

# Institutional capacities for a just transition in coal regions: the case of La Jagua de Ibirico, Colombia

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## List of abbreviations

ANH	National Hydrocarbons Agency (Agencia Nacional de Hidrocarburos)
ANI	National Infrastructure Agency (Agencia Nacional de Infraestructura)
ANLA	National Environmental Licensing Authority (Autoridad Nacional de Licencias Ambientales)
ANM	National Mining Agency (Agencia Nacional de Minería)
CAR	Regional Autonomous Corporation (Corporación Autónoma Regional)
CNR	Colombian Natural Resources
CODECTI	Departmental Council on Science, Technology and Innovation (Consejo Departamental de Ciencia, Tecnología e Innovación)
COP	Colombian pesos
DIAN	National Directorate of Taxes and Customs (Dirección de Impuestos y Aduanas Nacionales)
DNP	National Planning Department (Departamento Nacional de Planeación)
EIA	Environmental impact assessment
EITI	Extractive Industries Transparency Initiative
FAE	Savings and Stabilization Fund (Fondo de Ahorro y Estabilización)
FENOCO	Railways of Northern Colombia (Ferrocarriles del Norte de Colombia)
FONPET	National Pension Fund of Territorial Entities (Fondo Nacional de Pensiones de las Entidades Territoriales)
GDP	Gross domestic product
ICLD	Unrestricted revenue streams (Ingresos Corrientes de Libre Destinación)
MADS	Ministry of Environment and Sustainable Development (Ministerio de Ambiente y Desarrollo Sostenible)
Mt	Million tons
PDET	Development Plan with a Territorial Approach (Plan de Desarrollo con Enfoque Territorial)
PM	Particulate matter
PMS	Socio-economic management plan (Plan de Manejo Socio-económico)
PRV	Voluntary early retirement plan (Plan de Retiro Voluntario)
PTO	Works Plan (Programa de Trabajos y Obras)
SENA	National Training Service (Servicio Nacional de Aprendizaje)
SGP	General Revenue-Sharing System (Sistema General de Participaciones)
SGR	General Royalties System (Sistema General de Regalías)
SISAIRE	Air Quality Information Subsystem (Subsistema de Información Sobre la Calidad del Aire)
ZMC	Central Cesar Mining Area (Zona Minera del Centro del Cesar)
ZOMAC	Areas most affected by the armed conflict (Zonas Más Afectadas por el Conflicto Armado)

## Abstract

Local and regional economies dependent on coal production have faced serious challenges in recent years due to the volatility of global coal markets. Since 2020, the Colombian department of Cesar, particularly the municipality of La Jagua de Ibirico, has experienced serious consequences after the sudden termination of operations of one of the main coal mining companies active in the country. This event not only marked a critical shift for the local economy but also unleashed a series of profound social and economic impacts: mass layoffs, crises in affected families and the collapse of service economies that had grown around the coal industry, such as transport, hospitality and food – not to mention the legacy of socio-environmental impacts from decades of coal mining. This situation has triggered a clear crisis in a region already marked by armed conflict, with deep social inequalities, high levels of informality and few job alternatives. Authorities face significant challenges in managing this crisis at all levels, especially in the municipality, and it is likely that the same challenge will be repeated in other coal-dependent municipalities in the mining corridor. The mayor's office of La Jagua de Ibirico is already operating with fewer resources, and resulting capacity reduction, due to the company's departure, which indicates some of the institutional and financial challenges of supporting just coal transitions. This case study describes some of these institutional and financial gaps, pointing to the urgency and complexity of planning for just coal transitions. In addition, it highlights the need for various types of support for local authorities, who play a crucial role in leading just transitions in collaboration with a wider group of affected stakeholders.

## Keywords

Coal; just transition; mine closure; local governance; institutions

# 1. Introduction

Colombia is the main exporter of thermal coal in Latin America and historically among the top five worldwide (IEA, 2022). In the 2012–2019 period, coal production in Colombia reached an average of 88 million metric tons (Mt) per year, of which about 89% was for export (78 Mt). To respond to the climate emergency and keep the increase in global temperature rise below 1.5°C, it is estimated that the world must stop mining and using coal almost entirely by 2040 (SEI et al., 2023). Despite commitments by some importing countries to leave coal behind and fluctuations in international markets due to geopolitical factors, coal remains an important sector of the Colombian economy.

Thermal coal has played an important role in mining GDP, averaging a share of 62.6% between 2017 and 2021, and 1.5% of national GDP in the same period. Exports represent a significant source of revenue; coal royalties made up 21.1% of total royalties. The fiscal importance of coal grows much more relevant in producing regions such as La Guajira and Cesar, where 90% of national production is concentrated (Patzy & López, 2021). Between 2015 and 2022, Cesar contributed 55% of total production, positioning itself as the leading coal-producing department in the country (UPME, n.d.). This department is highly dependent on royalties, with a poorly diversified economy. In the 2019–2021 period, royalties accounted for 42.7% of the department's total revenue. Furthermore, in 2022, mining and quarrying accounted for 53.8% of the departmental GDP (Ministerio de Comercio, Industria y Turismo, 2024).

In 2020, during the Covid-19 pandemic, national production fell to 49.5 Mt, a 42% decrease compared to the previous year (Ministerio de Minas y Energía, 2021). Global demand for coal fell 4%, which in turn triggered a decline in the international price. In the context of the economic crisis and state of emergency decreed by the Colombian government, mining was considered an essential activity. Accordingly, the government defined a series of measures to support this sector and promote economic reactivation.<sup>1</sup> Despite these measures, three of the four largest producers in the country (Cerrejón, Prodeco and Colombian Natural Resources, known as CNR) suspended activities for two months; soon after, Prodeco (a Glencore subsidiary) and CNR, located in Cesar, provisionally suspended their activities. In 2021, CNR resumed operations, while Prodeco relinquished its mining titles in Cesar, claiming a lack of economic viability (Portafolio, 2021; Prodeco, 2021b). This combination of factors led to a drastic reduction in coal production, which dropped to an average of 57 Mt in the 2020–2022 period (UPME, n.d.).

Currently, only Drummond is operating its mines in La Jagua, as Prodeco has relinquished its mining titles. In March 2020, Prodeco suspended its mining operations due to the Covid-19 health emergency. Subsequently, citing economic and technical reasons associated with the drop in prices and the high costs of its operations, it submitted a request to extend the suspension. This was followed by Prodeco's relinquishment of its mining titles, announced in February 2021, under articles 54

<sup>1</sup> Decree 574 of 2020 postponed payment of the surface fee for mining titles and provided for using royalties from commercialization of minerals with an unidentified origin. The mining authority adopted measures to suspend the terms of holders and applicants to meet requirements and file appeals; it suspended visits with the exception of administrative protections, mine rescue, and inspection and regulatory oversight of high-risk titles, among others.

and 108 of the Mining Code.<sup>2</sup> The relinquishment, an unprecedented situation in the Colombian environmental system, was accepted by the National Mining Agency (ANM) in September 2021 after a long process of refusals and requests for reconsideration (Prodeco, n.d.-d).

Prodeco was the third-largest coal exporter in Colombia, after Drummond and Cerrejón, and most of its operations were concentrated in La Jagua de Ibirico. As a result of these operations, La Jagua de Ibirico became the second-largest coal-producing municipality in the country, with a local economy highly dependent on mining-related activities (Alcaldía de La Jagua de Ibirico, 2020). In La Jagua de Ibirico, the suspension of Prodeco's operations has triggered a social, environmental, economic and institutional crisis, ranging from an increase in unemployment to insecurity and difficulties for the municipal administration in providing goods and services due to the drop in revenue collection.

La Jagua de Ibirico serves as a case study for understanding the challenges of achieving a just energy transition in coal-producing regions. Much of the work on just transitions highlights the critical role of local authorities in leading planning efforts (Just Transition Initiative, 2021). However, local and regional governments in low- and middle-income countries face significant challenges and constraints in their responsibilities and capacities. These problems have grown more evident amid decentralization efforts in Latin America, as in other regions (Schaeffer & Yilmaz, 2008; de Janvry & Dethier, 2012). Such challenges become more complex in contexts of economic dependence on hydrocarbon mining and extraction, often despite significant sub-national resource allocations (e.g. of royalties or other transfers) (Arellano-Yanguas, 2011; Arellano-Yanguas & Mejía-Acosta, 2014). The abrupt suspension of mining operations may further exacerbate such institutional and financial challenges. In other words, just as local authorities are expected to address a variety of impacts stemming from the suspension of mining operations, whether these be foreseeable or unexpected, they are likely to be constrained by a reduction in resources, powers and capacities.

Using the “natural experiment” of La Jagua de Ibirico, this report seeks to identify the institutional challenges faced in order to offer recommendations that help improve the preparedness of other municipalities and regions that may find themselves in similar circumstances. It also describes some of the responses or actions taken by the authorities and other stakeholders affected by the multiple crises facing the municipality, as well as their limitations and scope. We propose a division of responsibilities and possible institutional structures at different levels of government to better prepare for a just transition. A just transition does not have a single definition but often refers to a shift away from coal mining toward more sustainable economic activities, based on an inclusive, democratic dialogue process that helps mitigate the social and economic costs of mine closure for local workers and communities, shares benefits more equitably, and addresses the environmental and social legacies of coal mining. The report is based on individual and group interviews carried out in September 2023, which involved 27 stakeholders in La Jagua de Ibirico. These included

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<sup>2</sup> Article 54 of the Mining Code refers to the suspension of mining “when temporary circumstances of a technical or economic nature, not constituting force majeure or acts of God, prevent or hinder the work of [...] mining operations”. Article 108 refers to relinquishment of the concession (Congreso de Colombia, 2001).

representatives from civil society, the municipal mayor's office, former council members and current and former Prodeco workers (see Annex). The report also draws on an analysis of statistical data and secondary literature.

The following section examines the responsibilities assigned to local and departmental governments in the different phases of mining, based on the existing Colombian legal framework. Section 3 provides an overview of the La Jagua de Ibirico municipality, highlighting the main impacts and challenges associated with Prodeco's suspension of mining operations. Section 4 notes some responses or strategies by the government and other active stakeholders in Cesar related to the issue of a just transition and mine closure. Finally, the report lays out recommendations to address the challenges of mine suspension and closure in the context of a just energy transition.

## **2. Division of responsibilities and powers among different levels of government**

To plan and execute a just transition in coal-producing regions, it is essential to understand how responsibilities and powers are divided among the various government entities throughout the mining cycle, in accordance with the current legislation and the principle of decentralization enshrined in the Political Constitution of Colombia. Based on this understanding, complemented by a review of the main transition management challenges identified in previous studies (e.g. employment alternatives, inspection and regulatory oversight, land restoration, protection of civic space) (Peña et al., 2023; Vega-Araújo et al., 2024; Yanguas Parra et al., 2021), this analysis seeks to understand the capacity of local and departmental authorities to influence the transition, considering their expectations and perspectives. The report also aims to identify shortcomings and opportunities for them to take on a leadership role in transition and mine closure processes.

### **2.1 Tensions in the division of responsibilities related to natural resource governance and territorial planning according to the Constitution**

Article 1, the Political Constitution of Colombia states that the country is organized in the form of a unitary, decentralized republic with autonomous territorial entities.<sup>3</sup> The Constitutional Court has explained that these mandates entail the following: "Unitary republic means there is a single legislature; decentralization consists of the power granted to entities other than the state to govern themselves, through the placement of certain functions in their hands; and autonomy means the capacity to independently manage their own affairs" (Corte Constitucional, 2001). Nonetheless, in practice, these constitutional principles have been in constant tension between territorial entities and the national government, as they suggest contradictory powers and the

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<sup>3</sup> Article 286 of the Political Constitution defines "territorial entities" as departments, districts, municipalities and Indigenous territories.

Constitution does not explicitly specify the hierarchical order of these principles (Corte Constitucional, 2018; Osorio, 2020).

Article 332 of the Constitution establishes that the state owns the subsoil and non-renewable natural resources, and Article 113 defines the state as organized into legislative, executive and judicial branches. The public bodies within these branches have separate functions, but they work together to achieve the state's goals. Within this organization, the executive branch is divided into the national<sup>4</sup> and territorial system (Article 115).<sup>5</sup> However, in the case of non-renewable natural resource management, decisions have been primarily made at the central level, shaping a hierarchical system that goes against the aforementioned principles, despite resistance at the territorial level (Peña & Velásquez, 2018; Velásquez, 2021). Examples include the continuous evolution and tensions around the governance of resources from the General Royalties System (SGR), including where they are sourced and how they should be distributed (Arond, 2020). Another example is the tensions around some municipalities' initiative to carry out public referendums to prohibit mining (Roa-García, 2017).

