

Enabling factors of social acceptance of wind energy projects in La Guajira

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Abbreviations

ANLA	National Authority of Environmental Licenses (Autoridad Nacional de Licencias Ambientales)
CORPOGUAJIRA	Regional Autonomous Corporation of La Guajira (Corporación Autónoma Regional de La Guajira)
FPIC	Free, prior and informed consultation
CREG	Energy and Gas Regulation Commission (Comisión de Regulación de Energía y Gas)
DANCP	National Prior Consultation Authority (Dirección de la Autoridad Nacional de Consulta Previa)
EIA	Environmental impact assessment
GW	Gigawatts
MME	Ministry of Mines and Energy (Ministerio de Minas y Energía)
ILO	International Labour Organization
SEA	Strategic environmental assessment
SIEL	Colombian Electrical Information System (Sistema de Información Eléctrico Colombiano)
UPME	Mining-Energy Planning Unit (Unidad de Planeación Minero Energética)
VAT	Value added tax

1. Introduction

Growing energy demand and the negative effects of fossil fuel use reflect a need for profound change in global energy systems, including an exponential increase in the installed capacity of renewable energy. Generating electricity from sources such as wind and solar is more competitive than conventional sources (IEA, 2022), contributing to the further development of renewable energy. Nevertheless, scaling up renewables is not merely a matter of technical or economic feasibility, but also of social acceptance (Energy Transitions Commission, 2023; GWEC, 2022; Muñoz Cabré & Vega-Araújo, 2022; Sovacool et al., 2022).

In Colombia, increasing renewable energy generation requires a special emphasis on the department of La Guajira due to its world-class wind resources. According to the Mining-Energy Planning Unit (UPME), La Guajira is projected to have up to 45 wind farms by 2034 (SIEL, n.d.), most located within the collective territory of the Wayuu Indigenous people. However, as in many parts of the world (Sovacool et al., 2022), the implementation of wind projects in La Guajira presents high potential for social conflict, given justice and equity concerns over aspects including social and cultural impact management, benefit-sharing, conflicts over land use and the legitimacy of consultation processes; these issues have led to project delays caused by various blockades and protests (Barney, 2023; Guerra, 2022; Monsalve, 2023; SER Colombia, 2023; Vega-Araújo et al., 2023; Vega-Araújo & Heffron, 2022). The national government is committed to the continued development of wind energy in La Guajira, and it seeks to reach agreements that will allow the projects to move forward (Ministerio de Minas y Energía, 2023a).

In this context, it is necessary to understand which factors, beyond techno-economic ones, influence social acceptance by the people whose daily lives and livelihoods would be affected by the expansion of wind energy. This report aims to identify enabling factors of such social acceptance and, more broadly, of a just energy transition in La Guajira. The findings represent insights gained from activities conducted during 2023, namely a workshop held by SEI and the University of La Guajira in the municipality of Uribia, La Guajira, with members of the Wayuu people and representatives of the municipal public sector. The research also included extensive fieldwork in communities surrounding wind farm locations and associated

infrastructure, such as transmission lines, and a total of 45 semi-structured interviews¹ with various relevant stakeholders, including developers, academia, civil society and the national and regional public sector.

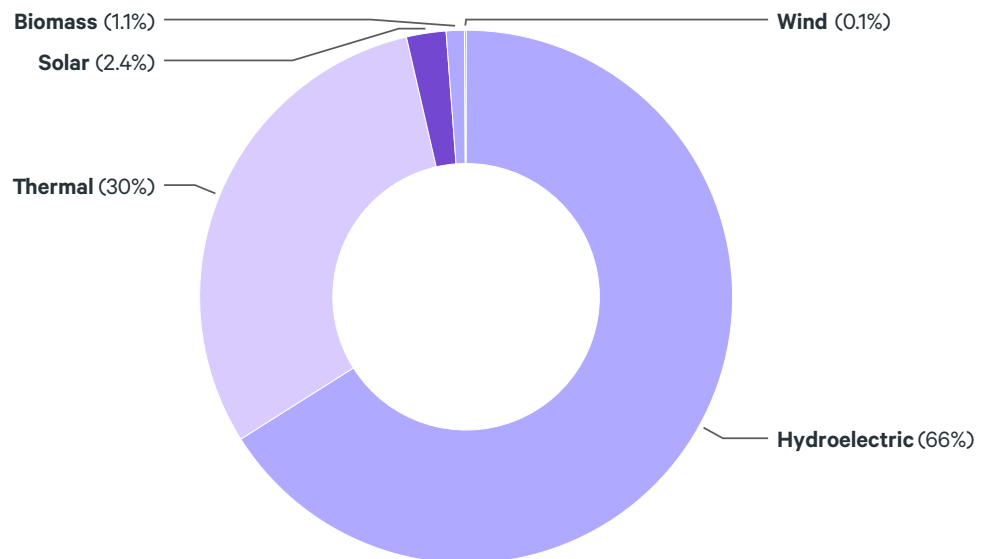
This report is structured as follows: Section 2 sets out relevant context, including facets of the Colombian electricity sector, La Guajira department and the right to free, prior and informed consultation (FPIC). Section 3 describes eight enabling factors of social acceptance of wind energy in La Guajira that were identified during our research. Our main conclusions are offered in the final section.

2. Context

2.1 The Colombian electricity sector

Colombia’s electricity generation capacity depends primarily on hydroelectric power. According to National Interconnected System (SIN) operator and electricity market manager XM, in October 2023, the country’s operational installed hydropower capacity was 66%, while installed wind power capacity accounted for only about 0.1% of electricity generation capacity (Figure 1). This dependence on hydropower makes Colombia’s electricity mix highly vulnerable to the effects of climate change and related hydrological variabilities, such as the El Niño phenomenon (Arias-Gaviria et al., 2019). In response to this vulnerability, one of the national government’s major proposals has been to diversify the electricity mix by increasing the share of renewable energy sources (Ministerio de Minas y Energía, 2021; Departamento Nacional de Planeación, 2023).

Figura 1. Colombian electricity mix (October 2023)



Source: XM Electricity market manager 2023

¹ Video testimonies recorded during our visits can be viewed online (Vega-Araújo et al., 2023).

Colombia is recognized as one of the countries with the best wind resources in South America (Vergara et al., 2010). Its wind energy potential amounts to approximately 30 gigawatts, exceeding the total capacity of the Colombian electricity system, which currently stands at 19 gigawatts (Vega-Araújo & Muñoz Cabré, 2023; XM, 2023). This potential is especially concentrated in the department of La Guajira and the rest of the northern coast of the country, the departments of Santander and Norte de Santander, and, to a lesser extent, the departments of Huila, Boyacá, Risaralda, Tolima and Valle del Cauca (Huertas & Pinilla, 2007).

Colombia has been establishing an incentive framework to take advantage of this potential (Vega-Araújo & Muñoz Cabré, 2023). The first specific incentives for the sector were introduced by Law 1715 of 2014 and were later updated by Law 2099 of 2021, including aspects such as income tax deduction, VAT exemption for equipment and services, import duty exemption and accelerated depreciation (Congreso de Colombia, 2014; Congreso de Colombia, 2021). In addition, contracts were awarded in 2019 to wind projects through renewable energy auctions at very competitive prices (IRENA, 2021). Both the incentive schemes and the auctions were decisive in achieving a record level of committed investments in wind energy in 2021, after more than a decade of stagnant investments in this sector (BloombergNEF, 2022). This could translate into 2564 megawatts (MW) of operational wind capacity in the 2023–27 period (UPME, 2023).

2.2 La Guajira: the key player

The department of La Guajira is a strategic player for scaling up wind energy in Colombia. La Guajira is of particular interest because of its unidirectional winds, which have an average speed of 9.8 metres per second (m/s) and a capacity factor² close to 65%. Together, these account for La Guajira representing between 18 and 21 gigawatts (GW) of Colombia's wind potential (Carvajal-Romo et al., 2019). Colombia's first wind farm, Jepirachi, was completed in La Guajira in 2004. The second, Guajira 1, was inaugurated 17 years later, just a few kilometres away.

As of June of 2023, the Colombian Electrical Information System (SIEL) list of projects indicate plans for at least 45 wind projects in La Guajira by 2034, totalling about 8 GW of capacity. These projects are mostly driven by foreign transnational companies (see Table 1). In 2023, 8 GW represented over a third of the total installed capacity in Colombia, including all available technologies. Of these projects, 31 are scheduled to come into operation in the next three years, representing a capacity of close to 5 GW (SIEL, 2023, n.d.). Connecting the energy generated by these projects to the National Interconnected System depends on the construction of new electricity transmission infrastructure, notably the Colectora 1 and Colectora 2 projects (see Figure 2). As of June 2023, Colectora 1 completed the prior consultation process and had begun the construction phase. It is expected to begin operating by the end of 2025, three years behind schedule (Gubinelli, 2023; Portafolio, 2023). The Colectora 2 project is in the planning stage and is expected to be in operation by 2032 (Gubinelli, 2022).

