# Environmental and Social Review Summary (ESRS) – Cerro Pabellón Geothermal Project

This document serves to demonstrate to the Board and to the public that the operation either currently complies with the IIC Environmental and Social Sustainability Policy, or that it will comply within a reasonable period of time.

## 1. Overview of Scope of IIC E&S Review

The environmental and social review of the Cerro Pabellón project ("the Project" or "Cerro Pabellón") to be developed by Geotérmica del Norte (GDN) was carried out between and July and September 2016. The review was based on publically available information and documentation provided by Enel Green Power (EGP), the project operator, and information gathered during a site visit (July 11-15, 2016). The primary goal of the visit was to evaluate the Project's E&S performance, compliance with E&S national applicable laws, regulations, and permits, and alignment with the IIC Sustainability Policy, which include the International Finance Corporation (IFC) Performance Standards (PS) on Environmental and Social Sustainability, and the IDB Safeguards. The site visit included a tour of the Project camp, the power plants, the geothermal wells, the transmission lines, and the community of Estación San Pedro. The team met with stakeholder groups, as well as members of the Project staff. Document review took place both before the site visit (focusing primarily on the EIAs) and after (considering additional information shared by EGP staff). The project is in construction and was considered to be 61% completed at the time of the site visit.

## 2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category B operation in accordance with the IIC Sustainability Policy, given that it will likely cause mostly short-term negative environmental and associated social risks and impacts and for which effective mitigation measures are readily available. These risks and impacts include those typically associated with construction projects (e.g., construction site health and safety, transportation safety, generation and management of wastes) and with drilling and testing of geothermal wells (such as loss of habitat in platform sites and access roads, management of drilling muds and cuttings, worker health and safety).

## 3. Environmental and Social Context

The Project is located in Pampa Apacheta, a remote area in high Andes (approximately 4.500 meters above sea level) of the Antofagasta Region of Chile east of the San Pedro and San Pablo volcanos, approximately 100 km northeast of the city of Calama, 70 km south of the village of Ollagüe, and 7 km west of the Bolivian border. Precipitation is scarce and is highly concentrated in the months of February to April, which coincides with the Altiplano winter. The surrounding arid puna and desert ecosystems that are considered natural habitats with a full assemblage of native species typical of the region, including those of national and international conservation interest such cacti, llareta plants, Andean cats (an IUCN Red List Endangered species), vizcachas, and *Liolaemus* lizards. There are no settlements

within the Project's area of direct influence (i.e., the Project camp near Ojos del San Pedro, the Pampa Apacheta area where wells and the geothermal plant are being constructed, the 27-km transmission line corridor to the vicinity of El Abra mine, and associated access roads). There are, however, six indigenous communities within the area of indirect influence (Conchi Viejo, Cupo, Estación San Pedro, Ollagüe, Taira, and Toconce), and with which EGP has a positive and on-going engagement. Despite the absence of present-day settlements, the Project is located in area with a rich cultural heritage, including numerous archaeological sites.

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

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

In line with Chilean legislation GDN rigorously assessed the environmental and social risks and impacts of the Cerro Pabellón project by four separate environmental impact assessments<sup>1</sup> (EIA or DIA) which included rounds of interagency review and securing of sectorial permits<sup>2</sup>.

GDN has developed and implemented environmental and social management plans that are, in general, in compliance with IFC's Performance Standard (PS) 1 requirements, including consultation with legally-recognized indigenous communities in the Project's broader area of indirect influence. These include: i) environmental management and environmental monitoring for each EIA (which include social and cultural heritage aspects); ii) environmental risks prevention; iii) spill response; iv) flora and fauna rescue and relocation; v) mitigation plans for structures installed in community occupied territories, changes in the quality of views, and for vegetation cover; vi) dust and emission control; vii) noise control; viii) geomorphologic alterations; ix) traffic control; x) protection of archeological sites; and x) central emergency.

The Project is governed by EGP's overarching Quality, Safety, and Environmental Policy and the *"Sistema de Gestión Integrado – Chile y Países Andinos"* (SGI). The information collected in the field indicates a set of robust social performance and risk management actions and protocols. The SGI requires legal compliance with all legislative national requirements, including all EIA and RCA<sup>3</sup> commitments.

