GREEN HYDROGEN IN COLOMBIA – SOCIAL STUDY – AKUAIPPAHY PROJECT

Executive Summary: Sociopolitical, Ethnic, and Security Prefeasibility Analysis

Federal Ministry
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VIRIDI

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1 Context and scope

This executive summary integrates the findings of the consulting engagement carried out by Trust for Viridi RE Colombia as part of the prefeasibility analysis for the AkuaippaHy project:

- (i) Context Characterization — structural diagnosis of the departmental territory.
- (ii) Sociopolitical, Cultural, and Ethnic Characterization — ethnic scouting of the four polygons.
- (iii) Sociopolitical, Intercultural, and Security Risk Analysis for the four area alternatives.

The three documents constitute the Social Analysis Component of the prefeasibility process and should be read as an integrated set.

The analysis was conducted during the prefeasibility phase, without a definitive footprint, technical designs, or construction schedule. For this reason, it does not assess specific project impacts; rather, it identifies territorial sensitivity conditions and risk scenarios that could be activated depending on future decisions regarding design, location, and stakeholder engagement.

2 Methodological framework

Trust's methodology for sociopolitical risk analysis begins by identifying critical factors in the sociopolitical context through the analysis of secondary sources and the collection of primary information in the field (ethnic scouting). Subsequently, for the risk analysis, the methodology identifies the project's exposed assets, analyzes vulnerabilities (both contextual and internal), classifies threat agents, and assesses the magnitude of each risk by correlating its likelihood of occurrence (1–5 scale) with its potential impact (1–5 scale).

The risk analysis uses two differentiated categories:

- **Risks to the context:** those that the company could cause, or contribute to causing, for communities, territories, and institutions as a result of its direct intervention.
- **Business risks:** factors in the sociopolitical, ethnic, security, and institutional context that bear on the company and may affect its operational continuity, reputation, and legal viability.

3 Structural context variables

The context analysis identified 53 critical factors grouped into eight dimensions that condition any intervention in the department of La Guajira. These factors are common to the four polygons and constitute the structural framework within which the specific risks of each alternative are interpreted.

Table 1. Structural context variables of La Guajira

Dimension	Critical factors
Sociopolitical	CF1 · Low levels of access to infrastructure, basic services, education, and health CF2 · High levels of structural poverty CF3 · Asymmetries in territorial development from an intercultural and rights-based perspective CF4 · Structural humanitarian emergency CF5 · Food insecurity CF6 · Historical violation of human rights
Geostrategic	CF7 · Dispersed territorial occupation CF8 · Border fluidity and limited state capacity to manage population flows CF9 · Migration and pressure on local services CF10 · Underutilized geostrategic potential CF11 · Limited integration of the relationship with the Caribbean into development strategies

	CF12 · Venezuela and United States situation
Socioeconomic	CF13 · Weak productive diversification policies CF14 · High incidence of informal economy CF15 · Strong economic dependence on the mining and energy sector CF16 · Commitment to diversifying the energy matrix in La Guajira
Socioenvironmental	CF17 · Water deficit and weaknesses in water governance CF18 · Coastal erosion and climate migration CF19 · Limited capacity for climate change mitigation and adaptation
Institutional and governance	CF20 · Departmental institutional weakness and weak coordination with national entities CF21 · Limited institutional capacity to guarantee rights CF22 · Institutional corruption phenomena CF23 · Institutional co-optation by criminal structures CF24 · Loss of institutional legitimacy CF25 · Ineffectiveness of public investment CF26 · National political context (2026 elections)
Ethnic and intercultural	CF27 · Territorial ethnic ancestry CF28 · Coexistence of Indigenous and Afro-Guajiro ethnic groups CF29 · Intercultural misunderstanding between ethnic communities and other actors CF30 · Challenges in understanding the representativeness and leadership of the Wayuu people CF31 · Confusion regarding the role of new forms of Wayuu Indigenous leadership CF32 · Kinship and territorial conflicts due to the return of Wayuu people from Venezuela CF33 · Re-ethnicization and consolidation of constitutional protection for Afro-Guajiro peoples CF34 · Wayuu community and territorial fragmentation CF35 · Formal recognition processes for Afro-Guajiro communities CF36 · Gaps and tensions arising from recognition of the Black Line
Socioenvironmental conflict with the energy sector	CF37 · Permanent social conflict CF38 · Collective ideological action CF39 · Deepening intra- and inter-clan conflicts due to the arrival of energy projects CF40 · Asymmetries in access to information in the context of the energy transition CF41 · Social opposition and vetoes against business projects CF42 · Community expectations regarding the energy industry CF43 · Ineffectiveness of interventions for sustainable territorial development CF44 · Differences in the valuation of territory and its natural resources CF45 · Disagreement over forms of fair compensation with Indigenous communities CF46 · Coexistence of normative systems CF47 · Difficulties in enforcing agreements between companies and communities CF48 · Inadequate practices by intermediaries in stakeholder engagement CF49 · Entry of new actors into the territory
Security, public order, and human rights	CF50 · Presence and influence of armed actors CF51 · Coexistence of illegal economies with the legal socioeconomic structure CF52 · Deterioration of public order CF53 · Social and territorial control by illegal armed groups

