

## Environmental and Social Review Summary (ESRS) Punta Lomitas Project - PERU

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

This transaction consists of a senior long-term loan of up to US\$300 million to ENGIE Energía Perú S.A. (the "Client", the "Company" or "EEP"), mainly to finance the construction of the "Punta Lomitas" wind farm (which includes, among others, a weather station, a control building, and the internal accesses to the wind farm), located in the districts of Ocucaje and Santiago, in the province and region of Ica, Peru, as well as its interconnection to the National Interconnected Electric System ("the Project"). The energy generated by the Project will be delivered to the Punta Lomitas substation (SS) through a 60.2 km long transmission line (TL) with a voltage of 220 kilovolts (kV), and then to a bypass substation that will be connected to the existing 220 kV Ica - Marcona TL (L-2211), owned by Red de Energía del Perú S.A. (REP).

As part of the environmental and social due diligence (ESDD), IDB Invest conducted the review of relevant environmental and social (E&S) information, which included, but was not limited to, an analysis of the following: (i) Semi-Detailed Environmental Impact Assessment (EIA-sd) of the Project; (ii) Sustaining Technical Report (STR); (iii) Modification of the Semi-Detailed Environmental Impact Assessment (MEIA-sd); (iv) environmental reports; (v) Project authorizations and permits matrix; (vi) archaeological monitoring plan; (vii) client's environmental and social management system (ESMS) and occupational health and safety (OHS) and of its main contractors; and (viii) manuals, regulations, procedures, plans, programs, and records.

The ESDD included several virtual meetings with EEP officials and, with the support of a local consultant, included a visit to the Project<sup>1</sup> that covered the following construction fronts: i) wind turbine platforms; ii) internal accesses; iii) excess material storage; iv) explosives storage sites; v) concrete plant; vi) workshops and warehouses; vii) worker camp and contractors' camps;<sup>2</sup> viii) Punta Lomitas substation and its branch; and ix) first section of the TL.

### 2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category B operation according with IDB Invest's Environmental and Social Sustainability Policy because its environmental and social impacts are localized, will be mostly reversible, and can be eliminated or mitigated by implementing suitable management systems.

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<sup>1</sup> The visit took place between February 21 and 23, 2022.

<sup>2</sup> ABENGOA (in charge of the bypass line), SACEEM (in charge of building the Punta Lomitas substation), COSAPI (in charge of building the wind turbine platforms and opening the internal accesses), and SIEMENS GAMESA (in charge of implementing and maintaining the wind farm).

The risks and impacts associated with the Project's construction and operation stages include: i) impacts on air quality from construction activities (earthworks); ii) an increase in noise and vibration levels resulting from the use of heavy machinery during construction; iii) minor loss of vegetation with possible impacts on fauna, flora, and natural habitats from clearing to install the wind turbine towers and the release of the TL's easement strip; iv) an increase in vehicular traffic (especially in the districts of Ocucaje and Santiago) from extra-wide cargo transport; v) probability of occupational accidents (falls and electrocution) due to the execution of works at height and electric works (wind turbine assembly, tower construction, TL conductors layout, equipment power-up and start-up); vi) possible impact on flying fauna (birds and bats) from possible collisions with wind turbine blades; and vii) permanent alteration of the landscape by wind turbines and the TL, among others.

The Performance Standards (PS) triggered by the Project are: i) PS1: Assessment and Management of Environmental and Social Risks and Impacts; ii) PS2: Labor and Working Conditions; iii) PS3: Resource Efficiency and Pollution Prevention; iv) PS4: Community Health, Safety, and Security; v) PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; and vi) PS8: Cultural Heritage.

### 3. Environmental and Social Context

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

The Project will be located in a desert area with low rainfall,<sup>3</sup> on a flat coastal plain of marine, wind, and alluvial origin, with some hills and hillocks. The wind turbines will be located at altitudes ranging from 15 meters above sea level ("masl") to 120 masl, and at between 350 meters and 4,800 meters from the coastline. The intervened area is located in two vegetation cover units: i) coastal desert (99.7%); and ii) coastal agriculture<sup>4</sup> (0.3%).

Although coastal desert vegetation cover is considerably low and scattered, there are seven species of interest for conservation, such as the Pinco (*Ephedra americana*), the only species classified as Near Threatened (NT) under national legislation.<sup>5</sup>

Biodiversity at these sites is generally poor. However, their extreme characteristics and conditions produce high species endemism. Birds are the most representative group and the coastal strip where the wind turbines are located has a greater richness and abundance of this group.

The Project area does not intersect population centers or indigenous territories. Nevertheless, the Project's stakeholders include 13 towns in the district of Ocucaje (Barrio Nuevo, San José de Pinilla, San Felipe, Córdova, Tres Esquinas, Callango, Pampa Chacaltana, El Tambo, Paraya, Cerro Blanco, La Capilla, San Martín de Porras and La Colmena) located along the provincial road (IC-108) used by vehicles headed to the Project. The nearest town is Callango, at a distance of approximately 6 kilometers.

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<sup>3</sup> Annual average precipitation of 4.1 mm/year (period 1966-2020).

<sup>4</sup> Two types of vegetation have been identified: crop-associated vegetation and sparse riparian vegetation (the latter only applicable to the TL component).

<sup>5</sup> S.D. N° 043-2006-AG Classification of Threatened Species of Wild Flora.

The Project (wind farm and SS) does not involve sites considered to be of high archaeological, paleontological, or cultural value. However, part of the TL layout crosses the Ocucaje paleontological and archeological protection zone, which is considered as having great potential because it contains vestiges of marine fauna that existed on the southern coast of Peru during the Tertiary Period.

### 3.2 Contextual Risks

Water in the region is a scarce and vital resource. Agriculture, the main economic activity in the area, uses water extracted from the Ica aquifer through wells, catchments, and canals located upstream of the Project's area of influence. These water sources, according to studies carried out by the National Water Authority (ANA, for its acronym in Spanish) and recorded by the Project's EIAsd, have a water deficit mainly due to the indiscriminate exploitation of 334 wells in the district of Ocucaje and 513 wells in the district of Santiago. This situation could give rise to risks and conflicts with the neighboring communities during the Project's construction stage.