EGP also has a Health, Safety, Environment and Quality (HSEQ) Manual for Contractors and Subcontractors, which provides a breakdown of its environmental and social objectives and principles, and references a broad range of policies and procedures regarding environmental and health and safety performance.

The Environmental Impact Assessments for the 50-MW Cerro Pabellón Geothermal Plant (CPGP or "the Plant"), the Transmission Line, and the Modified Transmission Line have been approved by the environmental authority. The Plant received its RCA in April, 2012, the Transmission Line in

<sup>&</sup>lt;sup>1</sup> The environmental assessments submitted are the Geothermal Plant EIA (2011), Transmission Line EIA (2012), Transmission Line Modification DIA (2015), and Geothermal Plant Expansion EIA (2016). The Geothermal Plant Expansion EIA was under agency review during the preparation of this ESRS.

<sup>&</sup>lt;sup>2</sup> The Sectorial Environmental Permits (PAS) obtained are for Wastewater Treatment and Disposal, Solid Waste Management, Industrial Facility Construction, Rural Land Subdivision and Urbanization, and Capture of Protected Species.

<sup>&</sup>lt;sup>3</sup> RCA stands for *Resolución de Calificación Ambiental*, which is equivalent to an environmental license.

July, 2013, and the Modified Transmission Line in January 2016. An EIA for the expansion of the CPGP to 100 MW was submitted in July, 2016, and is currently being assessed by the Chilean Environmental Assessment Service (*Servicio de Evaluación Ambiental* – SEA).

The EGP team, comprised of 13 individuals, is divided into three primary units: Project Management; Drilling; and Construction. In addition to the EGP staff, the firm SGA provides environmental and cultural heritage supervision with a focus on RCA requirements, with a rotating skilled and experienced team that includes environmental specialists, biologists and archaeologists. The EGP team supervises the adequate performance and compliance of the approximately 53 Contracting and Subcontracting companies.

The project has a "Central Emergency Plan (*Plan de Emergencia Central*) which all Project staff (direct or subcontracted) must adhere to. The plan includes those responsible, the scope of their responsibility, minimum equipment lists, evacuation routes, preventative and reactive guidelines for possible risks including fires, accident or injury, volcanic eruption, extreme weather, and blowout drilling. The project and its permanent installations have been evaluated for seismic risk and this is considered a low risk scenario.

The Regional Environmental Service (*SEREMI Medio Ambiente*) and the Livestock and Agriculture Service (SAG) have commented on the Geothermal Plant Expansion EIA and both request that the Emergency Prevention Plan include measures to protect flora and fauna from spills of hazardous materials and geothermal fluids. Also, the *SEREMI Medio Ambiente* requests that this plan include the number of people in the emergency brigades, contact information for responsible authorities, post-spill monitoring parameters, a map of water bodies, and actions for the risk of well steam releases.

The Project site undergoes periodic government-run inspections for compliance with legislative standards and RCA requirements. At the time of due diligence, no significant outstanding issues were identified. EGP undertakes weekly site safety walks performed by its senior managers, with documentation of findings and responses. Although identified risks and contractual or regulatory responsibilities are adequately addressed, there is no evidence of an overarching matrix or register which identifies all impacts and management programs in place, and monitors or reviews them for effectiveness in a holistic manner.

Information collected in the field indicates that all major stakeholders have been identified, and are being engaged with in an appropriate manner. The communities in the Project Area of Indirect Influence are primarily indigenous or of indigenous descent. GDN and EGP interact with the communities under a broad Project-wide policy of community engagement, regardless of ethnicity. There is ample evidence of ongoing engagement and disclosure with communities, as well as "community monitors" who are indigenous community members working directly with the Project and communicating relevant information back to their home towns. The Project is practicing "Informed Consultation and Participation" in compliance with PS 1 and enjoys broad community support.

EGP is in ongoing discussions to define agreements that would bring benefits to each of the six indigenous communities based on their specific situations and needs. Through these discussions, EGP has been able to share proactively information regarding the status of the Project.