Source: *General Characterization of the Sociopolitical Context — AkuaippaHy Project, Trust / GIZ H2Uppp, February 2026.*

In greater detail, the analysis identifies the six most relevant critical factors, which shape context dynamics and are those most directly associated with risk.

Table 2. Six most relevant critical factors

Institutional weakness and corruption	Documented history of co-optation of local public authorities in Uribia, Manaure, Riohacha, and Dibulla. Any institutional endorsement requires independent verification before it can serve as support for the project; local political agreements do not guarantee social legitimacy.
Structural water scarcity	A deficit the State has not resolved, in breach of Constitutional Court Judgment T-302. Any action by the team in the territory is read as an expectation of a water solution: water, not electricity, is the entry point for stakeholder engagement.
Structural poverty and service deficit	High unmet basic needs, low formal employment supply, and internal migration due to resource scarcity. Immediate expectations of compensation have been established by previous sector projects; the risk is that the project will be interpreted as a substitute for the State.
Ethnic diversity and fragmentation of authorities	Coexistence of the Wayuu people, Sierra Nevada peoples (Kogui, Wiwa, Arhuaco, Kankuamo), Afro-descendant communities, and campesino communities, with their own normative systems and territorial boundaries that transcend administrative divisions. There is no single interlocutor for any polygon.
Armed actors and illegal economies	ACSN and EGC (Clan del Golfo) exert territorial control in Alta Guajira, the Sierra Nevada, and the Caribbean Trunk Road corridor. Drug trafficking, smuggling, and illegal mining networks operate under armed protection and determine access conditions for each polygon.
Accumulated conflict associated with the mining and energy sector	Reputational liabilities inherited from previous operations — Cerrejón, AES-Irraipa, Ecoplanet, Enel/Chemesky, Wimpeshi/Ecopetrol — create structural distrust and biased engagement patterns before the project's first contact with any community.

4 Ethnic scouting findings

The ethnic scouting conducted an initial exploratory territorial characterization exercise across the four polygons of interest. Its central finding is that La Guajira is not a homogeneous territory: each polygon has a different ethnic composition, conflict dynamic, and set of access conditions. The ethnic scouting collected direct information from the four polygons through field visits, interviews with traditional authorities and leaders, georeferencing, and sociocultural characterization.[1]