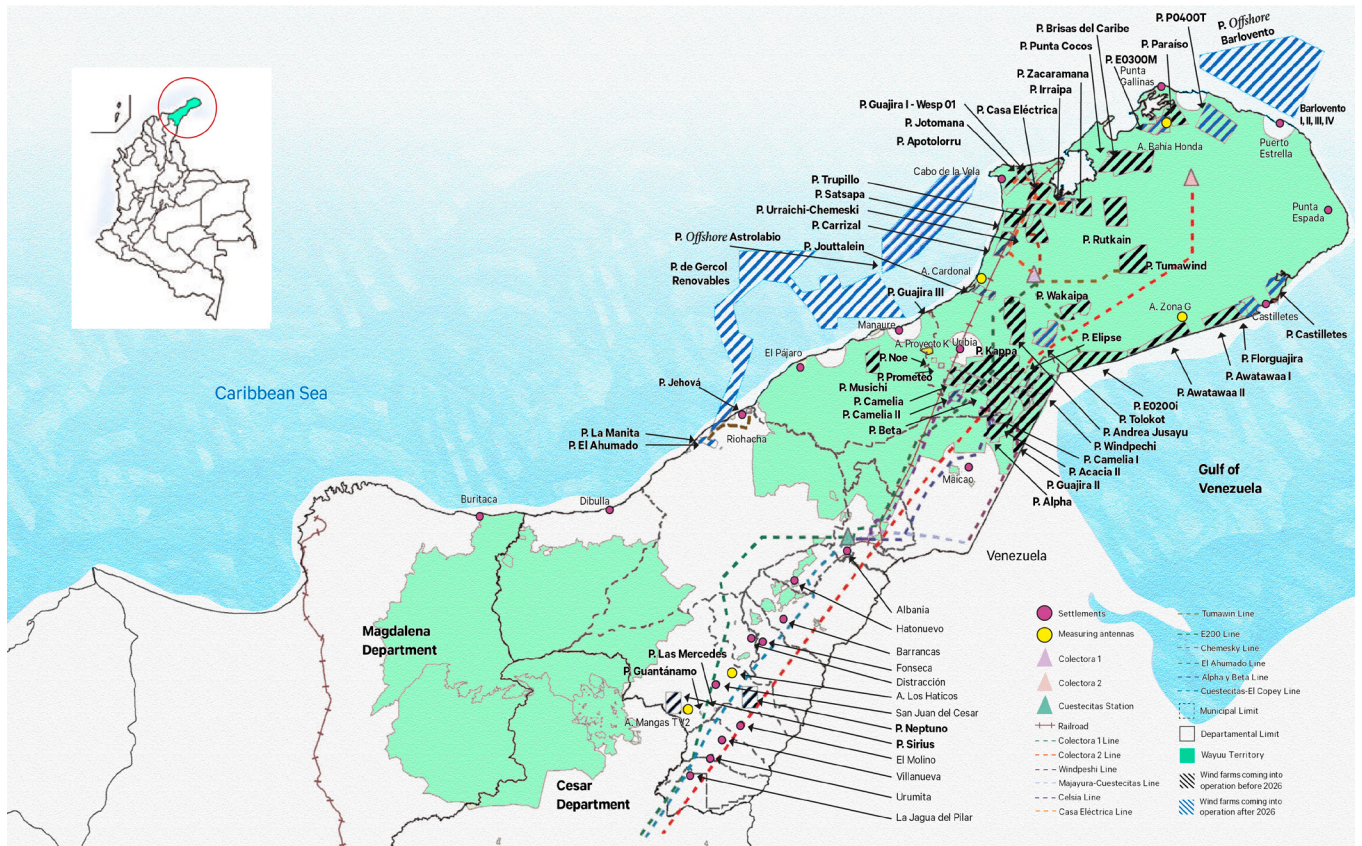
² Also known as the plant factor, or the percentage of the rated capacity of a wind turbine that can be translated into energy. Globally, this corresponds on average to 30% for onshore plants (IRENA, 2019). A higher plant or capacity factor means that fewer wind turbines can produce the same amount of wind power.

Table 1. Overview of planned wind projects in La Guajira (as of June 2023)

Company	Country of origin	Project	Municipality	Capacity (MW)	Planned operation start date
AES Colombia	US	JK1 (formerly Casa Eléctrica)	Uribia	180	2025
		JK2 (formerly Apotolurru)	Uribia	75	2025
		JK3 (formerly Irraipa)	Uribia	99	2024
		JK4 (formerly Carrizal)	Uribia	195	2024
		Jotomana-Apotolurru II	Uribia	99	2023
Celsia (Grupo Argos)	Colombia	Camelia	Uribia	99	2023
		Camelia 1	Maicao	52	2023
		Camelia 2	Uribia	99	2023
		Acacia	Maicao	80	2018
		Acacia 2	Maicao	80	2023
COLGEOLICA	Colombia	La Manita	Maicao	10	2024
		Noe	Maicao	10	2024
		Jehova	Maicao	10	2024
EDF Renewables Colombia and AMDA Energía	France and Spain	Cocos	Uribia	362	2022
		Motosira	Uribia	300	2026
		Cerrito (formerly Andrea Jusayu)	Uribia	378	2025
		Jouttalein	Uribia	150	2026
EDP Renewables	Portugal	Elipse	Maicao	200	2023
		Beta	Maicao	280	2024
		Alpha	Maicao	212	2023
		Kappa	Uribia	500	2024
		Omega	Maicao	300	2023
EPM	Colombia	EO200i	Uribia	201	2024
		Jepirachi	Uribia	~20	In decommissioning process
Enel Green Power	Italy	Windpeshi	Maicao	200	2023 (construction suspended)
		Tumawind	Uribia	200	2022
		Urraichi-Chemesky	Uribia	98	2023
Enerfin (Ecnor Group)	Spain	Musichi	Manaure	194	2022
		El Ahumado	Riohacha	50	2024
		Dividivi	Uribia	150	2024
Gualica S.A.S	Colombia	Tolokot	Uribia	200	2027
ISAGEN	Canada	Guajira I	Uribia	20	In operation
		WESP 01	Uribia	12	In operation
		Guajira II	Maicao	414	2024
Mainstream Renewable Power	Ireland	Neptuno	San Juan del Cesar	150	2026
		Sirius	San Juan del Cesar	150	2025
BlueFloat Energy	Spain	Barlovento	Uribia (offshore)	825	2032
		Barlovento I	Uribia (offshore)	50	2034
		Barlovento II	Uribia (offshore)	50	2034
		Barlovento III	Uribia (offshore)	50	2034
		Barlovento IV	Uribia (offshore)	50	2034
		Astrolabio	Uribia (offshore)	825	2032
SOWITEC	Germany	Britos	Barrancas	144	2020
MPC Energy Solutions	Netherlands	Wakuaipa	Uribia	200	2024
SJ RENOVABLES WIND 1 S.A.S. E.S.P	-	San Juan eólico	Fonseca	103	2022
Vientos de La Sabana	-	La Sabana	Manaure	250	2027

Sources: SIEL (2023, n.d.)

Figure 2. Location of wind projects and transmission infrastructure in La Guajira



Source: Barney, 2023

These projects are located in a territory with distinctive economic, social and environmental characteristics. La Guajira boasts a remarkable wealth of natural resources, such as coal, natural gas and salt, factors that have forged a regional economy that is mainly extractive-based and heavily dependent on mining royalties (Yanguas Parra et al., 2021).

La Guajira’s richness is also evident in its cultural makeup, as 46% of the population belong to the Wayuu Indigenous people. In addition, 62.5% of La Guajira’s territory is categorized as Indigenous reservation (*resguardo*), meaning this collective territory is inalienable, imprescriptible and unseizable (República de Colombia, 1991; Guerra, 2022). Accordingly, these territories cannot be purchased or leased. The Wayuu, the most populous Indigenous people in Colombia, are known for being organized into around 30 clans, with each including many dispersed communities. Their communities cross borders and have a mixed economy that includes activities related to horticulture, hunting, fishing and raising and herding goats and cattle, the most traditional livestock (Delgado & Mercado, 2010; Guerra, 2022). Most wind projects are located in Wayuu territory (Figure 2).³

Despite its wealth, La Guajira demonstrates marked social and economic disparities in comparison with other Colombian departments. Paradoxically, the abundance of natural resources and its economic potential have not translated into greater well-being for its inhabitants. This situation is clearly reflected in the high poverty rates in the region,⁴ limited access to basic services such as drinking water and electricity,⁵ problems with state corruption

3 The information presented in Table 1 and Figure 2 may have discrepancies, in part due to a changing landscape of project names, areas of influence, developers and other factors.

4 In La Guajira, 42.9% of the population lives in multidimensional poverty. In extreme cases such as the municipality of Uribe, the figure is 92.2% of the population (DANE, n.d.).

5 In 2018, energy access in Colombia was 96.5%, compared to 58.8% in La Guajira and only 5.6% in the Uribe municipality. In rural areas, it was even lower at 25.1% in La Guajira and 1.8% in Uribe (UPME, 2019).



Wayuu settlement (*ranchería*) © EDUAR MONSALVE / SEI

and institutional instability, and alarming child malnutrition rates (Corte Constitucional, 2017; DANE, n.d.; UPME, 2019). In fact, the Colombian Constitutional Court declared an unconstitutional state of affairs⁶ in La Guajira in relation to the effective enjoyment of basic rights, including Wayuu communities' rights to self-determination and participation (Corte Constitucional, 2017). In addition, extractive economic sectors have become established without consideration for a connection to the identity, way of life and culture of the Wayuu people (Guerra, 2022), which has generated a legacy of unresolved socio-environmental impacts, especially from thermal coal mining (López & Patzy, 2021; Yanguas Parra et al., 2021).

2.3 On the right to free, prior and informed consultation (FPIC)

Given the impossibility of buying or leasing collective Indigenous territory, wind energy projects must reach land-use agreements with local communities. These agreements are reached through processes of FPIC, which is a fundamental right inherent to Indigenous communities in Colombia. The Colombian legal system adopted FPIC through the ratification of ILO Convention 169 (Congreso de Colombia, 1991); the constitutional mandates established in Articles 286, 329 and 330 of the Colombian Political Constitution; and the jurisprudence of the Colombian Constitutional Court.

Indigenous people and ethnic minorities can exercise their right to participation through FPIC, and it must be implemented as a general rule when any measure is liable to directly impact them (Corte Constitucional, 2016). The Constitutional Court has established criteria to determine the existence of a direct impact,⁷ without considering the list of criteria to

⁶ An unconstitutional state of affairs occurs when "(1) there is a generalized violation of fundamental rights with respect to numerous persons, (2) caused by structural failures" (Corte Constitucional, 2017).