This situation has led to national entities such as the Ministry of Mines and Energy and affiliated entities, Ministry of Environment and Sustainable Development (MADS), Ministry of Finance and Public Credit, Ministry of the Interior and Geological Service holding a high degree of decision-making power related to the extractive sector. This concentration of power has sparked tension with the principle of territorial planning. According to Law 388 (1997), territorial entities should lead planning efforts through their territorial development plans, which should be created in a participatory way with various social stakeholders. This system and tensions in the relationship with the territorial level have triggered intense conflicts with both communities and sub-national authorities as they have been excluded from decisions that directly affect them, including the decision on whether mining can be prohibited at departmental, municipal and district levels.

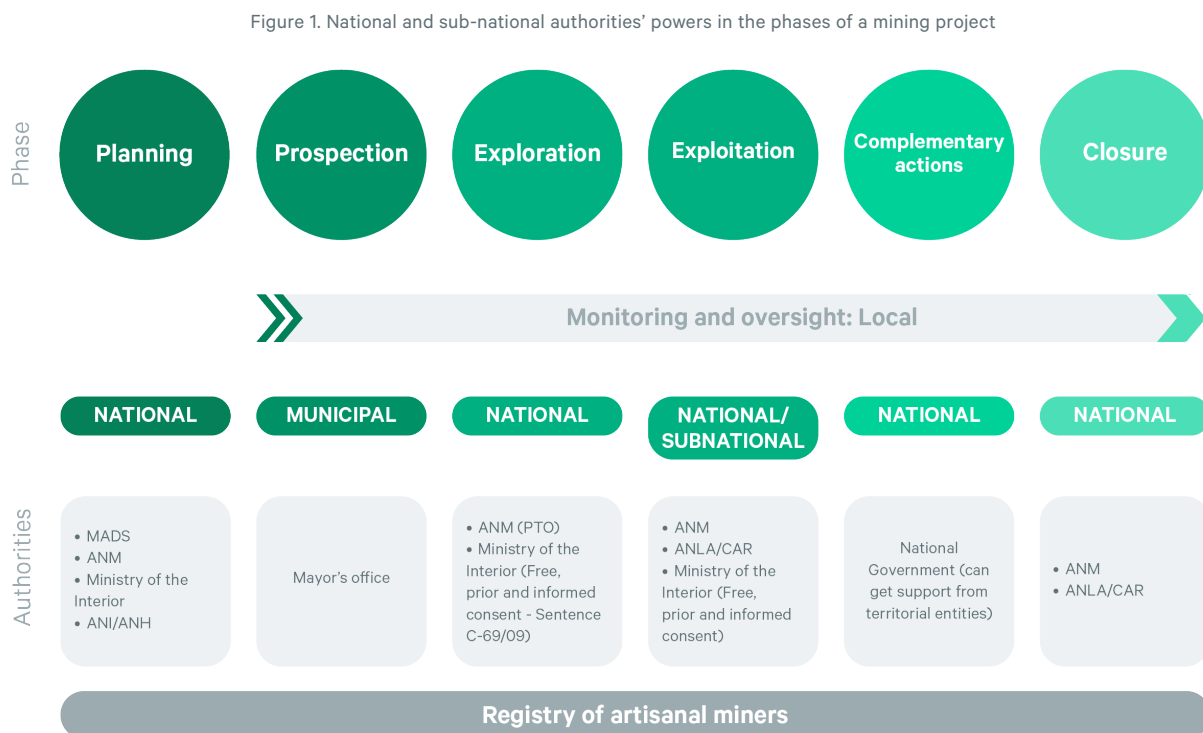
## 2.2 Division of responsibilities based on the Mining Code (2001)

Article 37 of the Mining Code explicitly prohibits territorial entities (municipal and departmental) from blocking mining operations within their jurisdiction. This controversial article caused intense debate and a legal battle, as it brought the principles of a unitary state and territorial autonomy into conflict, in addition to questioning territorial entities' authority over their territorial planning. Ultimately, the Constitutional Court declared this article unenforceable due to procedural issues (Ruling 273 of 2016). However, previous jurisprudence, such as Ruling T-445 (2016), had already recognized territorial entities' ability to prohibit mining to protect the environment. Below is a review of national and sub-national powers during the different phases of a mining project, according to Law 685 (2001), also known as the Mining Code, which governs these extractive activities.<sup>6</sup>

<sup>4</sup> Ministries, administrative departments, and affiliated or related entities (Función Pública, n.d.).

<sup>5</sup> Regions, departments, metropolitan areas, provinces, associations of municipalities, districts, municipalities, Indigenous territories, neighbourhoods and townships (Función Pública, n.d.).

<sup>6</sup> At the time of writing this report, a proposal is moving forward to replace the current Mining Code with the "Mining Law for a Just Energy Transition, National Reindustrialization and Mining for Life" (Ministerio de Minas y Energía, 2024b).



Source: Adapted from Peña and Velásquez (2018)

Analysing the current Mining Code reveals how responsibilities are distributed among the different sub-national and national entities throughout the various phases of a mining project. As shown in Figure 1, based on the provisions of the current Mining Code, mayor's offices have a particularly limited role. Their operational functions include verifying possible negative impacts caused in the prospecting phase, registering and certifying artisanal miners and scrap dealers to participate in commercialization, and resolving conflicts between artisanal miners and mining rights holders. Regarding control, inspection and regulatory oversight functions, they must (provisionally) confiscate any minerals transported or sold without an invoice, as well as suspend mining in accordance with the administrative protections issued by the ANM. In the case of easements, if the landowner or holder requires compensation, the mayor's office must set the bond for the miner through an expert who estimates this amount. Notably, mayor's offices' defined powers are more related to artisanal and small-scale mining and do not provide for any role in the management and operation of large-scale mining. In addition, in the closure phase, crucial for a just transition, no explicit role is assigned to mayor's offices or other sub-national authorities, such as departmental or regional environmental authorities (CARs).

The phase of complementary actions refers to the measures that public entities, led by the national government and with potential support from territorial entities, adopt to counteract factors that hinder the mining cycle from being carried out properly. The section on social aspects of mining (Article 248) of the Mining Code calls for evaluating the development of job retraining, specifically for cases when it is not possible to exploit mineral resources. This involves training for new economic activities or activities complementary to mining operations, funding of retraining and social support, but again, it does not specify a role for sub-national authorities.

Article 95 of the Mining Code considers the closure phase a part of mining operations, and Article 84 includes this phase within the Works Plan (PTO). The PTO, together with the environmental impact assessment (EIA), must be developed and submitted during the exploration phase for approval by the relevant authority. Among other elements, the PTO must contain a “plan for geomorphological, landscape and forest recovery works in the altered system” and a “plan for mine closure and abandonment of equipment and infrastructure” (articles 84 and 204). Responsibility for enforcing agreements in this phase lies exclusively with national entities, which must monitor compliance with the PTO and the EIA, as well as verify the return of any real estate for which the ANM is responsible. In this regard, sub-national authorities have almost no role in the mine closure stage, despite their territories being at risk if these plans are not properly executed.

Departments played a more active role under the Mining Code until the creation of the ANM in 2011. According to Article 320 of the Code, the mining authority may delegate its functions, temporarily or occasionally, of processing and entering into concession contracts, as well as conducting surveillance and oversight of their implementation, to governors and mayors of departmental capitals. Per this provision, the governor’s offices of Antioquia, Bolívar, Boyacá, Caldas, Cesar and Norte de Santander carried out this role granted by the Ministry of Mines until the ANM was created, when these functions were rescinded from them. However, the Governor’s Office of Antioquia received an extension and kept this delegated role until late 2023 (Carvajal, 2023).

The President Petro administration decided to end the delegated administration of these functions in Antioquia, which stirred up broad debate over the recentralization of powers and its direct impact on the department (El Colombiano, 2023; El Espectador, 2023). Currently, there is no jurisprudential basis that defines the role departments should play in decision-making and implementation of the various phases of a mining project, as the Constitutional Court has only addressed municipalities. Beyond the provisions of the Mining Code, mayor’s offices collect taxes and administer the royalties allocated to them.<sup>7</sup> In addition, they must formulate their territorial development plans with the aim of regulating land use in their respective jurisdictions, including classification of activities; protecting and conserving natural resources and the environment to improve productivity, competitiveness and sustainability; and making decisions about projects related to housing, public spaces and utilities, among other areas (Corte Constitucional, 2018).

Table 1 lists some of the policies within the Colombian legal system that reveal multiple forms of authority, across national and territorial levels, regarding mining operations:

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<sup>7</sup> With the recent law on royalties, Law 2056 (2020), territorial entities took on a greater role in prioritizing investment projects and allocating more resources for inspection and regulatory oversight.

Table 1. Laws, policies and court rulings relevant to mining governance

Relevant authority	Legislation, regulation or jurisprudence	Mandate
Constitutional Court	Article 1, Political Constitution of Colombia of 1991	“Colombia is a social state under the rule of law, organized in the form of a unitary republic, decentralized, with autonomy of its territorial units.”
Constitutional Court	Article 113, Political Constitution of Colombia of 1991	“The state is organized into the legislative, executive and judicial branches. The different state bodies have separate functions but cooperate harmoniously to realize the state’s goals.”
Constitutional Court	Article 115, Political Constitution of Colombia of 1991	“Governor’s offices and mayor’s offices are part of the executive branch.”
Constitutional Court	Article 288, Political Constitution of Colombia of 1991	“The powers assigned to the various territorial levels shall be exercised in accordance with the principles of coordination, competition and subsidiarity under the terms stipulated by law.”
Constitutional Court	Article 332, Political Constitution of Colombia of 1991	“The state owns the subsoil and non-renewable natural resources.”
Constitutional Court	Article 356, Political Constitution of Colombia of 1991	“The Constitution and the law, at the initiative of the government, shall determine the services that are the responsibility of the nation and the departments, districts and municipalities through the General Revenue-Sharing System” (see Article 357 in this regard <sup>8</sup> ).
Administrative Department of Public Service	Law 388 (1997)	Municipalities’ autonomy to promote planning of their territory, land use, and preservation of ecological and cultural heritage, among other issues.
Constitutional Court	Ruling C-1051/01, 2001	“Unitary republic means there is a single legislature; decentralization consists of the power granted to entities other than the state to govern themselves, through the placement of certain functions in their hands; and autonomy means the capacity to independently manage their own affairs.”
Congress of Colombia	Law 1176 (2007)	Implementation of articles 356 and 357 of the Political Constitution regarding the establishment of the General Revenue-Sharing System, among other issues.
Congress of Colombia	Law 1454 (2011)	“Departments and municipalities will have the autonomy to determine their internal structure and central and decentralized administrative organization, as well as the establishment and distribution of their functions and resources, to appropriately carry out their constitutional duties.”
Constitutional Court	Ruling C-123 (2014)	Mining Code, process for authorizing mining activities: agreement with local territorial authorities on the necessary measures for environmental protection and protection of a healthy environment.
Constitutional Court	Ruling 273 (2016)	“Legal prohibition for regional and local authorities to establish which areas of the territory are permanently or temporarily excluded from mining operations.”
Constitutional Court	Ruling C-035 (2016)	Delimitation and regulation of strategic mining reserve areas by the national government. “Limitations on the autonomy of territorial and regional entities are constitutionally acceptable, when they are reasonable and proportionate.”
Constitutional Court	Ruling C-389 (2016)	“Environmental decisions related to the use and enjoyment of the subsoil cannot be adopted at the central level but require the participation of territorial authorities, in line with the principles of competition, subsidiarity and coordination.”
Constitutional Court	Ruling SU-095 (2018)	“Coexistence of the principles of a unitary state and territorial autonomy in the exploration and mining of non-renewable natural resources in the subsoil”

<sup>8</sup> Several subsequent laws have amended articles 356 and 357. For more details, see Función Pública.

