

## Environmental and Social Review Summary (ESRS) Atlas Solar PV Project (GIP) - COLOMBIA

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### 1. General Information of the Project and Scope of IDB Invest's Environmental and Social Review

The proposed transaction involves financial support to design, build, operate and maintain: (i) Shangri La solar power plant, with a capacity of 160 ("MW") of alternate current and (ii) a 230 ("kV") 13.1 km-long transmission line ("TL")<sup>1</sup> to connect the plant with the Colombian interconnected grid, with a connection bay at the already existing 230 kV Mirolindo Substation (the "Project"). The Project is located in the municipalities of Ibagué and Piedras, in the Tolima department, 200 km away from Bogotá, Colombia's capital city, and 310 km from the Buenaventura port, on the Pacific coast.

The Project, sponsored by Atlas Renewable Energy ("Atlas", the "Client" or the "Company"), will involve a 15-year power purchase agreement ("PPA") with ISAGEN, the largest power generation company in Colombia. It will be built under separate engineering, procurement, and construction ("EPC") agreements for the plant and for the transmission line.

The Environmental and Social Due Diligence ("ESDD") process involved the following aspects, among others: (i) meetings with the Client's personnel; (ii) a visit to the site, which included interviews with owners and representatives of the communities and the municipalities from the Project area of influence; and (iii) the review of the information made available by the Client, such as: environmental permits and licenses, an Environmental Impact Assessment ("EIA"), environmental and social ("E&S") management plans and programs, among other relevant documents.

### 2. Environmental and Social Categorization and Rationale

According to IDB Invest's Environmental and Social Sustainability Policy, the Project has been classified as of category B, as it may generate the following risks and impacts, among others: (i) loss of vegetation and natural habitat; (ii) changes in the use of the land; (iii) interference with traffic in neighboring communities; (iv) noise and dust emissions during construction; (v) generation of waste and wastewater; (vi) possible pollution of the soil and water resources; (vii) increasing risk of road accidents during the construction phase; (viii) increasing risk of accidents involving workers during the construction and operation phases; and (ix) erosion. These impacts and risks are estimated to be of medium to high intensity, limited to Project facilities, mostly reversible and mitigable with the measures available in the context of the transaction.

The Performance Standards ("PS") triggered by the Project are: (i) PS1: Assessment and Management of Environmental and Social Risks and Impacts; (ii) PS 2: Labor and Working

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<sup>1</sup> 11 km running overhead and 2.1 km running underground.

Conditions; (iii) PS3: Resource Efficiency and Pollution Prevention; (iv) PS4: Community Health, Safety, and Security; (v) PS5: Land Acquisition and Involuntary Resettlement; and (vi) PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

### 3. Environmental and Social Context

#### 3.1 General characteristics of the Project's site

The Project is located in the rural community *vereda* of La Picalaña in the municipality of Ibagué and in the *vereda* Estación Doima, in the municipality of Piedras, both of rural features as well. The plant takes up a total area of 254.07 ha, distributed into three sites historically used for agricultural production and cattle raising<sup>2</sup>: (i) El Reposo (Ibagué and Piedras); (ii) Gascoña (Piedras); and (iii) Hato de Opía (Ibagué). The TL will use 6.55 ha and will require an easement as wide as 32 m. It will comprise an overhead portion with 61 support structures in the rural area and an underground portion (2.1 km) in the urban area.

The neighborhoods and *veredas* comprised in the Project area of influence have 13,752 inhabitants<sup>3</sup>, with the largest concentration living in the urban areas of the municipality of Ibagué. The area is made up of: (i) 10 territorial units ("TU") in Ibagué (9 for the TL<sup>4</sup> and 1 for an existing access road<sup>5</sup>); and (ii) one TU in Las Piedras, which corresponds to the solar power plant and an existing access road<sup>6</sup>.

The Project area of influence is located to the east of the Colombian central mountain range within the Upper Magdalena River basin in the Coello, Totare, and Opia river watersheds, and has bimodal rainfall and temperature patterns (200 mm of rainfall and temperatures between 24°C and 26°C, respectively) characteristic of altitudes of 650 m and 800 m above sea level; there are shallow water bodies, which are mainly used for domestic and recreational purposes, as well as irrigation channels and *jagüeyes*<sup>7</sup>, for agricultural uses. Additionally, there are two aquifers: Cuaternario and Abanico de Ibagué. The latter is sourced water from deep wells located at ten different points to be used in agriculture and human consumption.

The use of the land is distributed as follows: 53% is used for temporary crops (rice, corn and cane); 20% for a conservation area linked to the gallery forest coverage and secondary vegetation; 19% for extensive cattle grazing, and the remaining 8% for industrial estates, road infrastructure and services, fish farming, and residential use.

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<sup>2</sup> Large-scale rice crops and cattle raising.

<sup>3</sup> As per the 2018 national census.

<sup>4</sup> Vereda Aparco, Vereda Alto Combeima, Barrio Rincón de las Américas, Barrio Las Américas, Barrio Villas de Gualara, Barrio Los Tunjos, Barrio Picalaña and Conjuntos Madeira Campestre, Arboleda and Yarumos; and adjoining areas to Comuna 9. (Condominio Hacienda Las Victorias, apartment blocks Arboleda del Campestre and Ecociudad de la Riviera).

<sup>5</sup> Vereda Buenos Aires.

<sup>6</sup> Vereda Estación Doima.

<sup>7</sup> Well or ditch filled with water, either artificially or from natural filtrations.

### 3.2 Contextual risks

According to academic research<sup>8</sup>, up until 2016 (the year of the Peace Agreement between the FARC and the Colombian government), the central territory of the strategically located Tolima department served as a logistical corridor for guerrilla and paramilitary groups during the Colombian armed conflict. This conflict, in terms of victimization, reached its peak intensity between 1997 and 2007.

The 2021 Coexistence and Citizen Security Survey (“ECSC”, per its acronym in Spanish)<sup>9</sup> states that, whereas the nationwide victimization rate<sup>10</sup> in Colombia was estimated at 8%, Ibagué recorded a rate of 8.5%. The survey results revealed that crimes with the highest incidence in cities are related to extortion acts or attempts, robbery from individuals, vehicle theft and residence break-ins. The insecurity perception rate was 49.6% in the city of Ibagué, a relatively moderate figure compared to Cali and Bogotá D.C., where people reported feeling more insecure, at 84.1% and 83.8%, respectively.