⁷ Ethnic minorities are directly affected when: "(a) social, spiritual, cultural, health and occupational structures are disrupted; (b) there is an impact on livelihood sources within the territory of the ethnic minority; (c) it is impossible to carry out livelihood activities; (d) the community is resettled to a place other than its territory; (e) when a policy, plan or project infringes on the rights of Indigenous or tribal peoples; (f) when the measure is geared toward implementing ILO Convention 169; (g) likewise, if burdens are imposed or benefits are attributed to a community, in such a way as to modify

BOX 1. STAGES OF FPIC

- i. *Determination of the expediency of prior consultation:* the National Prior Consultation Authority (DANCP) determines whether consultation is appropriate for a project or activity based on the criterion of direct impact.
- ii. *Coordination and preparation:* different stakeholders and interested third parties are called on to form part of the FPIC process, including environmental and territorial authorities and control agencies.
- iii. *Pre-consultation:* consists of an initial dialogue with the representative authorities of the territory to determine a methodological roadmap, including logistical aspects such as dates, places and duration of the consultation.
- iv. *Prior consultation:* implementation of the agreed methodological roadmap, which includes various activities such as workshops to identify and analyse measures for handling possible impacts or project repercussions, with the aim of arriving at an agreement or certified protocol (protocolización). In Colombia, the consultation process does not offer communities veto power; if an agreement is impossible to reach, the DANCP applies a proportionality test to determine appropriate measures for preventing, correcting or mitigating direct impacts.

The proportionality test is applied in the following cases: (a) lack of agreement in the pre-consultation or consultation stages; (b) non-attendance of the representative authorities, after exhausting established procedures to convene them; (c) failure to resolve a conflict over who will represent the ethnic community (Presidencia de Colombia, 2020).

- v. *Monitoring of agreements:* Creating a monitoring committee ensures proper execution of agreements.

be exhaustive or inflexible. This is because prior consultation is a dynamic process that depends on the specific circumstances of each case and that may vary accordingly (Corte Constitucional, 2018). The Constitutional Court also recognizes free, prior and informed consent as another facet of participation in specific cases where intense impacts are present⁸ (Corte Constitucional, 2016), which has nonetheless seen limited implementation in the context of wind farms in La Guajira (Barney, 2023; Mendoza, 2022).

Ethnic groups should be able to decide through FPIC on legislative and administrative measures or projects or (private or public) activities that take place in their territories as a way to protect their cultural, social and economic integrity. This process, which should in theory be monitored by the national government, should permit the community and company to negotiate the monetary and non-monetary dimensions of a project. Pivotal points of this negotiation are compensation for environmental impacts and economic agreements or benefits (Schwartz, 2021).

their legal situation or position; or (h) there is interference with the defining elements of the identity or culture of the people concerned" (Corte Constitucional, 2018).

⁸ An "intense impact" can be: "(a) the transfer or relocation of the Indigenous or tribal people from their place of settlement; (b) measures that imply a high social, cultural and environmental impact that puts their subsistence at risk; or (c) measures related to the storage and disposal of hazardous or toxic materials in their lands and territories" (Corte Constitucional, 2018).

In the absence of a statutory law, the criteria and procedures for FPIC have been described in executive orders (*directivas presidenciales*), decrees and Constitutional Court rulings (Akubadaura, 2021). Primarily, the Constitutional Court has established general criteria to guide FPIC implementation through more than a dozen rulings.⁹ Generally speaking, Executive Orders No. 01 (2010), 10 (2013) and 08 (2020) describe the stages of a FPIC process, which are summarized in Box 1.

However, there is controversy over the binding nature of the procedural parameters set out in Box 1, especially given affected communities' minimal decision-making power in a context of conflicting and asymmetrical interests. Although the spirit of prior consultation seeks to prevent abuses of power and build legitimacy on the basis of dialogue, the absence of procedural guarantees to mitigate power asymmetries in the relationship between the state, companies and communities is persistent (Guerra, 2022; Rodríguez, 2015). FPIC is often seen as a merely legal or transactional requirement, rather than as an ongoing dialogue process to ensure long-term sustainability.

The Constitutional Court has recognized that there is no single procedure for carrying out FPIC and that, on the contrary, the evolution of FPIC must be agreed with the community (Corte Constitucional, 2018). In line with this thinking, and exercising their autonomy, some Wayuu communities have attempted to fill this vacuum by establishing their own procedures for prior consultation in "autonomous consultation protocols" (see Box 2).

BOX 2. AUTONOMOUS PROTOCOLS FOR PRIOR CONSULTATION AND FREE, PRIOR AND INFORMED CONSENT

Exercising their autonomy and self-determination, Wayuu communities in La Guajira have tried to remediate gaps in the consultation process by creating their own processes or autonomous consultation protocols. These protocols redefine consultation through a series of rules, methods and procedures that must be respected by external agents that intend to develop any project or activity in a specific territory.

One example is the Autonomous Protocol for Consultation and Free, Prior and Informed Consent prepared by ancestral authorities and representatives of the autonomous government of the Ipuana, Epinayú, Uriana and Epieyú *e'irükuus* or clans of the extended Indigenous Reservation of Alta and Media Guajira in the Cabo de la Vela area, La Guajira. Another example is the Cerrodeco Reservation Engagement Protocol of the Wayuu people in Barrancas, La Guajira.

⁹ See, for example, Rulings T-769 (2016), T-129 (2011), SU-123 (2018), T-462A (2014) and C-369 (2019).

3. Enabling factors of social acceptance of wind projects in La Guajira

Projects in La Guajira have had operational setbacks for multiple reasons, including troubled relations with local communities, a lack of clarity about ground rules during the consultation process, restricted access to the territory, and delays in the implementation of transmission infrastructure (Barney, 2023; Mendoza, 2022; Vega-Araújo & Heffron, 2022). Road blockades and work stoppages related to wind projects are frequent, with significant impacts on their progress. For example, Enel Green Power announced the indefinite suspension of construction on the Windpeshi project, one of the largest in La Guajira (200 MW). It did so claiming it was impossible to ensure a consistent pace of construction in light of “accomplished facts and acts of force” (*vías de hecho*)¹⁰ resulting in constant stoppages (Enel Green Power, 2023), thus demonstrating the operational and financial challenges faced by projects.

This section presents a non-exhaustive, illustrative list of relevant factors that need to be addressed in order to make progress on the social acceptance of wind projects in La Guajira. In general terms, the social conflict observed is not mainly fuelled by opposition to the projects themselves, but rather to the way in which the projects are introduced into the territory and related processes, such as prior consultation. The factors listed here point to these processes (Figure 3).

Addressing these factors must be understood from a perspective of shared responsibility among the different actors in the region. These factors are practical aspects that must be taken into account to fulfil the commitments laid out in the pact for a just energy transition in La Guajira, “*La Guajira 2050, un territorio de vida para todas y todos*” (“La Guajira 2050, Territory of Life for All”; Ministerio de Minas y Energía, 2023a), and the roadmap being developed for a just energy transition in Colombia (Ministerio de Minas y Energía, 2023).

Figure 2. Enabling factors for social acceptance of wind projects in La Guajira



¹⁰ Such “accomplished facts and acts of force” (*vías de hecho*) refer to a judicial determination that contradicts both the Political Constitution and the law, passing over the judge’s responsibility to issue a verdict in accordance with the very nature of the process and based on the evidence presented in that context (Corte Constitucional, 1995).

3.1 Facilitate information access

Reducing information-related inequality is an essential factor for making fair and timely decisions, while simultaneously building trust and legitimacy and fostering better-informed public discussions. Timely access to information has become a challenge for communities and developers, as well as for actors from academia, the rest of the private sector, and public administrations (Mejía, 2023; Transparencia por Colombia, 2023). Ignorance of various aspects – including projects' quantity, capacity, the actual areas slated for intervention, information from developers and contractors, environmental impact assessments (EIAs), ethnographic studies of local communities, and the other intrinsic characteristics of a given project – represents a barrier to effective participation and to discerning impacts, whether positive or negative (Box 3). The task at hand is to strengthen multi-directional information flows about projects, as well as about local communities.



Jepirachi wind farm, soon to be dismantled © EDUAR MONSALVE / SEI

Public institutions have limited capacity to make information available. Though much of this information is commonly in the public domain, accessing it is complicated; it is not always kept current, and it is dispersed among various sources, including the Mining-Energy Planning Unit (UPME), the regional environmental authority (CORPOGUAJIRA), the National Authority of Environmental Licenses (ANLA), DANCP and developers. Improving transparency in terms of the agreements reached by companies and communities should be prioritized. There is also a need to improve the comprehension of technical language and to remedy the deteriorated state of local archives of government offices, such as mayoral offices.

BOX 3. REGIONAL OBSERVATORY ON INFORMATION ACCESS

The current dearth of information requires strategies to collect and compile information on projects and initiatives throughout the wind energy value chain in La Guajira, as well as making that information publicly accessible. This requires developing a permanent reference site where all territorial actors can find comprehensive, reliable, up-to-date and easily accessible information to monitor economic, social, environmental and cultural implications. This site should be able to translate technical information and specialized knowledge into easily understandable language, including into the Wayuunaiki language. Such information should include:

- location and area of influence (coordinates)
- planned capacity
- developer and contractor information
- planned number of wind turbines
- planned route for connection lines
- environmental licences and EIAs
- wind resource measurement permits
- information on consulted communities
- certified protocols on prior consultation
- start-up date
- estimated investment budget

Various international organizations have made recommendations on information access. They have highlighted that companies should publish details such as their financial position, a statement of profit and loss, and their shareholders and corporate governance systems – including detailed information on financial and operating balances, business objectives, significant shareholder interests, declarations of principles, and rules of conduct (OECD, 2023).

Increasing access to information can result in more efficient project execution: it facilitates better consultation processes, informed public discussions, creation of benefit-sharing standards, more attention to the concerns of and impacts on stakeholders, and productive linkages formed by a better-informed private sector. Information access also supports informed territorial planning by municipal and departmental governments, which is even more relevant in view of the formulation and execution of the new 2024–27 departmental and municipal development plans.

