

Environmental and Social Review Summary (ESRS) Engie – Chile

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A. Investment Summary tab (provided by the Team Leader)

Disclosed Date:	4/24/2020
Project Name:	Engie Decarbonization Instrument
Project Number:	12995-01
Investment Type:	Senior Unsecured Term Loan
E&S Category:	B
Projected Board Approval Date:	5/26/2020
Company name (Borrower):	Engie Energía Chile S.A.
Sponsoring Entity: (if any)	N.A.
Sector:	Infrastructure and Energy / Energy
Financing Requested:	US\$ 125,000,000
Financing Currency:	United States Dollars
Project Country:	Chile
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Project Scope and Objective:

The project aims to support Engie Energía Chile (“EECL” or the “Company”) in the construction and operation of the Wind Calama (the “Project”), a wind project with an installed capacity of 151.2 megawatts (“MW”), to be located near the city of Calama in the Antofagasta Region, Chile. The energy produced will replace the anticipated decommissioning¹ of units U14 and U15 of EECL, each with a capacity of 125 MW that are part of the Tocopilla Thermolectric Plant (“TTP”). The estimated cost of the Project is US\$152.9 million. IDB Invest will participate in the transaction through a senior loan of up to 12 years, for an amount of US\$110.0 million. In parallel, IDB Invest will mobilize resources of the Clean Technology fund (“CTF”) for up to US\$15.0 million, to complement the Project’s financing.

The main objective of this operation is to deploy a pilot financial instrument that supports decarbonization activities in Chile, by monetizing a clean technology project’s actual displacement of CO₂ emissions of existing fossil fuel fired power assets. In the absence of a carbon credits market, the financing structure will establish a minimum price for the emissions through a lower financing cost in the CTF loan. Methodology of this mechanism is being developed alongside a technical consultant, so that it can be replicated in other projects in Chile and in Latin America and the Caribbean, with the broader objective to foster the development of a carbon credits market.

B. Environmental and Social Review Tab (provided by the SEG Officer)

ENVIRONMENTAL AND SOCIAL REVIEW SUMMARY

1. Scope of Environmental Review

EECL is a relevant player in the energy industry in Chile, being the fourth largest electricity generator and leader in the northern mining region, with 2.2 gigawatts (“GW”) of gross generation capacity. EECL is the third largest transmission company in Chile and has seaport infrastructure (one seaport in Tocopilla and one in Mejillones), and gas pipelines.

IDB Invest’s environmental and social due diligence (“ESDD”) included the analysis of EECL’s performance at both the corporate and project level. The corporate-level review focused on the Company’s Environmental and Social Management System (“ESMS”) and consisted of a review of documentation and interviews with Company management at their headquarters in Santiago. The interviews were conducted by IDB Invest staff and the ESDD consultants. The project level review focused on the on-the-ground management of Wind Calama and TTP. The ESDD consultants visited each of these facilities during the week of March 9, 2020, to observe performance and interview key actors, including facility management, workers, local community members and local government representatives. The ESDD team compared the performance at these facilities with EECL’s corporate-level ESMS to assess the Company’s conformance with its management system, as well as compliance with the IDB Invest Environmental and Social Sustainability Policy.

Wind Calama’s installed capacity of 151.2 MW will be produced by 36 wind generators (4.2 MW each) mounted on 100-meter towers. The energy will be evacuated to the national grid by way of a connection with the existing Calama-Jama Solar 220 kilovolt (kV) transmission line, which passes

¹ From the end of May of 2024 to January 1st, 2022.

approximately 300 meters from the Project’s electrical substation. Construction began in 2019 and is expected to last 18 months.

Civil works include the construction of platforms for the generators, approximately 20 km of internal roads, the main operations building, and the elevated substation. The contractor for the engineering and construction of all the civil and electrical works is Global Energy Services (GES). Mounting of the turbines will be done by Siemens Gamesa. The workforce will average 84 workers during construction, and six workers during operation.

TTP is comprised of individual units fed by either petroleum-based fuels (e.g., natural gas or diesel) or, in the case of Units 14 and 15, bituminous coal. At the time of this review, there were 493 workers at the Complex, including 337 contractors.