While EGP has an excellent organization in place to manage E&S risks, there is a need for a concise Project-specific ESMS framework document that provides a roadmap to the various components of the system and summary of the E&S commitments and requirements that will then inform the development of an E&C Compliance Report to be submitted periodically to the IIC.

## 4.2 Labor and Working Conditions

Cerro Pabellón currently has more than 1,000 workers spread among more than 50 contractors. EGP provides oversight and requirements through its management system and onsite supervision, as required by Chilean legislation. Working and labor conditions observed during the site visit met or exceeded IFC General EHS Guidelines. The Project does not involve any form of child or forced labor. Minor gaps with PS 2 requirements were limited to providing a formal worker's grievance mechanism and developing a more systematic approach to tracking contractor HR and OHS performance.

At the time of the site visit, the Project had 1,200 workers the majority of which were indirectly contracted. Of these, 13 were direct hires from EGP. A total of 350 contract employees live in the Project camp near the abandoned town of Ojos del San Pedro, while the rest live in regional population centers, primarily Chiu Chiu and Calama, and are brought in daily by buses or vans operated by third parties. However, the Geothermal Plant RCA indicates 560 workers during construction and the Transmission Line indicates a maximum of 362 workers during construction, for a total of 922 workers assuming simultaneous peaks for the Plant and the Transmission Line.

The overarching management system focuses on Contractor and Subcontractor obligations for compliance with national legislative requirements and the required language and content of Contractor or Subcontractor Labor, Working Conditions and OHS management plans. Chile's national legislative requirement with respect to labor issues are considered to be of high standard. The documents place the responsibility for compliance on Contractors and Subcontractors but do not offer procedures by which EGP would review or evaluate performance, beyond weekly safety walks. There is no mechanism for tracking and auditing Contractor and Subcontractor performance in regards to labor and working conditions, including OHS.

Chile is signatory of the following International Labor Organization (ILO) Conventions: i) Freedom of Association and Protection of the Right to Organize (C087); ii) Right to Organize and Collective Bargaining (C098); iii) Equal Remuneration (C100); iv) Discrimination (C111); v) Forced Labor (C029); vi) Abolition of Forced Labor (C105); vii) Minimum Age (C138); and viii) Worst Forms of Child Labor (C182). Thereafter compliance with national legislation is sufficient to adequately protect many of the specific worker rights identified in PS 2.

Chilean regulation (Law No. 20.123 – 2006) stakes responsibility for subcontractor and subcontractor behavior and compliance with minimum labor standards on the contracting company (EGP in this case). The content of this law is referenced and reinforced in the reviewed contractor manuals. These manuals provide a framework around which Contractors are expected to develop and implement viable OHS policies and procedures, although there is little evidence of ongoing reporting and monitoring of performance on the part of EGP to ensure compliance. It is unclear the extent to which EGP is able to manage potential OHS and EHS risks.

While the documentation provided did not reference Human Resources requirements or other key performance indicators (KPIs) specific to working conditions or management of worker relations, compliance with Chilean legislative requirements is considered to be provide general compliance with PS 2 working conditions standards. However, in order to fully comply with PS 2, EGP must develop and implement an internal grievance mechanism for all Project workers.

#### 4.3 Resource Efficiency and Pollution Prevention

Cerro Pabellón will generate and transport electricity using geothermal resources, thus the use of fuels and the generation of solid wastes, effluents, and GHG emissions during operations will be low and readily manageable. The use of water resources is the main concern given the Project's location in a relatively arid region of the Andes adjacent to the Atacama Desert. While no significant impacts to shallow aquifers have been predicted, continuous monitoring of shallow wells in the Quebrada La Perdiz and Río San Pedro basins is being carried out.

GHG emissions were calculated by Enel based on the GHG Protocol which establishes that emissions considered need to include: i) direct emissions (i.e. vehicles); –ii) emissions generated by purchase of energy directly from the grid – which does not apply to the Project; and –iii) emissions generated by third party companies that work for the Project (i.e. contractors, emissions generated by transportation of supplies). Enel determined that 69.62% of emissions will be generated by the third category (contractors, supplies, transportation of waste). Overall, the Cerro Pabellón geothermal project will result in the generation of electricity with minimal consumption of fuels and minimal GHG emissions. The use of binary geothermal technology reduces emissions to greenhouse gas and other emissions to zero, avoiding some 1,200 pounds of CO2 emissions per MW-hour compared to the operation of a power traditional LNG-fired power plant.