3.2 Delimit the role of community advisers

In the absence of specific regulations, and in keeping with the guidelines of the Constitutional Court, communities may request an adviser during the process of prior consultation. This adviser supports them in identifying any potential environmental, health, social and cultural impacts that have occurred or may occur due to the implementation of a project or activity, as well as any corresponding mitigation measures (Corte Constitucional, 1999, 2014). Advisers should have the knowledge, experience and impartiality often lacked by the community to analyse the implications of a project.

Communities usually perceive prior consultations as a fluctuation between opportunity and uncertainty (Cardona, 2022). Faced with a sense of helplessness, they use blockades to draw attention to their needs and demands. Local communities generally see wind projects as an opportunity to address their basic needs in the absence of government intervention, but also

as a source of unforeseen impacts. At this intersection between opportunity and uncertainty, community advisers have become a linchpin for facilitating coordination between the community and company. They position themselves as key actors for reaching a fair agreement and avoiding “accomplished facts and acts of force” (*vías de hecho*).

BOX 4. TRAINING PROGRAM FOR COMMUNITY ADVISERS

Community advisers have the potential to be influential actors in achieving balanced consultation processes if they reduce asymmetries of information access and capacity. Nonetheless, if there is no supervision or regulation of aspects such as their fees, the type of support being contracted and the minimum eligibility requirements, these aspects can jeopardize the ability to attain social justice and acceptance.

A professional pool and a state-regulated adviser certification mechanism can be offered. When establishing this pool and certification process, it is important to promote debate and reflection on the ethics of the personnel trained to provide such services. Climate change, Colombia’s interculturality and plurality, and Wayuu culture and its normative system should form the backbone of the training, regardless of the advisers’ academic backgrounds.

In this sense, a training program should be created and implemented for community advisers from the communities in the area of influence of wind projects or associated infrastructure (e.g. transmission lines, access roads) in such a way that the experts hail from the communities and Indigenous organizations themselves. This training program should provide theoretical, methodological and practical tools to balance the asymmetry of power and adequately represent interests, integrating at least four training areas with the participation of local institutions:

- i. **Legal:** focused on strengthening knowledge and application of the rights and duties of Indigenous Peoples and current FPIC regulations, both nationally and internationally.
- ii. **Technical:** focused on strengthening knowledge and application of the technical aspects of the wind energy value chain, including both positive and negative social, economic and environmental impacts.
- iii. **Cultural:** focused on framing the projects and their operation within Wayuu people’s cosmogony and values.
- iv. **Economic:** focused on strengthening knowledge of factors such as the wind energy business model, structuring of business models for community economic projects to better use perceived economic benefits from wind farms, capacity-building for implementation of energy communities, and fundamentals of territorial planning.

In La Guajira, however, inappropriate and even dishonest practices have materialized as these advisers carry out their work. Although advisers are generally chosen by the community they represent, the project developer is responsible for contracting them, which poses challenges that may compromise their impartiality and technical expertise (ILO, 2016; Vega-Araújo & Heffron, 2022). In addition, their fees are usually disbursed once a stage of the prior consultation process is completed (see Section 2.3), which incentivizes an expedited process at the expense of other social, environmental or economic considerations. More often than not, the advisers are outsiders to the community with limited knowledge of the local culture, and they are motivated by economic interests that do not necessarily coincide with those of the community they represent. In addition, their work often ends after the consultation is completed, with no long-term follow-up.

In general terms, advisers are seen by and large as guarantors for obtaining more benefits, barring the compounding factor of an inexistent mechanism for monitoring their activities or the interests that may influence their advisory services (ILO, 2016). In this respect, the Constitutional Court has noted that research institutions or universities may strike an appropriate balance between technical knowledge, experience, access to technical methods, and economic independence (Corte Constitucional, 2014). Nonetheless, factors such as fees and suitability criteria are not clear. Moreover, reviewing the possibility of alternative mechanisms to finance this type of consultancy is of utmost importance (ILO, 2016). The establishment of a regulated mechanism for the provision of these services, as well as best advisory practices, is sorely needed (see Box 4).

3.3 Consider the duality of Wayuu leadership

Currently, consultation processes do not appropriately reflect the duality of Wayuu leaders. The Wayuu people do not have a single representative for the entire territory that brings together the different clans under a singular structure of authority (Guerra, 2022). As such, consultation processes take place with the authority or leader of each community in the area of influence of a particular project. During this process, with the public sector absent, the company tends to narrowly recognize the Wayuu communities' socioeconomic context, socio-political structure and autonomous control over the territory. This illustrates why prior consultation often fosters fragmentation of the most vulnerable communities in terms of their internal cohesion (Cardona, 2022).

For example, there have been failures to recognize the ancestral nature of the territory. The *alaúla* (or maternal uncles; see Box 5) usually come into conflict with other figures, such as the traditional authority recognized by the Colombian state and mayor's office. This traditional authority is registered with the Ministry of the Interior and holds a purely administrative role for managing resources, programs and projects with the municipal and national government and non-governmental organizations (Corte Constitucional, 2019). In fact, the traditional authority role is commonly perceived as imposed by the government and, therefore, may not be considered legitimate by some communities (Cambar et al., 2014; Corte Constitucional, 2019; Vega-Araújo & Heffron, 2022). The ancestral authority or *alaúla* are those who make determinations on territorial and family matters due to their historical importance. As such, it is generally expected that they will be recognized, respected and heard during consultation processes. Ultimately, harmony between these two types of authorities should be prioritized, including in benefit-sharing.

Furthermore, given the Wayuu's poly-residential nature, some families that were residing in Venezuela or other departments of Colombia have returned to their territories, asserting their ancestry and, therefore, participation in consultation processes. In many cases, these families have considered the alternative of reorganizing and choosing another leader or authority to represent them and thus form a new community. The Ministry of the Interior



Wayuu cemetery © EDUAR MONSALVE / SEI

has issued statements about such cases, declaring their exclusion from the database on the grounds that these communities stem from divisions that could escalate territorial disputes (Corte Constitucional, 2019).

Consultation processes must be viewed in context to build trust. This includes recognition of the territory, its inhabitants and cultural practices and the different figures who hold power and act as representatives to ultimately achieve an ontological connection between the project and local communities (Guerra, 2022). This connection must necessarily begin with responsible behaviour by the state and companies in identifying culturally legitimate leaders.

BOX 5. WAYUU ANCESTRAL AUTHORITIES

The Wayuu people's socio-political organization is based on a matrilineal system of clans or *e'irükuus*, which constitute "uncoordinated categories of people who share a social status and a common mythical ancestor" (Guerra Curvelo, 2002, p. 66).

As there is no single voice or authority that speaks for the various *e'irükuus*, the *apüshii* serve as a focal point in Wayuu culture for clarifying who holds power and represents them. The *apüshii* are the group of uterine relatives of the mother, in which the maternal uncles or *alaüla* are particularly important in decision-making (Alarcón, 2006; Guerra, 2022) Accordingly, there is generally an expectation that they will be acknowledged, respected and listened to during consultation processes.

3.4 Regulate benefit-sharing with communities

Social acceptance of wind projects in La Guajira largely depends on a just, transparent and equitable distribution of benefits. However, beyond “electric transfers” or funds transferred by electric companies to municipalities and local communities (see Section 3.6), to date there has been no specific regulation of benefits nor a minimum standard for companies’ “voluntary” investments under their corporate social responsibility or shared value creation programs for communities in the areas of influence of wind farms.

Given the lack of directives or standards, companies and communities have reached different types of agreements in consultation processes. These agreements may vary according to each project and may even vary between communities affected by the same project. Benefit schemes may include allocating a percentage of annual sales, specific amounts per megawatt installed, specific amounts per wind turbine installed, or percentages of carbon credits generated, among others.



Wimpalaa microaqueduct in the Municipality of Maicao, La Guajira, associated benefit to the Windpeshi wind farm © EDUAR MONSALVE / SEI

The diverse nature of the agreements takes place in a context that in practice is a bilateral negotiation between the company and the community. Given this, when the many communities involved experience similar impacts but have different negotiation skills, benefit schemes may differ, leading to disproportionality and conflicts. The absence of guidelines, coupled by the limitations of mediation and communities’ negotiation capacity and lack of access to information about the projects, offers few guarantees for balanced negotiations during consultations. In this sense, it is necessary to develop specific institutional and regulatory frameworks that guarantee standards for benefit-sharing with local communities (see Box 6).

Biodiversity offsets present a unique situation. According to the handbook for biodiversity offsets (Ministerio de Ambiente y Desarrollo Sostenible, 2018), offsets must be made when project activities cause ecosystem losses in, for example, flora and fauna, and these losses can be compensated for in another place that is ecologically equivalent to the one affected. Under this premise, many offsets are made in other departments and therefore fail to benefit local communities. Moreover, they produce cultural impacts, considering that the Wayuu people's biocultural view is that all living beings maintain relationships of affinity and kinship (Guerra Curvelo, 2002; Vega-Araújo & Heffron, 2022).

BOX 6. MINIMUM STANDARDS FOR BENEFIT-SHARING

Minimum standards for benefit-sharing can be established to manage expectations based on recognition of the territory, following the example of experiences in other countries. For example, in Scotland, the government issued guidelines on good practices, which recommend a minimum annual amount per megawatt in the case of onshore wind projects and also encourage the online registration of agreements reached with communities (Government of Scotland, 2019).

Such standards should be developed collectively by various actors, including territorial entities, representatives of local communities, academia and the private sector, with the public sector galvanizing the discussion through forums such as the Departmental Assembly of La Guajira. This is the result of an iterative process that tests what the market could handle depending on a series of variables, including construction and operating costs, grid connection costs, interest rates, resource quality and electricity costs. Setting standards involves being open to innovative proposals from communities, exploring different options for and examples of benefit-sharing, and establishing effective mechanisms to follow up and monitor the mutually reached agreements and commitments during the prior consultation process.