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

### 4.1 Assessment and Management of Environmental and Social Risks and Impacts

#### 4.1.a E&S Assessment and Management System

At the corporate level, EEP has ISO<sup>6</sup> quality (ISO 9001:2015), environmental (ISO 14001:2015), and occupational health and safety (ISO 45001:2015) certifications. The scope of these certifications, however, does not include Project-specific environmental and social (E&S) management, so during the construction stage, the Client will implement its Environmental and Social Management System (ESMS). The ESMS will operate as described in the ESMS manual.

#### 4.1.b Policy

At the corporate level, EEP has the following E&S policies: i) Social; ii) Occupational Health and Safety; iii) Environmental; iv) Salary; and v) Corporate Sustainability. The Client will also develop the following policies applicable to the Project: i) Community Health, Safety and Security; and ii) Human Resources. These policies will be disseminated to towns neighboring the Project, contractors, and all employees.

#### 4.1.c Identification of Risks and Impacts

##### 4.1.c.i Direct and Indirect Impacts and Risks

The most important risks and impacts generated by the Project<sup>7</sup> during its construction phase include the following, among others: (i) changes in air quality (particulate matter and combustion

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<sup>6</sup> Certifications granted by the International Standardization Organization (ISO).

<sup>7</sup> EIA-sd approved through D.R. No. 0101- 2020-MINEM-DGAAE dated July 17, 2020 and with a Sustaining Technical Report (STR) for the technological improvement of wind turbines and modification of components approved through D.R. No. 0149-2021-MINEM/DGAAE dated August 11, 2021.

gases); (ii) increased noise levels; (iii) increased traffic accidents due to the transport of materials and people; (iv) impact on community health and safety due to the influx of external workers to the Project; (v) potential impact to archaeological and paleontological cultural heritage due to the planned earthworks; (vi) modification of geomorphology and landscape; and (vii) temporary alteration of terrestrial fauna distribution patterns.

The Project will generate the following impacts during its operation phase: i) increased non-ionizing radiation; ii) noise generation; iii) landscape alteration; iv) light intrusion;<sup>8</sup> and v) collisions of aerial fauna (birds and bats) with wind turbines and TL conductors. Concerning the latter impact, the Company will conduct routine biotic monitoring to determine whether: i) the recorded collisions are significant; ii) the number of affected specimens might alter the composition of bird or bat colonies in the area; and (iii) if the above two points are true, the measures to adopt in order to decrease the number of collisions.

The Client will also update the risk, impact, and hazard identification matrix to include the communities in the Project's direct area of influence (DAI). The matrix will also include a risk analysis of the influx of external personnel to the districts of Ocucaje and Santiago and extra-heavy transport (wind turbines) through public roads during the Construction phase.

#### 4.1.c.ii Analysis of Alternatives

The EIA presents an evaluation of two alternatives for the TL layout and three alternatives for the location of the Project. These alternatives consider the most relevant environmental and social aspects of the proposed Project sites, as well as the technical and economic aspects of their implementation. The analysis revealed no significant E&S differences between the alternatives studied, so the selection of the final alternative was defined by technical aspects related to the maximum wind potential utilization.

#### 4.1.c.iii Cumulative Impact analysis

The EIA does not present a cumulative impact study. It should be noted that since no projects are being executed concurrently with the implementation of the Project, a cumulative impact study is not applicable.

#### 4.1.c.iv Gender Risks

Peru has a prevailing pattern of inequality between men and women. Thus, with regard to employment, during the period 2018-2019, the activity rate for women was 64.5%, versus 81.1% for men.<sup>9</sup> This gap was slightly larger for the Ica region, where it reached 80.8% for men and 63% for women. Moreover, 81.7% of women worked in the informal market, compared to 73.7% of men. As of 2019, the national wage gap was 73.1%, almost identical to that in the Ica region (73.3%).

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<sup>8</sup> The Peruvian Aeronautics Regulation requires that the wind turbines, which will reach a height of 187 m, be lit for the safety of aircraft flying over the neighboring space.

<sup>9</sup> According to statistics from the National Institute of Statistics and Informatics (INEI, for its acronym in Spanish).

According to information from the Ministry of Women and Vulnerable Populations, during 2019, 53.4% of women aged 15 to 49 years in the Ica region experienced intimate partner violence. Gender-based violence and harassment were also exacerbated in 2020 by the COVID-19 pandemic. In this year, 1,650 cases of violence against women were attended to, of which 7 were femicides.

In view of this, the Client's Corporate Sustainability Policy promotes the participation of women and, through its Internal Labor Regulations (ILR), it ensures that there is no discrimination based on sex, and prevents and sanctions sexual harassment. In addition, EEP, through its social management activities, maintains contact with neighborhood women's organizations representatives and promotes the employment of local female labor.

#### 4.1.c.v Climate Change Exposure

The Project site is exposed to chronic climate hazards. Given its location on the coastal strip, it also has moderate to high exposure to sea level rise and changes in precipitation patterns. Because it is a renewable energy project, however, its transition risk exposure is low.

#### 4.1.d Management Programs

The Project has an environmental management strategy that includes the following management instruments: i) an Environmental Management Plan (EMP); ii) a Community Relations Plan (CRP); iii) a Contingency Plan (CP); iv) a Compensation Plan; v) an Environmental Monitoring Plan; and vi) a Closure Plan.

The EMP comprises the physical, biological, and socioeconomic environments. The section on the physical environment includes general measures to mitigate impacts on air quality, noise, soil, and the landscape. It also includes the following programs and plans: i) solid waste minimization and management; ii) archaeological management; and iii) various environmental programs (soil contamination prevention, reclamation of temporary use zones, blasting and explosives management, environmental management for the operation of the concrete plant, management of sludge and settled solids in the wastewater treatment plant, and mixer washing ponds, among others). The section on the biological environment includes general measures to mitigate impacts on flora, minimizing plant cover reduction during construction activities, and on terrestrial, aerial, and marine fauna.

The Project's Environmental Monitoring Plan details monitoring procedures and frequencies for: i) air quality (quarterly during construction and closure); ii) noise (quarterly during construction and semi-annually during operations); iii) domestic effluents (monthly during construction); iv) biological monitoring (semi-annually during construction and operation); v) soil quality (one-off, at the end of the construction phase); and vi) non-ionizing radiation (annually during operations).