2. Environmental and Social Categorization and Rationale

Pursuant IDB Invest’s Environmental and Social Sustainability Policy (“ESSP”), the Project has been classified as a Category “B” operation, considering the potential environmental and social (“E&S”) risks and impacts of the activities within this review’s scope: the disconnecting of Units 14 and 15 at TTP and the construction and operation of Wind Calama. The operation has potential moderate E&S impacts and risks that are generally limited to the project sites and largely reversible, and that can be mitigated via measures that are readily available and feasible to implement in the context of the investment. Regarding Wind Calama, there are no homes or businesses within 5 km of the project site, which is located in a relatively barren desert environment several kilometers from the nearest water source. Main risks and impacts of Wind Calama include: occupational health and safety (“OHS”) risks during construction and maintenance, solid and hazardous waste management during construction, traffic safety risks during the transportation of oversized loads from the port of entry to the project site during construction, and potential impacts to the habitat of an endangered species of lizard—one individual of which was observed during field surveys as part of the environmental assessment (“DIA”) process. Regarding the disconnection of Units 14 and 15 of TTP, since the units will be shut down but not dismantled, impacts will be limited to the loss or reassignment of approximately 80 jobs.

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

3. Environmental and Social Context

Wind Calama is located approximately 12 kilometers (km) east of the urban center of Calama. The project will be built on three parcels of uninhabited government-owned land, comprising an area totaling approximately 1,800 hectares (ha). Of that area, only about 99 ha will be intervened by project works. The surrounding landscape consists of “absolute desert,” with very low levels of biodiversity. While Indigenous Peoples’ communities can be found in this landscape, the closest such population is the community of San Francisco de Chiu Chiu, approximately 18 km from the project site. TTP, for its part, is located on a heavily industrialized peninsula which is largely geographically separated from the rest of the city of Tocopilla.

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

4.1 Assessment and Management of Environmental and Social Risks and Impacts

a. E&S Assessment and Management System

IDB Invest's ESDD found that EECL's corporate ESMS complies with international standards. The Company has obtained three internationally recognized certifications, all of which are still current: ISO 9001:2015 (Quality Management Systems), ISO 14000:2015 (Environmental Management), and OHSAS 18001:2007 (Occupational Health and Safety Management). All three certifications include TTP within their scope. The ESMS, and the EECL's implementation of it, also meet the requirements of PS1. To better organize and track this implementation across all of its operations, and to bring social management aspects more formally into the management system, EECL will develop an ESMS Implementation Manual. The manual will describe the overall management system and include in one place references to all the system's constituent parts.

b. Policy

EECL has various corporate E&S policies, including: a *Corporate Social Responsibility Policy*; a *Group Environmental Policy*; an *Environmental and Societal Responsibility Policy*; a *Group OHS Rule*; a *Policy on the Incorporation of Ethics in HR Processes*; and a *Community Contribution Policy*.

c. Identification of Risks and Impacts

EECL identified and evaluated the E&S risks associated with Wind Calama as part of the project's permitting process. While this process included an assessment of cumulative impacts, EECL will enhance this analysis to more fully align with guidance on the topic produced by the International Finance Corporation ("IFC"). Specifically, EECL will include in the analysis the identification of Valued E&S Components ("VECs") and of relevant planned or existing projects (including an existing wind farm directly adjacent to Wind Calama) that could impact those same VECs cumulatively.

Regarding OHS risks and impacts, EECL's *Group Health and Safety Rule* requires each project to carry out a Process Hazard Analysis, and in some cases (depending on the complexity of the project), a Hazard Identification (HAZID). The Company has a *Procedure for Hazard Identification in Risk Evaluation* as part of its OHS Management System. At the level of Wind Calama, GES has developed a procedure called *Identification of Hazards and Evaluation of Risks* which grounds this corporate requirement at the level of the individual project.

d. Analysis of Alternatives

EECL was not required to conduct a formal analysis of alternatives in order to obtain the permits for the wind farm. The Company has agreed, however, to compile such an analysis for IDB Invest. This analysis will document any relevant alternative locations and technologies considered during the project's planning phase.

