition has effectively already started, as activities of some mines have already been suspended.

Some civil society organizations at the national level call for a socio-ecological transformation one that goes beyond a transition from fossil to renewable energy systems - and also beyond a focus on regional economic, environmental and social development issues directly linked to the history and practice of fossil extraction. Rather, a socio-ecological transformation would address the current interlinked systemic crises including climate change, human rights abuses, justice and equity concerns, and especially the broader political-economic context of a cycle of dependency on fossil fuels and other extractive industries needed to maintain the "corporate economicpolitical model" (Censat et al., 2022; Pinilla & Tibocha, 2022; Yanguas-Parra et al., 2021).

Workshop participants from several of these organizations argued that the transition must be socio-environmental to "repair life" and build a "post-extractive" future; in other words, there will not be a true transition if there is no change in the economic model. In that regard, participants noted that the transition should be comprehensive and gradual while ensuring justice for repairing environmental and community damages. This vision further includes guaranteeing respect for the autonomy and sovereignty of communities, while prioritizing territorial (local communities and regional) perspectives and their effective participation in decision-making. This implies a cultural transformation and ensuring interculturality - especially including dialogue across ethnic, regional and social class differences - in the planning and implementation of transition processes.

In the discussion, organizations at the national level further emphasized that a just energy transition must include the transformation of governance at different scales, since the dominant scheme of "corporate transition" reflects a high concentration of power in the state and in profit-led companies. In this view, there is recognition that justice itself, a key part of just energy transitions, has multiple meanings and implications, but that it is largely absent as a guiding principle in the common, corporate model of transition.

In an exercise mapping actors' conceptions of a just energy transition, participants located different approaches along two axes, drawing on a model proposed by the Just Transition Research Collaborative (2018, p. 12): vision, which is transformational versus status quo, and scope, which is widely inclusive versus more narrowly focused (see Figure 1). In reflecting on the meaning of a just energy transition and the visions held by different actors in the Colombian context (focused especially on different civil society actors), participants in the Bogotá workshop proposed the inclusion of two additional axes with dimensions they considered fundamental to reflect other characteristics inherent to transformation not represented by the existing axes (Figure 1). One axis highlighted the dimension of power, with one extreme as high concentration of power and the other as distributed power; the other included the dimension of governance, specifically the type of governance (general, universal rules) versus territorially differentiated governance (highlighting differentiated meanings of justice and territorial reparations). The latter axis was highlighted also as a way of incorporating the missing dimensions of scale and levels of action for transformation.

For workshop participants, a key factor for an effective transformation is recognizing territorial diversity, including social, cultural and ecological aspects, which also interact and overlap at different scales. Hence, they expressed their concern for governance that can accommodate these complex, differentiated contexts to enable meaningful change.

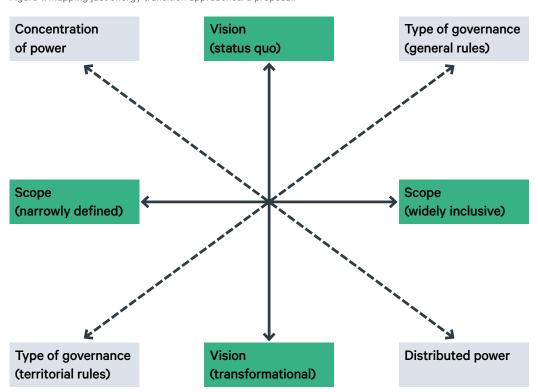


Figure 1. Mapping just energy transition approaches: a proposal.

Source: authors' own drawing on a model proposed by the Just Transition Research Collaborative (2018, p. 12)

In all the workshops, the involvement of communities was identified as indispensable, making it necessary to strengthen their capacities and position their agendas in decision-making bodies and in the exit strategy of the coal economy (Martelo et al., 2023). In particular, participants had a strong focus on the governance of mine closures and the management of related socioenvironmental liabilities, which must respond to accumulated problems and contemplate not only regions and territories where extraction occurs, but also those territories impacted by railways and port infrastructure for export. The transformation of distributional schemes is required in terms of who assumes the environmental costs and responsibility for impacts on each of these territories.



