

Thermal Coal in Colombia: Perspectives and Risks for the Economies of La Guajira and Cesar Departments

Silvio López and Fernando Patzy

Key messages

- In the global context of energy transition, due to the commitments in the Paris Agreement to reduce global warming, fossil fuels such as coal and oil will likely be replaced in the medium and long terms.
- Colombia's main mining export is thermal coal, and it is an important source of economic activity and fiscal income, especially in La Guajira and Cesar departments. Declines in demand and international prices cast doubt on the viability of these export operations, the suspension of which would drastically affect the economy and employment at the regional level.
- Strategies and policies must be designed in a concerted manner to ensure a progressive and just transition, generating alternatives for those affected and promoting a more diverse regional economy in order to reduce the negative impact of the decline in coal exports.
- The government of Colombia needs to be prepared to promote the planned transition in dependent regions in coordination with key actors in the sector: state agencies, sub-national governments, civil society and companies.

ABOUT THIS DOCUMENT

This briefing accompanies the NRGi report *Thermal Coal in Colombia: Perspectives and Risks for the Economies of La Guajira and Cesar Departments* available on NRGi's website: resourcegovernance.org/analysis-tools/publications/carbon-termico-en-colombia-implicaciones-para-la-economia-de-la-guajira

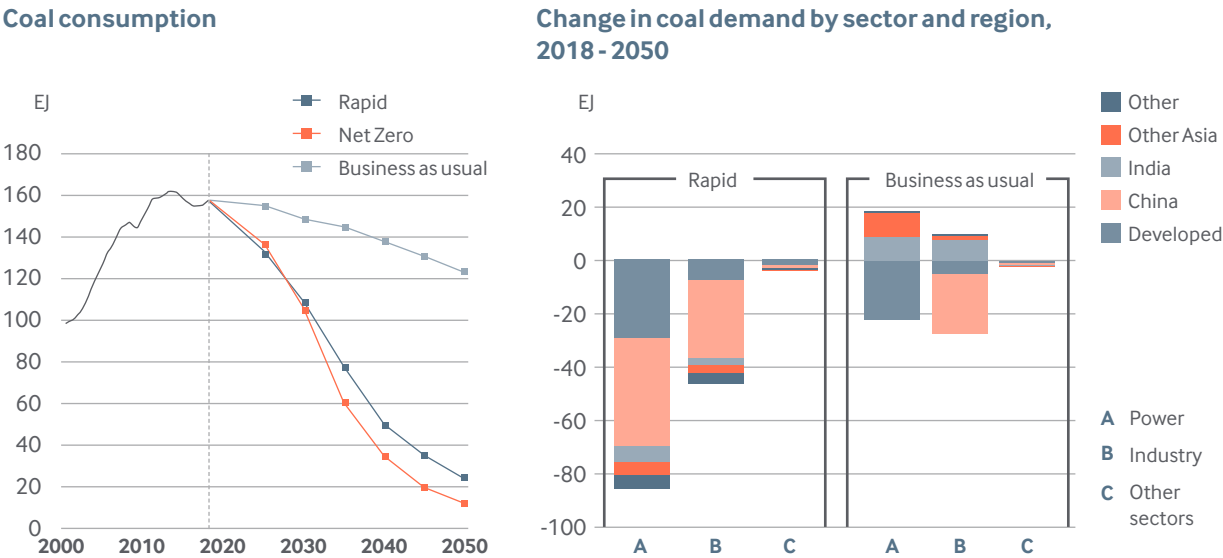
Colombia faces great challenges in its exploitation of thermal coal despite the abundance and quality of the country's reserves, mostly due to the international context. Structural declines in consumption have led to lower prices. European importers are rapidly substituting coal for less polluting fuels or renewable sources. Asian markets are comparatively far away from Colombian mines. Combined, these factors raise doubts about the economic viability of coal exports from Colombia.

The study explores the implications of the decline in coal demand for the national economy and for the main producing regions, such as La Guajira and Cesar, which are highly dependent on coal exploitation. The explores the following questions:

- Is there a risk that Colombian thermal coal will become a stranded asset?
- What would a contraction in thermal coal exports mean for the Colombian economy?
- What would be the consequences in the producing territories?

Analysis of the international context for thermal coal indicates it remains the main source of energy generation worldwide. According to the International Energy Agency (IEA), 27 percent of all the energy consumed in the world is obtained from coal (for all uses)—in the specific case of electricity generation, 38 percent comes from coal—and is responsible for 30 percent of carbon dioxide emissions. However, progress in the implementation of the 2015 Paris Agreement, aimed at keeping global temperature increase below 2 degrees Celsius, is producing structural changes in the demand for coal.