Relevant authority	Legislation, regulation or jurisprudence	Mandate
<b>Constitutional Court</b>	Ruling T-342 (2019)	“To resolve the tension in the powers granted to the nation and territorial entities in matters of soil and subsoil, Article 288 above must be applied, which defines the principles of coordination and competition for these cases.”
<b>National Mining Agency</b>	Resolution 1099 (22 December 2023)	“Resolution adopting the Public Hearing on Mining procedure for the granting of mining titles”
<b>Ministry of Mines and Energy</b>	Decree 0977 (2024)	Objectives, criteria and tools for the identification, prioritization and delimitation of Special Mining Districts for Livelihood Diversification.
<b>Ministry of Environment and Sustainable Development</b>	Decree 044 (2024)	“Decree establishing criteria to declare and delimit temporary natural resource reserves under the mining-environmental system and setting out other provisions”

Source: Author elaboration based on Colombian legislation and policy documents.

The significant influence that national-level entities wield in decision-making around mining is clear. In reference to the planning phase (Figure 1), the Constitutional Court evaluated and issued jurisprudence that revealed that both territorial entities and citizens had not participated in the planning process. Ruling SU-095 (2018) appeals to the constitutional order to resolve the tensions between a unitary, decentralized state and territorial autonomy and turns to the principles of coordination, competition and subsidiarity to address them. In this same ruling, the Court urged Congress to define one or more mechanisms for citizen participation and one or more instruments for coordination and nation-territory harmonization in planning. However, Congress has not yet fulfilled this mandate, despite the Court’s reiteration to do so in subsequent provisions.<sup>9</sup> The Court also ordered the Ministry of Mines and Energy, the National Hydrocarbons Agency and the ANM to maintain programs that strengthen dialogue, communication and information with territorial entities and their local authorities in order to apply the principles of coordination, coherence and providing sufficient information.

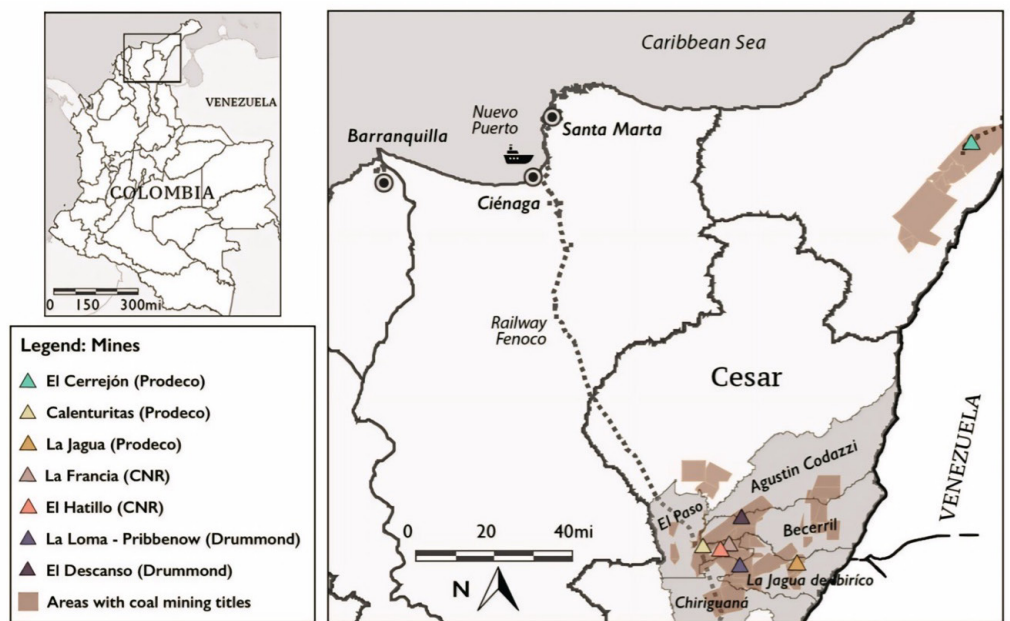
Based on this order and Ruling C-123 (2014), in which the Court authorized mineral exploration and mining operations, provided they are agreed to by territorial authorities, the ANM issued Resolution 1099 (22 December 2023), which provides for holding public hearings before mining titles are granted in the country. This procedure requires reaching an agreement with territorial entities to define areas susceptible to mining operations, in addition to holding in-person or online meetings with various stakeholders in the territory to solicit their opinions on mining. Agreements must be drawn up between the community and applicants seeking a mining contract, which are to be included in the draft contract for development (ANM, 2023b). Since they are recent developments, it remains to be seen how these new measures will be implemented and what their relevance will be in the specific context of coal mining closure and transition. In short, despite some progress in specifying sub-national authorities’ roles and responsibilities in overseeing and regulating mining operations within their territories, tensions persist in territorial planning. National authorities continue to wield influence in all phases of the mining cycle, and much remains to be fleshed out, especially at the closure stage.

<sup>9</sup> See, for example, Ruling T-342 (2019). In addition, Bill 202 (2022) on participation in extractive contexts was shelved in 2023.

### 3. The case of La Jagua de Ibirico

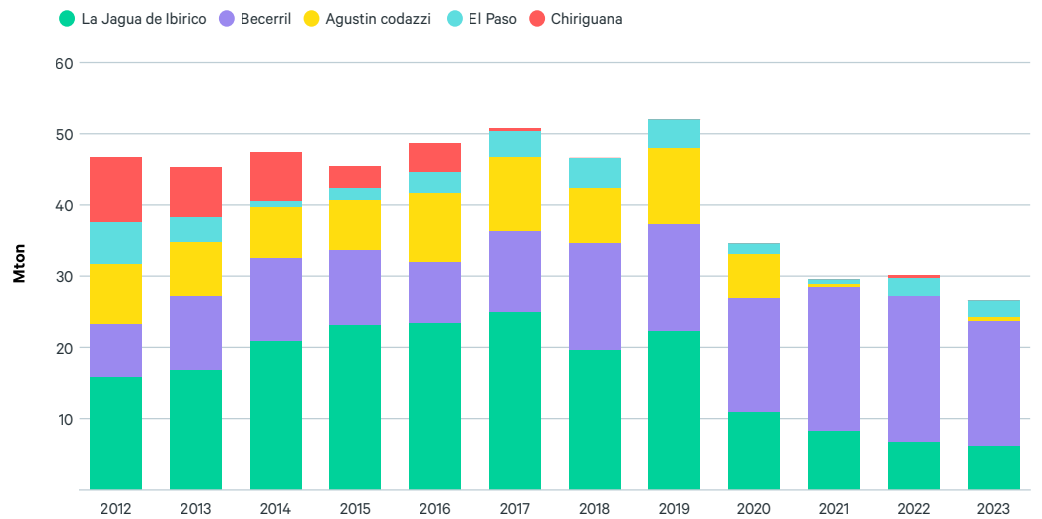
The municipality of La Jagua de Ibirico is located in the central region of the department of Cesar, at 140 metres above sea level. It is organized into three townships – La Victoria de San Isidro, Boquerón and Las Palmitas – and 37 rural settlements. La Jagua de Ibirico is one of the five municipalities, along with Becerril, Chiriguana, El Paso and Agustín Codazzi, that make up the Central Cesar Mining Area (ZMC; Figure 2). The ZMC represents all production in Cesar and is the main coal-producing area in Colombia, contributing an average of 54% in the 2012–2022 period (Figure 3)..

Figure 2. ZMC and export ports in the neighboring department of Magdalena



Source: Furnaro and Yanguas-Parra (2022)

Figure 3. Coal production in Cesar by municipality (2017–2022)



Source: UPME (n.d.)

Two mining companies are present in La Jagua de Ibirico: Drummond and Prodeco. Drummond operates the La Loma, El Descanso and El Corozo projects (Drummond Ltd., n.d.). Prodeco signed a mining concession contract with CARBOCOL in 1989, which awarded the company licence to operate the Calenturitas mine located in the municipalities of Becerril, El Paso and La Jagua de Ibirico. The construction and equipment installation phase for Calenturitas mine began in 1995, the same year that Prodeco was acquired by multinational company Glencore (OCA, 2017; Montoya-Domínguez, 2018). Then, in 2006, Glencore acquired Consorcio Minero Unido mine, followed by Carbones El Tesoro mine in 2007, thus finalizing its 100% acquisition of the La Jagua operation (Prodeco, n.d.-b). Currently, the Prodeco Group consists of C.I. Prodeco S.A. (which owns Calenturitas mine, wagons and locomotives), Carbones de la Jagua S.A., Consorcio Minero Unido S.A. and Carbones El Tesoro S.A. (which own La Jagua mine), and Sociedad Portuaria Puerto Nuevo S.A. (which operates and manages the Puerto Nuevo port facility in the department of Magdalena), which are all subsidiaries of Glencore (Prodeco, n.d.-a).

In the early 20th century, artisanal mining began in the region, providing local job opportunities. In the 1940s, exploratory work by American companies such as Richmond Petroleum Company and Tropical Oil Company (TROCO) identified great coal potential in La Jagua de Ibirico. The Colombian government's interest in mining this area only officially began in the 1980s, with the establishment of the first large-scale coal mining company in the region around 1985 (Alcaldía de La Jagua de Ibirico, 2019).

The emergence and consolidation of large-scale coal mining in La Jagua de Ibirico accompanied and accelerated a process of structural transformation of the municipality's economy. Formerly an agricultural economy, La Jagua de Ibirico was a major producer of rice and cotton in the 1960s, although sorghum, sesame, cacao, sugarcane, coffee, corn, beans, cassava, plantains, yams, pumpkins, taro and year-round crops such as citrus fruits and avocados were also grown there (Bayona, 2015; Alcaldía de La Jagua de Ibirico, 2020). In the 1970s, an agricultural sector crisis coupled with the intensification of the social and armed conflict contributed to a concentration of land ownership (Montoya-Domínguez, 2018). The establishment of mining companies in the 1980s and 1990s contributed to the relegation of these traditional activities, while generating dynamics of economic dependence on and enclave of the mining sector; in 2021, up to 85% of the municipal GDP depended on the primary sector, almost entirely on the coal industry, and royalties contributed 35% of the municipality's public budget (López & Patzy, in press). In addition to large-scale mining operations, coal has also generated other minor economic activities such as coal carving artisanry. By the mid-1990s, around 100 people were engaged in this activity; recently, 15 such people have been identified (Alcaldía de La Jagua de Ibirico, 2020).

The expansion of mining caused a rapid and significant increase in the urban population, driven by the better working conditions offered by jobs in the coal industry, which were formalized, safe and well-paid. The urban population increased from 3000 residents in 1975 to 12 000 in 1992, and nearly 30 000 in the early 2000s (Alcaldía de La Jagua de Ibirico, 2019). Between 2005 and 2021, the total population increased by 141%, cementing the municipality's place as the fastest-growing population in Cesar (Cesore, 2022). This migratory process created a demand for goods and services that

exceeded municipal supply and capacity, in addition to phenomena of inflation and effects on the expectations of public services and collective or civic responsibilities (Peña, 2020).

Although the department of Cesar was already beset by armed conflict when mining companies began their operations, the consolidation of these activities intensified disputes over the profits stemming from resource extraction and control over electoral processes at the municipal and departmental levels (Moor & Van de Sandt, 2014; PNUD, 2014). In addition, testimonies provided to the Special Jurisdiction for Peace indicate that some of the companies allegedly collaborated with, and even financed, illegal armed groups that participated in human rights abuses against the local population, including killings of trade union leaders (Moor & Van de Sandt, 2014; JEP, 2021). Currently, La Jagua de Ibirico has been declared as one of the areas most affected by the armed conflict (ZOMACs) and is one of the eight municipalities in Cesar prioritized for the implementation of Development Plans with a Territorial Approach (PDETs).<sup>10</sup>

In 2019, Prodeco was the third-largest coal producer in Colombia with a production of close to 16 Mt, creating 7498 jobs, of which 2494 were direct and 5004 were indirect (Prodeco, 2020).<sup>11</sup> During its operation, its two mines annually paid around COP 500 billion (USD 122 million) in royalties, taxes, purchases and contracts (Contraloría General de la República, 2023). In the 2019–2020 period, Prodeco paid around COP 65.4 billion in royalties to the Governor's Office of Cesar and COP 9.02 billion to the municipality of La Jagua de Ibirico by direct allocation and production incentive (out of the COP 50.14 billion that the municipality received in total royalties in that two-year period) (El Pilón, 2020).