Workshop participants considered some of the challenges and opportunities in the context of mine closure. © JOSÉ VEGA-ARAÚJO / SEI

The labour dimension was also a fundamental issue identified in the three workshops. Oriented towards an orderly labour transition, the vision included guarantee of new sources of employment, avoidance of mass layoffs and the non-intensification of working hours, change in the approach to risks at work, and proportionality in the allocation of wages, in addition to early retirement schemes.

Finally, participants in the workshops considered whether the transition can be a process in itself of reconciliation and reconstruction of the social fabric. Some stakeholders proposed the recovery of agricultural vocations as part of the productive alternatives for these territories; in other words, a return to the economy present in these communities before the arrival of coal mining and enclave economies. However, for some, this requires an improvement of practices and conditions. According to national organizations, any productive activity must be considered "in relation to nature" and the environment, and the impacts of these activities must be consistent with resource limits and planetary boundaries, in other words, a set of biophysical thresholds that cannot be transgressed if life is to remain sustained on Earth (Rockström et al., 2009).8

For a recent assessment of transgressed planetary boundaries, see, for example, Richardson et al (2023).

5. Main challenges in national and regional contexts

We consider the economic, environmental and sociocultural barriers at different scales in a just energy transition, from the perspective of workshop participants. Also, a brief discussion of an evolving case in Cesar illustrates some of the challenges to a just energy transition from coal, including the difficulties of unplanned closures and, conversely, the urgency of planning.

5.1 Economic barriers

Economic factors are a major challenge to transition, as thermal coal in Colombia is an important source of revenue. There are important differences between the national and regional levels.

From a national perspective, there are two major barriers to the transition away from coal. The first is the importance of fiscal revenues from coal exports. The income from taxes and royalties from coal contributes 2.4% of total fiscal income at the national level. Coal royalties amount to more than 80% of the mining sector's royalties – much more than gold and other minerals – and are second in importance only to oil, with coal representing 21.6% of total royalties within the period 2021–22 (López & Patzy, in press). The second barrier is the impact of coal exports on the trade balance, as coal is the second export after oil.

Further, coal is important in the country's balance of payments, considering the strong influence of direct foreign investment in mining. Ultimately, this foreign investment also has an influence on the exchange rate, indebtedness, interest rates and other macroeconomic variables. "Every peso counts" in the context of a fiscal deficit and pressure on public spending to reactivate the economy, in order to comply with a social agenda that a recent tax reform has not been able to finance completely. While not nearly as important as oil exports, these are still significant macroeconomic impacts (Peszko et al., 2020).

From a regional perspective, there are also two important economic factors. First, the fiscal importance of coal production is much higher at the subnational than at the national level. In Cesar and La Guajira, coal represented nearly 43% and 61% of the departments' total incomes, respectively, in 2019–20 (DANE, 2022; López & Patzy, in press). Second, there is fiscal dependence at the municipal level, given that royalties contribute a significant share of public budgets. For example, in 2021, royalties represented 79% of the public budget of the municipality of Becerril, 41% of Barrancas, 35% of La Jagua de Ibirico and 26% of Albania.

Regarding employment, the three coal mining companies that operated in Cesar and La Guajira reported for 2018 and 2019 a total average of 25 911 jobs, including direct jobs and contractors, and for 2020, a decrease to 13 559 jobs for various reasons besides the Covid-19 pandemic. While this is much lower than employment in other sectors such as agriculture, these are significant in mining-centred municipalities. Furthermore, jobs in the mining industry have historically been fairly well paid, with stronger benefit schemes than other sectors. It is estimated that thermal coal from the north of the country represents approximately 13% of total employment in the national mining sector.