Figure 1. Projected demand for thermal coal worldwide to 2050



Source: Energy Outlook 2020 Edition. (British Petroleum 2020).

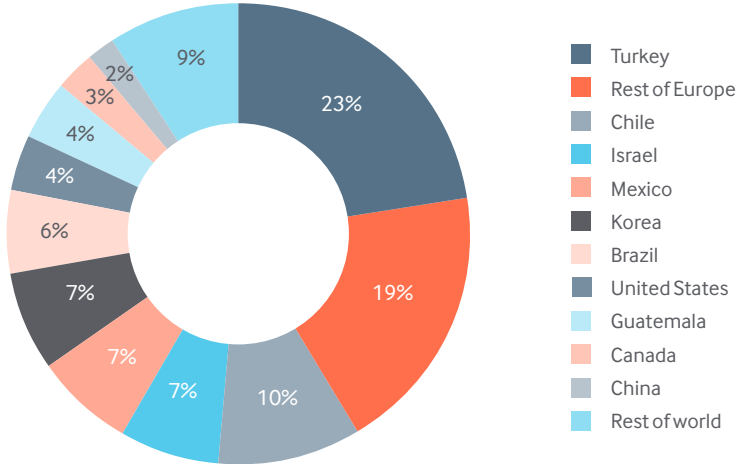
Colombia could be one of the first countries to suffer from the contraction in global demand for thermal coal, because its main markets are Turkey (23 percent) and the Atlantic ports in Europe (19 percent), two markets where demand will likely diminish in the short term. The contraction in demand would have various effects on the country’s economy, as it is the second-most important export (after oil), an important source of royalties and one of the main axes of the economies of La Guajira and Cesar departments.

PERSPECTIVES ON THE INTERNATIONAL MARKET AND THE RISKS OF COAL BECOMING A STRANDED ASSET

Different studies show that coal faces a decreasing demand. The IEA estimates that demand in the Asia-Pacific region will decrease from 4.1 million tons in 2018 to 1.8 million tons in 2040, a reduction of 57 percent. The World Bank predicts

a sharp drop in thermal coal prices in the next decade and estimates that by 2030 the price for one ton will reach USD 60, a 43.9 percent drop compared to the 2018 price. BP, in its Energy Outlook 2020 report, concludes that “global coal consumption will fall consistently in the next 30 years [...] and will never recover the peak reached in 2013.”

Figure 2. Exports of thermal coal, Colombia 2019 (share by destination country)



Own elaboration. Source: SIMCO 2020, DANE Comercio Internacional, Mining Directorate Business, Ministry of Mines and Energy.

IMPLICATIONS OF THE DECLINE IN INTERNATIONAL DEMAND FOR COAL FOR THE COLOMBIAN ECONOMY

The contribution of mining to Colombia’s gross domestic product is relatively small, on average 1.8 percent, but coal is a significant part of total mining production (63.1 percent) and of total exports, on average 18 percent, or \$4.6 billion in 2019.

The exploitation of coal is also important as a source of tax revenue, mainly in the form of royalties. Between 2013 and 2020, the nation’s total royalties (including hydrocarbons and minerals) amounted to \$ 14 billion¹, or about \$ 1.75 billion per year. Coal has contributed 25 percent of royalties on average over that same period.

In terms of employment, the three main companies producing thermal coal—Drummond and Prodeco in the department of Cesar, and Cerrejón in La Guajira—generated, on average, 24,212 jobs (direct and contractors) per year, which represents 11.9 percent of the total employment generated by mining and quarrying activity at the national level.

¹ Conversion to US dollars with the average Market Representative Rate (MRT) for 2019, Banco de la República de Colombia at 3 282 Colombian pesos per dollar.