The contextual risk assessment performed as part of the Project ESDD identifies two components of a certain risk level in the department of Tolima: (i) child labor (high); and (ii) social cohesion (moderate). The assessment highlights risks related to social cohesion, inequality of opportunities, unfulfilled social demands, and lack of effective communication. These risks could affect citizen participation in the project’s development, and community engagement during its operation phase. The assessment also identifies national-level risks concerning workers’ rights and local-level risks related to child labor<sup>11</sup>.

Therefore, the Client will carry out a security risk assessment to include: (i) the identification of potential risks associated with security and violence (group or collective violence, violent crimes and reprisals); (ii) the identification of other contextual risks; (iii) an analysis of the risks derived from the security measures implemented by the Company for those inside and outside the facilities; and (iv) the training and equipment needs of security personnel.

## 4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures

### 4.1 Assessment and management of environmental and social risks

The Project has an environmental license<sup>12</sup> approved by the National Authority of Environmental Licenses (“ANLA” per its acronym in Spanish) for: (i) the photovoltaic plant; (ii) the step-up substation; (iii) a new 19.43 km-long internal access road; (iv) the transmission line; (v) 10 temporary

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<sup>8</sup> Hernández, Arnulfo and Bermudez, Andrés Felipe. “Análisis del conflicto armado interno en la provincia Ibagué entre 1998-2016, y el estado social de derecho y de justicia”. University of Ibagué. 2019. Pages 13-23.

<sup>9</sup> Encuesta de Convivencia y Seguridad Ciudadana (“ECSC”) – 2021 reference period. National Administrative Statistics Department (DANE in Spanish), 2023. [https://www.dane.gov.co/files/investigaciones/poblacion/convivencia/2021/Bol\\_ECSC\\_2021.pdf](https://www.dane.gov.co/files/investigaciones/poblacion/convivencia/2021/Bol_ECSC_2021.pdf)

<sup>10</sup> Percentage of people aged 15 and older who have suffered crime at least once.

<sup>11</sup> According to data from the National Administrative Department of Statistics (DANE), the extended child labor rate in Tolima for 2019 is 9.1%, which speaks of 10,133 cases of child labor, i.e. the amount of boys, girls and teenagers involved in dangerous activities (2.2%) plus boys, girls and teenagers doing house work for 15 hours or more a week (6.9%).

<sup>12</sup> Resolution 01543 of July 15, 2022. Including watercourse occupation and forest utilization permit.

access roads for the transmission line installation; (vi) the connection bay; and (vii) the temporary ancillary facilities. Additionally, it has the following permits: (i) declaration of public utility<sup>13</sup>; (ii) permit to carry out road improvements in<sup>14</sup> Ibagué and Picalaña; (iii) a civil aviation authorization<sup>15</sup>; (iv) permit for intervention and occupation of public space in the municipality of Ibagué<sup>16</sup>; certificate of non-applicability of prior consultation<sup>17</sup> and (v) construction licenses<sup>18</sup>..

The Project will be executed in four phases: (i) Pre-construction, which started in 2023 and involves negotiating over land, sites, and easements, updating the E&S baselines and obtaining the construction permits; (ii) Construction, starting in July 2024 and for 18 months; (iii) Operation and Maintenance, starting in December 2025 and lasting 30 years; and (iv) Decommissioning, expected to be executed once the Project lifecycle is completed and estimated to last for one year.

#### 4.1.a E&S assessment and management system

The Client's E&S Management System ("ESMS") is composed of two levels: (i) a corporate level, which is based on the E&S policies and procedures for project development; and (ii) a Project level, which is based on the programs outlined in the Environmental Management Plan ("EMP") as part of the EIA.

#### 4.1.b Policy

The Client has established the following policies: (i) an Environmental, Health and Safety ("EHS") policy; (ii) a diversity and inclusion policy; (iii) an anti-corruption policy; (iv) a goods and services procurement policy; (v) a communications policy; and (vi) a staff selection and recruitment policy, which sets forth the Company's commitment to the principles of equal opportunities, respect for diversity and compliance with ethical and regulatory standards supporting the E&S management strategy. The Client has publicly stated<sup>19</sup> its commitment through a business model aligned with some of the UN Sustainable Development Goals ("SDG")<sup>20</sup>.

The Project has developed a sustainability policy, which expresses its commitment to prioritizing good E&S, and occupational health and safety ("OHS") performance, as well as to protecting human rights throughout the project phases. This includes: (i) complying with the applicable regulations and other E&S and OHS requirements, (ii) identifying and assessing E&S risks and impacts and implementing relevant screening and management measures, and (iii) reviewing the management system to guarantee continuous improvement. This policy will be communicated and disclosed

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<sup>13</sup> Resolution 1220-028301 of the Ministry of Mines and Energy.

<sup>14</sup> Resolution 20223040019175 and Resolution 20233040007255 of the National Infrastructure Agency (ANI in Spanish).

<sup>15</sup> Approving the heights of the transmission line support structures.

<sup>16</sup> Resolution 1220-2408, Resolution 1220-3478, Resolution 1220-3481 and Resolution 1220-0009 of the Secretaría de Planeación Municipal (Municipal Planning Office)/Dirección de Información y Aplicación de la Norma Urbanística (Urban Standard Application and Reporting Agency).

<sup>17</sup> Resolution ST – 1365 of October 7, 2021, of the National Authority of Prior Consultation (DANCP in Spanish)

<sup>18</sup> Resolution 73001-2-23 dated September 13, 2023, of the city of Ibagué and Resolution No. 073 of March 1, 2023, of the city of Piedras.

<sup>19</sup> <https://www.atlasrenewableenergy.com/sustainability>

<sup>20</sup> SDG 7: Affordable and Clean Energy; SDG 4: Quality Education; SDG 5: Gender Equality; 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 10: Reduced Inequalities; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action; and SDG 15: Life on Land.

across all organization levels, including the Project's contractors, suppliers and other internal and external stakeholders.