Cesar and La Guajira have important structural limitations in developing alternative productive activities. Among the most important are high risk of water scarcity (IDEAM, 2023), reduced availability of arable land and land tenure conflicts (ADR et al., 2019, 2021), high poverty rates, and deficiencies in infrastructure and distance from markets (Gobernación de La Guajira, 2020; Gobernación del Cesar, 2020). However, they also have potential in economic sectors such as tourism, renewable energy generation from solar and wind sources, and other extractive industries – especially gas and copper, as recognized by the departments' development plans (Gobernación de La Guajira, 2020; Gobernación del Cesar, 2020). Many NGOs and local communities have also raised concerns about how these new economic sectors will be developed, as well as the impacts on and involvement of local communities (Valero, 2021; Vega-Araújo et al., 2023).

Workshop participants were concerned about institutional limitations, corruption, and the low level and slight impact of investments (Banco de la República, 2022), as well as other factors that have limited sustainable economic growth in La Guajira and Cesar and helped sustain their dependence on coal exploitation. The limited impact of investments is striking, especially those that are financed with royalties from coal. In Colombia, royalties from oil, gas and mining were historically allocated directly to subnational authorities (departments and municipalities) where extractive activities occurred. However, in 2012, a constitutional reform reduced this allocation to 10% in order to redistribute the majority of royalties to all the departments and municipalities of the country (Congreso de la República, 2012).

In 2021, another reform was passed, changing the direct allocation back to 25% for subnational authorities in mining regions, where a baseline 20% could be increased by a 5% incentive for regions that continue mining (DNP, 2020). However, despite the availability of royalties in La Guajira and Cesar, the results are very poor both in terms of their effectiveness in reducing poverty gaps and enhancing productivity indicators (López & Patzy, 2021).

5.2 Environmental barriers

Large-scale coal mines in Colombia have been linked by workshop participants to many environmental impacts, including air and water contamination, the displacement or destruction of flora and fauna, the diversion of water sources, and high levels of noise for nearby communities. These impacts are also often associated with mining companies' non-compliance with legal obligations to protect human and environmental health, weak regulatory frameworks, and low institutional capacities for enforcement.

The current framework for awarding environmental licences and monitoring the impact of activities in the mining sector in Colombia is highly concentrated at the national level, excluding subnational entities and local residents from this process (Martínez et al., 2017). Local actors must deal with environmental impacts from operations despite limited opportunities for consultation and participation. A transformation of distributive schemes is needed to compensate those who bear the highest environmental costs and impacts in these territories.

While some regulations regarding mine closure were established in the Mining Code (Law 685 of 2001) and the Environmental Law (Law 99 of 1993), these regulations are divided between a company's works and activities plan and the environmental licence. Three months before beginning the dismantling and abandonment phase, the company must submit a study to the environmental authority including environmental impacts, mine abandonment plan and restoration activities, among others. If approved, the company must present an insurance policy covering the costs of those activities, which must be renewed annually for the next three years. In other words, guarantees for post-closure last only three years, while some research points to "perpetual" environmental impacts, leaving a severe gap in responsibility around longer term issues beyond the immediate three-year window (AIDA, 2020; Morales & Hantke, 2020). This fragmentation has created a gap in terms of determining which institution is responsible for monitoring the mine closure process, which highlights the need to strengthen the law to specifically recognize and address the physical, socio-economic and ecological impacts of mining activities as well as the scale of such impacts (Morales & Hantke, 2020; Ocampo, 2022). In addition, local actors claim lack of knowledge or difficulties in accessing mine closure plans.

This issue has been recognized by judicial authorities in the case of Prodeco (El Espectador, 2022). Local groups in Cesar also demanded remediation of environmental impacts in order to restore traditional productive vocations (agriculture, e.g.), considering that coal extraction activities have contributed to the decline in agricultural productivity in the region.