e. Management Programs

At the corporate level, EECL has 22 Standards that provide a set of management procedures that can be applied to all EECL's projects. These cover the gamut of environment, health and safety topics, such as Work with Electricity, Work at Heights, and Waste Management. At the level of Wind Calama, the DIA for the project includes a *Plan for Compliance with Applicable Environmental Legislation*, which includes the mitigation measures that will be implemented to comply with Chilean rules and regulations. The measures cover themes such as emissions (air, noise, and light), liquid effluents, solid waste, flora and fauna, and cultural patrimony. Regarding the decommissioning of Units 14 and 15 of TTA, as mentioned above, EECL is currently only planning for the units to be disconnected—meaning that E&S risks will be limited to just those risks related to potential retrenchment of workers (these are discussed later in Section 4.2). Nevertheless, EECL will develop a full E&S Closure Plan for the units and to incorporate this plan into the ESMS for TTA.

f. Organizational Capacity and Competency

At the corporate level, EECL's management structure includes several E&S related management units, including the Environmental Compliance Department, the Sustainability and Permits Department, and the External Communications Department. Managers from these departments were interviewed during the ESDD and found to be knowledgeable and competent. At the project level, EECL has assigned four experienced and competent employees from the corporate Sustainability and Permits Unit and from the corporate Health and Safety Unit to oversee E&S matters at Wind Calama. At TTP, E&S related staffing consists of the following: an environmental team comprised of four employees reporting to the Operational Environment Manager; two biodiversity specialists; one air emissions specialist; and eight OHS specialists who report to the OHS Manager. These professionals were interviewed during the ESDD and found to be experienced and competent. At the request of IDB Invest, EECL has agreed to prepare an E&S Personnel Plan. The Plan will include corporate- and project-level organigrams (limited to staff and contractors in E&S position) and descriptions of the responsibilities and qualifications of the employees in key posts.

g. Emergency Preparedness and Response

At the corporate level, EECL has developed a *Crisis Management Manual*, applicable to all EECL's projects, which defines roles and responsibilities, and includes an *Emergency Management Plan*. Each of EECL's projects is in turn tasked with developing project-specific procedures. In the case of Wind Calama, GES has developed an *Emergency and Evacuation Plan* aligned with the requirements of PS1. TTP, for its part, has implemented a *General Emergency Plan for TTP*, applicable to the entire complex. To fully align this plan with the requirements of PS1, EECL will incorporate the following: (i) measures for the adjacent community to participate in the identification of any potential emergency-related risks and impacts to their health and safety; (ii) plans for EECL to communicate any emergencies to this community; and (iii) procedures and a timeline for conducting emergency drills.

h. Monitoring and Review

EECL has a procedure called *Environmental Management Review and Follow-up*, which has as objectives to establish the methodology, frequency, and criteria for complying with applicable environmental legislation, and to promote the continuous improvement cycle. In addition, the Company has an *Internal Audit* procedure.

i. Stakeholder Engagement

EECL's Corporate Social Responsibility Policy states the Company's commitment to involving stakeholders in the policies, decisions and actions of the Company, and lays the foundation for a culture of proactive stakeholder engagement. The Company also has a Stakeholder Management Procedure with the objective of managing communication flows, relationships and contacts with external stakeholders.

At the project level, EECL implements Stakeholder Matrices, through which the Company maps all the external actors with whom EECL must establish some level of relationship. These matrices are also used to identify stakeholders' perceptions, expectations and interests. With this information in hand, EECL is able to generate strategies and set up working groups to attend to each particular stakeholder group and to establish agreements and commitments with each identified actor.

For Wind Calama, EECL has developed the *Territorial Management Plan to 2020*, which emphasizes the maintenance of good relations with community members in Alto Loa, as well as with local authorities, and local social institutions. The Company took this proactive step despite the fact that the DIA describes (and the ESDD confirmed) that the project is located in a desert landscape, devoid of communities or human settlements of any kind, where there are no cultural or religious activities or natural resources used by any people—indigenous or otherwise.

Although the project is located within the boundaries of the Indigenous Development Area of Alto Loa, the closest community is the Indigenous Community San Francisco Chiu Chiu, located at more than 18 km from the Project (and not on the route by which project materials will be transported to the work sites). Nevertheless, as part of the *Territorial Management Plan*, and in the spirit of Corporate Social Responsibility (as opposed to risk and impact management), the Project has signed a series of voluntary agreements of support with various indigenous communities from the Indigenous Development Area.

As part of the DIA process, EECL carried out two public consultation workshops (one in the commune of Calama on June 21, 2018, and another in San Francisco de Chiu Chiu on July 4, 2018). During its visit to the project area, the ESDD team observed that the communities of Ayquina and Lasana within the Indigenous Development Area were well informed about the Project, their opinion of it was favorable, and they did not have concerns about risks or impacts related to the project—which they acknowledged was located at great distance from the communities.