Currently, Prodeco's mining contracts are in the liquidation process, a phase in which the ANM verifies the company's compliance with a series of technical, environmental, social and economic obligations.<sup>12</sup> These obligations include rehabilitation of mined areas, environmental compensation related to forest use permits, loss of biodiversity, environmental management of used tyres, rehabilitation of water sources such as the Caimancito Stream, implementation of the socio-economic management plan (PMS) for the Boquerón community, a work program to complete the resettlement of the Plan Bonito and El Hatillo communities, and social management reports (Prodeco, 2022). Meanwhile, the mines remain under care and maintenance, and Prodeco has kept its 39.7% share in Ferrocarriles del Norte de Colombia (FENOCO) and its port concession contract in Sociedad Portuaria Puerto Nuevo S.A, thus maintaining the public service infrastructure (Prodeco, n.d.-d).

As part of its local social and economic contributions, other than royalty and tax payments, Prodeco carried out a series of activities through corporate social responsibility programs. These included building and renovating schools, implementing educational programs and providing support for other economic sectors such as

<sup>10</sup> The PDETs aim to stabilize and transform the territories most affected by violence, poverty, illicit economic activities and institutional weakness, and thus achieve the rural development required by these municipalities (ART, n.d.).

<sup>11</sup> Direct jobs at companies are different from indirect jobs, which involve contractors and temporary or subcontracted workers, who de facto work for the company but have employment contracts through third parties and usually much worse working conditions compared to direct workers (e.g. salary, benefits, contract duration).

<sup>12</sup> As of September 2023, three of Prodeco's four mining contracts that made up the La Jagua Integrated Operation have been closed out. The process to close out the Calenturitas project is moving forward (ANM, 2023a).

agriculture. Prodeco's sudden exit has resulted in uncertainty about the continuity of these activities and anxiety among beneficiaries (Furnaro & Yanguas-Parra, 2022).<sup>13</sup>

While the future of coal in the mines remains uncertain, the state's priority focus is on liquidating Prodeco's titles and ensuring the mines are handed over in operable conditions, in addition to promoting reverting the mining assets to the state through the Empresa Colombiana de Minerales (ECOMINERALES). This company's establishment is being debated by Congress (El Pílon, 2022a; Cámara de Representantes, 2023). This uncertainty about the fate of the mine has decreased expectations that mining operations will resume (Interviews E6, E17, E23, E19). Amidst these circumstances, the community has shown remarkable resilience and optimism in adapting to the new reality where "for many, the mine is already irrelevant" (Interview E11). Instead of relying exclusively on the mine's reopening, local residents have turned their attention towards exploring opportunities in new economic sectors – in a nutshell, "the suspension of the mine affected us, but it also woke us up" (Interview E2). For some, the prospect of reviving traditional sectors that can contribute to strengthening the local economy has created a renewed sense of hope and positivity. However, major challenges persist. The next section describes some of these challenges, which were identified in the interviews.

### **3.1 Challenges related to the suspension of Prodeco operations and the coal legacy in the municipality**

La Jagua de Ibirico faces various challenges stemming from both the suspension of mining operations and the legacy left by years of coal extraction and transport. We recognize, as detailed below, that many of these challenges are intertwined. For example, environmental impacts, such as air and water pollution, have social repercussions for local communities, affecting public health as well as access to unpolluted soil for subsistence or agricultural activities. We have divided the section into social, socio-environmental and economic impacts.

#### **3.1.1 Social impacts**

The sudden suspension of Prodeco's operations led to massive layoffs of both direct and indirect workers in Cesar and Magdalena, pressure around voluntary early retirement, and the loss of the legal rights of organized labour and job protections for workers with health conditions, among other impacts considered violations of labour and fundamental rights (CNV, 2021, n.d.-a). Of Prodeco's 1200 direct workers, 147 are still employed due to their trade union protections or work-related health problems (Monsalve, 2022). According to data obtained during fieldwork, this figure may increase to 382 active workers distributed as follows: 260 at C.I. Prodeco, 75 at Consorcio Minero Unido and 47 at Carbones de La Jagua (Interview E27). The remaining employees, about 7116, were dismissed through layoffs authorized by the Ministry of Labour or voluntary early retirement plans (PRVs).

<sup>13</sup> Although a detailed study of the balance of payments by Prodeco and other mining companies is beyond the scope of this analysis, it is worth noting that, under certain circumstances, the law allows social programs or infrastructure works implemented by companies to trigger tax breaks or discounts in royalties. One example is the "Works for Royalties" law (Law 2056 of 2020 of the General Royalties System).

To end workers' employment relationship with Prodeco, PRVs offer a series of benefits and compensation. Mainly, they include a payment equivalent to the compensation established under employment law for unilateral termination without due cause; a sum equivalent to 12 months of the employee's base salary; and payments for social security, life insurance and private health insurance (El Pílon, 2021d). In addition, PRVs should provide career coaching and mentoring programs to help workers identify alternative employment opportunities and careers (Monsalve, 2022). However, some workers have criticized the PRVs, viewing them as a covert strategy for mass layoffs that creates uncertainty regarding the professional future of older employees or those with health conditions that could make it difficult for them to be hired by other companies (Interviews E16, E15).

The suspension of Prodeco's operations has increased unemployment in the municipality, which stands around 25% compared to 8–10% in 2019 (López, 2022). This increase is also tied to the closure of various businesses in the service sector that grew around mining and the miner population, from hotels to transport companies, restaurants, entertainment venues and laundry services. According to interviewees, the informal economy, domestic violence, crime, prostitution and even suicides have increased, with adverse psychological consequences, especially for women, although there are no independent studies yet on these impacts (Interviews E18, E23, E25). Former Prodeco employees have been forced to move to other mining regions in search of employment, leaving their families behind in the process (Interviews E17, E19), and the closure has created labour market gaps for young people (Interview E20). Interviewees also report that educational scholarships from mining funds decreased (Interview E9).

Trade unions have been very active in dialogue with the government and the companies. However, they have had limited support from civil society, as others perceive that their demands focus on protecting their own interests and do not embrace local communities' causes (Peña, 2020). Some of the people interviewed believe that trade unions' role as intermediaries with the national government pushes aside the concerns and requests of the general population (Interviews E22, E25, E7), and even blame them for the fact that some workers have not accepted the PRVs and taken advantage of their benefits (Interviews E15, E16).

Uncertainty about the mines' reopening or closure has stirred up significant social tensions in La Jagua. Local residents have been divided into two groups: those advocating for reopening the mines and reintegrating workers, and those seeking a public dialogue on vulnerabilities related to the local and regional dependence on coal, as well as the fulfilment of Prodeco's outstanding obligations (BLU Radio, 2023; Monsalve, 2023; Tarazona, 2023). These tensions, added to the municipality's economic crisis, have led to an increase in insecurity and threats against social leaders, including those who have requested a closure plan adapted to the community's needs (Monsalve, 2023). Meanwhile, both the local community and the municipal mayor's office have found it difficult to access information on the procedure for accepting Prodeco's relinquishment of titles and its closure plans (Interviews E6, E12, E22, E13).

Several interviewees mentioned the township of La Victoria de San Isidro as a model of prosperity, resilience and social cohesion in the face of the mining sector's crisis

(Interviews E4, E5, E6, E17). Although it has received some support from mining companies for strengthening livelihood, recycling and ecosystem recovery projects (El Heraldó, 2016; El Pílon, 2023b), La Victoria de San Isidro is viewed as a township that has prospered by bringing together peasant organizations and developing its own Local Strategic Plan: Vision 2032, for which it actively engaged both public and private entities (Ecología, Economía y Ética, 2018; El Pílon, 2018). This vision aligns with a commitment to alternative (non-coal) industries, which has led to greater stability even in times of economic crisis.

### 3.1.2 Socio-environmental impacts

La Jagua de Ibirico has experienced disproportionate mining-imposed environmental impacts that negatively affect quality of life and the full exercise of the right to health. Even municipal planning documents and the National Environmental Licensing Authority (ANLA) recognize coal mining's negative impacts on the environment, including watershed degradation, effects on strategic natural ecosystems such as tropical dry forests, and impacts on air quality in Cesar, particularly the municipality of La Jagua (Alcaldía de La Jagua de Ibirico, 2020; ANLA, 2021b). In addition, expected impacts in the post-closure stage of the mines may be even greater, including other environmental liabilities and long-term or perpetual impacts (Ángel, 2019; Congreso de Colombia, 2023; Ángel et al., 2023; Ministerio de Ambiente y Desarrollo Sostenible, n.d.). These impacts on water, air and soil have affected subsistence activities and the local population's ability to meet their needs (Tierra Digna, 2015). As a result, many impacts are socio-environmental in nature despite resulting from mining-induced biophysical changes in the territory. This section identifies some of these impacts.

#### 3.1.2.1 Impacts on water

The impact of mining on water encompasses both quantity and quality, affecting both surface and groundwater sources. ANLA identifies the department of Cesar as a highly sensitive environmental area regarding surface water and groundwater, affected by the coal industry's demand for water, extraction and discharges (ANLA, 2021b). For example, ANLA recently determined that Prodeco Group companies did not properly manage surface runoff water in external landfill areas, in violation of established management measures. This failure constitutes an environmental infraction, which has resulted in impacts on water resources, flora and soil in a tributary of the Santa Cruz channel.<sup>14</sup> A significant risk of acid mine drainage, with long-term or perpetual impacts, has also been identified (Ángel, 2019; Ángel et al., 2023).

Another impact concerns mining companies' actions regarding water sources. The possibility of extracting more coal from the Calenturitas mine (Prodeco) resulted in altering the course of several rivers with MADS authorization,<sup>15</sup> including the Calenturitas River, Tucuy River, Maracas River and Caimancito Stream (OCA, 2017). In total, 13 water sources have been potentially affected by Prodeco operations (Corte Constitucional, 2023). Drummond has also diverted rivers in the jurisdiction of La

<sup>14</sup> According to ANLA Resolution 001251 (21 June 2024).

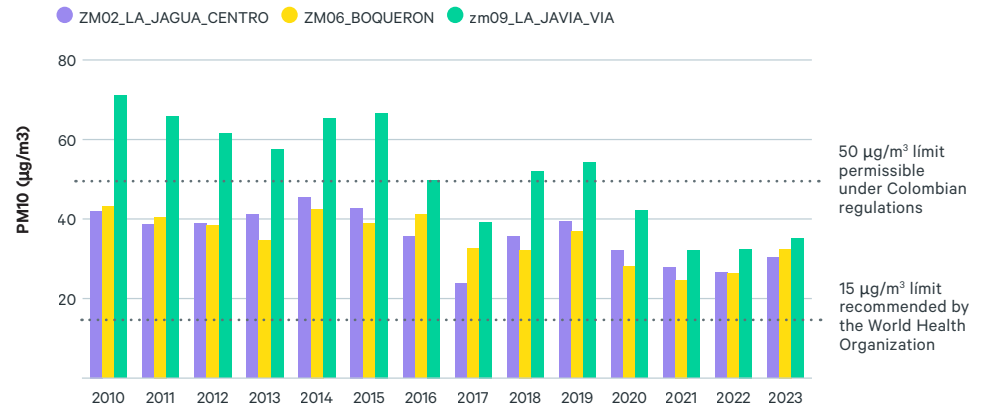
<sup>15</sup> In Resolution 464 (2009).

Jagua de Ibirico, such as the San Antonio Stream,<sup>16</sup> despite resistance from local residents (Jiménez, 2016).

### 3.1.2.2 Impacts on air

Another documented environmental impact of coal mining and transport is the degradation of air quality. As one of the departments with the largest open-pit mining areas in the country and with reported health problems, the particulate matter (PM) produced in the mining areas has been monitored for the last 15 years. The Air Quality Information Subsystem (SISAIRE) includes data on PM10 and PM2.5 concentrations measured at stations in the La Jagua municipality and other municipalities in the mining corridor. Figure 4 shows the average annual concentration of PM10 at two monitoring stations located in La Jagua de Ibirico (2018–2023) compared to the current limits (in 2024) permissible under Colombian regulations (50 µg/m<sup>3</sup>) and the level recommended by the World Health Organization (15 µg/m<sup>3</sup>). Notably, the concentration has not exceeded the level required by national regulations since 2020 but is still well above the international recommendation.

Figure 4. Average annual PM10 concentration at three monitoring stations located in La Jagua de Ibirico (2018–2023).



Note: The current limit (in 2024) permissible under Colombian regulations is 50 µg/m<sup>3</sup>, and the level recommended by the World Health Organization is 15 µg/m<sup>3</sup>.