#### 4.1.c Identification of risks and impacts

##### 4.1.c.i Direct and indirect impacts and risks

These are some of the most important direct E&S impacts the Project might cause: (i) employment creation; (ii) dust emissions; (iii) solid waste and wastewater generation; (iv) habitat loss; (v) interference with road traffic; (vi) changes to the landscape; (vii) soil and water pollution; (viii) land erosion, (ix) increased risk of work-related accidents; and (x) vegetation loss.

Some of the most relevant indirect impacts are: (i) indirect employment creation; (ii) increased risk of road accidents during the Project's construction phase; (iii) sedimentation in rivers; (iv) increased cost of living in neighboring communities; (v) increased risk of sexual exploitation of women and children; (vi) disruption of natural vegetation fragments; (vii) changes to wildlife distribution and behavior; and (viii) potential disturbance to neighbors during the construction phase.

##### 4.1.c.ii Analysis of alternatives

Even though the layout does not interfere with highly populated areas, the Client did not perform an environmental analysis of alternatives to the transmission line, in accordance with the ANLA<sup>21</sup>, which considered the proposed layout to potentially generate the smallest environmental effects. However, to prevent and mitigate impacts (mainly avoiding interference with towers and posts at site boundaries), the Client, in line with the National Infrastructure Agency (ANI), opted to lay a section of the transmission line underground along the national road<sup>22</sup>.

##### 4.1.c.iii Cumulative impact analysis

There are seven projects underway in the Project's area of influence, involving different sectors (oil & gas; infrastructure; and two in solar power: one under construction<sup>23</sup> and one in planning phase<sup>24</sup>). The related cumulative impact analysis, performed under the EIA<sup>25</sup>, identified the following impacts: (i) a potential reduction of the water resources due to decreased volumes caused by changes to watercourses and potential increases in sediment load in the canals that supply water to the area of influence; and (ii) possible effects on road safety for people and wild animals on the Project access roads.

Nonetheless, the Client will update this analysis following IDB Invest's "Practical Guide for Cumulative Impact Assessment in Latin America and the Caribbean". It will identify the impacts that each selected project could cause on each valued ecosystem component ("VEC") of the

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<sup>21</sup> Registration 20201081539-2-000 with the ANLA of April 28, 2021, approving the Project's non-applicability of the analysis of alternatives.

<sup>22</sup> Ibagué – Doima section.

<sup>23</sup> ESCOBAL

<sup>24</sup> ALVARADO

<sup>25</sup> As per the CONESA 2010 methodology

environmental components that would be affected by the activities performed under the EIA. Additionally, the Client will prepare a cumulative impact mitigation plan, which, although mainly executed by the developers of the projects included in the analysis, will be closely monitored by the Client.

#### 4.1.c.iv Gender risks

At peak activity, the Project will require approximately 1,000 workers, who will mainly stay in hotels and residences in Ibagué, as no campsites are expected to be set up on-site. Gender-based toilets and dressing rooms will be available on site<sup>26</sup>.

The main gender risks are associated with acts of discrimination and gender-based violence, such as sexual and workplace harassment. Additionally, statistical data shows that several women in the city of Ibagué have been victims of armed conflict and forced displacement, and that over 6,000 women have been victims of domestic or intrafamily violence.

The Project ensures the inclusion of principles of gender equality and non-discrimination in its sustainability, and diversity and inclusion policies, as well as its Code of Conduct. Likewise, the work conditions plan in the ESMS has these principles at its core. The Project also has a protocol to address workplace violence and has included clauses in its agreements with Contractors requiring them to implement their own prevention and response plans for any acts of workplace violence and to initiate investigation and punishment processes when applicable.

The Client, however, will update these instruments to include, among other aspects: (i) proper prevention and management measures to ensure female employees' safety, considering isolated work posts, night shifts, work environment, transport, and access to gender-based toilets; (ii) actions to minimize gender-based harassment and social conflict risk; (iii) measures to prevent the risk of sexual exploitation of boys, girls, teenagers and other vulnerable groups; and (iv) actions to prevent the spread of transmitted diseases and infections.

In accordance with Colombian regulations, the Project will periodically manage grievances and claims from employees, as well as cases involving possible unacceptable conduct, including workplace harassment. The Client, however, will include: (i) safe channels to capture confidential or anonymous grievances; and (ii) specific provisions to guarantee that grievances related to gender-based violence are properly handled with a victim-centered approach.

#### 4.1.c.v Gender programs

The Client has a female-hire corporate program in place called "Somos parte de la misma energía", which aims to hire at least 15% of women in the overall workforce during the construction phase, through contractors. The program includes a diagnosis of the local social context to develop STEM (science, technology, engineering and math) capabilities among women.

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<sup>26</sup> Colombia regulations demand one portable restroom per 15 workers. They also require that, in case the Company employs women, suitable gender-differentiated toilets be provided.

At the Project level, this program is being adjusted and prepared for implementation. In this context, personnel selection has considered female unemployment rates in Ibagué and will define a target population focused on gender and specific vulnerability conditions.

#### 4.1.c.vi Climate change exposure

The following threats have been identified within a 5 km radius of the Project area: (i) moderate droughts, with no significant increases expected; and (ii) heat waves, with significant increases expected for the high-emission RCP<sup>27</sup> 8.5 scenario, affecting 11% of the eastern portion of the study area. However, no risks of flooding or significant increases in rainfall have been identified. Therefore, given the Project characteristics, the climate threats identified, and their degree of exposure, these do not represent a significant risk.

#### 4.1.d Management programs

The Project EMP includes the following programs for managing the biota: (i) removal of vegetation cover and clearing; (ii) forest utilization, (iii) fauna; (iv) revegetation; (v) conservation of strategic ecosystems and sensitive and/or protected areas; (vi) endemic vegetal and animal species; and (vii) hydrobiological resources and surface water quality.

For managing abiotic aspects, the EMP also includes programs related to: (i) surplus material, (ii) erosive processes, (iii) construction materials; (iv) landscape, (v) water bodies, (vi) underground water; (vii) air; (viii) solid waste; (ix) liquid waste; (x) interaction with other projects; and (xi) soil recovery.

From the social perspective, the EMP includes the following programs: (i) community and social engagement and reporting, and complaint management; (ii) E&S training for workers; (iii) E&S education and training for local communities; (iv) support for community management strengthening; and (v) management of impacts on socio-economic infrastructure.

Each program in the EMP has an associated monitoring and follow-up plan to assess the effectiveness of the measures implemented.