A key strategy for implementing these minimum standards involves integrating them into renewable energy auctions. Auction eligibility mechanisms can go beyond mere price discovery and include eligibility criteria to encourage greater local participation (IRENA, 2021). For example, auctions in the US offer the opportunity to earn "bidding credits" worth 10–30% of the bid in exchange for commitments to support local workforce training programs, strengthen a supply chain and/or reduce impact on fisheries (Perkins Coie LLP, 2023). In Ireland, successful auction bidders must contribute to a local Community Benefit Fund both during the construction phase and during the support phase of an offshore wind project (Department of The Environment, Climate and Communications, Government of Ireland, 2022). Lessons learned also underscore the importance of comprehensive evaluation criteria. These include, for example, evidence of social risk analysis, communication plans detailing methods for engaging with local actors, monitoring and evaluation plans, and even community letters of support for the project (Lane y Hicks, 2017).



Goats around the Guajira 1 wind farm © EDUAR MONSALVE / SEI

3.5 Place greater focus on the distribution of benefits within communities

Problems exist as well with the internal distribution of benefits to communities, such as jobs, compensation and voluntary investments. These benefits often end up being appropriated exclusively by community authorities or leaders and their closest family members. While it is usually a culturally acceptable practice for a community authority or leader to receive benefits, their exclusive appropriation largely stokes internal conflicts and family divisions. Although these conflicts are sometimes caused by “bad” business practices, they are also often related to the internal segregation generated by community leadership (Mejía, 2022).

In some cases, the equitable division of compensation between a traditional authority and an ancestral authority establishes harmony between these two figures. However, conflicts deepen when both companies’ and communities’ approach to the consultation process focuses on the authorities’ individual economic expectations rather than considering proposals for collective benefit (see, for example, Schwartz, 2021).

Greater support for strategic planning around resources and benefits is needed to avoid this conflict. Using traditional mechanisms of the Wayuu people, such as general community assemblies, may encourage other members’ participation in both decision-making and benefit-sharing. Strengthening knowledge transfer schemes between communities within and outside the territory may facilitate their taking ownership of good practices in this regard (see Box 7). It may also help strengthen and monitor the Indigenous communities’ Life Plans (see section 3.8) as tools for mapping out communities’ futures and coordinating their initiatives, including their autonomous initiatives as ethnic peoples, with the initiatives of external, or *alijuna*, entities

(see Box 2). Developing manuals for hiring local labour is a notable way to promote better distribution of the jobs created by wind projects.

3.6 Guarantee and monitor funds from “electric transfers”

According to existing regulations, power generation companies in Colombia are required to make economic transfers to the territorial entities where plants are located, in line with the rate

established by the Energy and Gas Regulation Commission (CREG). These are often known as “electric transfers”. For wind plants, Law 2294 of 2023 establishes that these transfers will gradually increase from 1% to 6% for new plants and to 4% for already-operating plants (Congreso de Colombia, 2023). This applies only to plants located in areas with greater average wind speeds (over 4 m/s at 10 m high), such as La Guajira. According to this law, the funds will be allocated to projects defined by ethnic communities in the projects’ area of influence.



Motorcycle in Wayuu settlement (*rancheria*) © EDUAR MONSALVE / SEI

In the previous regulation, when transfers were at 1%, 60% of the total funds was allocated equally among ethnic communities. The remaining 40% was then allocated to municipalities located in the power generation project’s area of influence, with the aim of investing in projects for infrastructure, utilities, and basic sanitation and/or drinking water, in addition to projects that directly influence quality of life and well-being (Presidencia de Colombia, 2022). It is unclear if this same breakdown will continue now that

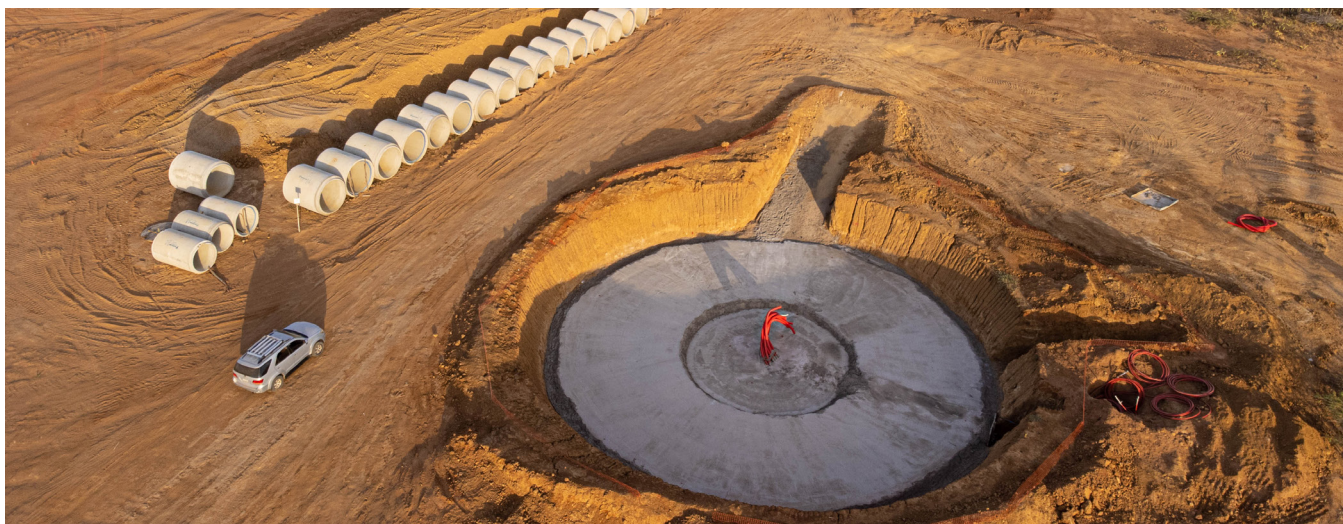
BOX 7. LEARNING NETWORKS

In La Guajira, like in many other places around the world, developers and their contractor teams arrive in the territory with significant prior experience and knowledge, while for many communities it is their first contact with the industry and its practices. The private sector usually has a solid community of practice through which it can call on other companies’ knowledge and experience, facilitated by entities such as professional or industry associations.

Meanwhile, such exchange is much more complex and difficult for communities, whether due to economic, technical, organizational or even language barriers. Exchange has been particularly difficult for Wayuu communities because they are federated communities scattered throughout a vast territory, and they have decision-making structures that usually depend on individual leaders who are not often very inclusive. In this sense, facilitating the exchange of information and previous experience among communities within their own territory and in other places may help strengthen their agency and knowledge of positive benefit-sharing experiences with long-term collective impact.

transfers are increasing to 6% and 4%, with a governance framework that will be regulated by the Ministry of Mines and Energy (MME).¹¹ In any case, it is important to have culturally legitimate community representatives participate in committees to monitor and plan these transfers, as well as to strengthen communities' internal organization to ensure resources are received and administered effectively. In the course of this study, no successful case of distributing transfers from wind farms was documented in La Guajira.

Although the planned increase in transfers is an enabling social factor for the energy transition, it has sparked a debate around the additional burden it poses for developers (Energía Estratégica, 2023b). There are also serious concerns about oversight and effective implementation of these resources in the context of local corruption in La Guajira and limited planning. While transfers by electric companies have historically played an important funding role for entities and municipalities, one clear problem has been the management of these resources due to their inefficient integration and use within local budgets (Vélez Gómez & Vélez Henao, 2014).



Wind turbine base of the Windpeshi wind farm. In 2023, the construction of Windpeshi was suspended © EDUAR MONSALVE / SEI

3.7 Identify and strengthen regional institutional capacity

In Colombia's mining and energy sector, strongly centralized decision-making takes place to the exclusion of territorial entities, which must deal with projects' operations and impacts. This situation produces an impression that projects are imposed on the region; while some regional public officials refer to their role as "guarantors" ("*garantes*"), they offer little by way of explanation of their specific procedures or prescriptive capacity during, for example, prior consultation. Oftentimes, the role of regional institutions is limited to being observers, signing documents or receiving information. Even though the Wayuu population has effective conflict resolution mechanisms (Guerra Curvelo, 2002), institutional weakness poses an obstacle to finding nimble solutions for the various conflicts that emerge on a day-to-day basis.

The governor's office, municipalities and environmental authority all have offices covering affairs related to renewable energy projects. However, these institutions typically have limited resources and capacity to assist the different stages of prior consultations and environmental assessments, in the context of a large number of projects over a vast territory with scattered communities. In general, there is a consensus that the national government's contributions have been mainly discursive and devoid of concrete actions.

¹¹ This would be the case if Congress passes the bill under review (Ministerio de Minas y Energía, 2023c).

In particular, the regional environmental authority CORPOGUAJIRA has shown a limited capacity to review the extensive EIAs for each project within stipulated time frames. Mayoral offices usually have limited resources and staff to carry out specific tasks to handle accessible and up-to-date information on the Indigenous communities in their jurisdiction. This includes, for example, a lack of effective records, means of transportation, and staff to assist and support prior consultation processes.

BOX 8. INSTITUTIONAL FRAMEWORK FOR RENEWABLE ENERGY IN LA GUAJIRA

A number of national and regional actors interact in wind project development. At the national level, bodies such as the MME, UPME and CREG lead the planning, formulation and regulation of the mining and energy sector. The DANCP (under the Ministry of the Interior) spearheads the work to guarantee ethnic and Afro-descendant communities' right to prior consultation, with the involvement of entities such as the Ombudsperson's Office (*Defensoría del Pueblo*) and the Inspector General's Office (*Procuraduría*).

Authority over environmental matters is shared by the national authority (ANLA) and regional authority (CORPOGUAJIRA). ANLA is in charge of granting and monitoring environmental licences for projects with an installed capacity equal to or greater than 100 MW, while CORPOGUAJIRA does the same for projects with an installed capacity of between 10 and 100 MW (República de Colombia, 2015).

Regionally, secretariats and directorates under the offices of the governor and mayors work in the various projects' areas of influence; these primarily include secretariats and directorates for Indigenous affairs and planning and, in the case of the Uribia municipality, undersecretariats for mines and energy. Some of their tasks are related to providing assistance to Indigenous communities, recordkeeping, monitoring and supporting processes to recognize traditional authorities, resolving conflicts and advising on resource investment.