Concerns about environmental liabilities include how to manage them and how to identify the party responsible for financing them. Notably, the majority of identified environmental liabilities in Colombia in 2016 were caused by mining and hydrocarbon extraction and transport (Cabrera y Ordoñez, 2022). In June 2023, the Congress approved a law that defines the concept of environmental liabilities and establishes instruments for their management, considered a first step on the path of environmental and social justice (WWF, 2023).

5.3 Sociocultural barriers

Cesar and La Guajira are among the Colombian regions impacted by the country's ongoing internal armed conflict. Coal companies, in collaboration with the Colombian national government, prioritized public order and security to ensure their mining operations in these conflict-affected regions. At the same time, high levels of violence and human rights violations have hindered the consolidation of a healthy social fabric and leadership. Consequently, persistent barriers have prevented the political exercise of citizenship (Peña et al., 2023).

In Cesar, the suspension of Prodeco's operations has resulted in an increase in conflicts, security problems, and threats against workers, union members and social leaders (Monsalve, 2023a). The civic space is precarious: communities are highly distrustful of companies and government entities, and the already tenuous social fabric continues to fragment (Peña et al., 2023). In coal mining regions, perception of corruption is widespread; these regions have low institutional capacities and limited spaces and mechanisms for citizen participation. Communities face difficulties in accessing and understanding public information related to existing mining projects, new concessions and proposed new projects, including environmental impact studies and other key information. Capacities and access to such information are key to enable more symmetric power relations; they are also crucial for transparent and inclusive planning processes involving the diverse range of actors required to make any just energy transition plan successful (Atteridge & Strambo, 2020; Yanguas Parra et al., 2021).

The labour dimension is also important in connection to both economic and sociocultural challenges. Coal operations have created enclave economies that have a primary focus on extracting and exporting coal with limited integration into the local economy (López & Patzy, 2021). In the context of transitioning away from coal, demand is strong for guarantees of new job opportunities, and therefore training is needed in new fields of work. This requires integrated planning between educational institutions, industry, and local and regional governments, as well as transparency of a company's closure plans and the specific transition of labour, compensation packages, and other details – all of which remain lacking in the cases of Cesar and La Guajira. A critical issue identified in the workshops was the emergence of alternative employment that can provide comparable wages to those in the coal sector, which, as mentioned above, is also tied to social and cultural status.

Cultural barriers also present themselves, in terms of the lack of a collective and concerted future vision of the direction of territorial development beyond coal. The planning instruments to date do not articulate the needs and desires of Indigenous and Afro-Colombian groups in particular, and these documents show a lack of understanding of Indigenous peoples' ancestral worldview regarding territory and development models. This problem is further reinforced by the ongoing violations of the right to prior consultation within the framework of International Labour Organization Convention 169.



Graphic report from the workshop held in La Guajira. It highlights main concerns of the participants regarding a possible mine closure © LILO A COLOR / SEI

5.4 Case study for transition challenges: La Jagua de Ibirico, Cesar

The municipality of La Jagua de Ibirico, Cesar, provides a case study in the challenges to finding a just energy transition. A three-pronged crisis - social, environmental and economic - has been triggered by the effort to move away from coal production.

In 2021, Prodeco, a subsidiary of Glencore and the third largest coal exporter in Colombia, suspended operations of two of its coal mines, Calenturitas and La Jagua in Cesar, claiming that they were not economically viable anymore in the face of the precipitous fall in coal prices in 2020 and the high costs of operations (Prodeco, 2021). During their operation, these two mines employed more than 7400 people (1200 direct jobs and 6200 contractors) and produced annually approximately COP 500 000 million (about USD 122 million) in royalties, taxes, purchases and contracts (Contraloría General de la República, 2023). In 2020 alone, Prodeco represented 21% of national coal production, and its operations were expected to continue at least until 2025 and in 2038 according to its last mining title (El Espectador, 2021; Fundación Chasquis, 2021).