For TTP, EECL has developed the *Territorial Management Plan Tocopilla 2020*. As part of it, the Company has carried out a series of communications with the different actors interested in the closure of Units 14 and 15, and has also identified socio-labor risks, held working group sessions, and signed agreements with local stakeholders (e.g., artisanal fishers, port workers, and municipal authorities, among others) with the aim of minimizing any social risks which might result from shutting down the generating units. Looking forward, EECL has agreed to enhance its record keeping efforts related to the continued implementation of these various stakeholder engagement activities in order to be able to more readily demonstrate the full breadth and depth of these activities.

j. External Communication and Grievance Mechanisms

At the corporate level, EECL's web page provides a channel for registering complaints related to such matters as ethics violations and harassment. At the Project level, residents interviewed from the nearest communities indicated having knowledge that they could approach the community relations staff of EECL directly with any complaints. Moving forward, EECL will develop and implement formal grievance mechanisms, aligned with PS1, for both Wind Calama and TTP. The Company will also introduce into its corporate level ESMS procedures to ensure that every project under EECL management will have its own grievance mechanism.

k. Ongoing Reporting to Affected Communities

EECL produces an annual report covering Company performance in a variety of thematic areas, several of which relate to E&S matters such as corporate governance, ethics, and environment. To more directly align with the requirements of PS1, EECL will include in its ESMS a procedure for managing its communications with the public specifically regarding the identification and management of E&S risks and impacts at each of the Company's facilities.

4.2 Labor and Working Conditions

a. Working Conditions and Management of Worker Relationships

EECL employees belong to six unions, accounting for over 84 percent of the Company's employees. Union representatives interviewed during the ESDD indicated that agreements have been respected by the Company, and that new workers feel free to join unions. EECL's *Corporate Social Responsibility Policy* covers aspects related to labor and working conditions and commits the Company to carry out its activities in line with relevant conventions of the International Labor Organization. The Policy makes clear that the Company rejects all forms of forced or child labor. It includes the commitment to "combat all forms of discrimination," and "promote equal opportunity." The policy also formalizes the Company's acceptance of employees' right to join unions and bargain collectively. Furthermore, the Policy codifies EECL's commitment to the principles of non-discrimination in employment-related decisions. EECL also has an *Internal Regulation on Order, Hygiene and Security* which all employees must read and sign at the time of their induction and which lays out their labor rights. Taken together, these documents provide a robust framework for managing labor and working conditions according to the standards set in PS2 and Chilean rules and regulations.

At the Project level, GES provides each worker with clear, understandable documentation regarding their employment rights, by way of a project-level *Internal Regulation on Order, Hygiene and Security* that aligns with EECL's corporate policy.

There is no worker camp at the project site (workers commute from surrounding communities). The project site is, however, equipped with a cafeteria that is built and operated in compliance with Article 28 of Decree Number 594 of the Ministry of Health. Workers interviewed during the ESDD reported being equipped with appropriate Personal Protective Equipment ("PPE") and feeling safe on the job. No accidents have occurred at the site since the start of construction. EECL plans to take the proactive step of developing and introducing a formal Project worker grievance mechanism aligned with the requirements of PS2, thereby offering workers the opportunity to register any complaints they may have, without fear of reprisal and with the expectation of receiving a fair and due process.

The shutdown of Units 14 and 15 at TTP present the risk that some workers may need to be retrenched. Although the shutdown will affect approximately 80 positions, EECL has been working to minimize the need for retrenchment through various avenues. For example, the Company has held working group sessions with labor unions and has constituted an Energy Transition Committee, with the hope of reassigning most of the affected workers to other positions within the Company. EECL is also developing plans to train affected workers in other productive areas, and assessing other options such as possibly offering early retirement to those affected workers nearing retirement age. EECL has incorporated its analysis of options and the resultant plans into a Workforce Reduction Plan aligned with the principles in PS2.

b. Occupational Health and Safety

At the corporate level, EECL has a series of policies and plans that orient OHS management across its operations. These include umbrella policies, such as the aforementioned *Internal Regulation on Order, Hygiene and Security*, as well as detailed Health and Safety Rules that include the following: Permit to Work System (GR 05), Prevention of Traffic Risks (RG 08), and Health and Safety in Projects and Acquisitions (GR 09). In compliance with the Chilean legal requirement to develop a Worker Health and Safety Management System applicable to its contractors and subcontractors, EECL has developed the *Special Regulation for Contractor and Subcontractor Companies*. During its visits to the project sites, the ESDD team confirmed that both Wind Calama and TTP align their OHS plans with these corporate level guides.