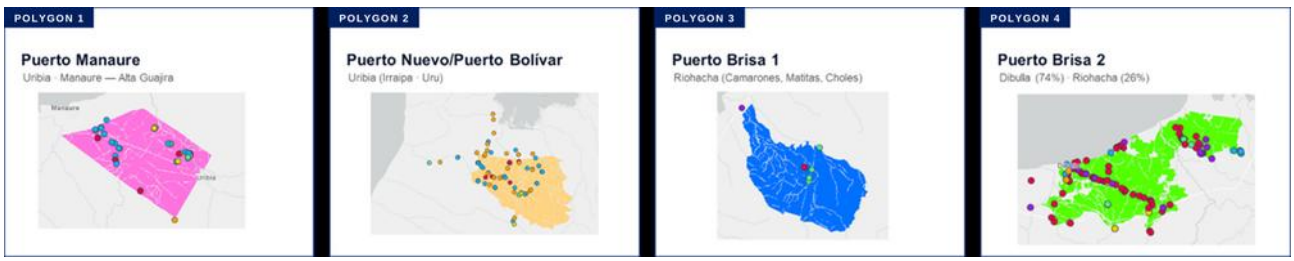


Figure 1. Polygons assessed in the ethnic scouting

[1] Given the scope of the consulting engagement, the scope of the scouting is limited and should be deepened once the decision is made to move forward with the project in any of the four polygons. The findings presented here are based on the information that could be collected during the consulting engagement.

4.1 Puerto Manaure

This territory is entirely populated by Wayuu communities belonging to the Alta y Media Guajira Indigenous Reserve. The scouting directly characterized 16 communities in the municipalities of Uribia and Manaure, and identified by reference another 77 communities in the immediate area of influence. In all the communities visited, the priority and unanimous demand was access to water: this is not an expected benefit, but rather the basis for subsistence, productive activities, and educational development. One sector of the polygon — Tulumana and areas north of the Camino Verde sector — could not be visited due to time constraints and the adverse position expressed by some communities toward energy projects. The conflict between the Epinayu clans of Coropontain and Kasaoulechon is active and documented. The general disposition toward the project was favorable in the communities visited.

4.2 Puerto Nuevo/Puerto Bolívar

It covers 15,600 hectares in the districts of Irraipa and Uru in the municipality of Uribia, with 34 communities identified: 5 directly characterized and 29 identified by reference. The scouting georeferenced 52 infrastructure points and documented 11 cemeteries — the highest density of ancestral cemeteries in the project — which are markers of ancestral ties and clan territoriality with direct implications for any intervention. The communities have prior experience with energy projects in the area, which has generated structured expectations regarding compensation and benefits. The concept of green hydrogen requires a specific pedagogical strategy to support community understanding. The central limitation of the scouting was the high percentage of the community universe that was not visited.

4.3 Puerto Brisa 1 (Riohacha)

It consists entirely of individual private properties in the districts of Camarones, Choles, Matitas, and Arroyo Arena in the District of Riohacha. The scouting georeferenced 12 points within the polygon and 17 external properties. No organized ethnic communities with a formal presence were identified within the direct area. Land management is comparatively more expeditious because the area consists of individual owners with defined boundaries and clear title. However, access to the properties required prior coordination, and the scouting was unable to complete the survey of the Matitas sector due to security conditions. The scouting recommendations are to implement early planning, establish formal and verifiable agreements with each owner, and rigorously document technical, socioeconomic, and land-related aspects.

4.4 Puerto Brisa 2 (Dibulla)

This is the project's most systemically and organizationally complex polygon. It covers 13,254.67 hectares across two jurisdictions: Dibulla (9,460.82 ha, 71%) and the District of Riohacha (3,271.65 ha, 29%), which requires coordination with two municipal land-use plans (POT) and two different local administrations. The scouting documented more than 25 active organizations: Afro-descendant community councils, Community Action Boards (JAC), productive associations, and ethnic organizations from the Sierra Nevada. No community expressed opposition to the project during the characterization phase. However, the scouting identifies two structural conflicts that condition stakeholder engagement: the territorial tension between the Sierra Nevada and Afro-descendant community councils over the dispute related to Decree 1500-2018 and the Black Line, and the fragmentation of the Wiwa community between the Arimaka and Salamanca factions. The territory's strength is its social capital: the organizational density and productive vocation of its communities provide a real basis for building shared-value proposals from the outset of engagement.

5 Risk analysis findings

The analysis assessed 24 risk typologies for each of the four polygons. A summary of the most relevant risks for each polygon is presented below.