The EMP's socioeconomic environment section includes general measures to mitigate socioeconomic impacts on the population and on cultural heritage. In this regard, the CRP considers four main lines of action: i) communication mechanisms with the population; ii) employees' responsible behavior; iii) local labor; and iv) the promotion of sustainable social intervention activities within the scope of the Project.

The EMP does not include a compensation plan because the Project will not cause significant negative environmental impacts, nor will it result in the loss of resources or ecosystems.

#### 4.1.e Organizational Capacity and Competency

At the corporate level, the Client has an Environmental Manager and an Occupational Health and Safety Manager from the Operations Division, as well as a Head of Environment. At the Project level, there is an Occupational Health, Safety, and Environment (OHSE) Lead and a team consisting of two OHSE supervisors in charge of the wind farm, and two supervisors for the TL who report to the OHSE Lead. Each contractor also has health and safety supervisors and environmental supervisors.

As regards social management, the Project has two community relations officers who report directly to the Site Manager and, through the matrix, to the Social Affairs Manager. The main contractors also have a social manager whose main functions are to attend to the grievance mechanism, coordinate the process of hiring local labor, and report on the contractor's activities.

In addition, the Client will appoint a person in charge of the implementation of the ESMS and monitoring contractors' and subcontractors' E&S performance, reporting directly to the Project Manager.

#### 4.1.f Emergency Preparedness and Response

At the corporate level, the Client has a Crisis Management Manual, and at the Project level, a Contingency Plan, consisting of a set of rules and procedures that include response actions to address any accident, incident, or emergency situation in a timely, adequate, and effective manner. The plan contains: i) a risk assessment; ii) measures to apply in the event of an emergency; iii) personnel training guidelines; iv) communication procedures; v) details of the emergency response equipment; and vi) description of spill control equipment and materials. The most likely emergencies identified for the Project include: (i) natural (earthquakes, tsunamis, tidal waves, high winds); (ii) technological (fires and explosions, spillage of fuel or other polluting substances, work accidents and medical emergencies); and (iii) social (protests or riots).

Different emergency communication channels have been identified, mainly: i) radio; ii) cell phones; iii) company and SARCC<sup>10</sup> landlines; iv) satellite phones; and v) e-mail.<sup>11</sup> Depending on the type of emergency, support should be requested from the following relief agencies: i) Peruvian National Police - Ica Region; ii) Peruvian General Fire Department - Ica; iii) Civil Defense; iv) Prefecture and Municipality of Ocucaje; and v) hospitals or other health institutions in the region.

The Client provides guidelines to its contractors so that, as part of their emergency plans, they: i) implement training programs for their personnel; ii) carry out drills and inspections; iii) form

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<sup>10</sup> Number: 01 46020805 of the SARCC, which is a support and non-profit organization of the National Society of Mining, Petroleum, and Energy (SNMPE), to coordinate the resources available at the national level in a timely and effective manner through contacts with different support organizations to address emergency situations involving personnel of associated companies located in remote areas and requiring support through search, rescue, medical evacuation, etc. operations.

<sup>11</sup> [control.engie@pe.engie.com](mailto:control.engie@pe.engie.com)

emergency response brigades; and iv) have ambulances and the necessary equipment to handle the different emergency situations identified.

EEP will also update the Emergency Preparedness and Response Plan to include: i) an assessment of the risks associated with the transportation of Project equipment and materials; and ii) a review and update of the means of communication to be used during an emergency.

#### 4.1.g Monitoring and Review

According to the environmental permits,<sup>12</sup> the Client has the obligation to report to the competent authorities on compliance with the commitments entered into for the Project. Thus, for example, the Environmental Monitoring Plan describes how to monitor: i) air quality; ii) noise; iii) domestic effluents; and iv) flora and fauna.

The Client conducts internal audits to evaluate its environmental, social, and occupational health and safety performance every six months, and external occupational health and safety audits on a quarterly basis. The competent authorities lack a schedule for periodic inspections and have the authority to carry out unannounced inspections.

Moreover, the Client will develop and implement a procedure to manage contractors' environmental and social performance for the construction and operation and maintenance (O&M) phases, including targets and key performance indicators (KPIs). It will also periodically update the Project's E&S license and permit matrix.

#### 4.1.h Stakeholder Engagement

The Client started a participation and consultation process with the populations in its indirect area of influence IAI (Ocucaje and Santiago districts) prior to the preparation of the EIA. It is worth noting that EEP, as part of the Citizen Participation Plan (CPP), conducted participatory workshops in these districts during 2019.

The Project's CRP consists of the following programs: i) Citizen Communication and Information; ii) Citizen Monitoring and Oversight; iii) Local Employment; iv) Project Personnel Adequacy and Training; v) Support for Institutional Management Capacity; vi) Code of Conduct; vii) Compensation and Indemnification; and viii) Contribution to Local Development.

As required by the CRP's Citizen Monitoring and Oversight Program, the Client has formed a Citizen Participation and Oversight Committee formed by 10 representatives from the district municipality, the villages in the Ocucaje district, and local organizations (fishers' and seaweed farmers' associations). This committee, in coordination with the Company, visits the Project area, follows the environmental monitoring of air, noise, and effluents, and proposes other zones to be monitored to the Client, as needed. During these visits the client trains members of the committee on the focus of the monitoring and resolves their doubts. The committee's activities are regularly reported to the environmental authority.

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<sup>12</sup> Environmental Management Instruments (EMI).

Since the start of the construction phase, EEP has had a permanent information office in the Ocucaje district, in order to attend to its stakeholders directly. There, it has set up complaints and suggestion boxes and has implemented a grievance mechanism called Queries, Grievances, and Complaints (QGC), which records and follows up on complaints until the affected population receives a response. At the time of the due diligence, 17 CGCs had been reported, both orally and in writing.

#### 4.1.h.i Disclosure of Information

EEP has adopted a Citizen Communication and Information Program with the goal of: i) establishing communication mechanisms to promote stakeholder participation in the Project; and ii) provide information on Project activities, their implications, scope, and effects on stakeholders and the population at large. To this end, the Company: i) holds annual or semi-annual informative meetings with its stakeholders; ii) advertises in the most widely consumed written, radio, or television media; and iii) produces educational materials for personalized and mass dissemination.

The Client has reported the use of the following media to provide information to the population: i) Facebook page called "Ocucaje al Día";<sup>13</sup> ii) the Ocucaje al Día newspaper, which is prepared and distributed every two months; iii) newsletters; and iv) scheduled visits. Stakeholders may also obtain information on the Project at the Information office in Ocucaje.