c. Workers Engaged by Third Parties

In addition to the abovementioned *Special Regulation for Contractor and Subcontractor Companies*, EECL has developed a corporate level policy called, *Health and Safety with Regard to Subcontracting*, with the objective of assuring that the OHS procedures of EECL's subcontractors are at least as rigorous as those of EECL itself. During the visit to Wind Calama, the ESDD team verified that GES was duly implementing various key requirements stipulated in these high-level documents such as: providing workers with training in OHS and the proper use of PPE, providing workers with adequate drinking water and sun block; delimiting and demarcating work areas; and implementing a system of inspection cards ("*fichas*"); among others.

d. Supply Chain

In accordance with its *Code of Conduct in Relationships with Providers*, all of EECL's providers must accept EECL's contractual clause regarding environmental and social ethics and responsibility. Furthermore, the Code stipulates that the Company will exclude from future consideration any provider, direct or indirect, that participates in any form of prohibited labor practice (e.g., child labor or forced labor), corruption or discrimination in the carrying out of any activity related to the EECL Group.

4.3 Resource Efficiency and Pollution Prevention

a. Resource Efficiency

EECL's *Corporate Social Responsibility Policy* and its *Group Environmental Policy* establish the Company's objectives regarding the transition to renewable energy and the reduction of greenhouse gases. The latter policy includes indicators for 2015-2020 that include a portfolio consisting of 25 percent renewable sources, and a reduction of 20 percent in greenhouse gas emissions. Likewise, the *Environmental and Social Responsibility Policy* includes policies regarding the management of climate change impacts.

At the project level, the greenhouse gas emissions generated during construction of Wind Calama will be minor, particularly in relation to the significant reduction in such gases that will result from the replacement of thermal power sources by this low carbon source once the project is in operation.

Regarding the efficient use of water, The *Environmental and Social Responsibility Policy* and the *Group Environmental Policy* establish objectives regarding the use of natural resources, including water. For Wind Calama specifically, water will be used for drinking, for dust management and for cleaning of equipment during construction, as well as for some construction purposes (e.g., mixing cement). Drinking water will be bottled water, and the DIA specifies that water for construction-related purposes (approximately 4,800 cubic meters) will be trucked to the site. The DIA also specifies that all water used for cleaning of equipment will be filtered and reused.

b. Pollution Prevention

EECL's corporate standards contemplate measures for waste management (hazardous, standard, and domestic). At the project level, for both TTP and Wind Calama, the environmental permits ("RCAs") provide assurance that the mitigation measures planned by the project to manage air emissions, wastes, effluents and hazardous materials are compliant with national and local laws and regulations. The ESDD confirmed that these measures also comply with the requirements of PS3. For Wind Calama specifically, GES has developed a *Waste Management Plan*, aligned with the corporate standard, that includes specific coverage of the management of hazardous waste. The ESDD team observed that the waste storage area was clean, well-organized, and built in line with international good practice standards.

At TTP, the team also observed waste management practices aligned with international good practice. At that location, management of non-hazardous wastes is carried out according to the EECL corporate Standards, as opposed to being carried out according to plans that are site specific. Hazardous wastes are managed according to a site-specific Hazardous Waste Management Plan.

4.4 Community Health, Safety and Security

a. Community Health and Safety

As mentioned previously, EECL has various corporate-level policies that address emergency response and will be updating these to address risks to community health and safety. Regarding the Project specifically, considering its remote location relative to any human settlements, there is no risk of emergency events posing a threat to any community. The Project also does not pose risks to local

communities related to traffic safety; the DIA evaluates this potential risk and finds that the route to access the project (B-165) is not used by buses destined for any communities (most of the traffic is heavy truck traffic associated with the mining industry). The DIA also explains that project-related truck traffic will not enter the urban center of Calama. During its visit to the zone, the ESDD team interview representatives from indigenous communities from Alto Loa who confirmed that the local population does not make use of route B-165.