#### 4.1.e Organizational capacity and competency

For E&S management, Atlas has in place a structure at the regional, national and Project level. The Company has an Environmental, Social and Governance (“ESG”) Department with authority over all Colombia, consisting of: (i) three coordination areas: environmental and archeological, work and human rights, and social, with one head each; and (ii) one ESG analyst. Additionally, the responsibility over OHS issues corresponds to a managing consultant with a reporting supervisor. However, the Project’s ESG management will be supported on site and with staff from an ESG consulting firm who will report to the national ESG Department.

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<sup>27</sup> RCP stands for Representative Concentration Pathways; they are a standard set of possible modeled future scenarios, which are used to guarantee the initial conditions, historical data and forecasts used by different groups of researchers from several climate science areas.

The Client will periodically train its direct and indirect staff (contractors and subcontractors) in E&S aspects. Given that the contractors will be responsible for implementing most management programs during the Construction phase, the Client will require them to have a specialized team in E&S matters.

#### **4.1.f Emergency preparedness and response**

The Project's EIA includes emergency response procedures to: (i) identify protection priorities; (ii) roles and competencies of the internal and external staff; (iii) community disclosure programs; (iv) details on how and when to perform drills within the company, involving the communities; and (v) a risk management program for the identification of risks, reduction, monitoring, vulnerability analysis and contingency management. The plans and programs include: (i) a description of the required resources; (ii) evacuation criteria; (iii) response activation; (iv) notification mechanisms; (v) response responsibility levels according to the emergency level; and (vi) mechanisms to engage and coordinate actions with local governments for a joint response during events that exceed the Project's response capacity.

#### **4.1.g Monitoring and review**

To assess and monitor the performance of the ESMS, the Client has prepared a monitoring and review program, which establishes the audits and inspections to be executed, and the action plans to be drafted based on those results, to monitor the suggested actions and to check for their effectiveness. The Project's EMP also includes monitoring and tracking plans for each management program, to assess the effectiveness of the established measures. Notwithstanding the above, these programs will be updated to include indicators on gender, cumulative and contextual risks.

The Client will also update all monitoring and review processes against an E&S legal matrix that will be established and implemented for the Project Construction and Operation phases. It must include: (i) all the national E&S and OHS regulatory requirements; (ii) the contractual obligations and requirements derived from the financing facility; and (iii) the timely monitoring and review of those obligations and requirements.

#### **4.1.h Stakeholder Engagement**

The Client has a stakeholder engagement procedure, consisting of corporate actions to identify and analyze who they are, and determine the actions, channels and the frequency of external communications.

The Project includes a social and community reporting and engagement plan, and a complaint management plan<sup>28</sup>, which establishes: (i) the way stakeholders will be engaged; (ii) a mechanism to receive and handle complaints; (iii) the information disclosure processes; and (iv) the external communication channels. Additionally, stakeholders have been mapped and the following groups have been identified: (i) communities; (ii) enforcement agencies; (iii) municipal administrations; (iv)

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<sup>28</sup> QGCRs stands for questions, grievances, claims and requests.



foundations and non-governmental organizations; (v) owners; (vi) authorities; and (vi) education institutions. To date, the Company staff are in contact with these groups and their representatives have expressed they know the Project and agree with its development.

#### 4.1.h.i Disclosure of information

The Project: (i) maintains channels and mechanisms<sup>29</sup> to disclose the E&S information it generates; (ii) conducts disclosure actions; and (iii) has a strategy to engage with the stakeholders. The strategy includes: (i) linguistic considerations to enhance effectiveness and reach all stakeholders; (ii) a list of agreements to be reached with the representatives of those groups regarding communication; c) specific information tailored to each stakeholder group according to the Project phase; and d) detailed requirements to disclose the corporate programs, in addition to those required by law.

Nevertheless, the Project shall: (i) update these procedures to implement tools to document them during the Construction and Operation phases; and (ii) disclose the social investment programs, such as education, environment, sports promotion and capacity building, as well as the mitigation plans for associated impacts, if applicable.

#### 4.1.h.ii Informed consultation & participation

The consultation process during the environmental licensing procedure was based on the ANLA's guidelines and included: (i) project description; (ii) detailed description of major risks and impacts; and (iii) detailed measures to manage the undesired effects and to encourage positive outcomes.

Additionally, the Project: (i) will update the stakeholder map based on the updated risk and impact assessment; and (ii) will schedule public participation meetings during both the Construction and Operation phases.

#### 4.1.i External communication and grievance mechanisms

The Client has in place procedures to record external grievances as part of the Stakeholder Engagement and Information Management System. These are supported by an engagement and information process contained in the Project's environmental license, which requires a system to receive, deal with and solve the QGCRs from the communities in the area of interest. Also, it will implement a customer service office to support the existing channels to receive the QGCRs. There will be a professional in the office to take care of community relations.

Nevertheless, the Client will update its procedures to guarantee: (i) culturally adequate access for affected communities and other stakeholders; (ii) that all communications are recorded, analyzed, assessed, and responded timely; (iii) anonymity and priority attention to vulnerable groups; and (iv) that the grievances due to gender-based violence and harassment are properly addressed.

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<sup>29</sup> Telephone, Whatsapp, post, in person, brochures, billboards and public address announcements.

## **4.2 Labor and Working Conditions**

The Project's workforce is estimated to reach 1,000 workers at construction peak, over 90% of whom will be employed by contractors.

### **4.2.a Working conditions and management of worker relationships**

The Company, at corporate level and as part of its ESMS, has the following human resources procedures in place: (i) working conditions and employment; (ii) an internal mechanism to receive and manage occupational grievances; and (iii) supervision over the supply chain to set up controls over all work-related issues, including OHS matters.

#### **4.2.a.i Human resources policies and procedures**

The Company has in place a human resources policy, applicable to all its workforce, which reinforces the organization's commitment to the development of human capital to attract and retain talent, and the consolidation of an organizational culture in line with the corporate goals, mission, principles and values. It also bases its labor practices on international labor standards as well as on the guidelines of the International Labor Organization ("ILO"). It explicitly refers to the respect for the workers' collective bargaining and freedom of association rights; the need to register the workers with the social security system; the need to comply with the regulatory frameworks applicable to all its operations; and the need to adopt practices to eliminate discrimination and to provide equal opportunities, as well as to promote wellbeing, among other aspects.