Most of Prodeco's operations are concentrated in the municipality of La Jagua de Ibirico, the economy of which is 80-90% dependent on coal mining (Mejía, 2021). The impact of the decision by the company to stop activities resulted in an economic, environmental and social crisis in the municipality, highlighted in congressional hearings and the media and emphasized in the workshops for this research. The decrease in revenue from taxes and royalties affected public spending and decreased the response capacity of the municipality's administration for the provision of goods and services (Caracol Radio, 2022). Concerns were raised about noncompliance with environmental obligations under weak national regulation around mine closures in Colombia and the unprecedented nature of Prodeco's decision (Barrios, 2021; Monsalve, 2022). The violation of communities' rights to effective participation and information access on the mine closure plan has been recognized by judicial authorities (El Espectador, 2022).

In the social realm, the withdrawal of Prodeco led to an increase in unemployment, the closure of commercial establishments – from hotels to transport companies, catering and entertainment establishments, confectionaries, and laundries, among others. It also led to increased insecurity, threats to social leaders, and concerns regarding the resettlement of local communities, as ordered by the environmental authority (Monsalve, 2023a; PAS, 2021; W Radio, 2021).

Social impacts are also often differentiated by gender expectations and constraints. Workshop participants highlighted specific impacts on men, who compose the majority of mine workers, including the psychological impact on men who lost their social status or breadwinning role in their families, and the subsequent economic and social impacts on families dependent on that income. Some local leaders have also reported an increase in gender-based violence.

A new social tension has been experienced in the region due to uncertainty about the decision to reopen or close the mines. The future of Prodeco's mining titles has been a contentious discussion locally in Cesar: it has divided La Jagua's inhabitants between those who call for reopening the mines and those who want a public discussion on the vulnerabilities associated with local and regional dependence on coal, as well as compliance with the obligations of the environmental license (BLU Radio, 2023; Monsalve, 2023a). Social leaders who have demanded a closure plan in accordance with community needs have also denounced threats against their lives and physical integrity (Monsalve, 2023a).

This situation highlights the local complexities of just energy transitions. While the need to accelerate the pace of planning and implementation of the energy transition at different levels is dire, so is the need to prepare national and regional economies to face the fiscal, economic, social and environmental risks entailed by the decline of fossil fuels. This case underscores the need to prioritize addressing the impacts of transitions on coal-producing regions that heavily depend on the sector (Peña et al., 2023).



"Prodeco and the state abandoned us" reads the middle sign, during a protest by Prodeco workers against the impacts of the suspension of mining operations in La Jagua de Ibirico, Cesar © JOSÉ VEGA-ARAÚJO / SEI

6. Power, politics and resistance

Overall, elites in both economic and political spheres at national and regional levels in Colombia have favoured extractive industries as one of the main drivers of economic growth (Hincapié, 2017; Velásquez et al., 2017). Historically in Latin American countries, private groups' interests become blurred with public interests, partly due to the institutional weakness of their respective states combined with a tendency toward centralized governance structures.

In Colombia, the National Coffee Federation is an early example of such a pattern, where private actors governed a major key export industry. As this association gained significant power, it became a central axis of economic and political decisions, including with regard to the administration of public funds.

Since then, many key decisions regarding economic policies have resulted from negotiations between political elites and business associations that increasingly represent large industry; this pattern has continued, or one might argue, deepened further, with mineral extractive industries and other agribusiness (Martínez et al., 2021). At the regional level, especially in Cesar, a prominent role has been played by the oil palm industry in the regional economy, which represents 92% of recent agricultural GDP and about half of the total cultivated area in Cesar (ADR et al., 2019). Stakeholders have expressed concerns that decisions will be made to turn any mining environmental restoration programs into large monocultures run by established agribusinesses such as the oil palm industry (El Turbión, 2023), following the usual path of these political-business negotiations.