Given that some project components will be transported on extra wide and long trucks, the project will enhance its Transit Plan (which currently focuses on traffic within the project site) to identify all points of high risk along the route from the port of entry to the Project site (e.g., any schools or locations where people might congregate for events), and to present plans to avoid or mitigate any such risks. The enhanced plan will also include emergency response procedures to be followed in case of any accident involving project-related vehicles along the route.

b. Security Personnel

Engie contracts the security services for both TTP and Wind Calama from a third-party security provider. None of the guards carry arms. According to interviews with the guards at Wind Calama during the ESDD site visit, upon joining the firm guards are put through a formal training as Security Guards (OS-10). This training qualifies them to be accredited by the Chilean National Police Force (*Carabineros de Chile*).

To align the Company's management of risks related to security with international good practice, EECL will incorporate into its corporate ESMS a procedure to ensure that each project at which security services are required will be prepared with a Security Management Plan. These plans will adhere to the requirements set forth in PS4 regarding the protection of human rights. Furthermore, EECL will develop and implement such plans specifically for Wind Calama and TTP.

4.5 Land Acquisition and Involuntary Resettlement

The construction and operation of Wind Calama does not involve any physical or economic displacement or any land acquisition, and therefore PS 5 does not apply. The Project will be built on state-owned land to which EECL has been granted a concession.

4.6 Biodiversity Conservation and Natural Habitats

a. General

Biodiversity conservation is a principal component of EECL's corporate Environmental Policy. The Policy makes clear that EECL's projects shall address biodiversity management through the implementation of the mitigation hierarchy (i.e., avoid, minimize, compensate). To more directly align this policy with the PS6, EECL will include an explicit requirement for any project with potential impacts on biodiversity to develop a discreet Biodiversity Management Plan.

The Wind Calama farm is in a bioregion classified as "Desert Region," with annual rainfall of less than 100 millimeters. The Project site itself is situated within "absolute desert," without any vegetative cover, approximately five kilometers from the Loa River—which is the nearest open water body. The Project is not located near any protected areas or Key Biodiversity Areas.

b. Protection and Conservation of Biodiversity

Two biological field surveys were carried out for the DIA—one in 2017 and one the following year. Consistent with expectations—given the biogeography and interviews with inhabitants from the region—the surveys did not detect any birds, mammals or amphibians. The only vertebrate detected was a single specimen of a lizard known as the Dragon of Torres-Muta (*Liolaemus torresi*).

Despite the relatively low level of bird activity at the project site (resident, migratory or transient), the DIA discusses the potential risk of birds colliding with turbines or other project infrastructure and proposes several measures to mitigate this risk. These measures include: (i) painting the turbine blades with anti-reflective coating to avoid confusing birds; (ii) installing devices to visually dissuade birds from approaching (e.g., marker balls on power collection lines); and (iii) prompt removal of trash from the site so as not to attract scavengers. EECL will incorporate the aforementioned risks and mitigation measures, as well as any others mentioned in the DIA, into a Biodiversity Management Plan in conformance with PS6.

c. Modified, Natural and Critical Habitat

The only lizard that was detected (Dragon of Torres-Muta) is endemic to Antofagasta desert region and is listed on the IUCN Red List as Endangered. Impacts to the species from the project are anticipated to be relatively small in scale (given the small physical footprint of the project's infrastructure and the low observed abundance of the species at the site) and limited in duration to just the construction period. Nevertheless, EECL will conduct a Critical Habitat Assessment to determine the importance of the project area to the overall population of the species quantitatively. With that assessment as a guide, EECL will then develop a Biodiversity Action Plan aimed at ensuring that, over a reasonable time period, the project will result in a "net gain" for the population. EECL will incorporate monitoring of this population over the long-term into a Biodiversity Monitoring Plan which will also include all the biodiversity monitoring requirements specified in the DIA, plus the addition of procedures to monitor for the possible presence of any bats.

4.7 Indigenous Peoples

As mentioned previously, neither Wind Calama nor TTP involve risks or impacts to any Indigenous Peoples. The Project is located 18 km from the nearest indigenous community, on land with no value (religious, economic, or otherwise) to any such community, and on a route that is not used to access any such community.

4.8 Cultural Heritage

a. Protection of Cultural Heritage in Project Design and Execution

The archaeological study undertaken for the DIA found seventy archaeological sites all over the Project footprint. Most of these sites consist of lithic piles thought to be territorial boundary markers of very low archaeological importance, while the rest are small, dispersed artifacts (mostly historical artifacts, animal parts, or pieces of stone). Even though the construction activities will not affect any of these sites, the Project will respect a buffer of 10 meters around each one of them.