The principle of due diligence means that a company carrying out FPIC processes must cooperate in good faith with the affected communities and follow every requirement and procedure established in national legislation to effectively provide all guarantees of this fundamental right to be consulted (Preciado & Lattanzio, 2021). Nevertheless, the lack of defined rules and limited institutional support create an environment of uncertainty for developers and for communities. An example of this is the Windpeshi wind project (Enel Green Power, 2023), for which construction was suspended just weeks after the government had announced agreements that would have allowed the construction process to move forward (Ministerio de Minas y Energía, 2023b).

Strengthening regional institutions and settings for dialogue, coordination and knowledge transfer is necessary, keeping in mind that the private sector has experience and presence in territories where the public sector is often weak. Some of these settings include the La Guajira Departmental Assembly's technical committee on the environment, water and labour (Asamblea Departamental de La Guajira, 2019) and the MME-led Tripartite Committee (Ministerio de Minas y Energía, 2023a). Strengthening and mobilizing local institutions can improve interpretation of the context and increase security in the territory, including institutions that work on peace, migration and natural disasters and international cooperation agencies with experience in the territory.

3.8 Coordinate industry development with territorial planning instruments

The development of wind projects in La Guajira has followed the decide-announce-defend (DAD) model (Devine-Wright, 2010), in which decisions on mining and energy are simply communicated to the public. Evidence of this are the auctions held by the national government ahead of a final agreement with the communities where the projects will be built, and a roadmap for offshore wind development that the national government published without completing the consultation process with local communities.¹² Ensuring the alignment of mining and energy planning with subnational planning instruments is necessary for greater clarity on where projects can be implemented and where they have important adverse effects on the environment and local communities that cannot be mitigated or managed. Ensuring such alignment is also key for avoiding both conflict and competition with other economic sectors.

At the departmental and municipal levels, there are tools to support improved territorial planning. For instance, territorial management plans (known as POTs, for *planes de ordenamiento territorial*) are methodological instruments for planning land use and fostering greater competitiveness, security and economic and social cohesion. Territorial management plans are a roadmap for guiding the physical development of the territory; they classify what can and cannot be done and, therefore, help reduce uncertainty while carrying out economic activities.



Central square of the municipality of Uribia, La Guajira. In the background, the municipal town hall
© EDUAR MONSALVE / SEI

Nevertheless, there are at least three aspects to consider regarding territorial management plans: first, renewable energy projects are “subject to public utility and social interest, public, and national convenience” and, as such, take precedence in territorial and environmental planning matters (Congreso de Colombia, 2021). Second, a high percentage of territorial management plans in Colombia are outdated or not in force (Instituto de Estudios Urbanos, 2020), as evidenced in municipalities of La Guajira that have the most wind projects, such as Uribia (Alcaldía de Uribia, 2020) and Maicao (Alcaldía de Maicao, 2020). Third, even if they are in force or up to date, territorial management plans usually do not include artisanal fisheries, nor do they apply to Indigenous reservations because they act autonomously within their territories. With this in mind, Indigenous territories have

been developing their own Life Plans as territorial planning and governance instruments, ideally in alignment with local and regional plans (see Box 9).

Limitations in territorial planning have made the work of environmental authorities difficult. For example, they must process requests to withdraw the protected status of areas despite the work, time, resources and significant amount of dialogue with local communities involved in having declared an area protected (Enlaza, 2022). This illustrates the need to have sectoral planning tools that open up regional consultation settings at earlier and higher stages of decision-making.

¹² See the autonomous statement (in Spanish) by the ancestral Wayuu and communities of Puerto Estrella, Nazaret, Taroa and Punta Espada on the issuance of the roadmap for deploying offshore wind energy in Colombia (The Renewables Consulting Group, 2022).

BOX 9. LIFE PLANS AS INDIGENOUS TERRITORIAL PLANNING INSTRUMENTS

Life Plans are an autonomous planning tool for Indigenous communities. Based on these communities' own worldview and interests, these plans define concrete actions to strengthen cultural, social, political, economic and cultural aspects (CIDH, 2021). They are official documents recognized by the Ministry of the Interior (Decreto 1953, 2014) that describe in detail the changes a community wants to achieve and its various land uses. Accordingly, they are equivalent to municipalities' development plans and territorial management plans. The national government has established overall methodological guidelines to direct the preparation of Life Plans (Departamento Nacional de Planeación, 2019).

On this note, preparing strategic environmental assessments (SEAs) serves to proactively reach a regional consensus on designating specific areas for certain types of energy development; gathering information on cumulative social, economic and environmental effects; and developing regional environmental baselines (Jay, 2010; Noble et al., 2013). This is in contrast with the reactive and project-based approach of EIAs.

In addition, it has been demonstrated that as markets develop, the growth of the wind energy manufacturing sector and related service sectors can play a key role in maintaining social and political support for the industry (GWEC, 2023). This growth in the wind energy value chain is already becoming apparent in La Guajira with the establishment of concrete tower manufacturing plants (Energía Estratégica, 2023a). Specific actions are called for in territorial planning instruments if coordination with these activities is to be considered.



WESP 01 wind farm and, in the background, coal ships © EDUAR MONSALVE / SEI

4. Conclusion

La Guajira, a region with great natural and cultural wealth, has witnessed a growing interest in the implementation of wind projects as an alternative to meet Colombia's energy demand. However, progress on wind energy in La Guajira is not only a matter of technical or economic feasibility but also a matter of social acceptance, which largely depends on the quality of the consultation and engagement process between developers and Wayuu Indigenous communities. Actors such as community advisers, national and regional public officials, and the environmental authority also play a crucial role in these processes.

BOX 10. ENABLING FACTORS OF SOCIAL ACCEPTANCE OF WIND PROJECTS IN LA GUAJIRA

1. Facilitate access to information.
2. Delimit the role of community advisers.
3. Consider the duality of Wayuu leadership.
4. Regulate benefit-sharing with communities.
5. Place greater focus on the distribution of benefits within communities.
6. Guarantee and monitor funds from "electric transfers".
7. Identify and strengthen institutional capacity.
8. Coordinate industry development with territorial planning instruments.

While progress on renewable energy projects is imperative for achieving a just energy transition, it is important to recognize that these projects, by themselves, are not inherently just or unjust. They must go hand in hand with strategies to identify and address concerns while managing expectations.

For these strategies to advance social acceptance of wind energy projects in La Guajira, they must address a comprehensive set of enabling factors. These factors, as explained in detail by this report, can significantly support the process of wind projects' installation to contribute to building social acceptance, emphasizing shared responsibilities among various actors within the territory (see Box 10). Although we focused on enabling factors for social acceptance in this report, other factors also affect the potential development of wind energy in La Guajira. For example, these include the lack of security in the territory and the lack of legal and institutional protection perceived by some developers.

To move forward in addressing these factors, we propose four actionable ideas:

- Implement a **regional observatory on information access** as a platform for closing information gaps between actors and an essential element for informed decision-making and more effective consultation processes.
- Develop a **training program for community advisers** from communities in the area of influence of wind projects or associated infrastructure.
- Agree on a **minimum standard for benefit-sharing** as an effective strategy to manage expectations and ensure equity in projects' implementation. The collaborative development of these standards, engaging various actors in the territory, emerges as an essential component.
- Develop **peer-to-peer learning networks** as a platform for local communities to share successful experiences in sharing benefits and managing projects with long-term impact.

Addressing these issues will be essential for guaranteeing the implementation of renewable energies at the speed and scale necessary to support the fulfilment of climate objectives, in addition to contributing positively to La Guajira's social, economic and environmental transformation in the context of a just energy transition.

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References

- Akubadaura. (2021). Alcances y evolución jurídica del derecho a la consulta previa en Colombia. <https://akubadaura.org/wp-content/uploads/2021/08/INFORME-Alcances-y-evolucion-juridica-del-derecho-a-la-consulta-previa-en-Colombia-1-1.pdf>
- Alarcón, J. (2006). La sociedad wayuu, entre la quimera y la realidad. *Gazeta de Antropología*, 22. DOI: <https://doi.org/10.30827/Digibug.7098>
- Alcaldía de Maicao. (2020). *Plan de Desarrollo Municipal «El Verdadero Cambio»*. <https://obsgestioneducativa.com/download/plan-de-desarrollo-municipal-maicao-2020-2023/>
- Alcaldía de Uribia. (2020). *Plan de Desarrollo Territorial «Unidos por la Transformación de Uribia» 2020-2023*. <https://www.uribia-laguajira.gov.co/Transparencia/PlaneacionGestionyControl/PLAN%20DE%20DESARROLLO%202020-2023.pdf>
- Arias-Gaviria, J., Carvajal-Quintero, S. & Arango-Aramburo, S. (2019). Understanding dynamics and policy for renewable energy diffusion in Colombia. *Renewable Energy*, 139. 1111-19. DOI: <https://doi.org/10.1016/j.renene.2019.02.138>
- Asamblea Departamental de La Guajira. (2019). Ordenanza 481. https://asamblealaguajira.micolombiadigital.gov.co/sites/asamblealaguajira/content/files/000050/2499_ordenanza-n-481-de-2019.pdf
- Barney, J. (2023). *Por el Mar y la Tierra Guajiros, Vuela el Viento Wayuu*. Bogotá: INDEPAZ. ISBN: 978-628-95412-2-9 <https://co.boell.org/sites/default/files/2023-04/por-el-viento-y-el-mar-guajiros.pdf>
- BloombergNEF. (2022). *Climatescope 2022. Power Transition Factbook*. <https://www.global-climatescope.org/>
- Cambar, J., Rincón, M., Prado, A. & Rincón, N. (2014). *Plan Salvaguarda del Pueblo Wayuu*. https://siic.mininterior.gov.co/sites/default/files/pueblo_wayuu_sur_albania_-_diagnostico_comunitario_0.pdf
- Cardona, J. (2022). *Significados de las Consultas Previas para Comunidades Wayuu de la Media y Alta Guajira en Proyectos de Generación de Energía Eólica Entre 2014 y 2021*. Caldas, Colombia: Universidad de Manizales. <https://ridum.umanizales.edu.co/xmlui/bitstream/handle/20.500.12746/6073/Informe%20final%20Investig%20Jose%20Manuel%20Cardona%20P%2029ab%202022%20VF.pdf?sequence=1>
- Carvajal-Romo, G., Valderrama-Mendoza, M., Rodríguez-Urrego, D. & Rodríguez-Urrego, L. (2019). Assessment of solar and wind energy potential in La Guajira, Colombia: Current status, and future prospects. *Sustainable Energy Technologies and Assessments*, 36. DOI: <https://doi.org/10.1016/j.seta.2019.100531>
- CIDH. (2021). Derecho a la libre determinación de los Pueblos Indígenas y Tribales. <https://www.oas.org/es/cidh/informes/pdfs/LibreDeterminacionES.pdf>
- Congreso de Colombia. (1991). Ley 21. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=37032#:~:text=Los%20pueblos%20ind%C3%ADgenas%20y%20tribales%20deber%C3%A1n%20gozar%20plenamente%20de%20los,y%20mujeres%20de%20esos%20pueblos>
- Congreso de Colombia. (2014). Ley 1715. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=57353>
- Congreso de Colombia. (2021). Ley 2099. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=166326>
- Congreso de Colombia. (2023). Ley 2294. https://colaboracion.dnp.gov.co/CDT/portalDNP/PND-2023/Ley_2294_del_19_de_mayo_de_2023.pdf
- Corte Constitucional. (1995). Sentencia T-518. <https://www.corteconstitucional.gov.co/relatoria/1995/T-518-95.htm#:~:text=Las%20%22v%C3%ADas%20de%20hecho%22%20implican,las%20pruebas%20aportadas%20al%20mismo>