#### 4.1.h.ii Informed Consultation and Participation

The Client, as part of its CPP, conducted the following activities: i) participatory workshops in the capitals of the districts where the Project is located (Ocucaje and Santiago); and ii) a public meeting.<sup>14</sup> It has also implemented complementary citizen participation mechanisms, such as conducting personalized interviews through its team of promoters, and setting up a suggestions and complaints mailbox.

#### 4.1.h.iii Indigenous Peoples

According to the Indigenous or Native Peoples Database (BDPI, for its acronym in Spanish)<sup>15</sup> of the Ministry of Culture, no native communities or indigenous peoples have been identified in the Project's area of influence. The same is true for Afro-Peruvian communities.

#### 4.1.h.iv Private Sector Responsibilities Under Government-Led Stakeholder Engagement

Participatory workshops and public meetings were held and attended by the Client and the population of the Project's indirect area of influence, as well as the General Directorate of Environmental Affairs of Electricity and the Regional Directorate of Energy and Mines of Ica.

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<sup>13</sup> It informs about all aspects of the Project, promoting tourism, domestic trade, and highlighting local residents in their local development activities and their contributions in benefit of the community.

<sup>14</sup> Place: Municipal Coliseum of the district of Ocucaje - Province and Region of Ica; date: August 22, 2019; topics covered: Occupational health and safety, Environmental protection, Basic needs of the community, Importance of the Punta Lomitas project, Wind energy generation; number of participants: 205 people.

<sup>15</sup> <https://bdpi.cultura.gob.pe/>

#### 4.1.i External Communication and Grievance Mechanisms

##### 4.1.i.i External Communication

The CRP's Communication and Citizen Information Program describes how the Client communicates with local communities and other stakeholders, and will be supplemented<sup>16</sup> to include: i) procedures for managing external communications; ii) the external grievance mechanism detailed in section 4.1.i.2 below; and iii) requirements and frequency of reports that will be periodically shared with the community.

##### 4.1.i.ii Grievance Mechanisms for Affected Communities

EEP has a grievance system (CGC) applicable to all its projects, which is complemented by dissemination campaigns and training on the use of the mechanism, and which includes: i) a description of the grievance reception channels (verbal, written, by telephone or e-mail);<sup>17</sup> ii) follow-up procedures for communications received; and iii) the protocol to be followed for referring complaints to contractors.

The ESDD did not identify any particularly vulnerable groups in the Project's areas of influence; however, the Client will update its CGC so that it: i) includes a register, follow-up, and analysis of complaints and solutions; ii) is culturally appropriate and accessible; iii) allows for anonymity; and, iv) highlights that any other independent consultation mechanism can be used in case of dissatisfaction with the required responses.

##### 4.1.i.iii Ongoing Reporting to Affected Communities

Project progress is shared with the community through newsletters and meetings of the community relations officers with key stakeholders. The Company will verify if the type of language used to date is suitable and if the presentation is didactic and understandable enough for the population at large. The Client prepares an annual Integrated Report that is available to the public on its website.<sup>18</sup> Among other topics, it informs about: i) environmental indicators;<sup>19</sup> ii) social indicators;<sup>20</sup> and iii) corporate governance indicators.

## 4.2 Labor and Working Conditions

### 4.2.a Working Conditions and Management of Worker Relationships

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<sup>16</sup> This supplement does not imply or constitute a modification of the environmental management instrument in force.

<sup>17</sup> Puntalomitas.eep@engie.com

<sup>18</sup> <https://engie-energia.pe/publicaciones-y-politicas>

<sup>19</sup> Total CO2 emissions, grid energy consumption and primary energy consumption for energy production, water footprint, recycled water for irrigation, managed and recovered hazardous and non-hazardous waste, particulate matter emissions, sulfur hexafluoride (SF6) emissions, nitrogen oxides (NOx) emissions, sulfur oxides (SOx) emissions, ash and gypsum waste, direct mercury emissions.

<sup>20</sup> OHS indicators, purchases from local suppliers, women in the organization, women in management positions, women on Executive Committees, women vs. men pay ratio, areas of influence covered by an appropriate mechanism for dialog and consultation with stakeholders, social investment, beneficiaries of social actions, among others.

The Client has Internal Labor Regulations (ILR) that sets out the guidelines governing the relationship between employees and the Company. These regulations include the following topics: i) employee entry or admission; ii) working day and hours; iii) work attendance record; iv) paid and unpaid leaves of absence; v) weekly days off, holidays, and paid annual leave; vi) compensation; vii) rights and obligations of the Company; viii) employee rights, obligations, and prohibitions; ix) encouraging and maintaining harmony between employer and employees; x) occupational safety and hygiene; xi) disciplinary measures and their application; xii) termination of the employment contract; xiii) sexual harassment; xiv) protection of HIV positive employees; xv) protection of employees with tuberculosis; xvi) guidelines for the use of the breastfeeding room; xvii) collective labor relations; xviii) requests, complaints, and how they are resolved; and xix) prohibition of smoking. Each contractor company also maintains an ILR that details, among other things, employee rights and obligations, as well as communication channels.

At the time of the ESDD, the Project had 1,180 workers, 99% of them engaged by its main contractors<sup>21</sup> and 1% by EEP. Female staff accounted for 5%. In addition, 16% of the total number of workers belong to the districts of Ocucaje and Santiago.

Contractor employees are lodged in rented houses in the Ocucaje district and in the town of La Venta in the Santiago district. Companies from the cities of Ocucaje and La Venta have been contracted to provide food.

#### 4.2.a.i Human Resources Policies and Procedures

Through their human resources policies and their ILR, contractors express their commitment to: i) non-discrimination based on sex, race, religion, disability, or any other reason; ii) the prohibition of child labor and forced labor; and iii) equal opportunities in terms of remuneration, pay scales, and different types of professionals.

Nevertheless, the Client will develop, adopt, and disseminate among its direct employees and its contractors, a Human Resources Policy for the Project which, among other issues, will include: i) the obligation to comply with national legislation on employment and labor issues; ii) the promotion of fair treatment, non-discrimination, and equal opportunities for employees; iii) the protection of employees; iv) the promotion of safe and healthy working conditions, and the promotion of workers' health; and v) the prohibition of forced labor.