5.1 Puerto Manaure

- Water is the trigger that connects the entire extreme-risk band. R19 and R6 are not two separate risks: they are the same reality viewed from two angles.
- The fragmentation of the Wayuu governance system means that any engagement error may have irreversible consequences: across 93 communities with overlapping clans and Achonyus, there is no single interlocutor.
- The presence of the EGC and the ACSN determines whether the team can operate in the territory, as documented in Early Warning 010-2025 (Defensoría del Pueblo).

Table 3. Most relevant risks — Puerto Manaure

R19	Pressure on the project to cover state responsibilities (structural water deficit; Constitutional Court Judgment T-302).	**Very high**
R6	Strikes, blockades, and collective actions against the project when expectations are not met.	**Very high**
R9 **R10**	Active/latent tenure disputes and invalid or challengeable agreements due to ambiguity in clan representation.	**Very high**
R18	Uncertainty due to co-optation of local public authorities in Uribia and Manaure.	**Very high**
RE3 **RE5**	Interference with productive use of the territory and disruption of functional corridors; misinterpretation of impact.	**Very high**
RE4	Intra- and inter-community disputes induced or activated by the project.	**Very high**

5.2 Puerto Nuevo/Puerto Bolívar

- These are the project's highest risks. The 15,600 ha operate as an integrated grazing system where there is no "technically available area."
- Very high impact across three fronts: R1 (direct armed interference), RE2 (impact on cemeteries, a sensitive issue in the Wayuu worldview), and RE5 (85% of the territory with unknown uses).
- The low level of theft is misleading: it does not indicate security; it indicates consolidated territorial armed control that inhibits isolated crime.

Table 4. Most relevant risks — Puerto Nuevo/Puerto Bolívar

R1	Direct interference by illegal armed actors in field activities — the project's only impact score of 5.	**Very high**
R2 **R6**	Access restrictions due to armed control and collective strikes/blockades against the project.	**Very high**
R4 **R9**	Use of the polygon for illegal activities; active or latent ownership and tenure disputes.	**Very high**
R10 **R12**	Invalid or challengeable agreements; accumulated structural distrust toward sector projects.	**Very high**
R15 **R16** **R18** **R19**	Community pressure, instrumentalization by third parties, institutional co-optation, and pressure to cover State responsibilities.	**Very high**

RE2 **RE3** **RE4** **RE5**	Interference with the 11 active cemeteries, disruption of corridors, induced disputes, and misreading of the territory (15% characterized).	**Very high**

5.3 Puerto Brisa 1 (Riohacha)

- A qualitatively different profile from polygons 1, 2, and 4: the complexity is not ethnic, but operational and related to physical security.
- The highest risks are geographically locatable and potentially manageable through field intelligence; they are not structural.
- Extortion has the highest impact within the high-risk band: in the illegal economy of rural properties, a single informal payment compromises the project's legality.

Table 5. Most relevant risks — Puerto Brisa 1 (Riohacha)

R1	Direct interference by illegal armed actors in field activities — EGC and ACSN in dispute over the Caribbean Trunk Road corridor.	**Very high**
R2	Restriction of access and mobility due to armed territorial control over the polygon's corridors.	**Very high**
R14	Social restriction of territorial access: urban landowners delegate to foremen without authorization.	**Very high**
R18	Uncertainty due to co-optation of local public authorities in the District of Riohacha.	**Very high**
RE3	Interference with productive use — the polygon is Riohacha's breadbasket: active cattle ranching, dairy production, and fruit crops in operation.	**Very high**

5.4 Puerto Brisa 2 (Dibulla)

- Structural infeasibility is not the sum of manageable problems: the highest risks are structural, interconnected, and cannot be managed within a near-term horizon.
- Convergence of three mutually reinforcing conditions: hegemonic armed control that charges every economic actor, ethnic conflict among four groups, and the legal constraint of differentiated prior consultation.
- Affecting a sacred site not only triggers ethnic rejection but also immediate legal consequences under the Resolution of March 27, 2026.