Due to the scarcity of freshwater resources and high demand for competing uses, water use is a major concern for all projects located in the Atacama Desert and adjacent high Andes. During construction, water is being trucked in for industrial uses and drinking purposes. This scheme will be maintained during operation, but water demand is foreseen to diminish significantly as the needs for freshwater for domestic uses are greatly reduced due to the small number of onsite personnel and for the consumption for construction is eliminated. The geothermal wells themselves will provide the majority of water required for the operation of the Project.

During drilling, the estimated peak water demand is 25 liters per second (I/s) per well. Muds from previous drilling is stored in lined ponds and is been reutilized during the ongoing drilling activities. The geothermal fluids will be extracted from depths of 1,900 to 2,700 meters and will be reinjected at a maximum of 1,600 tons per hour (t/h). With the proposed expansion, each additional generator unit will require an additional 700 cubic meters per hour (m<sup>3</sup>/h). Thus, the demand for the 100-MW project is 2,800 m<sup>3</sup>/h. However, the binary technology of the proposed expansion is a closed system and there is no loss of water via evaporation from the cooling system. However, the Regional Environmental Service (*SEREMI Medio Ambiente*) comments on the Geothermal Plant Expansion EIA request that the EIA indicate how the expanded plant (50 MW to 100 MW) will not affect the shallow aquifers of the Salar de Ascotán and the Ojos de San Pedro.

The construction phase will generate air emissions estimated at: 0.3 t/d MP10 approx.; 1.6 t/d NOx approx.; 0.4 t/d CO approx.; 0.003 t/d SOx approx. and 0.003 t/d HC/COV approx., mainly produced during the excavation phase, by traffic and the use of machinery. These emissions are anticipated to continue during the 30 months of construction.

The only type of liquid waste generated will be wastewater from the camp (45 m<sup>3</sup>/d approx.) and from the work fronts (45 m<sup>3</sup>/h approx.). These waters will be taken to modular treatment plants, and treated water will be used for dust control (road wetting). Some work fronts will have chemical bathrooms<sup>4</sup>. Their supply, removal and handling will be managed by a licensed company that has sanitary authorization. However, in comments on the Geothermal Plant Expansion EIA, the Regional Service of the Ministry of Health (*SEREMI de Salud*) has requested that GDN present an updated Wastewater Treatment Permit Application based on updated wastewater generation estimates.

The project will generate an average of 560 kg/d of solid waste, 10 t/month of non-hazardous industrial waste, and 0.8 t /month of hazardous waste, such as oils, filters, oils, wipes and fabrics with oil remains. All waste will be collected temporarily in enabled enclosures, will be removed by a licensed company on a regular basis, and will be sent for final disposal to an authorized location. The *SEREMI de Salud* is also requesting updated volumes of non-hazardous and hazardous wastes for the Geothermal Plant Expansion EIA in order to determine if they will be required to apply for new permits.

The Project does not involve the use or management of pesticides.

## 4.4 Community Health, Safety and Security

Given the remote location of the Cerro Pabellón in relation to both regional population centers and small rural communities, there is little potential for impacts to community health and safety in the Project construction sites and facilities during operations. Likewise, there is very limited potential for interaction between onsite security personnel and members of local communities. The only recommendation in regards to PS 4 is to incorporate road and vehicular safety both as part of employee training, and as part of potential investments into local communities.

The primary potential impact to community health and safety comes from increase in vehicular traffic. However it is expected to be minimal and of short term duration as project traffic does not pass directly through any of the communities.

No impacts relating to ecosystem services or community exposure to disease are anticipated.

Chilean legislation requires that all security staff receive training and certification by the national police. It also requires specific certification to carry weapons. The security team for the project does not carry weapons. It has received appropriate certification and training in accordance with the law.

<sup>4</sup> 

Regulations are established by D.S. N° 99/594 of MINSAL.