The Client will prepare and disclose a human resources policy that is specific for the Construction and Operation phases of the Project.

#### **4.2.a.ii Working conditions and terms of employment**

Atlas's working conditions and corporate employment guidelines indicate that all work vacancies that are directly or indirectly created will have a description of jobs, responsibilities and expertise requirements, which will be determined by the Project needs. Each employee will be informed in writing about: (i) the working conditions; (ii) the contract term and conditions, including salary, benefits, annual leave, collective association rights as per the applicable laws in force; (iii) the formal onboarding process for the job to be performed, and the minimum contents to cover in the process (human resources policy, code of ethics and conduct, etc.); (iv) their rights and duties; (v) contact information of public agencies connected with the Project; (vi) actions to prevent discrimination and violence at the workplace; (vii) required alignment with organizational culture; and (viii) the conditions to resume work after leaves of absence.

Atlas encourages equal salary and benefits for men and women and guarantees compliance with the working conditions established in the local legislation, the best international practices and the ILO provisions.

The Client, however, will develop and disclose a human resources procedure for the Construction and Operation phases of the Project.

#### 4.2.a.iii Workers' organizations

The Client observes the legal framework that is applicable to each place where it operates. In cases where the legislation is not specific, the Company guarantees freedom of speech and the protection of its workers' rights to free association and collective bargaining. The working conditions and employment procedure are explicitly stated in its declaration of non-discrimination or retaliation for the employees who are part of or are willing to be part of a union or any other collective organization. The Client, however, will develop and disclose a human resources procedure for the Construction and Operation phases of the Project following these guidelines.

#### 4.2.a.iv Non-discrimination and equal opportunity

The Company is committed to not admitting any form of discrimination and to respecting and promoting equal opportunities for the entire workforce. In this regard, it will not make any decisions about work and employment issues based on discriminatory criteria, but on the following principles: (i) clarity about all job specifications; (ii) equal salary compensation and otherwise by means of benefits, for both men and women; (iii) equal working conditions, including access to training and promotion opportunities; and (iv) hiring of at least one woman in the social area and in field teams. The Project will adapt and implement those commitments.

#### 4.2.a.v Retrenchment

The working conditions and employment procedure states that workers' layoffs at the end of the Project lifecycle shall be mitigated by: (i) scheduling such layoffs; (ii) planning the Project decommissioning or closure phases; (iii) clearly disclosing the available severance payments; (iv) the dissemination of job offers at the employee's place of return; and (v) implementing work transition and assistance programs.

To date, the Project has not contemplated how the personnel will be managed when the Construction phase is over, which is why it will prepare a retrenchment plan to support workers in the work relocation and labor market reintegration.

#### 4.2.a.vi Grievance mechanism

The Client has a corporate reporting system called "IRIS"<sup>30</sup>, which is managed by a third party. The system is available for all internal stakeholders and is triggered upon potential deviations or behaviors against the Company's corporate values<sup>31</sup>.

The Project will implement the internal grievance mechanism for workers, to include: (i) an itemized

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<sup>30</sup> <https://www.atlasrenewableenergy.com/contact/iris>

<sup>31</sup> <https://www.atlasrenewableenergy.com/contact/iris>

list of the means to collect any grievances or concerns (including confidential, anonymous and GBV grievances); (ii) a strategy to disseminate the mechanism; (iii) a grievance registration and follow-up system; (iv) KPIs for follow-up and to submit reports; (v) specific provisions to guarantee that GBVH grievances will be adequately attended; and (vi) a non-retaliation commitment for those submitting grievances.

#### **4.2.b Protecting the workforce**

##### **4.2.b.i Child and forced labor**

The corporate human resources procedures set up internal and external controls to avoid any deviation if child labor occurred in the supply chain. Additionally, the Project has a construction rulebook that shall be used by all contractors and subcontractors, and establishes, among other things: (i) the obligation to develop a human resources manual that includes a policy forbidding child labor and protecting against forced labor; (ii) the appointment of a professional to deal with labor and human rights issues in the Project, who will prepare and submit weekly reports with information on monitoring and tracking these requirements; (iii) the creation of a Labor and Human Rights Committee with representatives for the Company and the workers; and (iv) joint inspections with representatives of the workers and the Company to identify opportunities for improvement.

##### **4.2.c Occupational health and safety**

The ESMS incorporates corporate procedures which guide the drafting of specific plans and programs that help identify and manage the OHS risks for direct and indirect workers. They include identifying the training needs for the different roles and defining training programs, as well as responsibilities, scope, activities, indicators and the associated documentation to be considered when developing programs to identify and assess risks at Project level.

The Project's construction rulebook features the ESG requirements to be fulfilled by its suppliers, contractors and subcontractors while their contracts are in force, as well as the need for E&S plans and programs which follow: (i) the World Bank Group's Environmental, Health and Safety Guidelines; (ii) standard ISO 45001; and (iii) Atlas's ESMS. It also deploys strategies to monitor how effectively the contractual and licensing commitments (such as internal and external audits, as detailed in the contractor supervision procedure) are complied with.

The Client, however, will prepare an OHS management plan that is specific for the Construction and Operation phases to include: (i) guidelines to carry out field inspections at work fronts in order to assess the OHS conditions and properly identify opportunities for improvement; (ii) procedures to identify any unmitigated risks; (iii) requirements to protect workers from physical and road safety risks; and (iv) ways to improve the following processes: (a) safety risk identification and communication, (b) competence assessment and certification for equipment operators, (c) equipment safety inspections, (d) emergency protocols and communications, and (e) field health and safety monitoring.

#### 4.2.d Provisions for people with disabilities

The Client, as committed to observing the principle of non-discrimination in any form, has measures in place to guarantee personnel is hired on fair, equitable terms, promoting the inclusion of minorities and candidates with disabilities. Its diversity and inclusion<sup>32</sup>, and recruitment and selection policies, as well as its working conditions and employment procedure<sup>33</sup>, hold Atlas accountable for a work environment that encourages diversity and inclusion with different lenses, constantly training its workers to promote an inclusive culture.