Table 6. Most relevant risks — Puerto Brisa 2 (Dibulla)

R9	Territorial disputes: the Sierra vs. Afro-descendant conflict, threats against Los Nonis, and violent concentration by banana and oil palm producers converge.	**Very high**
R11	Intercultural complexity: four incompatible systems of authority in the same space.	**Very high**
R16	Instrumentalization by third parties with their own agendas: tourism, private reserves, and the banana and oil palm agroindustry.	**Very high**

R1 **R2** **R3** **R4**	Direct armed interference, access restriction, extortion, and illegal use — under hegemonic ACSN control.	**Very high**
R18	Institutional co-optation in the jurisdictions of Dibulla and Riohacha.	**Very high**
RE2 **RE3** **RE4** **RE5**	Interference with the 34 sacred sites of the Black Line (active legal protection); disruption of corridors; induced disputes; misreading of the territory.	**Very high**

6 Differential conditions by polygon

None of the four polygons presents conditions for unrestricted entry. All require the fulfillment of minimum prior conditions before the team can move forward with a manageable level of risk. The following analysis is not a recommendation for exclusive selection: it is a map of differential conditions that the team should consider when defining the project development strategy.

1

Puerto Brisa 1 (Riohacha) — Comparatively more favorable alternative under known conditions

It is the polygon with the lowest concentration of very high-magnitude risks (5 in total), all operational and physical-security related, with none of ethnic origin. Its favorable position is conditioned by a significant information gap: only 10 of approximately 200 properties were verified, and the scouting could not be completed.

Minimum conditions to move forward: (i) land/property verification of the uncharacterized universe; (ii) security assessment in restricted sectors, especially Matitas; (iii) analysis of water risk concerning the Riohacha aqueduct.

2

Puerto Manaure — Viable with an intercultural strategy and water-related proposal

It has 10 very high-magnitude risks, but also real comparative advantages: prior positive engagement with Cerrejón and Promigas, a Wayuu self-governance system with a known protocol, and a demand that can be addressed from the first contact: water.

Minimum conditions: (i) prior water-related due diligence; (ii) validation of legitimate authorities by community; (iii) clan-based reading of the polygon and mapping of the Epinayu–Kasaoulechon conflict; (iv) permanent security monitoring.

3

Puerto Nuevo/Puerto Bolívar — High complexity with a limited window in the eastern sector

The project's most critical security profile (15 very high risks). Operation in the western sector is infeasible at the current stage. The eastern sector (~7,000 ha of 15,600) was identified as an area of relatively lower conflict.

A reduced-polygon strategy could be evaluated at a later stage, conditional on completing the characterization of the 85% of the community universe that was not visited.

4	**Puerto Brisa 2 (Dibulla) — Structural conditions that cannot be managed within the prefeasibility horizon** The simultaneous convergence of hegemonic ACSN armed control, active ethnic conflict among four groups with incompatible authorities, and the Resolution of March 27, 2026 requiring differentiated prior consultation creates conditions that cannot be resolved within the prefeasibility horizon. *Reassessable in the medium term under four concurrent conditions: resolution of the Sierra–Afro-descendant conflict, modification of Dibulla's Basic Land-Use Scheme (EOT), implementation of a security strategy aligned with human rights standards, and completion of the differentiated prior consultation process with the four groups.*

7 Strategic conclusions

The identified risks are inherent territorial conditions that predate the project. The distinction between territorial risk and project-generated risk is methodologically fundamental: what is assessed here are the contextual conditions the project will encounter upon arrival, not the impacts the project will generate on that context.

Risks related to leadership, representation, and engagement must be managed before entering the territory, not during the process. Arriving in the field without validation of authorities, clan mapping, water-related due diligence, and a security protocol does not reduce the risks: it activates them from the first contact, at the moment when the process is most vulnerable.

The magnitude of risks varies according to the project phase. During construction stages, risks that currently have a moderate magnitude may escalate significantly. It is recommended that the risk analysis be updated at every project phase change, with emphasis on security, armed actors, the status of prior consultation processes, and the evolution of community expectations.



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