Such negotiations or "political settlements" often function to support the development of regulations and other policies that favour elite interests, with certain tacit agreements on the acceptable distribution of resources, as seen in Latin American and other countries with important extractive sectors (Bebbington et al., 2017). In Colombia, this arrangement has facilitated the consolidation of a prevailing narrative that emphasizes the essential role of the extractive sector in the country's economy and development and that positions the national government as a promoter rather than as a regulator (Velásquez, 2021).

The narrative is a half-century old and has shifted over time: Large-scale coal mining operations were presented as symbols of progress and development in the context of Colombia's deteriorating economic conditions in the early 1970s (Corral-Montoya et al., 2022; Strambo et al., 2020). In 2012, a reform of the national royalties system entailed a redistribution of rents from mining and oil extraction across the national territory (instead of its prior distribution that favoured regions and municipalities where extraction occurred), under the justification of addressing inequality and the country's uneven development, while also ensuring broad political support from non-extractive regions. This also became an important source of funds to implement the peace agreement signed in 2016, and most recently has been argued to be key for supporting regional and national energy transition processes.

In other words, the reform has continued to form the basis for a self-fulfilling argument for the importance of continuing mining and oil extraction, in order to ensure a needed flow of rents. Moreover, during the past decade, the country has deepened its commitment to the extractive sector, including coal - not as a result of a great consensus, but rather as a short-term strategy, agreed (sometimes outside of public debate) between the government and businesses to take advantage of favourable international prices in the absence of a diversified economy and export basket (Martínez et al., 2021).

Scale is also a key factor in these negotiated settlements. Historically deeply centralized, the national government based in the capital of Bogotá has an overwhelming influence on the direction of economic policy, and it has emphasized export-oriented extractive industries as a central pillar of the economy. This is notable in the asymmetric distribution of power between

mining governance structures at different levels or scales. Local communities and regional governments face powerful national-level actors, such as the Ministry of Mines and Energy (Ministerio de Minas y Energía, MME), the National Mining Agency (Agencia Nacional de Minería, ANM) or the National Authority of Environmental Licenses (Autoridad Nacional de Licencias Ambientales, ANLA), which have the ability to prohibit or reverse decisions made by subnational entities (Hincapié, 2017).

The concentration of power in centralized actors has historically largely excluded other state actors from decision-making, including Congress and local authorities, as well as smaller private actors, informal or artisanal miners, local communities, ethnic groups and the general population. Despite the large sums of revenues accruing to industry and the state (notwithstanding important subsidies and tax breaks favouring the industry), the existing arrangements have left a legacy including profound negative effects on local environments, human rights violations (Cardoso, 2015; CINEP/PPP, 2020; INDEPAZ, 2019), regional economic dependence on the coal sector within the framework of broad tax incentives (ABColombia, 2012; Yanguas Parra et al., 2021), and alleged links of coal companies with illegal armed groups (CCJ, 2023; van Beers, 2015). As levels of extraction increased, the negative impacts of interventions on ecosystems and social sectors has remained largely unrecognized by public authorities and by the extractive industry itself, with some limited efforts for recognition in the case of coal (OCA, 2017).

The variety of incumbent actors at the national and regional levels have converged around three objectives that obstruct efforts for a transition beyond coal, even as these same objectives are often leveraged in discourses that suggest they are necessary to support the transition (Strambo et al., 2020). These include maintaining the flow of rents, ensuring energy reliability and security, and managing socio-environmental conflicts (Puerto & Corral, 2022). According to Vélez-Torres (2014), two main mechanisms support this agenda: legislation and securitization - that is, the establishment of legal and military elements in favour of private companies, which have prevailed over the rights of local communities in the name of "development". Subnational governments have also protected the interests of large-scale mining, which, over time, displaced other more prominent and labour-intensive economic sectors (Corral et al., 2021; Weber & Cabras, 2021).