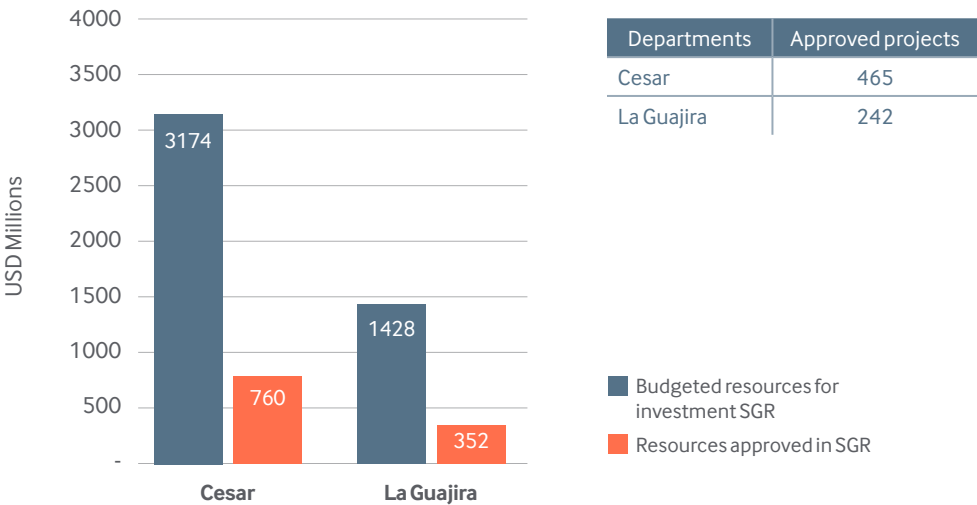
ASSETS AT RISK: COLOMBIA’S MAIN THERMAL COAL EXPORT OPERATIONS

In the last 10 years, Drummond, Prodeco and Cerrejón have contributed around 86 percent of the country’s coal production and 96 percent of the coal royalties, which shows their importance in the national context. These companies have consolidated cost-efficient coal exploitation operations, and the levels of production and reserves place alongside among major mining projects worldwide.

But the magnitude of the coal reserves compared to the prospects for the international market mean that Colombia’s coal could become a “stranded asset”—assets that cannot be profitably exploited, with related transportation facilities and infrastructure that then may be abandoned.

These companies contribute significantly to government revenues through the payment of royalties and taxes. Between 2016 and 2018 the three companies paid the government \$4.1 billion (approximately \$1.4 billion per year).

Figure 3. Total value of royalties budgeted and approved resources in the thermal coal producers municipalities (2013-2020)



Own elaboration. Source: Account payment instructions, Information system and consultation of SICODIS territorial resource distributions and approved projects, SGR portal as of May 21, 2020.

DEPENDENCE ON COAL IN THE CESAR AND LA GUAJIRA ECONOMIES

The three companies have integrated with local economies by creating productive chains mainly through interactions with product and service providers. Approximately 90 percent of their suppliers are local and national, which implies that coal has boosted economic activity and indirect employment, especially at the local level.

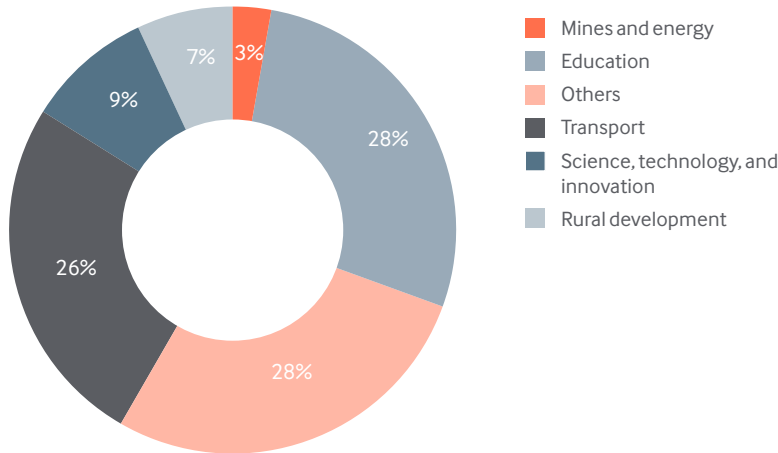
In Cesar, production is concentrated in the municipalities of Agustín Codazzi, Becerril, Chiriguana, El Paso and Jagua de Ibirico, where Drummond and Prodeco operate. In La Guajira, production is concentrated in the municipalities of Albania, Barrancas and Hato Nuevo, where Cerrejón operates.

In both departments, the main economic activity is mining and quarrying; in 2019, these represented 38.4 percent of the departmental GDP in La Guajira and 35.5 percent in Cesar. Thermal coal production reached 87.3 million tons per year during the 2014-2019 period. The Cesar department contributed 55.2 percent and La Guajira 35.7 percent to Colombia’s total coal production.