Source: Prepared by the authors based on SISAIRE data

Studies and reports on exposure to PM near the mines point to respiratory diseases and genotoxic effects in human populations. Such effects range from a higher probability of experiencing asthma to an increased risk of cancer, in addition to impacts identified in other species near the mines and along its transport routes (Ángel et al., 2023).

In 2007, due to local protests and monitoring showing that air pollution exceeded the levels permitted under Colombian regulations at the time, the MADS declared

<sup>16</sup> In Resolution 384 (2016).

the Cesar Mining Area a source of air pollution.<sup>17</sup> In 2010, it ordered the resettlement of three populations: El Hatillo, Plan Bonito and Boquerón,<sup>18</sup> the latter of which is located in the jurisdiction of La Jagua de Ibirico (Huertas et al., 2012). Not only was the two-year deadline for the resettlement of Boquerón missed, but 10 years lapsed without an agreement on a resettlement action plan. Public administrations suspended social investment programs and projects in Boquerón for fear of incurring penalties or proprietary damage on land in the process of resettlement, where their investments would be lost in the event of the population's relocation (Mejía, 2021). This meant that during those 10 years, nearly 1345 Boquerón inhabitants did not receive any state investment to improve their living conditions.<sup>19</sup>

In 2021, at the height of the pandemic, the MADS declared that the township no longer qualified for relocation based on a reclassification study of nearby contamination source areas.<sup>20</sup> Instead, it requested that Drummond, Prodeco and CNR formulate and implement a PMS. The PMS submitted by the mining companies and approved by ANLA<sup>21</sup> in 2022 (after the suspension of Prodeco's activities) outlined the following specific obligations for Prodeco: undertaking and expanding the child development centre, improving the health centre, building a central park and sports centre, improving the police station, implementing a rural and urban livelihood development program and implementing a gender and domestic violence prevention program (Prodeco, n.d.-c). In the context of the PMS, the municipality's assessment findings reflect highly vulnerable conditions "due to high [rates of] teenage pregnancy, inadequate nutrition, a high illiteracy rate and low or no economic income[s]" (ANLA, 2022, p. 10). These years of experience have left Boquerón's inhabitants with conflicted feelings; on the one hand, they observe signs of progress in other townships such as La Victoria and La Palmita with gratitude, and on the other hand, they are deeply troubled by the noticeably worsening impoverishment of their own township (Interviews E4, E6, E24).

Several residents have noted a significant improvement in the quality of the environment following the suspension of Prodeco's operations (Interviews E6, E11, E19, E24). This is evidenced by lower PM10 concentrations in the data from two monitoring stations in 2020 and 2021 (see Figure 4), which was the basis for the MADS decision. Some interviewees also mentioned the return of some animal species, attributing it to the cessation of operations and a consequent reduction in air pollution and discontinued detonations (Interviews E6, E11, E19, E24).

Nonetheless, residents do not overlook the environmental impacts from years of mining activity. This has translated into high expectations for Prodeco's fulfilment of its obligations, with special attention to the company's future actions (Interviews E6, E19, E20, E21). For example, concerns abound regarding guarantees for the company's compliance with the Constitutional Court's order that measures for the prevention, mitigation and compensation for damages to the Yukpa Indigenous People be included in environmental management plans, along with a comprehensive care plan to ensure food security for Yukpa children and adolescents (Corte Constitucional, 2023). 2023).

<sup>17</sup> Resolution 386 (2007).

<sup>18</sup> Resolution 970 (2010).

<sup>19</sup> According to Boquerón assessment considerations in Resolution 664 (2022).

<sup>20</sup> Resolution 640 (2021).

<sup>21</sup> Resolution 664 (29 March 2022), amended by Resolution 1272 (10 June 2022) and Resolution 1452 (11 July 2022).

### 3.1.2.3 Soil impacts

Although Cesar is recognized for its vast agricultural potential, the land allocated to agriculture has diminished since 2014 as a result of the coal sector's growth (ADR & FAO, 2021, as cited in Ángel et al., 2023). Coal mining has directly influenced soil pollution, coupled with the drastic transformation of landscapes due to large-scale open-pit mining. Recently, ANLA determined that Prodeco Group companies improperly managed waste material at the Aeropuerto landfill, amounting to an environmental violation that affected the vegetation cover, including species such as peralejo (*Byrsonima spicata*).<sup>22</sup>

The temporary stop in detonations for coal mining has also paused ground vibrations, which inhabitants associate with cracks and fissures in their homes (Barrios, 2019; Interviews E6, E11, E19, E24). Although no official census exists, it is estimated that up to 1000 homes have been affected, for which no concrete solutions have been offered (Interviews E3, E12). Local residents mentioned that, in addition to dealing with pollution, noise and health problems, they are concerned about the loss of their livelihoods, including due to the potential purchase of new land by former mineworkers. Some argue this purchase could result in the expansion of the agricultural frontier, threatening the remaining forests (Envol Vert, n.d.). There are similar concerns about environmental restoration programs using palm oil in mining areas; the monocrop could deteriorate soil quality and water sources, increasing the region's climate vulnerability (Dhandapani et al., 2019; El Turbió, 2023).

### 3.1.2.4 Assessment of socio-environmental impacts

It is not easy to measure the environmental or socio-environmental impacts of coal over its entire value chain, many of which are fully unpreventable. These include impacts on lost ecosystem services, the displacement of human populations and other species, the loss of agricultural soils and fishing areas and impacts on marine systems (Cardoso, 2015; Ángel, 2019; Ángel et al., 2023). In an economic valuation of these rarely considered socio-environmental impacts, Cardoso (2015) and others (Corral et al., 2021; Puerto & Corral, 2022) calculate costs, finding them to exceed the price of coal in the market, especially if the damages generated by coal combustion are included. The following section considers the economic and fiscal impacts of the suspension of mining operations in La Jagua but does not refer to this socio-environmental valuation.

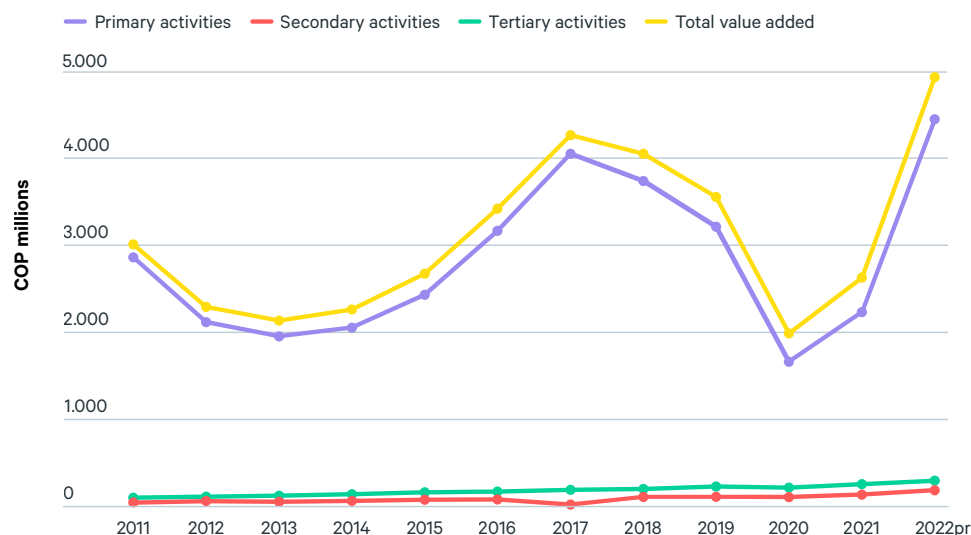
## 3.1.3 Fiscal and economic impacts

The suspension of Prodeco's mining operations has had a significant economic impact. It has affected 80% of the municipality's economic activities, with nearly COP 180 billion ceasing to circulate and the informal economy ballooning (El Pilón, 2022b). Although it had already been trending downward since 2017, municipal GDP decreased by 44% (Figure 5) in the 2019–2020 period, compared with Becerril where GDP increased by about 6% during the same period (DANE, n.d.). From a

<sup>22</sup> As stated in ANLA Resolution 001251 (21 June 2024).

fiscal perspective, the dependence on royalty resources acted to disincentivize efforts to increase the municipal administration's own resources which – given Prodeco's retreat – considerably diminished, setting off an austerity period in public spending (Interview E11).

Figure 5. Municipal GDP (2011–2022)<sup>23</sup>



Source: DANE (n.d.)

Although Prodeco continues to operate its crusher and market its coal, interviewees from the public administration do not have clarity about future economic compensation for these activities, whether for the municipality or even the country. Furthermore, they cited uncertainties about the provenance of the coal (Interviews E15, E16, E26). In fact, forecasted obsolescence risks are valued at approximately USD 2 billion in relation to more than 147 000 mining assets that would become state property, such as mining equipment, infrastructure, compounds, vehicles and land, among other assets belonging to Prodeco in Cesar (Contraloría General de la República, 2023; Cámara de Representantes, 2023). Once obsolete or unusable for future mining activities, these assets could be fully depreciated, bringing their value to zero and incurring additional dismantling or maintenance costs.

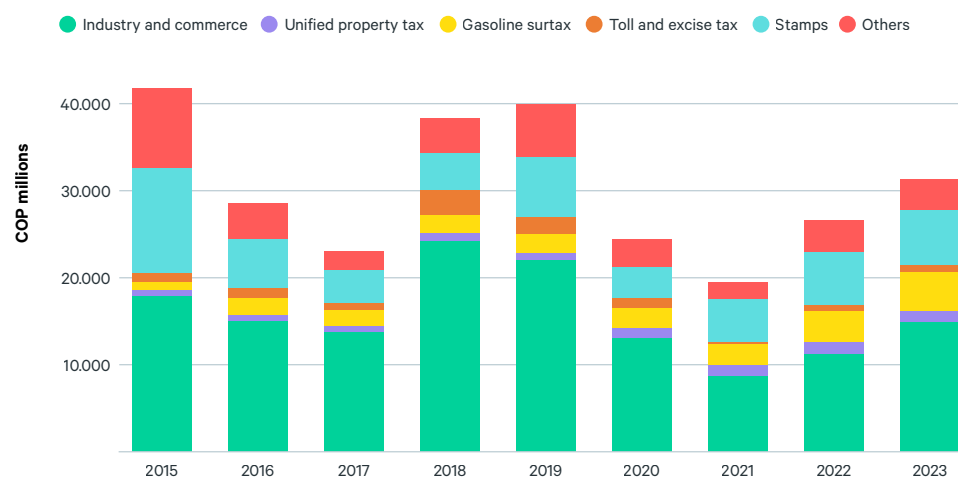
At the local level, the municipality's main sources of funding are tax revenues and revenues from the General Royalties System (SGR) and the General Revenue-Sharing System (SGP).<sup>24</sup> Among tax revenues, the industry and commerce tax has been the most significant in the 2015–2022 period, representing on average 52% (DNP, n.d.-b). Between 2019 – before the suspension of Prodeco's operations – and 2022, the share of industry and commerce tax in the municipality's tax revenues decreased by

<sup>23</sup> Primary activities include agriculture, livestock, hunting, forestry, fishing, and mining and quarrying. Secondary activities include manufacturing industries and construction projects. Tertiary activities include wholesale and retail trade, transport, hotels and restaurants, information and communications, finance, real estate and insurance activities, administrative services, public administration, education, health, arts and recreation (DANE, 2024).

<sup>24</sup> Through the SGP, the state transfers national resources – as stipulated in articles 356 and 357 of the Political Constitution (amended by Legislative Act 01 of 2001 and Legislative Act 04 of 2007) – to the territorial entities (departments, districts, municipalities and Indigenous reserves) to fund the services they are responsible for. These include health, education, drinking water and basic sanitation and other powers assigned in Law 715 (2001) and Law 1176 (2007; DNP, 2023).

12 percentage points, a reduction of close to COP 10.9 billion (Figure 6). The mining sector is crucial to the collection of this tax in the municipality: in 2019, approximately 94 out of every 100 pesos collected from industry and commerce came from companies associated with coal mining (Vera, 2022; El Pilón, 2023a). In 2021, the figure decreased to 75 out of every 100 pesos, mainly due to the retreat of Prodeco and its contractors. Currently, industry and commerce resources depend almost exclusively on the operations of Drummond and its contractors (Vera, 2022).