In this context of significant social, environmental and human rights impacts, the main national institution with significant influence in making these negative impacts more legible has been the Constitutional Court, through rulings that have declared coal mining companies responsible for violations of individual and collective rights of native inhabitants. See, for example, Constitutional Court rulings T-704 of 2016, SU 698 of 2017, T-154 of 2013 and T-672 of 2014.

Various unions have become increasingly active in debating and promoting a vision of just energy transition that centres workers' interests, as evidenced by the creation of the Worker's Collective for Just Energy Transition, mentioned above, among other initiatives. Trade unions have also exercised various mechanisms of pressure for the improvement of working conditions and compensation for workers' families affected by work accidents and dismissals in the coal industry. However, the labour agenda has often been dismissed historically, as opponents cite links with left-wing political interests regarded by traditional elites as a threat or barrier to territorial development, while union leaders continue to be targets of political violence (Corral-Montoya et al., 2022; El Tiempo, 2008).

Business associations have been key to strengthening the bargaining power of companies and influence decision-making through a strong presence in the public sphere. The close relationship between the government and associations has shaped economic policy and the form of management of non-renewable natural resources, often with limited transparency and behind closed doors (Martínez et al., 2021). Practices such as the "revolving door", wherein individuals alternate between jobs in the public and private sector, have played a decisive role in shaping the regulatory framework and governance model towards favouring the mining industry, including environmental licensing (Martínez et al., 2021).

In 2014, the three main mining associations merged to form the Colombian Mining Association (Asociación Colombiana de Minería, ACM), with the aim of improving their negotiating position; the main coal companies, including Cerrejón and Drummond, joined this group. Other small and medium-scale actors in the sector are affiliated to the National Federation of Coal Producers (Fenalcarbón) (Transforma, 2021). Although associations and their member companies are aware of the difficulties facing the coal market, they emphasize reaching new markets in a profitable and competitive way to continue exploiting Colombian coal (Transforma, 2021).

As mentioned above, the draft version of the most recent National Development Plan (2022–26) prohibited new open-pit coal mines in the country, but the prohibition was eliminated in the discussion by Congress (Cambio, 2023; DNP, 2023). The national government attempted once more to prohibit new mines in La Guajira by issuing an emergency decree in July. Although the Constitutional Court declared this decree unconstitutional, it granted one year of validity and the opportunity to establish the necessary measures through ordinary proceedings (Dejusticia, 2023; Decreto 1277 de 2023, n.d.).

New coal mines are still being planned in Colombia. A Turkish company, Best Coal Company (BCC), sought to sidestep one community's resistance to the establishment of a new coal mining complex in La Guajira alongside new railway and port infrastructure (Vega-Araújo, 2022), with support from the outgoing Duque government's Ministry of Interior, applying a legal instrument called the "proportionality test" (CINEP/PPP, 2022; Vega-Araújo, 2022). This instrument seeks to determine the appropriate management measures to prevent, correct or mitigate direct

Cese a la ampliación de la frontera minero energética en La Guajira como el avance de la Empresa BCC 13

"We demand: to halt the expansion of the mining-energy frontier in La Guajira such as the progress of the BCC company" reads a message during a public hearing session of the ad hoc Congressional Commission on Coal © JOSÉ VEGA-ARAÚJO / SEI

impacts in the absence of an agreement between the company and the community (Directiva presidencial No. 08, 2020). While the company's proposed mining complex proceeded with the proportionality test, the communities later sued, and a judge ruled in favour of the communities, citing numerous irregularities regarding the community's right to participation (Padilla, 2023; Prieto, 2022).

For their part, despite historic low prices leading into and during the COVID pandemic, coal mining companies have proven nimble, appropriating the term "just energy transition" within their business models while promoting carbon neutrality strategies (Drummond, 2023; Patria Energética, n.d.). Also, the precedent of coal companies returning their mining titles without executing a closure strategy is itself a significant threat to a just energy transition, understood to include environmental rehabilitation of affected lands, as well as compensations for locally affected populations and consideration of longer-term or "perpetual impacts" (Ángel, 2019; Holguín, 2020).