The DIA commits the project to train workers in appropriate measures to protect any cultural heritage at the site, and to ensure the presence on site during any earth moving activities of a professional archaeologist. During construction activities to date, three “chance finds” of artifacts have occurred. None of these is in an area that will be affected by construction activities.

In addition to the archaeological sites, there are five “*huellas troperas*,” (historical tracks) that cross the Wind Calama area, and which cannot be affected without permission from the National Commission of Monuments (*Consejo Nacional de Monumentos*). The Project has applied for and is awaiting a permit that would allow it to work in the areas of the *huellas* under the supervision of an archaeologist. In the meantime, it has installed eight platforms to allow vehicles to cross the *huellas* without damaging them. Any artifacts encountered during future work in the *huellas* will be rescued and, after being catalogued, donated to a museum in Calama.

5 Local Access of Project Documentation

More information about ENGIE Energía Chile, the Wind Calama project and the Tocopilla power plants can be found in the following websites:

- www.engie.cl (Website for ENGIE’s activities in Chile)
- www.engie-energia.cl (Website for ENGIE Energía Chile S.A. Please refer to Investors section (“*Inversionistas*”))
- https://seia.sea.gob.cl/expediente/ficha/fichaPrincipal.php?modo=normal&id_expediente=2138966796 (Website of the SEIA - Environmental Impact Assessment Service)

6 Environmental and Social Action Plan

No.	Aspect	Action	Deliverable	Deadline
PS 1: Assessment and Management of Environmental and Social Risks and Impacts				
1.1	Legal Compliance	a. Provide IDB Invest with periodic updates of the permit matrix for Wind Calama.	Permit Matrix.	In each Environmental and Social Compliance Report (ESCR)
		b. Provide IDB Invest with the environmental permits required for the dismantling of Units 14 and 15 of the Tocopilla Thermoelectric Plant (TTP), if this occurs during the life of the Loan.	Environmental and Social (E&S) Permits.	Prior to the dismantling of Units 14 and 15
1.2	Environmental and Social Management System (ESMS)	a. Incorporate the social plans and procedures in Engie Energía Chile’s (EECL’s) corporate ESMS.	Updated ESMS.	Prior to First Disbursement
		b. Prepare a manual that describes how the integrated corporate ESMS functions, including references to all the documents that form part of the system (i.e., its constituent parts).	ESMS Manual.	Prior to First Disbursement
1.3		a. Update the Cumulative Impact Assessment (CIA) already	Updated CIA.	Prior to First Disbursement

No.	Aspect	Action	Deliverable	Deadline
	Risk and Impact Identification	undertaken for Wind Calama to better aligned with the methodology in the IFC manual, "Good Practice Handbook on Cumulative Impact Assessment and Management: Guidance for the Private Sector in Emerging Markets" (2013).		
		b. Incorporate actions into the Wind Calama ESMS to manage any impacts identified in the CIA.	Updated ESMS.	Prior to First Disbursement
1.4	Management Programs	Develop a closure plan for Units 14 and 15 of the TTP.	Closure Plan incorporated into the ESMS for TTP.	One year after Financial Close
1.5	Organizational capacity and competency	Prepare an E&S Personnel Plan with organigrams and information about the qualifications of key personnel at the corporate level.	E&S Personnel Plan incorporated in the corporate ESMS.	Prior to Financial Close
1.6	Organizational capacity and competency	Prepare an E&S Personnel Plan with organigrams and information about the qualifications of key personnel at the level of Wind Calama, that includes all contractor and consultant personnel in charge of managing E&S matters at the project site.	E&S Personnel Plan incorporated in the Wind Calama ESMS.	Prior to Financial Close
1.7	Stakeholder participation	Document the continuous stakeholder participation process with communities and interest groups in the vicinity of TTP and Wind Calama.	Meeting minutes, agreements, attendance lists and photographic records.	In each ESCR
1.8	Complaints mechanism	At the corporate level, implement a procedure that establishes that each project have a complaints mechanism aligned with the requirements of PS1.	Procedure incorporated into the corporate ESMS.	Prior to Financial Close
1.9	Complaints mechanism	For Wind Calama, develop and implement a complaints mechanism aligned with PS1.	Complaints mechanism for Wind Calama.	Prior to Financial Close
1.10	Complaints mechanism	For TTP, develop and implement a complaints mechanism aligned with PS1.	Complaints mechanism for TTP.	Prior to Financial Close
1.11	Comunicacion es externas	At the corporate level, develop a procedure for the management of communications with the public aligned with PS1.	Procedure incorporated into the corporate ESMS.	Prior to First Disbursement
1.12	Análisis de Alternativas	Compile an Analysis of Alternatives for Wind Calama.	Analysis of Alternatives.	Prior to First Disbursement
PS 2: Labor and Working Conditions				
2.1	Working conditions	Establish a worker complaints mechanisms aligned with PS2 for workers at Wind Calama.	Worker Complaints Mechanism incorporated into the Wind Calama ESMS.	Prior to Financial Close