Figure 6. Tax revenue of the municipality of La Jagua de Ibirico (2015–2023)



Source: DNP (n.d.-a)

This drastic reduction in tax revenues, mainly from industry and commerce tax, caused a reduction in unrestricted revenue streams (ICLD), which correspond to tax revenues such as property tax, industry and commerce tax and a gasoline surtax, as well as non-tax revenues, mainly unrestricted SGP resources.<sup>25</sup> This, in addition to a sustained increase in operating expenses between 2020 and 2023, caused the municipality's tier to be downgraded over that period (SICODIS, n.d.-c). In Colombia, such downgrading has several implications. When downgraded, a municipality receives less resources for certain items, such as the "revenue for general purposes" SGP category. A municipality's tier determines the percentage of funds allocated; in tier 4, 5 and 6 municipalities, the percentage of unrestricted resources is lower (DNP, 2023).

During 2022, La Jagua de Ibirico received COP 12.9 billion in ICLD. At less than 15 000 times the monthly minimum wage, this amount classifies it as a sixth-tier municipality (see Table 2). In addition, the municipality allocated 85.6% of ICLD to operating expenses, exceeding the 70% limit allowed of third-tier municipalities (Congreso de Colombia, 2000; SICODIS, n.d.-c). In summary, declining revenues and high operating and payroll costs led to the reclassification of the municipality from Tier 3 to 6 in 2023. In 2024, La Jagua was changed to a Tier 5 municipality due to an increase in ICLD.

<sup>25</sup> For a description of the ICLD calculation method, see Congreso de Colombia (2000).

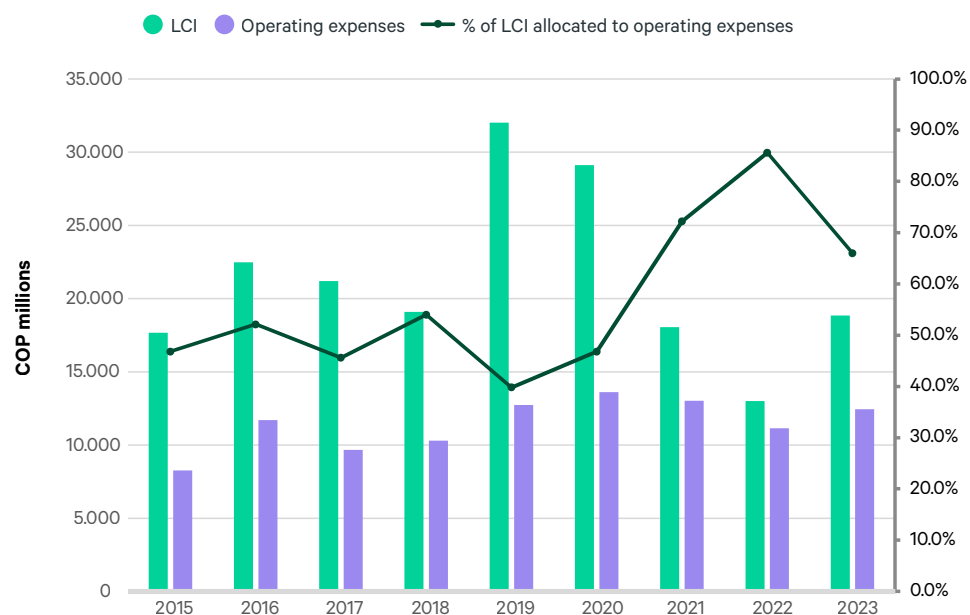
Table 2. Categorization of municipalities<sup>26</sup>

Tiers	ICLD budget (billions of COP)		Maximum value of operating expenses <sup>27</sup>
	From	To	
Special category: Annual ICLD over 400 000 SMLMV	464		50%
Tier 1: Annual ICLD between 100 000 and 400 000 SMLMV	116	464	65%
Tier 2: Annual ICLD between 50 000 and 100 000 SMLMV	58	116	70%
Tier 3: Annual ICLD between 30 000 and 50 000 SMLMV	34.8	58	70%
Tier 4: Annual ICLD between 25 000 and 30 000 SMLMV	29	34.8	80%
Tier 5: Annual ICLD between 15 000 and 25 000 SMLMV	17.4	29	80%
Tier 6: Annual ICLD under 15 000 SMLMV		17.4	80%

Source: Congreso de Colombia (2000) and Presidencia de Colombia (2019)

Figure 7. ICLD vs. operating expenses by collection year, La Jagua de Ibirico

Source: SICODIS (n.d.-c)



A downgrade to Tier 6 decreases the maximum value of ICLD that can be allocated to operating expenses (Table 2) and the salaries or fees of municipal public servants (Presidencia de Colombia, 2023b). This has led some interviewees to report a decrease in the number of employees at the mayor's office (Interviews E1, E2), resulting in heavier workloads for current employees (Interview E13).

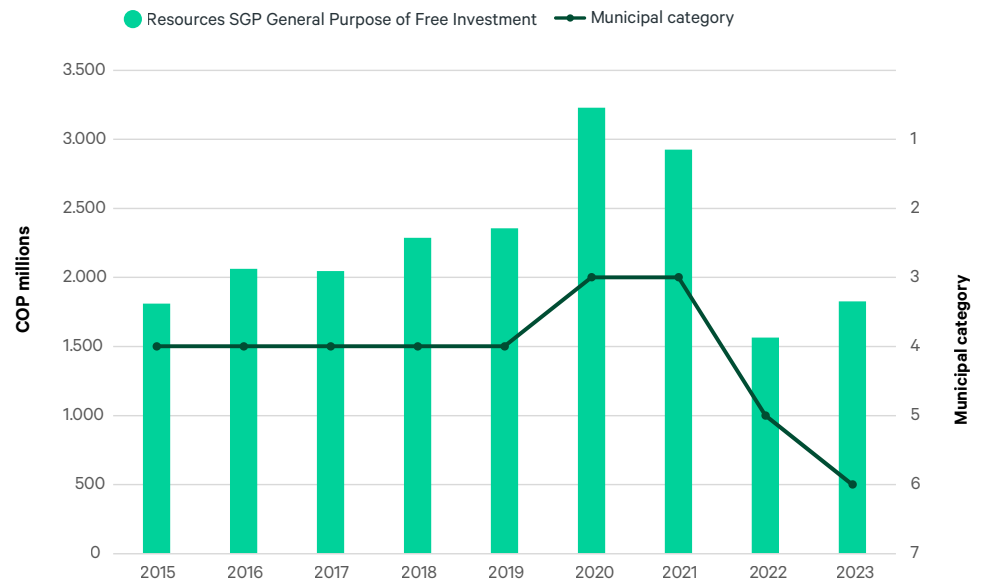
While total SGP resources increased in the 2020–2022 period, in falling from the third to sixth tier, the unrestricted SGP resources for La Jagua de Ibirico decreased by 43% between 2020 and 2023 (Figure 8). In other words, the municipality stopped receiving nearly COP 1.4 billion to fund sectors and programs under the Municipal Development Plan.

Figure 8. General SGP funds for unrestricted investment

<sup>26</sup> ICLD budget is illustrated in relation to the 2023 minimum legal monthly wage (SMLMV): COP 1.16 million.

<sup>27</sup> During each fiscal year, the operating expenses of districts and municipalities may not exceed this limit, in proportion to their unrestricted revenue streams.

Source: SICODIS (n.d.-c, n.d.-a)



In addition, the closure of Prodeco’s operations resulted in a significant decrease in La Jagua de Ibirico’s royalty collections. For example, between 2019 and 2021 there was a notable drop of 65%, from COP 485 billion to around COP 170 billion (Figure 9), although collections had already begun to decline prior to 2019.

Figure 9. Coal production and royalty collection in La Jagua de Ibirico (2012–2023)

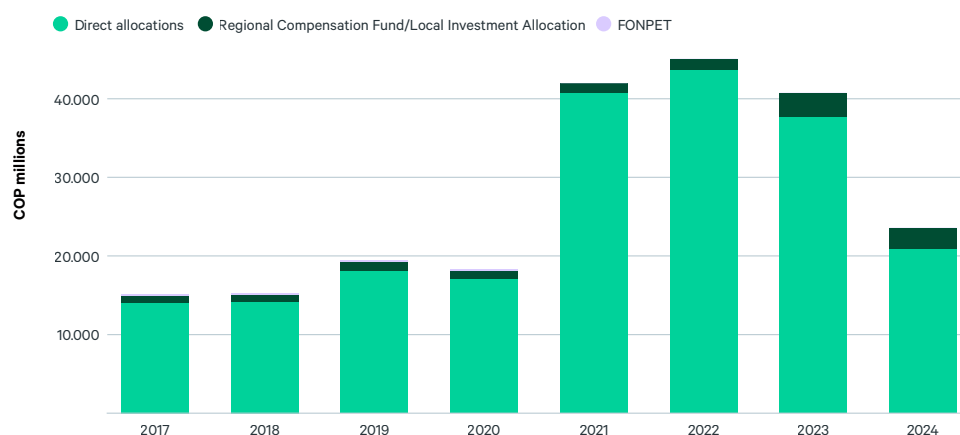
Fuente: UPME (s.f.)



Collected royalties are earmarked for either savings or investment. Investment resources go towards different categories, including local investment (aimed at the poorest municipalities in the country); regional allocations; science, technology and innovation; peace; and the environment. They also go towards other categories such as direct allocations (up to 25% of the SGR), which are economic resources aimed at financing or co-financing investment projects for social, environmental and economic development at territorial entities in whose jurisdiction natural resources are extracted

or transported, as is the case in La Jagua de Ibirico (Congreso de Colombia, 2020; DNP, 2023). Meanwhile, savings are divided between the Savings and Stabilization Fund (FAE) and regional pension funds, through the National Pension Fund for Territorial Entities (FONPET). Although La Jagua de Ibirico is one of the municipalities that has received the most resources from direct allocations, the SGR resource plan anticipates reductions in this category. In 2023–2024, the municipality should receive about COP 58.7 billion, compared to COP 84.5 billion in 2021–2022 (SICODIS, n.d.-b). There has been a 45% reduction between 2023 and 2024 (Figure 10).

Figure 10. SGR resource plan, La Jagua de Ibirico



Source: SICODIS (n.d.-b)

With the suspension of mining operations, an additional loss of economic compensation is expected – for example, in the annual social investment made by Prodeco, estimated at COP 1.7 billion in 2022. Unless an agreement is struck with the company, this funding will be discontinued (to date nothing has been made explicit) (Contraloría General de la República, 2023). Funding would also be affected for the Cesar Mining Corridor Entrepreneurship and Workforce Development Centre (Cemprede, Centro de Emprendimiento y Empleabilidad del Corredor Minero del Cesar). Since 2015, this centre has been run by the Prodeco Foundation. It has 1240 ventures in its area of influence in Cesar and Magdalena, having created direct and indirect jobs for more than 725 individuals to date (Prodeco, 2021a, 2023). In addition, unemployment associated with the closure of mining operations has affected local hospitals' finances. Employees of coal companies, inasmuch as they are not part of the subsidized healthcare regime that covers 47% of the residents of La Jagua de Ibirico, are essential to local hospitals' finances through the income provided by private healthcare insurance companies (Alcaldía de La Jagua de Ibirico, 2020; Furnaro & Yanguas-Parra, 2022).

This series of dynamics has led to high levels of indebtedness and inadequate budgetary support for the municipal government, including debts tied to public services, civil servants and contractors, treasury credits and current liabilities (El Pílon, 2024).

## 4. Strategies and responses to challenges stemming from Prodeco's withdrawal

Faced with the difficult outlook in the mining region, particularly in La Jagua de Ibirico, state institutions have enacted a series of responses, and civil society and trade unions have been proactive in confronting some of these social, fiscal, economic and environmental challenges. Thanks to the efforts of civil society and local communities, a discussion about a post-mining future in their territories has gained traction, attracting the attention of international actors and different levels of government. The national government has initiated public dialogues to support creating a just transition roadmap and a specific plan for the municipalities of the Cesar mining corridor – renamed the “Cesar Corridor of Life”– which was included as a strategic project in the 2022–2026 National Development Plan, precisely to reimagine the future of the region after coal. Under this scheme, COP 26 billion has been earmarked for ecological restoration activities (Ministerio de Ambiente y Desarrollo Sostenible, 2022) and close to COP 39.3 billion has been redirected from the SGR to support economic diversification projects. Of this, COP 14.5 billion was specifically allocated to La Jagua de Ibirico (Ministerio de Minas y Energía, 2023b).