The desolate terrain found in open-pit mines and the areas tainted by pollution can only be restored through extensive and challenging efforts on economic, social and political fronts. However, accomplishing this recovery appears highly improbable in the current era if coal companies are allowed to easily abandon their mining rights and responsibilities as soon as they encounter unfavourable economic circumstances and in the absence of a regulatory framework. As exemplified by the recent instance of Glencore's Prodeco operation in Cesar, such a situation suggests, as indicated above, that companies continue to have strong leveraging power with the government.

7. Concluding discussion

Discussions around the energy transition in Colombia have evolved quickly in recent years, including around the role of thermal coal in national and regional economies and the role of coal and coal-producing regions in the energy transition. The previous Colombian government, under then-President Duque, initiated the establishment of regulatory frameworks and policies to promote an energy transition, with barely any reference to the adjective "just". Meanwhile, civil society organizations and communities in regions affected by coal extraction have increasingly pushed for a broader conception of a just energy transition, including a socio-ecological and economic transformation of regional and national development away from a large-scale extractive model.

The current government, led by President Petro, refers explicitly to a just energy transition approach that encompasses four principles: (i) equity and democratization, (ii) gradualness, sovereignty and reliability, (iii) binding social participation and (iv) knowledge-intensive in a variety of forms. The discussion has been primarily centred around a campaign promise to actively decarbonize the economy while better understanding and addressing the challenges faced by producing territories, in a context of both national-level policy decisions aimed at advancing the energy transition agenda and the impacts of declining global fossil fuel markets in the medium and long term. However, challenges remain in how the transition will be operationalized, given strong opposition from influential actors such as mining associations and political actors from opposing political parties. Some technical experts even argue that Colombia should not take a leading role in the energy transition, since the country is not an important contributor to the climate crisis in terms of greenhouse gas emissions and since coal has been an important contributor to national and regional economies.

The coal sector has a noticeable power asymmetry between private and civil society actors regarding decision-making in the regulatory and public policy arena. This imbalance is further reinforced by the lack of civic space within coal-producing territories, as well as the lingering effects of the ongoing conditions of violence and armed conflict. The merging of private interests and public decisions not only poses risks to state autonomy, democracy, and the exercise of basic rights and freedoms, but also creates structural barriers that hinder just planning processes for energy transitions. The departmental and local governments are dealing with socio-environmental impacts of coal mining in a context of weak capacities to enforce regulations and long-lasting and unresolved community issues around access to water and electricity, displacement and resettlements, and contamination.

Within this context, the challenges of a coal sector in decline have begun to become a reality in Cesar. Prodeco's sudden suspension of coal mining operations in Cesar left municipalities with limited possibilities to face the problems of unemployment, economic recession, and lack of economic alternatives. What Cesar and the municipalities near Prodeco's operation are experiencing is just the beginning of a structural and progressive decline of the coal industry in Colombia. The level of preparedness that territories can achieve before the decline fully manifests itself will be decisive for achieving resilience. Coal-producing municipalities and communities in La Guajira, which are currently highly dependent on the coal economy, must learn from the experience of Cesar's municipalities, such as La Jagua de Ibirico, and begin as soon as possible to build a new regional vision before the crisis reaches their own territories.

High coal prices inject an element of urgency to the current situation. Departmental and municipal public spending deserve immediate discussion in this context, given that these contribute decisively to the strengthening of alternative sectors to coal production. Regional elections in 2023 and the new departmental and municipal development plans (2024–27) will be pivotal opportunities to shape strategies that align the energy transition with principles of justice. Participatory exercises within the framework of development plans should raise awareness and lay the foundations for a long-term just energy transition process that enhances alternative sectors and turns territories' comparative advantages into competitive advantages.

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