No.	Aspect	Action	Deliverable	Deadline
PS 4: Community Health, Safety, and Security				
4.1	Emergency preparedness and Response	Include in the corporate ESMS a procedure to ensure that the Emergency Response Plan for each of EECL's projects and installations contemplates the following: (i) the participation of communities and interest groups in the identification of potential risks and impacts to their health and security; (ii) alert and support to local communities in case of emergencies.	Procedure in the corporate ESMS.	Prior to Financial Close
4.2	Emergency preparedness and Response	Update the Emergency Response Plan for TTP so that it contemplates the following: (i) the participation of communities and interest groups in the identification of potential risks and impacts to their health and security; (ii) alert and support to local communities in case of emergencies; (iii) procedure and a chronogram for emergency drills.	Updated Emergency Response Plan for TTP.	Prior to Financial Close
4.3	Traffic risk management	Update the Traffic Management Plan to cover risks associated with the transport of oversized loads from the port to the entrance of Wind Calama, and to contemplate the following: (i) the identification of any high risk point on the route from port to project and the definition of the respective mitigation measures; (ii) the emergency response procedure related with this transport.	Updated Traffic Management Plan.	30 days prior to the arrival of first oversized loads
4.4	Security personnel	Include in the corporate ESMS a procedure to ensure that any installation of EECL with security guards implements a Security Plan aligned with PS4.	Procedure in the corporate ESMS.	Prior to Financial Close
4.5	Security personnel	Develop a Security Plan aligned with PS4 for Wind Calama.	Security Plan as part of Wind Calama ESMS	Prior to Financial Close
4.6	Security personnel	Develop a Security Plan aligned with PS4 for TTP.	Security Plan as part of TTP ESMS	Prior to Financial Close
PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources				
6.1	ESMS	Update EECL's Environmental Policy to align the management of biodiversity themes with PS6, including the need to have Biodiversity Management Plans for any new project of EECL that might have potential impacts on biodiversity.	Updated policy.	One year from the date of Financial Close.

No.	Aspect	Action	Deliverable	Deadline
6.2	Biodiversity protection and conservation	a. Carry out a Critical Habitat Analysis for the species Dragon of Torres-Mura (<i>Liolaemus torresi</i>).	Critical Habitat Analysis.	Prior to Financial Close
		b. Prepare and adopt a Biodiversity Action Plan for the species.	Biodiversity Action Plan.	Prior to First Disbursement
		c. Prepare a Biodiversity Management Plan for Wind Calama that conforms to the Environmental Impact Declaration (DIA) and that includes measures necessary to mitigate the risks identified.	Biodiversity Management Plan as part of the ESMS for Wind Calama.	Prior to Financial Close
		d. Carry out a baseline study for bats for Wind Calama, covering both migratory seasons.	Final baseline study for Wind Calama.	One year from the date of Financial Close
		e. Prepare a Biodiversity Monitoring Plan that includes all the agreements in the addenda of the DIA for terrestrial fauna (e.g., guanacos), birds and bats.	Biodiversity Monitoring Plan for Wind Calama.	Prior to the start of operations

Contact Information For project inquiries, including environmental and social questions related to an IDB Invest transaction please contact the client (see **Investment Summary** tab), or IDB Invest using the email requestinformation@idbinvest.org. As a last resort, affected communities have access to the IDB Invest Independent Consultation and Investigation Mechanism by writing to mecanismo@iadb.org or MICI@iadb.org, or calling +1(202) 623-3952.