Several local stakeholders have greater optimism for aid from the national government than from the municipal or regional governments. Notwithstanding, there is a perception of ambiguity or a lack of clarity about the terms that apply to instruct how such aid would be put into practice (e.g. differences between the emphasis placed by different authorities or officials on the social, economic, productive, energy or just transition) (Interviews E1, E2, E3). This in turn feeds confusion or scepticism about the viability and effectiveness of such transitions, and also begs of a more active role of the mayor's office to guide and lead towards a long-term vision.

The general perception of local stakeholders is that despite the numerous meetings held and action plans developed, progress towards concrete actions has so far been rather limited. Although the local aspiration is to “transition through investment” (Interview E18), there are still concerns about the use of already allocated public resources, such as the funds redirected from the SGR that were channelled towards a single livestock-related project. Such situations raise concerns about transparency and arbitrary decision-making in the allocation of resources that do not necessarily aim to achieve just transition objectives (Interviews E6, E23, E26).

### 4.1 Fiscal strategies

The municipal administration has promoted a series of strategies to address the impacts associated with the suspension of mining activities, including more rigorous processes for the collection and regulatory oversight of municipal revenues in light of the reluctant payment culture of taxpayers. The collection office of the municipal mayor's office has become what some have called “a mini DIAN” – referring to the national entity responsible for tax collection – with strategies that include coercive tax collection, discounts of up to 100% of delinquent interest, taxpayer education programs and financing schemes for delinquent debtors and incentives for officials who achieve

higher collection (Interview E10). Despite positive collection results, such as a 60% increase in tax revenues during the 2021–2023 period (see Figure 6), these strategies have worsened the crisis for some taxpayers who face foreclosures, affecting their ability to obtain financing for livelihood projects (Interview E10). At the same time, the mayor's office may have limited the economic resources allocated to community action boards in accordance with Law 2166 of 2021 (Interviews E23, E25, E26).

The mayor's office has had to reduce its operating expenses, limiting resources for community services. During the 2020–2023 period, these expenses saw a 13% decrease (SICODIS, n.d.-c), reducing the resources available for categories such as transport and fuel service for employees and their activities (Interviews E10, E11). As a result, employees of the mayor's office have opted to assume some of these costs from their own income, often with communities' support. This situation has led to a greater connection and coordination between the local population and municipal administration.

Meanwhile, the municipal administration has lacked access to key information related to the mine closure process. This challenge, together with the limited powers of the mayor's office, has weakened its ability to influence environmental decisions and policies. This is of particular concern given the role that offices such as the Environmental Secretariat, recently established in 2017, are expected to play in environmental management and decision-making (Interviews E12, E13).

## **4.2 Strategies for livelihood development and social investment**

Some interviewees noted that efforts by the mayor's office have focused on revitalizing the agricultural sector after the mine closures. This work has had some positive outcomes. For example, the mayor's office's support of the coffee sector helped the municipality go from being the fourth-largest producer in Cesar in 2021, to the second-largest producer, after the municipality of Pueblo Bello (El Pílon, 2021b). However, as one interviewee reflected, "those of us who do not want to farm are also part of the process, yet we buy what the fields produce" (Interview E1). This reflection suggests that, while those who choose not to participate directly in this sector recognize the importance of the agricultural reactivation process, they underscore the need to promote other economic sectors (e.g. manufacturing, services) that can in turn support the commercialization of agricultural products.

This emphasis on reactivating the agricultural sector has highlighted the community's deep yearning for access to land, along with their broader vision for its use and concomitant economic opportunities. These include not only traditional agriculture but also opportunities to transform agricultural products and add value to strengthen and diversify income streams. The economic recession and search for livelihood alternatives in the agricultural sector have had repercussions in the real estate sector; there is a reported decrease in square metre value, especially in urban areas, while in rural areas the price per hectare has increased by up to 300% (Interview E11). Hence the demand for "loan for use" land (Interview E10), which suggests an interest in

alternative forms of land tenancy that would allow people to work the land without necessarily owning it.

Some responses have been coordinated across different levels of government. Such is the case with the “Boquerón avanza y emprende” (Boquerón progresses and produces) plan promoted by the local mayor’s office and the Ministry of Mines and Energy. This plan aims to execute social investment projects in Boquerón, in coordination with three levels of government and the mining companies, along six strategic lines: housing, water and basic sanitation, healthcare, education, food security and entrepreneurship (Alcaldía de La Jagua de Ibirico, 2021). The first project to materialize would be the aqueduct and sewage system, with an investment of close to COP 9 billion financed by OCAD Paz (El Pílon, 2021a). The plan has been criticized for its limited progress, in addition to the need to clearly differentiate it from the obligations of mining companies under the PMS (ANLA, 2021a; El Pílon, 2021c).

### 4.3 Educational and training strategies

The National Training Service (SENA) and the Chamber of Commerce have promoted training for established organizations and associations in the region. Despite these efforts, SENA continues to offer training for occupations that are principally tied to the mining industry, such as mining truck operation. This situation reflects the need to “shift thinking around education” (Interview E17), meaning to transform the educational offering to adapt to the new demands of the labour market and promote economic diversification in the region in alignment with emerging opportunities in more sustainable sectors and the objectives of a just transition. Recently, the national government committed to building a Universidad Popular de Cesar campus in La Jagua de Ibirico, with the purpose of providing quality and relevant education focused on the energy transition and the region’s economic diversification (Ministerio de Educación, 2023a). This commitment is part of the “University in Your Territory” initiative, which aims to enrol 500 000 new students in public higher education nationwide by 2026, among other goals (Ministerio de Educación, 2023b).

To address the labour and economic repercussions of Prodeco’s suspension of operations, the main trade unions in the open-pit coal mining sector (Sintracarbón, Sintracerrejón, Sintradrummond, Sintradem and Sintraminenergética), supported by CNV International, opted to establish an autonomous coalition for trade union coordination known as the Workers’ Collective for a Just Transition (Colectivo de Trabajadores por la Transición Justa). Nearly 9000 coal workers are affiliated (CNV, n.d.-b). The collective has been dialoguing with the government to ensure that energy transition policies integrate the initiatives and concerns of communities and workers, including discussions about the new Mining Code and legal gaps and transparency related to mine closures (CNV, 2023). It has also advanced in dialogues with mining companies under a sector-wide agreement strategy and unified plea that addresses specific claims related to the relinquishment of mining titles, cessation of operations and mine closures (CNV, 2024).

Civil society organizations, think tanks and universities have also done valuable work by contributing research, updated data, analysis and training that they have

made available to local stakeholders, including educational and capacity-building work. An example of this is the certificate course, Just Mining-Energy Transition in the Colombian Caribbean, spearheaded by Universidad del Magdalena with the support of organizations such as the Heinrich Böll Foundation-Colombia and CNV International. The course is geared at current and former mineworkers and community leaders who have been affected by Glencore's relinquishment of mining titles in Cesar. In addition to bolstering knowledge and skills, it has facilitated the conception and development of new livelihood initiatives such as the Comprehensive Technical Services and Renewable Energy Cooperative (COOMUSTIER, Cooperativa Multiactiva de Servicios Técnicos Integrales y Energías Renovables), the Ex-mineworker's Association (ASOEXTRAMIN, Asociación de Extrabajadores Mineros) and the Cesar Renewable Energy Association (ASOENERGY, Asociación de Energías Renovables del Cesar), among other initiatives led by members of the Workers' Collective for a Just Transition.<sup>28</sup>

#### 4.4 Litigation strategies

Civil society has also broken new ground through strategic litigation. Lawsuits filed before high judicial bodies, such as the Constitutional Court, have resulted in jurisprudence that obliges the Colombian state to review its regulations and adopt measures to protect individual and collective rights in the context of coal mine extraction and suspended operations, albeit with limited execution. For example, in 2022 a judge ordered setting up a dialogue roundtable between the communities of La Jagua de Ibirico and Prodeco to determine Prodeco's pending environmental and social obligations (Juzgado Séptimo Administrativo de Valledupar, 2022). However, some interviewees refer to the dialogue roundtables as merely informative spaces devoid of the possibility of integrating community feedback, with the aggravating factor of plaintiffs receiving various types of threats (Interview E6).

Though civil society, trade unions and public institutions in the territory have been motivated into action by the multiple crises caused by Prodeco's departure, there is still much to be done. Crisis responses must address not only the challenges resulting from the suspension of mining activities but also the legacy of socio-environmental and economic impacts from these extractive activities over many years, in addition to the inequalities and social challenges exacerbated by this difficult context. In the following section we propose some recommendations resulting from this analysis. They aim to support the municipality of La Jagua de Ibirico in its approach to a just transition process, as well as to serve as lessons and recommendations for other municipalities in the Cesar and La Guajira mining corridor to prepare and plan for a just transition beyond coal.carbón.

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<sup>28</sup> For more information on these and other livelihood initiatives, see CNV (n.d.-c).

## 5. Recommendations and conclusions

To move towards a just energy transition in this context, three complementary areas of action are necessary. First, the national government – led by the National Planning Department (DNP) in collaboration with the ministries of Mines and Energy; Agriculture; Industry, Trade and Tourism; Labour; and Environment – must prioritize and coordinate efforts to strengthen the institutional capacities and resources available for local authorities, in addition to their own dedicated capacities and resources. This involves becoming skilled at understanding the local challenges associated with leaving behind coal, taking ownership of tools to address these challenges in an effective and sustainable manner, and channelling and coordinating the aid that is already arriving and will continue to arrive for the transition. Second, local authorities should promote genuine participatory planning, not limited to mere consultation, to create and protect civic space for participation on multiple levels. It is important to begin by carrying out local processes of dialogue and participation to build a long-term vision for the region that eclipses the proposals of the administrations in power and that envisions a future beyond coal from a regional perspective. Third, it is important for international technical and financial cooperation organizations to understand the context they intend to support, knowing the particularities and histories of each territory, coordinating their support with the different levels of government, and also playing an important role in strengthening civil society in their efforts to oversee and monitor these transition processes, with respect for local leadership.

Here we focus on recommendations at the national and local/regional levels. Progress on these two fronts involves a series of concrete actions, for which we prioritize three thematic areas: financing for a just transition, powers of local authorities, and citizen participation and civic space.

### 5.1 Financing for a just transition

It is imperative to establish a fund to support transition-related needs, such as livelihood and employment alternatives for the region. The fund should be sub-regional and ongoing and cover the municipalities of the mining corridor. Financed with domestic and international development cooperation resources, it must be tailored to meet the needs posed by the just transition in the territories. Colombia already has similar funds aimed at mitigating crises or emergencies, such as the Emergency Mitigation Fund in the context of Covid-19 (Ministerio de Hacienda y Crédito Público, 2021).

The fund's objectives could be developed with specific and measurable indicators to help address the multiple economic, social and environmental impacts associated with a just transition, and to avoid the misuse of resources, without taking away sufficient flexibility at the local and regional level to prioritize which indicators are most relevant in the regional context. For example, objectives could include specific targets related to job creation in sustainable sectors, the promotion of social equity through training and support programs for affected communities, and the implementation of measures to mitigate the negative environmental impacts of coal mining – for example, by reducing pollution levels to meet the recommended international standards.

The indicators most relevant to the regional or local context should be agreed by a diverse advisory committee to the fund that includes representatives from local and departmental government, academia, the private sector (e.g. Chamber of Commerce) and civil society.

As an example, departmental councils on science, technology and innovation (CODECTIs)<sup>29</sup> already exist under Colombian regulations as multisector bodies tasked with advising departmental governments (In some departments, such as Valle del Cauca, counterpart municipal councils have been created to respond to particular challenges.). Such a departmental or municipal advisory body, or a variation on it with a focus on transition, could support the proposed transition fund and help ensure consistency with other regional innovation and development plans, such as on the allocation of royalty resources. Interestingly, the CODECTIs also have the capability to “propose studies and/or evaluations to assess and act on the potentialities and needs of the department, or to design and/or adjust the institutional framework, regulations and public policies” (Ministerio de Ciencias, Tecnología e Innovación, n.d.) at the departmental level, which the sub-regional fund could finance itself if necessary. This fund could be backed by SGR resources, combining both FAE resources and unspent funds from the biannual allocation. The FAE was originally conceived as a foreign currency fund to grow savings from royalty revenues to cushion adverse economic cycles, but it has ultimately accumulated resources amid reductions in public investment (Ocampo et al., 2021). The budget allocated to the FAE for the department of Cesar for 2023–2024 amounts to COP 47 billion, in addition to the expected revenues from increased collections<sup>30</sup> of COP 309 billion, for a total of approximately COP 356 billion. Other sources of financing include resources from international cooperation, the private sector and national government appropriations, such as those currently proposed for the “Cesar Corridor of Life” initiative.