#### 4.2.e Workers engaged by third parties

The Project EPC agreement describes the E&S requirements in relation with: (i) protecting the environment; (ii) complying with legal obligations; (iii) protecting human rights; and (iv) eradicating slavery or forced labor. In OHS terms, it states the obligation to comply with the provisions in: (i) the Client's ESMS; (ii) the regulations of the Occupational Safety and Health Administration (OSHA)<sup>34</sup>; (iii) and the ISO 45001:2018 certification<sup>35</sup>.

#### 4.2.f Supply chain

The Company relies on a framework for sustainable suppliers<sup>36</sup>, which reflects its corporate commitment to reaching stringent sustainability goals; presents a management model that serves as a roadmap for its suppliers; and provides insights on the process and continuous improvement, by integrating three aspects: (i) awareness and guidance, which communicates the Company's governance and shared responsibility criteria, which have been conceived to facilitate the suppliers' participation in the process and to make sure there are suitable training and awareness-raising programs; (ii) ESG criteria, which help assess how robust and integrated the suppliers' sustainability governance is; and (iii) due diligence, which help evaluate the suppliers, including their own supply chains.

The framework seeks to identify and manage risks in six different sustainability dimensions: (i) ethics, anticorruption and bribe-taking; (ii) environment; (iii) human rights; (iv) biodiversity; (v) occupational health and safety; and (vi) community safety and respect.

Additionally, the contracts with suppliers of electronic devices (modules and investors), entered into by virtue of the Project, include the following requirements, among others: (i) being certified in ISO 45001; (ii) submitting a risk analysis with control measures; (iii) providing the workers with suitable personal protection equipment (PPE) for their jobs; (iv) offering medical insurance; (v) detailing the certifications and qualifications to be obtained by the staff; (vi) complying with the applicable local regulations; (vii) demanding the subcontractors to fulfill these requirements, including the

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<sup>32</sup> <https://www.atlasrenewableenergy.com/sustainability/diversity-and-inclusion>

<sup>33</sup> This procedure shows the responsibilities at different organizational levels, the deviation reporting channels and the consequences for violating them. Including adapting the physical facilities to guarantee the staff with special needs feels included.

<sup>34</sup> US government agency.

<sup>35</sup> ISO 45001:2018 - Occupational health and safety management systems

<sup>36</sup> "Marco de Atlas Renewable Energy para Proveedores Sostenibles" (Atlas Renewable Energy's Framework for Sustainable Suppliers).

prohibition to use child or forced labor; and (vii) having performed forced labor due diligence down their own supply chain, based on the ILO indicators.

Contracts establish that none of the parties, or its agents or authorized subcontractors, can supply the Project with any additional component containing: (i) conflicting minerals, like tantalum (Ta), tin (Sn), tungsten (W) and gold (Au), whose proceeds directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo or bordering countries, like Angola, Burundi, the Central African Republic, Rwanda, South Sudan, Tanzania, Uganda and Zambia; or (ii) any component coming from Russia. It also establishes the supplier's responsibility for extending this requirement down to its own suppliers. It suggests following the guidance of the code of conduct published by the Responsible Business Alliance<sup>37</sup>; among other things, it presents standards to guarantee that working conditions in the supply chains are safe and that business is conducted responsibly, ethically and respectfully in terms of human rights and the environment, including the ban on child and forced labor in all their forms (serfdom, involuntary work, work exploitation, slave work and people trafficking).

In line with the above, the Project requires that its suppliers' policies explicitly declare the prohibition to hire minors and to use slave or forced labor. As a way to make sure these are complied with, the Project is entitled to perform desk and field inspections, and to take corrective measures (such as agreement termination) in case deviations are found.

### **4.3 Resource efficiency and pollution prevention**

#### **4.3.a Resource efficiency**

##### 4.3.a.i Greenhouse gases

The Project's greenhouse gases ("GHG") emissions will result from the following actions: removing and clearing vegetation, moving land, digging, adjusting roads, laying foundations and supports at the plant, adjusting and building water works over water bodies, and transporting parts, equipment, vehicles, machinery and materials. However, forecasts are yet to be made for the Construction phase, so the Client will prepare an annual inventory of GHG emissions that will include significant sources of direct emissions (scope 1) and indirect emissions (scope 2) from the energy consumed at each Project phase. Likewise, the Project will implement a Forestry Compensation Plan to offset the emissions arising from deforestation and a Disposal Plan of the forest resource resulting from forest clearance and use.

##### 4.3.a.ii Water consumption

The Project has implemented operational management measures for water efficiency and saving at all the phases. The water used for human consumption during all Project phases will be mainly sourced from the municipal pipeline.

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<sup>37</sup> A code of conduct prepared for the electric and electronics sector that refers to such international standards as the Universal Declaration of Human Rights, the ILO's international labor standards, the OECD's guidelines for multinational enterprises, the SA and ISO standards.

For the Construction phase, water will be supplied in water wagons by third parties duly authorized with valid environmental permits. In this regard, the Project will have factsheets to manage external water supply before the construction activities start; they will include objectives, goals, impacts, management measures, indicators, etc.

No underground or surface water is expected to be used in the Project area.

The volume estimated to be consumed at construction peak is about 100 m<sup>3</sup>/day, which is required for human consumption, domestic use, concrete preparation, roadway wetting, etc. Additionally, consumption is estimated to be 580m<sup>3</sup>/year during operations, mainly for photovoltaic modules (panels) cleaning. Both figures fall within the water consumption range for similar projects.

The Project will develop and implement a water resources management plan to make sure: (i) water is used rationally and efficiently; (ii) water quality is kept without negatively affecting the people (health and wellbeing) or the use of the land on site; (iii) the applicable standards and legal requirements are implemented; (iv) potential impacts on the quality of the water caused by the works are mitigated; and (v) the ecosystems around the Project area are protected.

#### 4.3.b Pollution prevention

The demand for natural resources as well as their utilization and the effects on them have been established for Project execution. The necessary measures to avoid, minimize or control the outpour of pollutants into the water, the air and the soil have been identified. Monitoring and tracking indicators have been included for the most representative quality parameters in the relevant monitoring and tracking plans.

Some of the management measures are: (i) performing technical inspections, and preventive and corrective maintenance on equipment; (ii) carrying out technical and mechanical inspections on vehicles; (iii) controlling the container capacity of the vehicles transporting materials; (iv) covering the load; (v) imposing speed controls on unpaved roads and wetting roads in open areas; and (vi) fencing the work front and the material storage areas.