#### 4.2.a.ii Working Conditions and Terms of Employment

Most of the Client's contractors' personnel are hired under the civil construction scheme with all social benefits provided by law.<sup>22</sup> Working hours are from 7:00 a.m. to 6:00 p.m.

The Client provides its employees with a copy of the Internal Occupational Health and Safety Regulations (IOHSR), and contractors also provide a copy of its IOHSR to their employees.

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<sup>21</sup> Cosapi (54%), Abengoa (27%) and SACEEM (19%).

<sup>22</sup> Bonuses, social security, paid annual leave, retirement fund contributions, compensation for time of service, among others.

#### 4.2.a.iii Workers' Organizations

The Company, observing local labor standards, respects the right of workers to unionize and to negotiate collective bargaining agreements. There are currently two labor unions<sup>23</sup> at the Project.

#### 4.2.a.iv Non-discrimination and Equal Opportunity

The Client and its main contractors, through their policies and ILRs, affirm their commitment to zero tolerance of discrimination due to political affiliation, ethnicity, race, language, gender, age or nationality, personal beliefs, sexual orientation, and union membership, among others.

The Client has a Human Rights Policy, an Ethics Charter, and a Practical Guide to Ethics applicable to partners, contractors, suppliers, and borrowers, which promotes—among others—equality between men and women, respect for privacy, the promotion of diversity, the fight against any form of discrimination, the protection of health and safety at work and, in particular, the prevention and punishment of any situation of harassment.

#### 4.2.a.v Retrenchment

The Client lacks a retrenchment plan.

#### 4.2.a.vi Grievance Mechanism

At the corporate level, the Client maintains a "Whistleblower Channel and Ethics Hotline" which is open to all employees and all external stakeholders, covering all types of complaints in case of suspicion or breach of the Client's ethical standards, including ethical incidents related to labor issues. This hotline uses the following channels to capture complaints or claims (including any internal ones): i) form on the web page;<sup>24</sup> ii) e-mail ([etica.engie@resguarda.com](mailto:etica.engie@resguarda.com)); and iii) dedicated telephone line (0-800-00932). The mechanism allows anonymity and has an option to follow up on the claim made.<sup>25</sup>

EEP will also adapt its existing internal grievance mechanism to incorporate the following: (i) capture complaints through physical forms in the Project area, allowing anonymity; and (ii) response flow. It will also train direct employees and those engaged by its main contractors on its use and generate statistics on complaints received.

#### 4.2.b Protecting the Workforce

At the time of the ESDD, there was no evidence of child or forced labor practices. Even so, the Client will develop a Human Resources Policy for the Project that will explicitly include this prohibition.

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<sup>23</sup> Contractor employee unions: 1. *Confederación general de trabajadores del Perú - Ica* / Number of members: 310; 2. *Juntos por la victoria - Ica* / Number of members: 62

<sup>24</sup> <https://report.resguarda.com/formulario>

<sup>25</sup> <https://report.resguarda.com/seguimiento>

#### 4.2.c Occupational Health and Safety

At the corporate level, the Client maintains an Occupational Health and Safety Management System (OHSMS) certified under ISO 45001:2018 and complies with national Occupational Health and Safety (OHS) legislation. It also implements digital technology to improve its OHS management, through the "ENGIE PREVIENE" application used to report unsafe acts and substandard conditions.

The Client has an Occupational Health and Safety Plan specific to the Project, which is applicable to its own employees, contractors, and subcontractors. This plan covers: i) contractor and personnel entry procedures; ii) protocols for identifying legal requirements and other commitments applicable to the Project; iii) Occupational Safety and Environmental (OS&E) requirements for contractors and suppliers; iv) general OS&E requirements for construction projects; and v) other group guidelines applicable to the Project. In order to comply with the above, the plan includes: i) the execution of OHS activities; ii) the performance of OHS inspections and monitoring; iii) the implementation of OHS training and education; iv) the participation of personnel in drills organized by the main contractor; and v) the implementation of contractor monitoring and supervision.

The Client has an Internal Occupational Health and Safety Regulation for companies providing services to EEP, which is mandatory for all personnel providing services in any of its facilities and projects or performing activities on its behalf. This, in order to comply with the legal provisions in force<sup>26</sup> and to simultaneously guarantee health, physical integrity, environmental conservation, and continuous production in the facilities where it performs its work or services.

The Client will also: i) develop and implement a procedure for the provision of food services, which guarantees food safety in the work camps and includes follow-up and control actions to verify compliance by the contractor companies; ii) conduct periodic monitoring of the quality of water for consumption by all workers on the Project; iii) adapt camp facilities to provide recreation and rest areas for all workers on the Project; iv) develop a procedure for selecting temporary housing (whether internal or external to the Project site) that includes site selection criteria and minimum (standard) habitability conditions; and v) generate statistics for the latter.

#### 4.2.d Provisions for People with Disabilities

The Project does not have persons with disabilities in its workforce. Neither the Client's policies nor the ILR make any mention of provisions for persons with disabilities.

#### 4.2.e Workers Engaged by Third Parties

The Client's policies and the ILR do not explicitly mention workers engaged by third parties; however, the contracts entered into by the Client with its contractors include labor compliance and human rights clauses to be fulfilled by contractors.

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<sup>26</sup> Law No. 29783 - Occupational Health and Safety Law, the Regulations of the Occupational Health and Safety Law approved by S.D. No. 005-2012-TR and the Regulation on Occupational Health and Safety in Electrical Work 2013 approved by R.M. No. 111- 2013 - MEM/DM.

### 4.3 Resource Efficiency and Pollution Prevention

#### 4.3.a Resource Efficiency

The electricity required for the Project's construction phase is supplied by diesel generator sets ranging from 100 kVA to 250 kVA. In addition, small-scale mobile diesel generators are used at the different construction sites, as required. The fuels and lubricants required for construction activities will be supplied by market distribution companies in the region and stored in tanks designed specifically for this purpose. Construction fuel consumption through January 2022 was nearly 1.4 million gallons of diesel; about 1,300 gallons of Gasohol<sup>27</sup> 90 octane, and 43 gallons of Gasohol 95 octane.