- Corte Constitucional. (1999). Sentencia T-194. <https://www.corteconstitucional.gov.co/relatoria/1999/T-194-99.htm>
- Corte Constitucional. (2014). Sentencia T-969. <https://www.corteconstitucional.gov.co/relatoria/2014/t-969-14.htm>
- Corte Constitucional. (2016). Sentencia C-389. <https://www.corteconstitucional.gov.co/relatoria/2016/C-389-16.htm>
- Corte Constitucional. (2017). Sentencia T-302. <https://www.corteconstitucional.gov.co/relatoria/2017/t-302-17.htm>
- Corte Constitucional. (2018). Sentencia de Unificación 123. <https://www.corteconstitucional.gov.co/relatoria/2018/SU123-18.htm>
- Corte Constitucional. (2019). Sentencia T-172. <https://www.corteconstitucional.gov.co/relatoria/2019/T-172-19.htm>
- DANE. (n. d.). Pobreza y desigualdad. Pobreza multidimensional. <https://www.dane.gov.co/index.php/estadisticas-por-tema/pobreza-y-condiciones-de-vida/pobreza-multidimensional> (accessed 27 April 2022)
- Delgado, C. & Mercado, R. (2010). La blasonería y el arte rupestre Wayuu. *Revista latinoamericana de arte rupestre*. <http://www.rupestreweb.info/wayuu.html>
- Department of The Environment, Climate and Communications, Government of Ireland. (2022). *Draft Rules & Guidance for Offshore ORESS 1 Community Benefit Funds*. <https://assets.gov.ie/230650/a8767776-0990-40b8-a667-4fc0c726e619.pdf>
- Departamento Nacional de Planeación. (2019). Lineamientos para la elaboración de Plan de vida en comunidades indígenas. https://proyectostipo.dnp.gov.co/index.php?option=com_k2&view=item&layout=item&id=249&Itemid=320
- Departamento Nacional de Planeación. (2023). Colombia, potencia mundial de la vida: Bases del plan nacional de desarrollo 2022-2026. <https://colaboracion.dnp.gov.co/CDT/portalDNP/PND-2023/2023-02-23-bases-plan-nacional-de-desarrollo-web.pdf>
- Devine-Wright, P., ed. (2010). *Renewable Energy and the Public: From NIMBY to Participation*. London: Routledge. DOI: <https://doi.org/10.4324/9781849776707>
- Enel Green Power. (2023). Enel Colombia suspende indefinidamente la construcción del parque eólico Windpeshi en La Guajira. <https://www.enel.com.co/es/prensa/news/d202305-suspension-indefinida-windpeshi.html>
- Energía Estratégica. (2023a). Nordex reafirma su apuesta por Colombia: nuevos proyectos e inauguración de fábrica de torres local. <https://www.energiaestrategica.com/nordex-reafirmar-su-apuesta-por-colombia-nuevos-proyectos-e-inauguracion-de-fabrica-de-torres-local/> (accessed 14 August 2023)
- Energía Estratégica. (2023b). SER Colombia se posiciona frente a dos temas prioritarios del Plan Nacional de Desarrollo. <https://www.energiaestrategica.com/ser-colombia-se-posiciona-frente-a-dos-temas-prioritarios-del-plan-nacional-de-desarrollo/> (accessed 26 June 2023)
- Energy Transitions Commission. (2023). *Streamlining Planning and Permitting to Accelerate Wind and Solar Deployment*. https://www.energy-transitions.org/wp-content/uploads/2023/01/Barriers_PlanningAndPermitting_vFinal.pdf
- Enlaza. (2022). Corpoguajira otorgó autorización al proyecto Colectora para su ejecución. *Inergia* (digital magazine). <https://www.enlaza.red/revista-inergia/sostenibilidad/corpoguajira-otorgo-autorizacion-al-proyecto-colectora-para-su-ejecucion>
- Government of Scotland. (2019). *Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments*. <https://www.gov.scot/publications/scottish-government-good-practice-principles-community-benefits-onshore-renewable-energy-developments/>
- Gubinelli, G. (2022). El Gobierno de Petro da a conocer modelos para transportar 3 GW renovables desde La Guajira. *Energía Estratégica*. <https://www.energiaestrategica.com/el-gobierno-de-petro-da-a-conocer-modelos-para-transportar-3-gw-renovables-desde-la-guajira/>
- Gubinelli, G. (2023). Colectora entrará en operaciones en octubre del 2025 tras finalizar el proceso de consultas previas. *Energía Estratégica*. <https://www.energiaestrategica.com/colectora-entrara-en-operaciones-en-octubre-del-2025-tras-finalizar-el-proceso-de-consultas-previas/>
- Guerra, C. (2022). Proyectos de energía renovable en el territorio Indígena Wayuu: una relación desconectada. *Revista de Derecho Universidad del Norte*, no. 59. DOI: <https://dx.doi.org/10.14482/dere.59.612.519>
- Guerra Curvelo, W. (2002). *La Disputa y la Palabra: La Ley en la Sociedad Wayuu*. Bogotá: Ministerio de Cultura
- GWEC. (2022). Global Wind Energy Report 2022. <https://gwec.net/wp-content/uploads/2022/03/GWEC-GLOBAL-WIND-REPORT-2022.pdf>
- GWEC. (2023). Global Wind Energy Report 2023. <https://gwec.net/globalwindreport2023/>