Establishing rules for the fund’s management is crucial to ensure the long-term sustainability of strategies associated with achieving a just transition. We propose creating a permanent fund, modelled on a trust structure similar to the FAE, which would guarantee a gradual use of resources over time. This approach would not only ensure the availability of resources across multiple local administrations but also make it possible to attract investment from other external funders. In addition, we suggest establishing a formula to determine the proportion of the fund’s resources that could be drawn annually, taking into account the preservation of capital, future contributions and the return generated. Unused fund resources should be invested in securities to generate additional returns.

The rules for the use of the fund’s resources must be clearly established, taking into account the fund’s specific objectives. These could include two rules: first, each allocation must be supported by a specific project. This rule will allow for an ex ante evaluation of the proposed actions and their potential contribution to a just transition, considering their economic, social and environmental impact against the indicators agreed on and prioritized by the aforementioned mixed-composition committee. For example, economic indicators could include employment, access to services,

<sup>29</sup> For a detailed review of CODECTI functions, see Ministerio de Ciencias, Tecnología e Innovación (n.d.).

<sup>30</sup> The concept of “increased collection” is the difference between current revenues from the exploitation of non-renewable natural resources budgeted for the biennium and the amount actually collected (Presidencia de Colombia, 2023a).

multidimensional poverty (prioritizing sectors for intervention) and strategic industries. Social indicators could encompass gender, public health, education, social inequality, discrimination or domestic violence, or other demographic and cultural categories, in addition to other indicators related to transition, such as employment alternatives and identity. Environmental indicators could include the restoration of mined landscapes, project impacts on greenhouse gas emissions or other particulates that affect air quality, soil and water source contamination, deforestation, impacts on biodiversity and the integrity of ecosystems or ecosystem services, or opportunities for their remediation. Second, the regional committee itself must approve projects (just as the SGR prioritizes projects and general priorities for royalty investment from CODECTI). This would strengthen this important regional governance space, which in many regions has exhibited institutional weaknesses.

### 5.1.1 Incentives for new sectors and/or economic activities

There are concrete opportunities to promote the development of new economic sectors in La Jagua de Ibirico through the strategic use of existing tax benefits. For example, as the municipality has ZOMAC status, new or formalizing companies may access a series of tax benefits under Law 1819 (2016).<sup>31</sup> These include a special and progressive income tax rate for 10 years depending on the size of the company<sup>32</sup> and the amount of employment it generates. In addition, a “works for taxes” mechanism allows taxpaying companies to allocate up to 50% of income tax for 10 consecutive years to the development of infrastructure projects.

Much like the ZOMAC benefits, special taxation regimes can be promoted to support the economic activation of regions specifically affected by the decline of the coal sector and its ramifications. Interviewees referred to strategies to attract new taxpayers, such as extending tax discounts to vehicle registration or licence plate transfer to La Jagua de Ibirico, and applying subsidies and credits at low interest rates for inputs and tools for the agricultural sector, such as hoses and fertilizers (Interviews E4, E5). The departmental and municipal government tax system must also be modernized to strengthen local revenue collection.

## 5.2 Powers of local authorities

Section 2 of this report, which analyses the powers of mining municipalities and departments, reveals how they have been excluded from managing projects and making decisions that affect their jurisdictions. However, some municipal and departmental governments, as well as other regional actors, have played an active role in promoting and defending mining as a source of income and employment (Vega-Araújo et al., 2024). Even though they have been marginalized from decision-making, especially with regard to restrictions or prohibitions, they have not been passive agents in the current context. However, some local governments, such as La Jagua de Ibirico, are increasingly aware of the need to prepare for a post-coal future and a territorial

<sup>31</sup> The tax benefits are regulated by Decree 1650 (2017).

<sup>32</sup> Excluding companies engaged in mining, hydrocarbon exploitation, port activities and those existing prior to Law 1819 (2016).

economic transformation, as reflected in the current municipal development plan (Alcaldía de La Jagua de Ibirico, 2024).

In accordance with the constitutional principles of decentralization and autonomy, it is essential for local authorities to participate more proactively and in a coordinated fashion with national institutions to face the challenges of the energy transition. Although often dismissed for a lack of technical and scientific capacities, local governments have the potential to be the state entity best positioned to address the foreseeable and unexpected impacts of mine closures, given their unique position in establishing direct and ongoing channels of dialogue with citizens to closely understand regional issues. Strengthening this role involves providing municipal governments with greater functions and resources to strengthen their capacities and effective citizen oversight mechanisms to address current socio-economic and environmental challenges, and to plan more strategically for the future of their municipality after coal, focusing on the diversification of their economy. However, strengthening this role could also have dual consequences in the context of an energy transition, especially if it takes place in an adverse political environment.

In this context, the mayor's offices of fossil fuel-producing municipalities should start now to build a joint, long-term vision for municipal development in new contexts and with new opportunities for diversified and sustainable economies. So, too, must they project beyond their political-administrative limits to articulate sub-regionally (among several municipalities, such as those in the mining corridor) and/or regionally (among several departments or with frameworks such as the administrative planning regions). The national government is currently proposing a special mining districts framework for livelihood diversification (Ministerio de Minas y Energía, 2023a, 2024a) that would serve as a planning instrument with greater coordination between entities at different levels, including ethnic-territorial authorities.

Local governments should not start this forward planning process from scratch. Various existing planning instruments have begun to carve a path forward, and it will be important to build on what has already been established. Municipal development plans, PDETs, land use plans, watershed management plans and others should be the initial input for articulating long-term development commitments. This effort requires updating and revalidating several of them.

Once this long-term vision has been shared and agreed, investments should be coordinated and oriented towards social programs, the provision of services and infrastructure to foster local livelihood development and promote quality employment and linkages, including the promotion of local and regional trade associations.

### **5.2.1 Municipal capacities to direct royalty resources**

Economic diversification proposals should be channelled based on the income Colombia is receiving because of high commodity prices resulting from Russia's war in Ukraine. This boom is temporary and not indicative of a long-term trend; it should be used to strengthen other economic sectors and begin to prepare local and regional economies to reduce their economic dependence on fossil fuels. This work involves

strengthening the capacity of local authorities to formulate investment projects that can make efficient use of resources by identifying priority needs, preparing realistic budgets, evaluating the technical and financial viability of projects, and implementing them efficiently.

A lack of training has been a determining factor in the under-execution of resources allocated to the region. Providing local authorities with the necessary tools to effectively identify, design and manage projects could significantly improve the implementation and impact of investments in regional development. These training and strengthening processes could be financed or co-financed by the aforementioned fund. In addition, academia's capabilities can be tapped through alliances with universities in the region to help direct these resources and to come up with innovative projects for the provision of services that can also create jobs. Infrastructure projects ought to have a productive relevance and function (as one interviewee commented, "works that create employment, not just cement"). The cultural sector can also propose and support local initiatives to promote narratives about alternative livelihoods. For example, the Life and Territory Festival (Festival del Territorio y la Vida) seeks to highlight natural wealth and its responsible use.

Concerning the phase of mining closures and project decline, it is imperative for local authorities to act as key players, as much as the national entities tasked with responding to this phase. Therefore, decision-making, monitoring and implementation of measures having to do with closures, environmental remediation and the identification or mitigation of presumed environmental impacts should arise from a process that is co-led among national and local government, including CARs, and with the participation of potentially- or already-affected communities.

### **5.3 Citizen participation and civic space**

Participatory processes must go beyond mere consultation and become permanent spaces for dialogue between institutions and citizens with reasonable possibilities of influencing decision-making.

To promote substantive participation, local authorities need to allocate adequate funding to allow for information to be accessed, used effectively, disseminated and taught. They must guarantee overcoming barriers such as transport and support for caregivers, thus ensuring the inclusion of all population segments in forums for participation.

The influx of municipal resources to meet the new challenges of the transition also requires transparent information sharing and the creation of spaces and leadership for citizen oversight. Ongoing accountability/information provision processes, required every six months by Law 2056 (2020), are good practices that should be incorporated into municipal conduct for the common good. So, too, are open forums for dialogue in environments that are safe and trustworthy for citizen participation and oversight over the monitoring and evaluation of local investment policies and programs, as well as the implementation of mining closures.

Civic space is an essential mechanism for civil society to exercise its right to express itself, organize, and influence the political, social, and economic decisions that affect their environment and impact their lives. Consequently, civic space is vital to the defence of rights in the face of repression and any type of restriction on freedom of expression, participation, assembly and association. In La Jagua de Ibirico, having a vigorous civic space is crucial to ensure fairness in the development and implementation of transition policies, as well as strategies aimed at closing gaps and promoting a better quality of life for residents (Peña et al., 2023).

The Extractive Industries Transparency Initiative (EITI) protocol for civil society considers five dimensions for assessing civic space for participation and for identifying possible violations. These are expression, operation, association, engagement and access to public decision-making (Mesa de la Sociedad Civil para la Transparencia en las Industrias Extractivas, 2022). In the case of La Jagua, authorities have failed to make information public and to promote effective opportunities for citizen participation, limiting themselves to compliance with only a few of the demands and requirements of the civilian population (Peña, 2020). Nonetheless, this framework (see Table 2) provides a guide for better protections for civic space in the context of mine closures and transition in municipalities such as La Jagua de Ibirico. Its elements can be applied at different levels (national, regional, local, international).

Table 3. Definition of the five dimensions for assessing civic space (EITI Protocol)

Expression	Operation	Association	Engagement	Access to public decision-making
Representatives of civil society are able to engage in public debate related to natural resource governance in the context of extractive industries, as well as express their opinions on this process, without restraint, coercion or reprisal.	Civil society representatives are able to operate freely.	Civil society representatives are able to communicate and cooperate with each other regarding natural resource governance.	Civil society representatives are able to be fully, actively and effectively engaged in the design, implementation, monitoring and evaluation of, and public discussions on, natural resource governance and extractive industry transparency.	Civil society representatives are able to speak freely on transparency and natural resource governance issues and contribute to public debate.

Source: Prepared by the authors based on Mesa de la Sociedad Civil para la Transparencia en las Industrias Extractivas (2022)

## 5.4 Conclusions

Prodeco’s unexpected relinquishment of mining titles in 2021, an unprecedented situation in the Colombian mining sector, stoked uncertainty about the social, environmental and economic future of the municipalities of the Cesar mining corridor. This crisis has been aggravated by various institutional challenges, especially in a context where municipal administrations have limited powers and resources to address adverse impacts. The rapid deceleration of coal mining by Prodeco is just the

beginning of a structural and progressive decline in this sector in Colombia (Yanguas Parra et al., 2021; WTW & Universidad de los Andes, 2023). In that sense, this report offers a vision of the difficulties of achieving a just energy transition in municipalities and regions where coal extraction has been the predominant economic activity, taking as a case study the municipality of La Jagua de Ibirico.

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## Annex

### Interview list

No.	Type of actor	Role
E1	Civil society	Political leader
E2	Civil society	Political leader
E3	Civil society	Political leader
E4	Public sector	Councilperson
E5	Civil society	Political leader
E6	Civil society	Social leader
E7	Civil society	Social leader
E8	Workers	Union leader
E9	Civil society	Leader in the education sector
E10	Public sector	Official at the Municipal Mayor's Office
E11	Public sector	Official at the Municipal Mayor's Office
E12	Public sector	Official at the Municipal Mayor's Office
E13	Public sector	Official at the Municipal Mayor's Office
E14	Public sector	Official at the Municipal Mayor's Office
E15	Workers	Former Prodeco employee
E16	Workers	Former Prodeco employee
E17	Civil society	Entrepreneurs' association
E18	Civil society	Entrepreneurs' association
E19	Civil society	Entrepreneurs' association
E20	Civil society	Entrepreneurs' association
E21	Civil society	Entrepreneurs' association
E22	Civil society	Community action board
E23	Civil society	Community action board
E24	Civil society	Community action board
E25	Civil society	Community action board
E26	Civil society	Community action board
E27	Workers	Current Prodeco employee

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