Royalties in Colombia are evenly distributed among all departments and municipalities, but producing departments receive an additional royalty allocation for their direct administration. From 2013 until 2020, the Cesar government received an average of \$87.5 million in royalties per year and La Guajira authorities received \$83.7 million. Cesar receives approximately 8 percent more money from direct royalties’ assignments as it has a higher production than La Guajira. However, La Guajira has a greater share of resources earmarked for regional compensation funds, regional development, and science and technology, probably due to its higher levels of poverty. Governments in Cesar and La Guajira have received twice the royalties per capita compared to the national average.

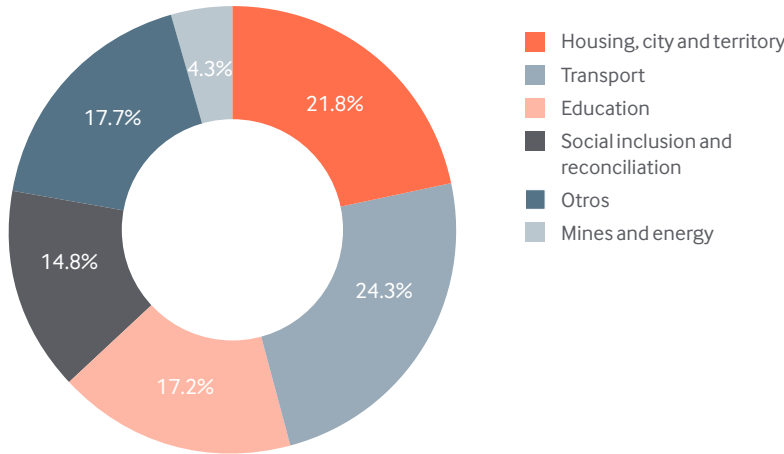
Royalties are largely under-spent in the producing municipalities, and at the departmental level more has been spent, but in many small projects across multiple sectors mainly in infrastructure and social spending. Coal royalties also play an important role in the public finances of the departments: they represent on average 34.7 percent of revenues in Cesar and 65 percent in La Guajira.

Figure 4. Prioritized sectors for royalty investment in producing municipalities in La Guajira (2013 – 2020)



Own elaboration. Source: SICODIS 2020.

Figure 5. Prioritized sectors for royalty investment in producing municipalities in Cesar (2013 – 2020)



Own elaboration. Source: SICODIS 2020.

PUBLIC POLICIES AND THE RISKS OF STRANDED ASSETS AND ECONOMIC DEPENDENCY

Colombia’s national government has no specific policies regarding the decline in the prices of thermal coal. Its policies are instead aimed at redefining the mining-energy matrix, diversifying mining production, and increasing the use of renewable energy sources such as solar and wind.

At the regional level, within the framework of the departmental development plans of La Guajira and Cesar, there are no concrete strategies for replacing the income and jobs generated by the coal industry, in terms of diversifying or strengthening the current productive base. There are some references to policies regarding the promotion of greater use of renewable energy sources such as wind and solar.

CONCLUSION

Despite the abundance and quality of reserves, Colombian thermal coal faces difficult prospects. In the Atlantic Europe markets, the demand for coal is declining rapidly. Turkey, the main buyer of Colombian coal, has closer suppliers such as Russia and the country is also making progress in the substitution of natural gas and renewable energies for coal. In the Pacific countries, Colombian coal might compete with closer suppliers such as South Africa and Australia. These developments have come amid a global scenario of weaker demand and lower prices.

While Colombia's three main coal-exporting companies have contributed significantly in terms of taxes and royalties, the current situation and outlook for prices and margins endanger the country's coal industry.

The economies of the departments of La Guajira and Cesar are highly dependent on the coal industry. Even though the exploitation of coal in these Colombian departments has been profitable for more than 30 years, with economic linkages supporting the economies, authorities have been unable to consolidate a productive base unrelated to the extractive sector.

The contraction of coal exploitation would have important consequences for tax revenues and exports, as well as for the economies of Cesar and La Guajira. Therefore, officials should start planning for a "just transition" away from coal, which may soon become a stranded asset without economic prospects.

ABOUT THE AUTHORS

Fernando Patzy is a Latin America Senior Officer at the Natural Resource Governance Institute. Silvio López is an international consultant and advisor on issues related to governance of natural resources, energy transition, mining and economic development.

The Natural Resource Governance Institute, an independent, non-profit organization, helps people to realize the benefits of their countries' oil, gas and mineral wealth through applied research, and innovative approaches to capacity development, technical advice and advocacy.

Learn more at www.resourcegovernance.org