- Huertas, L. & Pinilla, A. (2007). *Predicción de rendimiento de parques eólicos como herramienta de evaluación*. Bogotá: Empresas Públicas de Medellín–Universidad de los Andes
- IEA. (2022). *Renewable Energy Market Update - May 2022 - Analysis*. <https://www.iea.org/reports/renewable-energy-market-update-may-2022>
- ILO. (2016). *Convenio núm. 169 de la OIT sobre Pueblos Indígenas y Tribales en Países Independientes y la consulta previa a los Pueblos Indígenas en proyectos de inversión. Reporte regional: Colombia, Costa Rica, Guatemala, Chile*. Lima: International Labour Organization / Organización Internacional del Trabajo (OIT). https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/documents/publication/wcms_507556.pdf
- Instituto de Estudios Urbanos. (2020). El 88 % de los municipios de Colombia tienen el POT desactualizado: Ministerio de Vivienda, Ciudad y Territorio. <http://ieu.unal.edu.co/medios/noticias-del-ieu/item/el-88-de-los-municipios-de-colombia-tienen-el-pot-desactualizado-ministerio-de-vivienda-ciudad-y-territorio> (accessed 6 June 2023).
- IRENA. (2019). *Future of Wind: Deployment, Investment, Technology, Grid Integration and Socio-Economic Aspects*. A Global Energy Transformation paper. Abu Dhabi: International Renewable Energy Agency. https://www.irena.org/-/media/files/irena/agency/publication/2019/oct/irena_future_of_wind_2019.pdf
- IRENA. (2021). *Renewable Energy Auctions in Colombia: Context, Design and Results*. Abu Dhabi: International Renewable Energy Agency. ISBN 978-92-9260-313-7. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2021/March/IRENA_auctions_in_Colombia_2021.pdf
- Jay, S. (2010). Strategic environmental assessment for energy production. *Energy Policy*, 38(7). 3489-97. DOI: <https://doi.org/10.1016/j.enpol.2010.02.022>
- Lane, T. & Hicks, J. (2017). *Community Engagement and Benefit Sharing in Renewable Energy Development: A Guide for Renewable Energy Developers*. Department of Environment, Land, Water and Planning, Victorian Government, Melbourne
- López, S. & Patzy, F. (2021). *Carbón Térmico En Colombia: Implicaciones Para La Economía de La Guajira y Cesar*. <https://resourcegovernance.org/analysis-tools/publications/carbon-termico-en-colombia-implicaciones-para-la-economia-de-la-guajira-y-cesar>
- Mejía, E. (2022). Wayús completan 10 días de protestas en el parque eólico Guajira 1. *El Tiempo*. <https://www.eltiempo.com/colombia/otras-ciudades/la-guajira-protestas-por-parque-eolico-en-cabo-de-la-vela-645229> (accessed date: 6 May 2023)
- Mejía, E. (2023). Los proyectos de energía eólica en La Guajira son desconocidos por la comunidad. *El Tiempo*. <https://www.eltiempo.com/amp/colombia/otras-ciudades/los-proyectos-de-energia-eolica-en-la-guajira-son-desconocidos-por-la-comunidad-773220> (accessed date: 6 May 2023)
- Mendoza, D. (2022). Sin chivos ni cementerios: La energía eólica en los dominios del pueblo Wayuu de Colombia. <https://www.iwgia.org/es/recursos/publicaciones/4899-sin-chivos-ni-cementerios.html>
- Ministerio de Ambiente y Desarrollo Sostenible. (2018). *Manual de Compensaciones del Componente Biótico*. https://archivo.minambiente.gov.co/images/BosquesBiodiversidadyServiciosEcosistemicos/pdf/manual_de_compensaciones/Manual_de_compensaciones_del_componente_bi%C3%B3tico.pdf (accessed 13 March 2022)
- Ministerio de Minas y Energía. (2021). *Transición Energética: un Legado para el Presente y el Futuro de Colombia*. <https://www.minenergia.gov.co/es/micrositios/enlace-legado-transicion-energetica/> (accessed 30 June 2023)
- Ministerio de Minas y Energía. (2023a). Comunidades Wayuu, empresas del sector energético y el Gobierno del Cambio firman pacto por la Transición Energética Justa en La Guajira. <https://www.minenergia.gov.co/es/sala-de-prensa/noticias-index/comunidades-wayuu-empresas-del-sector-energ%C3%A9tico-y-el-gobierno-del-cambio-firman-pacto-por-la-transici%C3%B3n-energ%C3%A9tica-justa-en-la-guajira/> (accessed 30 June 2023)
- Ministerio de Minas y Energía. (2023b). Se reactiva construcción del Parque Eólico Windpeshi en La Guajira gracias a diálogos con comunidades. <https://www.minenergia.gov.co/es/sala-de-prensa/noticias-index/se-reactiva-construcci%C3%B3n-del-parque-e%C3%B3lico-windpeshi-en-la-guajira-gracias-a-di%C3%A1logos-con-comunidades/>
- Ministerio de Minas y Energía. (2023c). Transferencias del sector eléctrico con destino a los municipios y distritos beneficiarios. <https://www.minenergia.gov.co/es/servicio-al-ciudadano/foros/transferencias-del-sector-el%C3%A9ctrico-con-destino-a-los-municipios-y-distritos-beneficiarios/>
- Ministerio de Minas y Energía. (2023). Documentos de la Hoja de Ruta de la Transición Energética Justa. <https://www.minenergia.gov.co/es/servicio-al-ciudadano/foros/documentos-de-la-hoja-de-ruta-de-la-transici%C3%B3n-energ%C3%A9tica-justa/>
- Monsalve, M. (2023). El viento de la transición energética lleva disputas a La Guajira colombiana. *El País*. <https://elpais.com/america-futura/2023-05-14/el-viento-de-la-transicion-energetica-lleva-disputas-a-la-guajira-colombiana.html> (accessed 24 May 2023)

- Muñoz Cabré, M. & Vega-Araújo, J. (2022). Considerations for a just and equitable energy transition. <https://www.sei.org/publications/just-equitable-energy-transition/>
- Noble, B., Ketilson, S., Aitken, A. & Poelzer, G. (2013). Strategic environmental assessment opportunities and risks for Arctic offshore energy planning and development. *Marine Policy*, 39(1). 296-302. DOI: <https://doi.org/10.1016/j.marpol.2012.12.011>
- OECD, (2023). *Líneas Directrices de la OCDE para Empresas Multinacionales sobre Conducta Empresarial Responsable*. Paris: OECD Publishing. <https://doi.org/10.1787/7abea681-es>
- Perkins Coie LLP. (2023). BOEM issues proposed sale notice with novel bidding credits for Gulf of Mexico offshore wind. <https://www.perkinscoie.com/en/news-insights/boem-issues-proposed-sale-notice-with-novel-bidding-credits-for-gulf-of-mexico-offshore-wind.html>
- Portafolio. (2023). Línea Colectora logró la totalidad de consultas para su construcción. Infraestructura. *Portafolio*. <https://www.portafolio.co/economia/infraestructura/linea-colectora-se-completo-el-100-de-las-consultas-previas-en-la-guajira-585124> (accessed 30 June 2023)
- Preciado, A. & Lattanzio, D. (2021). La importancia de la debida diligencia. <https://www.ambitojuridico.com/noticias/especiales/la-importancia-de-la-debida-diligencia>
- Presidencia de Colombia. (2020). Directiva presidencial No. 08. <https://estudiojuridicomym.com/wp-content/uploads/DIRECTIVA-PRESIDENCIAL-No-08-DEL-9-DE-SEPTIEMBRE-DE-2020.pdf>
- Presidencia de Colombia. (2022). Decreto 1302. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=190528>
- República de Colombia. (1991). *Constitución Política de Colombia*. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=4125>
- República de Colombia. (2014). Decreto 1953. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=59636>
- República de Colombia. (2015). Decreto 1076. <https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=78153>
- Rodríguez, G. (2015). Los derechos de los pueblos indígenas de Colombia. Luchas, contenido y relaciones. Editorial Universidad del Rosario. <https://editorial.urosario.edu.co/gpd-los-derechos-de-los-pueblos-indigenas-de-colombia-luchas-contenido-y-relaciones.html>
- Schwartz, S. (2021). Wind extraction? Gifts, reciprocity, and renewability in Colombia's energy frontier. *Economic Anthropology*, 8(1). 116-32. DOI: <https://doi.org/10.1002/sea2.12192>
- SER Colombia. (2023). Proyectos de energías renovables 2023-2024. Oportunidades y desafíos para su ejecución. <https://ser-colombia.org/wp-content/uploads/2023/05/REVISTA-2.pdf>
- SIEL. (2023). Seguimiento a proyectos de generación en desarrollo. Marzo 2023. <https://www1.upme.gov.co/siel/Pages/Seguimiento-proyectos-generacion.aspx> (accessed 18 June 2023).
- SIEL. (n. d.). Inscripción de proyectos de generación. UPME. <https://www1.upme.gov.co/siel/Pages/Inscripcion-proyectos-generacion.aspx> (accessed 18 June 2023)
- Sovacool, B. K., Hess, D. J., Cantoni, R., Lee, D., Brisbois, M. C., Walnum, H. J., Freng Dale, R., Johnsen Rygg, B., Korsnes, M., Goswami, A., Kedia, S. & Goel, S. (2022). Conflicted transitions: Exploring the actors, tactics, and outcomes of social opposition against energy infrastructure. *Global Environmental Change*, 73. 102473. DOI: <https://doi.org/10.1016/j.gloenvcha.2022.102473>
- The Renewables Consulting Group. (2022). *Hoja de Ruta para el Despliegue de la Energía Eólica Costa Afuera en Colombia*. Colombia: Ministry of Mines and Energy. <https://www.minenergia.gov.co/static/ruta-eolica-offshore/src/document/Espa%C3%B1ol%20Hoja%20de%20ruta%20energ%C3%ADa%20e%C3%B3lica%20costa%20afuera%20en%20Colombia%20VE.pdf>
- Transparencia por Colombia. (2023). Hacia una lectura de la transición energética desde una perspectiva anticorrupción. https://transparenciacolombia.org.co/wp-content/uploads/2023/10/TEdesdeperspectivaAnticorrupcion_versFINAL.pdf
- UPME. (2019). Anexo 3: Metodología y resultados de la estimación del Índice de Cobertura de Energía Eléctrica ICEE – 2018. https://www1.upme.gov.co/siel/PIEC/2019-23/2019/Anexo3_Metodologia_ICEE_2018_paraComentariosDic5.pdf
- UPME. (2023). *Actualización Plan Energético Nacional (PEN) 2022-2052*. https://www1.upme.gov.co/DemandayEficiencia/Documents/PEN_2020_2050/Plan_Energetico_Nacional_2020_2050.pdf
- Vega-Araújo, J. & Heffron, R. J. (2022). Assessing elements of energy justice in Colombia: A case study on transmission infrastructure in La Guajira. *Energy Research & Social Science*, 91. 102688. DOI: <https://doi.org/10.1016/j.erss.2022.102688>
- Vega-Araújo, J. & Muñoz Cabré, M. (2023). *Energía Solar y Eólica en Colombia: Panorama y Resumen de Políticas 2022*. SEI Report. Stockholm Environment Institute. DOI: TK. https://www.sei.org/publications/energia-solar-eolica_colombia-2022/
- Vega-Araújo, J., Muñoz-Cabré, M., Lerma, R. & Ramirez, Y. (2023). Wind energy and Wayuu Indigenous communities: challenges in La Guajira. Feature (13 July). Stockholm Environment Institute. <https://www.sei.org/features/wind-energu-wayuu-la-guajira/>

Vélez Gómez, L. D. & Vélez Henao, J. A. (2014). ¿Son las transferencias del sector hidroeléctrico un instrumento eficaz para la protección de los recursos naturales? *Gestión y Ambiente*, 17(2). 107-18

Vergara, W., Deeb, A., Toba, N., Cramton, P. & Leino, I. (2010). *Wind Energy in Colombia*. Washington, D.C.: The World Bank. <https://documents1.worldbank.org/curated/en/766921468018592029/pdf/558420PUB0wind1IC0dislosed071221101.pdf>

XM. (2023). CEN por área operativa y tipo fuente. <https://sinergox.xm.com.co/oferta/Paginas/Informes/CapacidadDpto.aspx> (accessed 24 May 2023)

Yanguas Parra, P., Arond, E., Strambo, C. & Vega-Araújo, J. (2021). *El Ocaso del Carbón y la Necesidad de una Transición Justa en Colombia*. SEI Report. Stockholm Environment Institute. <https://www.sei.org/publications/el-ocaso-del-carbon-y-la-necesidad-de-una-transicion-justa-en-colombia/>

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