#### 4.5 Land Acquisition and Involuntary Resettlement

The Project footprint is within an established geothermal concession on public lands and was not acquired through expropriation. There are very limited restrictions to land or resource use currently in effect. As such, requirements relating to land acquisition and involuntary resettlement are not triggered by this Project.

## 4.6 Biodiversity Conservation and Natural Habitats

Cerro Pabellón is located in a remote area of Chile in largely natural habitats with some important biodiversity values that qualify the landscape as critical habitat based on the presence of an IUCN Red List Endangered species and a restricted-range lizard species. However, the Project's impacts on these biodiversity values are considered to be of low magnitude and highly manageable and there are significant opportunities for achieving net gains with an appropriate Biodiversity Action Plan that embodies the actions taken by the Project to avoid and minimize impacts and additional commitments to enhance conservation in the area of influence.

The collection of baseline information began with studies for a prior EIA in 2009 and continued with the Plant EIA, the Transmission Line EIA, the LTE Modification DIA, and the Expansion EIA, The construction of the Project will result in the conversion of natural habitat totaling approximately 205 ha, of which at least 110 ha are considered to permanent. As part of the Biodiversity Action Plan, GDN should provide an assessment of the feasibility of achieving no net loss for natural habitat.

The Regional Environmental Service (SEREMI Medio Ambiente) and the Livestock and Agriculture Service (SAG) have commented on the Geothermal Plant Expansion EIA and request that biodiversity baseline be redone to include the warmer and wetter season when there is better detectability of flora and fauna and that the area be expanded to include the entire Pampa Apacheta and with better representation of all of the habitat types within the area. In particular the SAG mentions the need to include the High Andean Grassland habitat as it might support the lizard *Liolaemus stolzmanni* (= *L. pachecoi*), a species categorized as "Rare" by the Hunting Law Regulation. The *SEREMI Medio Ambiente* requests that the impact assessment and monitoring plan be adjusted accordingly after the new baseline includes at least one complementary sampling campaign that includes at least one rainy period. The SAG requests that a Fauna Management Plan be proposed, as well as a plan for the plant *Azorella compacta*.

The Project is located in a relatively well preserved area with the exception of small patches that had been previously altered to develop exploration wells, access roads and camps.

The lava dome known as Cerro Pabellón presents unique rocky habitats that support colonies of vizcachas (*Lagidium viscacia*). The Project area also supports a terrestrial vertebrates, including species as vizcachas (*Lagidium viscacia*), the Andean cat (*Leopardus jacobita*), the taruka (a native deer, *Hippocamelus antisensis*), vicuñas (*Vicugna vicugna*), puna tinamous or perdiz de la puna (*Tinamotis pentlandii*), and the lizard *Liolaemus pachecoi*.

Of these, the Andean cat is listed as Endangered by the IUCN and the national Classification Process. Also, based on potential impacts on aquifers of the Quebrada La Perdiz basin, the Project is considered to have the potential to indirectly impact critical habitat for *Orestias ascotanensis* (a

nationally-listed Endangered fish that is endemic freshwater springs in the Ascotán salt flats) and *Telmatobius* sp. (a poorly understood aquatic frog that is restricted to a few freshwater springs in the Chilean and Bolivian Altiplano). The Salar de Ascotán is also considered to be an example of a critical habitat based on the criteria of highly threatened and unique ecosystems and key evolutionary processes. The impacts on these critical habitats are considered to be manageable with an appropriately designed Biodiversity Action Plan and Biodiversity Monitoring and Evaluation Program, including monitoring of potential impacts on the aquifers of the Quebrada La Perdiz basin that could affect the Salar de Ascotán. While the need to offset these impacts is not deemed necessary due to the absence of reasonably foreseeable measurable adverse impacts, the Biodiversity Action Plan should seek to bring net gains through enhancing conservation in the Project's area of influence.

The Project is not located within or near any legally protected areas or internationally recognized areas of high biodiversity value; it does not involve the use of any invasive alien species and is not considered likely to result in any unintentional introductions or promotion of such species; and will not alter ecosystems services identified by any affected communities, the sustainable management of living natural resources, or biodiversity-related supply chain issues.