The Project performed baseline measurements of environmental noise at sensitive reception points (20 houses) in its area of direct influence, which turned out higher than the levels allowed for rural-suburban areas in local and international regulations<sup>38</sup> (daytime and nighttime) for noises from human and natural sources. For this reason, the Project will adopt the following measures to mitigate noise during the Construction phase (the most impactful one): (i) keeping equipment horns and sirens under control; (ii) checking work equipment and machinery for silencers; and (iii) limiting or banning the use of noise-generating equipment, especially during nighttime activities.

##### 4.3.b.i Wastes

The Project identified the following types of hazardous and non-hazardous waste to be generated during the construction works: (i) ordinary solid waste, including organic waste and that produced

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<sup>38</sup> The World Bank Group's Environmental, Health and Safety Guidelines.

during construction and demolition (wood, cardboard, plastic, scrap, aluminum, debris, concrete pieces, etc.); and (ii) hazardous waste (lubricants, oils and grease, batteries, oil-polluted soil, paint, etc.). The EMP considers measures linked to identification, classification and separation of waste per type at source; identification of waste dropping points at the work fronts; recording the waste delivered to third parties; and requirements for the waste staging areas (ventilation, air circulation, waterproof flooring, perimeter channeling to avoid ground contamination, etc.).

Wastewater generated by the Project during Construction (21.66 m<sup>3</sup>/day), Operation and Maintenance (4.42 m<sup>3</sup>/day), and Decommissioning and Abandonment (8.84 m<sup>3</sup>) will be disposed of at authorized sites.

Certain measures are taken to manage rainwater, both during Construction and Operation, for example: (i) laying drain pipes; (ii) putting up sediment barriers in runoff channels to prevent sediment coming into surface water bodies in areas adjacent to work fronts; (iii) building protection barriers in soil-filled sacks in all the *jagüeyes* near the work fronts; (iv) periodically cleaning the water supplying structures where the riverbeds were occupied to avoid obstructions; and (v) performing regular water quality monitoring actions.

The Project will engage companies properly authorized for use, treatment, and final disposal of hazardous and non-hazardous waste.

#### 4.3.b.ii Hazardous materials management

During the Construction phase, the Project will require fuel (gasoline or diesel fuel) to run its electric generators, which will be stored in 200-liter tanks. At Operation, it will require: (i) to have 38 liters of fuel stored for the emergency generator; (ii) lubricating oils (vegetable or mineral) for the transformers (about 200 liters for the medium voltage stations and collector boxes, and 4,000 liters for the step-up substation); and (iii) nitrogen and sulfur hexafluoride (SF<sub>6</sub>).<sup>39</sup>

The Project has implemented the following measures for proper storage of fuels, lubricants and hazardous materials: (i) containment dikes; (ii) perimeter ditch systems with grease traps; (iii) collection and subsequent treatment of the resulting hazardous waste; (iv) optimal ventilation and lighting; (v) fire prevention systems; (vi) spill kits; (vii) signage; and (viii) availability of material safety data sheets.

The Project, however, will inventory its chemical substances and products, including an analysis of less hazardous alternatives and will ensure that internationally prohibited materials are not used.

#### 4.3.b.iii Management and use of pesticides

No toxic chemicals will be used by the Project in the following activities: (i) vegetation clearing during the construction phase, which will be conducted manually (with machetes or with chainsaws); (ii) maintenance activities in the area where the solar panels will be installed, as vegetation will be controlled manually through vegetation clearing, trimming and cutting, and with

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<sup>39</sup> SF<sub>6</sub> is a GHG.



cleaning teams supervised by contractors; and (iii) pests and rodents control, which will employ mechanical methods (e.g. traps) or compounds that are not classified as “Ia” (extremely hazardous) or class “Ib” (highly hazardous) according to the World Health Organization’s classification of pesticides.

#### **4.4 Community health, safety and security**

##### 4.4.a.i Infrastructure and equipment design and safety

The potential impacts that the Project may have on community health, safety and protection include: (i) road deterioration; (ii) dust generation; (iii) increased noise from construction activities; (iv) water pollution and reduced availability; and (v) road accidents. For their prevention, Atlas has established a corporate procedure to manage community health, safety and security, which includes measures to: (i) mitigate impacts on areas with higher population density and sensitive ecosystems; (ii) focus on design and safety of infrastructure and equipment; (iii) manage traffic flow; and (iv) monitor environmental noise levels.

Nonetheless, the Client will develop and implement the following actions through its contractors and subcontractors: (i) a road signage program to guarantee the safety of workers and local residents; (ii) a dust control program through spraying of roads and work fronts; (iii) periodic monitoring of noise at sensitive receptors to ensure compliance with acceptable levels; and (iv) a road management plan with potential alternative access routes for the Project to avoid road deterioration caused by frequent travel of trucks and heavy machinery.

##### 4.4.a.ii Hazardous materials management and safety

During the Construction phase, the Project will require managing and handling rocky materials, oils, and machinery maintenance fluids. Therefore, the Client will update and implement the Community Health, Safety and Security procedure, including measures to reduce community exposure to these materials.

##### 4.4.a.iii Ecosystem services

Given that the main economic activities in the Project area are agriculture (predominantly rice crops), livestock farming, hunting and fishing, and forestry, no significant impact on ecosystem services is expected.

##### 4.4.a.iv Community exposure to disease

As the Project will prioritize hiring local labor, community exposure to contagious and sexually transmitted diseases is considered very low. Nonetheless, the Client will develop and implement: (i) awareness campaigns targeted to workers and communities; and (ii) protocols to prevent the spread of vector-borne diseases (such as dengue, malaria, etc.).

#### 4.4.a.v Emergency preparedness and response

The Project has an emergency plan in place that includes: (i) emergency preparedness activities with the communities in the area of influence; (ii) engaging staff in emergency drills and general preparedness activities; and (iii) coordination with municipal disaster risk management authorities.

#### 4.4.b Security personnel

The Client has developed a security risk analysis in the Project's area of influence, which will serve as the basis for preparing a risk management strategy. Additionally, the Client will develop a security plan for managing private security forces that: (i) includes measures to prevent potential damages to employees, communities and other stakeholders; (ii) aligns with the Good Practice Handbook "Use of Security Forces: Assessing and Managing Risks and Impacts, Guidance for the Private Sector" issued by the International Finance Corporation ("IFC"); (iii) applies to contractors and subcontractors; (iv) includes formal procedures to report on, respond to and document security incidents; (v) incorporates training requirements covering the use of force, and prevention and management of GBVH; (vi) includes procedures for reviewing security contractors records; and (vii) includes procedures for screening security guards applicants.