The Project will produce its own electricity during the O&M stage. Fuel (mainly diesel) for personnel transportation is estimated at approximately 1.3 m<sup>3</sup>/month. The annual consumption of oil for wind turbines will be 10.5 m<sup>3</sup>. Water for human consumption will be 51 m<sup>3</sup>/month.

##### 4.3.a.i Greenhouse Gases

Greenhouse gas (GHG) emissions during the construction stage will be not significant and limited to those generated by Project vehicles, equipment, and generators. The Company will conduct an inventory of these gases for this phase of the Project.

GHG emissions for the operation phase of the Project will be negligible.

##### 4.3.a.ii Water Consumption

The Project will require the following volumes of water: i) domestic use in camp and offices, about 93,692 m<sup>3</sup> per year (considering 1,175 workers), which will be supplied by the Municipal Water Supply Service of Ocucaje (SEMAPO) and supplied by tanker trucks and stored in tanks designed for this purpose; and ii) human consumption, through 20-liter treated water boxes (60 boxes/day).

The monthly consumption of industrial water is estimated at about 7,592 m<sup>3</sup>. Water for this purpose will be transported to the Project by tanker trucks from two groundwater sources duly authorized by the National Water Authority (ANA, for its acronym in Spanish): i) Ancevalle well, located in the Callango sector, and ii) Ica well, located in the Fundo Rincón Grande sector.

For the construction stage, the Project will develop and implement a Water Use Monitoring Plan that includes actions to optimize water use (mainly in road wetting activities, concrete preparation, and use in camps) at all the Project's construction sites. It will also update its Groundwater Abstraction Monitoring Plan to ensure that subsurface water abstraction remains compliant with the permits issued.

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<sup>27</sup> Gasoline blend with at least 10% alcohol by volume.

A monthly volume of 1,736 m<sup>3</sup> of water will be required to enable the Project's accesses, which will come mainly from the reuse of treated water, after verifying compliance with the applicable maximum permissible limits (MPLs).

#### 4.3.b Pollution Prevention

The Project's Environmental Monitoring Plan includes monitoring of: i) air quality (mainly sulfur dioxide SO<sub>2</sub>, nitrogen dioxide NO<sub>2</sub>, particulate matter PM<sub>2.5</sub> and PM<sub>10</sub>, and carbon monoxide CO) at 5 stations; ii) environmental noise at 5 stations; iii) domestic effluents (at the outlet of the Domestic Wastewater Treatment Plant (WWTP)); iv) biological matter; and v) soil.

The following activities, among others, have been implemented to prevent noise levels: i) preventive or corrective maintenance of mobile units, equipment, and machinery; ii) prioritization of the transportation of materials during daylight hours; and iii) implementation of informative or restrictive signage related to the unnecessary use of horns and sirens in specific areas. To maintain air quality at acceptable levels, the following activities are currently being implemented: i) cleaning and maintenance of access roads; ii) control of vehicular traffic speed within the Project; iii) use of authorized roads; iv) preventive maintenance of vehicles, equipment, and machinery; and v) control of the validity of technical inspection certificates for vehicles and machinery.

With regard to soil protection, the following is currently being carried out: i) reuse of material left over from earthworks (whenever possible); ii) proper management of surplus material in the surplus material storage area; iii) use of previously disturbed areas; iv) gradual rehabilitation of areas disturbed by the Project.

The last two quarterly noise and air quality monitoring reports for the third and fourth quarters of 2021 indicate that the environmental quality standards (EQS) for these parameters have not been exceeded. To date, domestic effluents have not been monitored since the domestic WWTP only began operating in February 2022.

The Client, in addition to the tasks it is currently implementing, will expand its monitoring campaigns to include: i) hazardous and non-hazardous solid waste, both generated and disposed of; ii) surplus excavation waste transported to the surplus material storage area; iii) concrete waste; iv) domestic and industrial effluents;<sup>28</sup> and v) fuel, lubricants, and oil consumption.

#### 4.3.b.i Wastes

The EMP's solid waste minimization and management plan promotes reuse, reutilization, and recycling, as well as waste segregation according to its physical characteristics for better handling.

The solid waste generated by the Project will be as follows: i) common waste, such as food, plastics, cardboard, glass, paper, wrappings, among others, whose production is estimated at almost 40 tons per month (t/month); ii) cables, 30 t/month; iii) cardboard for packaging, 5 t/month; iv) wood, 2

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<sup>28</sup> It should be noted that the industrial effluents generated by the Project are generated by the concrete plant and are recirculated in the same process.

t/month; v) metals, 70 t/month; and vi) construction material, 100 t/month. The Client will evaluate and implement alternatives to eliminate, reduce, reuse, or recycle common waste (mainly food packaging) from employees, contractors, and subcontractors.

Waste is currently collected at the various construction sites and taken to a temporary storage facility before being transported by Solid Waste Management Companies (EO-RS, for the Spanish acronym) for treatment and final disposal.

#### 4.3.b.ii Effluents Management

The Project foresees a maximum domestic wastewater generation volume of approximately 129 m<sup>3</sup>/day (with 1,175 workers), considering an average of 110 liters per person per day. This water will be treated at the domestic WWTP. Portable chemical toilets have been installed at the work fronts, and the waste is handled and disposed of through an authorized EO-RS.

The maximum volume of water for washing the mixer trucks at the concrete plant is estimated at 300 liters per truck, equivalent to approximately 3 m<sup>3</sup>/day. The water resulting from this activity will be collected in a settlement pond and its effluent will be used as a dust control measure to irrigate accesses or work areas.

#### 4.3.b.iii Hazardous Materials Management

The Project's EMP includes a subprogram for managing hazardous substances or materials such as oils, greases, lubricants, and fuels. The estimated amount of waste to be generated during the construction stage is around 3 t/month.

Currently, the Client has implemented the following preventive measures for the temporary storage of hazardous materials: i) placement of safety signage; ii) leveling of the floor with geomembrane lining and a height difference of approximately 30 cm; iii) requirement to use specific personal protective equipment; and iv) placement of anti-spill kits and fire extinguishers in places where hazardous materials are used.

The resulting hazardous waste is collected at the various work fronts and taken to a temporary storage facility before being transported by an EO-RS for treatment and final disposal.

#### 4.3.b.iv Pesticide Use and Management

The Project does not foresee the use of pesticides. There was no evidence of the use of these compounds during the ESDD.