## 4.7 Indigenous Peoples

Located in the Andes of northern Chile near the Bolivian border, Cerro Pabellón is found in a region with legally-recognized indigenous communities. However, these communities are comprised of six small settlements located far from the Project facilities and that are largely unpopulated during much of the year. There are no claims from indigenous peoples focused on the project's activities. The Project does not interfere with traditional uses or access to cultural or spiritual sites. GDN has proactively engaged these six indigenous communities and works together with them to ensure the Project brings benefits relevant to the needs of each community..

The Project will not generate expropriation of indigenous people's lands, nor will induce their physical or economic displacement in anyway.

A number of indigenous communities <sup>5</sup> have long-existing legal claims requesting formal recognition of historical ties to the land within the geothermal concession, including that used by Cerro Pabellón. Interviews with EGP staff and with indigenous community representatives indicate that the legal claims are intended to formalize documentation of scope and reach of historical territories, rather than as a means to claim use or ownership of the land. Therefore EGP needs to be prepared to address any legal issues that may arise should courts decide in favor of existing land claims discussed above

At the time the 50-MW Geothermal Plant EIA was produced and relevant RCA obtained, Chilean legislation did not require consultation with communities. However, by the time the Transmission Line EIA was passed, there was a Community Engagement activity required that complied with ILO Convention 169 (on Indigenous Peoples). Since the implementation of the Project, EGP has established and implemented a broad series of consultations, negotiations and voluntary

<sup>&</sup>lt;sup>5</sup> The legally-recognized indigenous communities in the Project area of influence are Conchi Viejo, Cupo, Estación San Pedro, Ollagüe, Taira, and Toconce.

commitments with community members. While these consultations are not based on the PS, there is evidence of a strong relationship between communities and the company, a strong and ongoing stakeholder engagement, sustainable community investment strategies, and prioritization in maximizing benefit to local communities. Based on these factors, the Project is considered to be substantially compliant with PS 7.

The National Indigenous Development Corporation (CONADI) has commented on the Geothermal Expansion EIA and has requested that the baseline be redone using participatory approaches that include the indigenous communities. Also, the CONADI notes that the impact assessment is required to consider impacts of the existing project as well as the modified project. Finally, the CONADI requests that Compensation Program describe the time frame for the program and that it indicates how the "continuous dialogue process" will be carried out.

## 4.8 Cultural Heritage

Despite Cerro Pabellón's location in a presently very sparsely populated region, numerous archaeological and historical cultural features have been identified. Project construction is carefully monitored by a qualified cultural heritage professional and is in full compliance with national and PS 8 requirements.

The Project EIAs all include baseline field surveys of archaeological and historical cultural heritage features. All cultural heritage features identified by the surveys are delimited with fencing and signage and protected from direct impacts. An archaeological monitor is present during all construction activities and there is a chance finds procedure in place. EGP is also producing monthly reports on their archaeological monitoring program and is providing cultural heritage training for workers.

EGP has consulted with institutions and indigenous communities regarding cultural heritage findings and mitigations. Some members of indigenous communities interviewed during the site visit expressed that impacts to cultural heritage is one of their main concerns regarding the Project. Access to cultural heritage features by community members is not affected by the Project.

## 5. Local Access of Project Documentation (Address where project information can be accessed locally)

Full access to the documentation of the Project's environmental approvals, including copies of the environmental assessments, environmental licenses (RCAs, which include public comments received), agency comments, and GDN responses, are available online in the Chilean Environmental Assessment Service's (SEA) portal:

Geothermal: EIA:

http://seia.sea.gob.cl/expediente/ficha/fichaPrincipal.php?modo=ficha&id\_expediente=5569783

Transmision Line EIA:

http://seia.sea.gob.cl/expediente/ficha/fichaPrincipal.php?modo=ficha&id\_expediente=7189173

Modification of Transmission Line DIA:

http://seia.sea.gob.cl/expediente/ficha/fichaPrincipal.php?modo=ficha&id\_expediente=2130712 979

Geothermal Expansion EIA:

http://seia.sea.gob.cl/expediente/ficha/fichaPrincipal.php?modo=ficha&id\_expediente=2131615 979