### 4.5 Land acquisition and involuntary resettlement

#### 4.5.a General

The area where the photovoltaic solar power plant will be built consists of four private sites. Lease agreements were signed with three of them<sup>40</sup>, whereas a purchase agreement was executed with one of them<sup>41</sup>. The Project will not affect any homes or infrastructure belonging to owners, families, employees or occupants; therefore, no physical or economic displacement of the community is expected.

The transmission line easement strip is 32 m wide and will traverse 14 sites. The Project has reached voluntary easement agreements with two of them. However, judicial enforcement of the easement may be pursued for the remaining 12 sites, unless voluntary agreements are reached. The affected area does not exceed 20% of the total site area.

According to Colombian legislation, the compensation process for easement imposition (which limits land use in that area) allows owners to be compensated for emerging damages and lost revenues. Consequently, each affected owner is expected to remain in an equal or even better position than before the easement imposition, retaining ownership and the right to use the affected strip of land.

The Project will update its corporate land acquisition procedure to guarantee: (i) fast-track compensation for those who are economically displaced due to asset loss or use limitation, at a value allowing for replacement of lost assets (fixed assets at total replacement cost in cash or in

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<sup>40</sup> Hato de Opia, El Reposo, with the counterparts.

<sup>41</sup> Hato de Opia, El Reposo, with the counterparts.

kind); (ii) restoration of economic activity; (iii) economic support for transition to restore income-generating capacity or production levels; and (iv) special measures for vulnerable populations (if applicable).

#### 4.5.a.i Project design

The selection of land, as well as the access roads to the Project area, was carried out to avoid interference with vulnerable communities.

### 4.6 Biodiversity conservation and natural habitats

#### 4.6.a General

The Project area of influence is located in tropical dry forest<sup>42</sup> (4,935 ha) and premontane wet forest (21.5 ha). However, the landscape is dominated by modified habitats of grasslands, rice crops and secondary vegetation, as well as scattered forest patches mainly along rivers (gallery forests). These fragile ecosystems face pressures from urban expansion, livestock farming, extensive crop cultivation<sup>43</sup> and the introduction of invasive alien species.

#### 4.6.b Protection and conservation of biodiversity

The Project is not located in or near any national forest reserves, protected areas, key biodiversity areas, important bird areas, or areas of interest of the Alliance for Zero Extinction (AZE).

Priority biodiversity values are associated with natural habitats in the forest patches within the Project area of influence. Within a 5 km buffer around the project, six critically endangered (“CR”) and endangered (“EN”) animal species were identified: (i) Magdalena River turtle (*Podocnemis lewyana*); (ii) Glass frogs (*Centrolene geckoideum*); (iii) Capaz (*Pimelodus grosskopfii*); (iv) freshwater oysters (*Acostaea rivolii*); (v) long-whiskered catfishes (*Pseudoplatystoma magdaleniatum*); and (vi) *Plutarchia* (*Plutarchia dichogama*).

The environmental license of the Project granted permits for: (i) riverbeds occupation (29 in total, with 19 existing, 9 new within the park, and 1 temporary for access to the LT towers); and (ii) forest utilization (1,604 individuals max., with a total volume of 977.48 m<sup>3</sup> and a commercial volume of 455.80 m<sup>3</sup>).

The Project is expected to implement measures to minimize biotic impact. They are detailed in the EMP programs and factsheets, which will be complemented based on the update of the Project’s biotic baseline.

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<sup>42</sup> In Colombia, the tropical dry forest is a critically endangered ecosystem, only 8% of which still remains (2017). For the Instituto Humboldt and the Ministry of Environment and Sustainable Environment, it is a strategic ecosystem with high conservation urgency. The country is enforcing a national conservation and restoration program; the ecosystem is part of Colombia’s action plan to fight desertification.

<sup>43</sup> These crops have heavily transformed the land, the coverage and the water sources (creeks and streams have been modified for irrigation purposes).

The Project will intervene in 260.68 ha of forest area<sup>44</sup>. Therefore, as per local legislation, a total of 83.35 ha must be compensated. The Client is developing a Compensation Plan and Rehabilitation Actions for non-vascular species (“Veda” per it acronym in Spanish), as outlined in the EMP.

This plan will include: (i) an estimation of losses and gains in the affected forest areas considering the compensation plan required by law; (ii) a strategy to fulfill the reforestation requirements; and (iii) a plan to assess and monitor the implementation of such strategy.

#### **4.6.c Management of ecosystem services**

The Client will update the identification of ecosystem services (provisioning, regulating, cultural and support) that may be significantly affected by the activities of the Project and its supply chain, and will implement the necessary measures to protect them.

#### **4.7 Indigenous peoples**

The Project has performed due diligence to identify the territories of ethnic communities requiring prior consultations. Certifications have been obtained confirming the absence of indigenous communities, ethnicities or afro-descendant communities in the area of influence, as well as the non-applicability of prior consultation with any kind of ethnic community.<sup>45</sup>

#### **4.8 Cultural heritage**

No cultural heritage elements have been identified within a 5 km radius of the Project area. However, the Project includes, for the solar park and transmission line: (i) preventive archeology programs<sup>46</sup> and (ii) a chance find protocol applicable to all activities involving soil removal.

### **5. Local Access of Project Documentation**

The information related to the Project is available at:

<https://www.atlasrenewableenergy.com/news-and-insights/atlas-renewable-energy-consolidates-its-operations-in-colombia-by-acquiring-its-first-solar-project-in-the-country>

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<sup>44</sup> Made up of: 7.86 ha of natural habitat of secondary vegetation and 252.82 ha of modified habitats.

<sup>45</sup> Resolution T- 365 of October 7, 2021, and Validity Response 202350016366711 of December 07, 2023, from the National Prior Consultation Agency (DANCP in Spanish).

<sup>46</sup> Resolution 1639 and Resolution 083, approved by the Colombian Institute of Anthropology and History (ICANH in Spanish).