### 4.4 Community Health, Safety and Security

#### 4.4.a Community Health and Safety

##### 4.4.a.i Infrastructure and Equipment Design and Safety

Considering its remote location and distance from any human settlement, the probability that the Project will generate emergency events that constitute a direct threat to any community is practically nil.

Nevertheless, the Client will develop and implement a Traffic Management Plan, applicable to existing and alternate access routes, that identifies potential risks associated with increased vehicular traffic during construction of the Project and establishes: i) procedures for monitoring and supervising vehicular traffic; ii) ingress and egress routes; iii) populated areas; iv) frequency and schedules for mobilization of cargo; v) minimum vehicle driving conditions; and vi) minimum health conditions for drivers. The plan will also evaluate alternatives and develop and implement an Entrance Control Plan for the Project (including the area where the wind farm intersects with the public road) for people outside the Project.

#### 4.4.a.ii Hazardous Materials Management and Safety

The subprogram for handling hazardous substances or materials establishes measures for handling containers with oil, grease, lubricants, and other hazardous materials that may be generated at the project. These measures include: i) temporary storage with safety signs; ii) leveling and covering of floors with geomembranes; iii) identification and proper classification of waste; iv) final disposal of hazardous waste by the EO-RS; v) use of appropriate storage containers; vi) periodic training of personnel working in the area; vii) availability of material safety data sheets (MSDS); viii) use of specific personal protective equipment; ix) anti-spill kits; x) fire extinguishers; and xi) procedures for handling spills on the roads.

Explosives will be used during the construction stage only if there is solid rock and will be stored in two storage sites (storage A and B) located to the north and south of the wind farm. The explosive to be used in the Project will be dynamite, together with its blasting accessories (detonating cords, panels, and electronic detonator). Explosive storage sites will be fenced according to the requirements of the National Superintendency for the Control of Security Services, Arms, Ammunition, and Explosives for Civilian Use (SUCAMEC, for its acronym in Spanish) and storage facilities will have a minimum size of 12 m x 5 m in metal containers with good ventilation. The perimeter of the sites will be fenced with galvanized steel wire mesh. Explosives and blasting accessories will be periodically supplied as required, to avoid keeping excessive quantities of explosives on site.

It should be noted that blasting with protection will be used in some Project areas. Once the (controlled charge) explosives are placed in the holes, this charge will be covered with simple mesh (galvanized steel wire mesh or similar), using sandbags or earth on top of the mesh to fix or fasten it to the ground. This minimizes fragments being released into the atmosphere. At the end of the construction phase, the explosives storage areas will be removed, and the area will be leveled and compacted.

#### 4.4.a.iii Ecosystem Services

There are two ecosystem services that could be affected by the Project: i) insect population regulation and control provided by the avifauna in the area; and ii) the exploitation of brown algae (sargassum) by seaweed farmers from communities in Ica.

To manage the effects on insect population control provided by avifauna, the Project will implement measures to avoid or mitigate their impact on bird populations in the Project area. Regarding the second service, Project activities are not expected to materially affect this activity.

#### 4.4.a.iv Community Exposure to Disease

The only risk of community exposure to disease is the influx of non-local workers for the Project. The Client will therefore develop and implement a Community Health, Safety, and Security Program that includes: i) identification of sensitive receptors; ii) an assessment of impacts and risks of transporting personnel, materials, and equipment; iii) preventive and control measures relating to environmental air quality and noise levels; and iv) prevention and monitoring of COVID-19 cases in contractor employees. It will also develop and implement a training program on community health, safety, and security issues, including campaigns for the prevention of: i) contagious diseases, particularly COVID-19; ii) sexually transmitted diseases; iii) prevention of alcohol, tobacco, and drug use; iv) prevention of sexual exploitation of children and adolescents; and v) traffic accidents and road safety.

#### 4.4.a.v Emergency Preparedness and Response

The Project has a Contingency Plan. The document, however, makes no provision for disseminating it with local communities or for notifying them in the event of an emergency situation. EEP will therefore update it to include these two provisions.

#### 4.4.b Security Personnel

The Client has no direct security personnel. Nevertheless, its contractors do retain external companies for the physical security of Project components and personnel. Accordingly, the Client will: i) develop a Physical Security Management Manual that includes professional ethics and human rights issues and incorporates the United Nations Voluntary Principles (VPs) on Security Forces and Human Rights; and ii) train security personnel on human rights issues using the International Finance Corporation's "Good Practice Handbook. Use of Security Forces: Assessing and Managing Risks and Impacts. Guidance for the Private Sector in Emerging Markets" as a reference and as applicable to the Project.

### 4.5 Land Acquisition and Involuntary Resettlement

#### 4.5.a General

Ninety-five percent of the area acquired for the construction of the Project's components belongs to the Peruvian State. The remaining area was acquired through satisfactory agreements with the holders and owners of these lands, with no involuntary physical or economic displacement whatsoever.

## 4.6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

### 4.6.a General

The Project will be located in a coastal desert habitat (99.7%) of little biological or special ecological interest, covered with minor vegetation (vegetation associated with crops and sparse riparian vegetation belonging to the coastal and Andean agricultural habitat), scarce fauna, and a landscape consisting mainly of dunes and coastal plains with some hills and ridges.

The biological baseline presented in the EIA and supplemented by multiple studies conducted between November 2018, September 2019, October 2020, and January 2021 identified low plant biodiversity for the Project. However, it identified isolated patches of Machay Verde (*Tillandsia latifolia*) distant from each other but close to the TL and the Wind Farm; Pinco-pinco (*Ephedra americana*), which is included as Near Threatened (NT) in the national legislation;<sup>29</sup> Anagrama de Lima (*Mila caespitosa*), also considered as Vulnerable according to the International Union for Conservation of Nature (IUCN); Cirio de Haageo (*Haageocereus sp.*), considered Near Threatened by IUCN; and Nolas (*Nolana arequipensis*, *N. pallida*, *N. willeana*), considered endemic to Peru.

Seventeen species of birds were recorded in the coastal strip; six species in the coastal desert; and 13 species in coastal and Andean agriculture. Species that stand out include: the Peruvian Pelican (*Pelecanus thagus*) and Red-footed Cormorant (*Phalacrocorax gaimardi*), endemic birds classified as Near Threatened by the IUCN; the Peruvian Tern (*Sternula lorata*) and Peruvian Booby (*Sula variegata*) categorized as Endangered by the IUCN; and the Sanderling (*Calidris alba*), the Royal Tern (*Thalasseus maximus*), the Spotted Sandpiper (*Actitis macularius*), the Eurasian Whimbrel (*Numenius phaeopus*), the Ruddy Turnstone (*Arenaria interpres*), and the Surfbird (*Calidris virgata*), classified as of little interest.