## 6. E&S Action Plan

| No.       | Aspect  | Action  | Deliverable   | Date   |  |  |  |
|-----------|---|---|---|--|--|--|--|
| PS 1: As  | PS 1: Assessment and Management of Environmental and Social Risks and Impacts |   |   |  |  |  |  |
| 1.1       | Management System   | Develop a concise Project-specific ESMS framework document that provides a roadmap to the various components of the system and summary of the E&S commitments and requirements that will then inform the development of an E&C Compliance Report to be submitted periodically to the IIC. | ESMS Framework<br>Document<br>Evidence of the<br>adoption of the<br>ESMS  | Prior to First<br>Disbursement                                 |  |  |  |
| 1.2       | Compliance Tracking   | Present an Environmental and Social Compliance Report that evidences compliance with all RCA and Lenders requirements.  | Environmental and<br>Social Compliance<br>Report  | At the end of every<br>quarter following<br>First Disbursement |  |  |  |
| 1.3       | Grievance Mechanism   | Present and adopt a grievance mechanism to capture, process and address any request, claim, grievance or suggestion.  | Grievance<br>Mechanism<br>Evidence of the<br>adoption of the<br>mechanism.  | Prior to First<br>Disbursement                                 |  |  |  |
| 1.4       | Stakeholder<br>Engagement   | Present a stakeholder mapping and stakeholder engagement plan   | Stakeholder<br>Mapping and<br>Engagement Plan   | Prior to First<br>Disbursement                                 |  |  |  |
| PS 2: Lal | oor and Working Condition   | ns  |   |  |  |  |  |
| 2.1       | Grievance Mechanism   | Present and adopt an internal grievance mechanism for direct and indirect employees   | Grievance<br>Mechanism.<br>Evidence of the<br>adoption of the<br>mechanism  | Prior to First<br>Disbursement                                 |  |  |  |
| 2.2       | Monitoring of Third<br>Parties  | Present and adopt a monitoring and evaluation of Contractor or Subcontract compliance with labor and working conditions plan, including HR and OHS requirements and standardized templates for Contractors and Subcontractors to report on their compliance with requirements.            | Monitoring and<br>evaluation of<br>Contractor or<br>Subcontract<br>compliance with<br>labor and working<br>conditions plan, | Prior to First<br>Disbursement                                 |  |  |  |
| PS 3: Re  | PS 3: Resource Efficiency and Pollution Prevention                            |   |   |  |  |  |  |

| No.  | Aspect                       | Action   | Deliverable                            | Date   |  |  |  |
|--|------------------------------|--|--|--|--|--|--|
| 3.1  | Shallow Aquifers             | Continue monitoring of shallow aquifers in the Quebrada La Perdiz and Ojos del San Pedro basins.   | Monitoring reports                     | Every month after<br>First Disbursement.                   |  |  |  |
| PS 4: Community Health, Safety, and Security   |                              |  |  |  |  |  |  |
| 4.1  | Road and Vehicular<br>Safety | Incorporate explicit training regarding road and vehicular safety both as part of employee training, and as part of potential investments into local communities.  | Documentation of<br>Training Delivered | At First<br>Disbursement and<br>semiannually<br>thereafter |  |  |  |
| PS 5: Land Acquisition and Involuntary Resettlement – Not Applicable                   |                              |  |  |  |  |  |  |
| PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources |                              |  |  |  |  |  |  |
| 6.1  | Biodiversity Action<br>Plan  | Preparation of Biodiversity Action Plan (BAP) that articulates the approach for achieving compliance with RCA and PS 6 requirements. This should contain: i) a framework for implementing the actions required by the RCAs; ii) a description of additional actions to achieve no net loss of natural habitats and net gains for critical habitat-<br>qualifying biodiversity features; iii) a set of indicators for operations phase and the post-construction restoration of temporary work areas and accesses; and iv) a description of monitoring activities as per the RCAs and to track progress achieved. | Biodiversity Action<br>Plan            | Prior to First<br>Disbursement                             |  |  |  |
| PS 7: Indigenous People – No actions required  |                              |  |  |  |  |  |  |
| PS 8: Cultural Heritage – No actions required  |                              |  |  |  |  |  |  |