As for smaller flying mammals, two species of bats were identified: the Long-snouted bat (*Platalina genovensium*), classified as Near Threatened by the IUCN; and the Atacama little brown bat (*Myotis atacamensis*), classified as Endangered by the IUCN.

In addition, specimens of House mouse (*Mus musculus*), South American gray fox (*Lycalopex griseus*), Andean Fox (*Lycalopex culpaeus*), and five minor reptile species were identified.

### 4.6.b Protection and Conservation of Biodiversity

The EMP, through environmental prevention, correction, or mitigation programs, sets out measures for biodiversity protection and conservation during both the construction and operation phases. Thus, the following activities, among others, have been defined to protect flora: i) prioritization of work in areas without plant cover or previously altered; ii) prohibition of invasive exotic flora that alters natural conditions; and iii) prohibition of burning plant remains. Similarly, terrestrial fauna protection measures include, among others, the following activities: i) prohibition of invasive alien fauna that alters natural conditions; ii) light and noise control during activities; iii) prohibition of

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<sup>29</sup> S.D. No. 043-2006-AG.

hunting, fishing, or capture of fauna; iv) prohibition of pet ownership in the Project areas; iv) use of intervened areas and existing accesses; v) restrictions on circulation outside the defined roads; and vi) fencing of excavated areas and ditches to avoid species entrapment.

The Client will: (i) update and implement the Avifauna Monitoring Plan for the operation phase; (ii) develop and implement a Bat Monitoring Plan; (iii) adjust the frequency, duration, and continuity of avifauna and bat monitoring campaigns based on the observed results; and iv) develop and implement an Operational Adaptation Plan based on the results of the bird and bat monitoring activities that considers, among other preventive actions, wind turbine curtailment or shut-down on demand procedures, as appropriate.

#### 4.6.b.i Modified Habitat

Modified habitats are associated with Andean Coastal Agriculture, with crop-related vegetation, and where invasive alien species were recorded. These habitats, however, account for only 0.3% of the Project area.

#### 4.6.b.ii Natural and Critical Habitat

The Project's natural habitats are primarily associated with a coastal desert habitat. Nevertheless, the Client will implement mitigation and avifauna control measures, as well as restoration of disturbed sites (as part of the Abandonment Plan).

#### 4.6.b.iii Legally Protected Areas and Internationally Recognized Areas

The Project is not located in key biodiversity areas (KBAs) or important bird areas (IBAs); nor is it located in a legally protected area or an internationally recognized area. However, the Project area borders Natural Protected Areas (NPAs) that are part of the National State Protected Natural Areas Service (SERNANP, for its acronym in Spanish) such as the Islotes and Puntas Guaneras – Punta Lomitas Island System National Reserve (located 1.17 km to the southwest), the Paracas National Reserve (located 18.97 km to the northwest) and the San Fernando National Reserve, located 25.32 km to the southeast. A fragile ecosystem called Loma Amará, recognized in the sectorial list of the National Forestry and Wildlife Service (SERFOR, for its acronym in Spanish), is located 1.77 km southwest of the Project.

#### 4.6.b.iv Invasive Alien Species

The Project does not foresee the introduction of invasive alien species.

### 4.7 Indigenous Peoples

#### 4.7.a General

The Project is not located near any indigenous communities and is therefore not expected to impact any indigenous peoples.

## 4.8 Cultural Heritage

The Project has Certificates of Absence of Archaeological Remains (CAARs).<sup>30</sup> It should be noted that Section 2 of the TL has a Technical Opinion<sup>31</sup> from the sectoral authority indicating that the Project is located in an area with pre-existing infrastructure, which is why an Archaeological Monitoring Plan was submitted. On the date of the ESDD, excavation activities in Section 2 had already concluded and had been performed as provided for in the Archaeological Monitoring Plan approved by the Ministry of Culture (MINCUL, for its acronym in Spanish).

### 4.8.a Protection of Cultural Heritage in Project Design and Execution

The Project has an Archaeological Monitoring Plan that sets out the monitoring and control actions for excavation and soil removal activities. The mitigation and contingency measures to prevent, avoid, control, and reduce the incidence and negative impacts established in the Archaeological Monitoring Plan were implemented when archaeological and paleontological remains were discovered by chance in the Project area.

#### 4.8.a.i Chance Find Procedures

The Project has an Archaeological Finds Management Protocol that consists of 5 basic procedures: (i) initial contact, through which the monitoring archaeologist is notified of any material found; (ii) evidence management, through which he/she evaluates the find, and (if applicable) the Ica Decentralized Directorate (DDC-Ica) of MINCUL is notified; (iii) on-site intervention, where the corresponding Technical Record Sheets are prepared; (iv) treatment and custody, through which the general inventory of materials is carried out; and (v) final disposal, which involves the preparation of the final inventory, to be included in the Final Monitoring Report and made available to the DDC-Ica. The delivery of evidence entails signing a record and it then becomes the full responsibility of the MINCUL.

## 5. Local Access of Project Documentation

The documentation relating to the project can be accessed at the following link: <https://engie-energia.pe/notas-de-prensa/avanza-proyecto-eolico-punta-lomitas-en-ica>

The Client's most recent annual Corporate Sustainability Report (2021) is available on the following website: <https://engie-energia.pe/publicaciones-y-politicas>.

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<sup>30</sup> Wind Farm Area (CIRA N° 023-2018/MC); Section 1, Section 3 and SS Bypass (CIRA N° 024- 2018/MC); Section 2 UTM coordinates, Start: East 435742.96, North 8388277.89; End: East 426823. 95, North 8388288.25; Accesses (CIRA N° 127-2021-DDC ICA/MC); Accesses and towers (CIRA N° 150-2021-DDCICA/MC); LV01 (CIRA N° 047-2021-DDC ICA/MC); and DME 01 and 02 (CIRA N° 115-2021-DDC ICA/MC).

<sup>31</sup> Report No. 040-2018-YLCR-APAI-DDC-ICA/MC.