

# **Public Disclosure Template** (Direct Operation)

Original language of the document: English Revision's cut-off date: September 2019

# A. Investment Summary

**Disclosure Date:**October 2019 **Project Name:**Puebla Solar PV

Project Number: 12541-01

**Investment Type:**Long term Financing

E&S Category: B

Projected Board Approval Date: August 2020

Company Name (Borrower): Alten Energías Renovables México Siete, S.A.

de C.V.

Sector: Energy

Financing Requested: Up to US\$ 45,000,000

Financing Currency: US Dollars (US\$)

**Project Country:** Mexico

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#### **Project Scope and Objectives:**

The Puebla Solar Photo-Voltaic (PV) Project ("the Project") consists of the design, construction, commissioning, operation and maintenance of a 250MWAC PV solar power plant in the state of Puebla, México; and all associated transmission and interconnection facilities, which include a transmission line (TL) of up to 6 km. from the lift substation, to the interconnection substation with the Transmission System network. The financial plan is expected to be completed with co-loans from other commercial and development banks.

The Project will receive income under bilateral energy purchase and sale contracts and will sell part of the energy generated in the market, seeking a balance between contracted and market prices. The Project will contribute to achieving the objectives of the Government of México to diversify its electricity matrix by delivering clean PV solar energy and supporting the impulse to create a wholesale electricity market while reducing the country's dependence on thermal energy, since the Mexico's objective is that in 2050 clean energy sources provide 50% of the electricity generation combination



## B. Environmental and Social Review Summary

### 1 Scope of Environmental and Social Review

The Project consists of the design, construction, commissioning and operation of a 250 megawatt (MW) solar photo-voltaic (PV) plant, that will be connected to the Mexican Comisión Federal de Electricidad ("CFE") national grid system through a 6 km transmission line (TL), and all the associated transmission and interconnection facilities. The Project has a 30-year life expectancy for energy production.

The Project is developed by Alten Energías Renovables México Siete, S.A. de C.V. ("Alten" or the "Company"), a special purpose vehicle organized under the laws of Mexico and it will be owned by Sojitz Global Investment (SGI), Alten RE Developments America 3, B.V. ("AAM3") and Alten Renewable Energy Developments, B.V. ("Alten Corp."). All SGI, AAM3 and Alten Corp. "the Sponsors".

IDB Invest together with RINA Consulting INC., as the Independent Environmental and Social Consultants (IESC), and environmental and social (E&S) officers of Bancomext and ING reviewed, among other documents provided by the Company, the following: i) environmental permits; ii) Environmental Impact Assessment (Manifestación de Impacto Ambiental Regional -MIA-R); and iii) Social Impact Assessment (Evaluación de Impacto Social - EvIS). The Environmental and Social Due Diligence (ESDD) process included a field appraisal mission conducted between July 16 and July 18, 2019. During the ESDD several meetings where conducted both in Alten's Corporate office in Mexico City, and in the Project's site and its area of influence. with the Project site's owners and other stakeholders, including representatives of the Municipality of Tepeyahualco.

## 2 Environmental and Social Categorization and Rationale

The Project has been classified as a **Category B** operation, in accordance with IDB Invest's Environmental and Social Sustainability Policy, since most of its environmental and social risks are expected to be reversible and capable of being mitigated through currently available technologies.

The potential key Environmental, Social and Health and Safety (ESHS) negative impacts and risks identified for the Project's the construction phase, are related to: (i) the generation of solid waste, both hazardous and non-hazardous; (ii) air emissions; (iii) noise pollution; (iv) wastewater generation; (v) movement of soils; (vi) ground vibrations; (vii) the removal of natural vegetation; (viii) the potential alteration and displacement of fauna; (ix) occupational health and safety of workers; and (x) community health and safety concerns related to the increase of heavy traffic. During the operations and maintenance (O&M), the risks tend to be related to: (i) occupational health and safety of workers, (ii) generation of solid waste, both hazardous and none-hazardous; and (iii) use of resources such as energy, water and local services. Natural disasters such as earthquakes, fires, floods and electric storms, might also pose very limited risks to the Project, both from the potential of risk to workers and in terms of structural and environmental damage to physical infrastructure, resulting in loss of business.

The Project will trigger the following Performance Standards (PS):

- PS-1. Evaluation and Management of Environmental and Social Risks and Impacts
- PS-2. Labor and Working Conditions
- PS-3. Resource Efficiency and Pollution Prevention
- PS-4. Community Health, Safety and Security
- PS-5. Land Acquisition and Involuntary Resettlement
- PS-6. Biodiversity Conservation and Sustainable Management of Living Natural Resources
- PS-8. Cultural Heritage



#### 3 Environmental and Social Context

The Project is located in the Municipality of Tepeyahualco, in the state of Puebla, approximately 90 km northeast from the city of Puebla. It will occupy an area of approximately 1,726 hectares (ha) which has been used mainly for agriculture and livestock grazing. The site is partially flat; therefore, no major ground works are expected. According to data form National Commission for the Knowledge and Use of Biodiversity (CONABIO), most of the Project area corresponds to two dry climates, semi-arid and arid present in the north of the area; while temperate climates are located southeast of the defined area. The average annual temperature varies from 13 °C to 14.3 °C and the average annual rainfall varies from 245 to 403 mm per year, while the prevailing winds are towards the NE with an average speed of 0.5 knots.

The Project area is not urbanized and consists of agricultural fields in its entirety, which are adjacent to the town of San José Alchichica. In terms of the socio-economic outreach, the only municipality involved is Tepeyahualco, in the state of Puebla. According to the intercensal survey of 2015, the total population of this municipality was 16,892 people (equivalent to 0.3% of the state of Puebla), and the vast majority are engaged in the primary sector activities such as agriculture, livestock, forestry, fishing and hunting; as well as secondary sector activities, such as manufacturing industries.

The Project, nor its area of influence, affects any protected natural area (ANP), Priority Terrestrial Region (RTP), Areas of Importance for Bird Conservation (AICA), or RAMSAR Site. Section 4.6, describes the main vegetation within the Project area, as well as the species of flora and fauna with some degree of vulnerability and subject to special protection according to Mexico's standards (NOM-059-SEMARNAT-2010) and/or international list, such as the International Union for Conservation of Nature (IUCN) red list or the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) appendices.

Permits granted by the Secretariat of Energy (SENER), the Secretariat of Environment and Natural Resources (SEMARNAT), the National Center for Energy Control (CENACE), the Energy Regulatory Commission (CRE), the Secretariat of Communications and Transportation (SCT) and the Secretariat of Infrastructure, Mobility and Transportation of Puebla of Puebla for TL right of way, have been awarded. However, during the ESDD review, the following documents were not received:

- The Power generation permit by the CRE;
- Register of the Project with the Secretariat of Labor and Social Welfare (STPS);
- The authorization from the National Water Commission (CONAGUA); and
- Municipal Licenses (for example: construction, operating, etc.).

After having reviewed the corresponding EvIS, the SENER granted the Project the Social License (Resolution 117.-DGISOS.1252/19 of July 10, 2019). Also, after reviewing the MIA-R, the SEMARNAT granted the Project its Environmental License (Official Letter SGPA/DGIRA/DG 09037 of November 22, 2018). An extension of the permit for the preparation of the site, construction of the Project and for the delivery of the Environmental Surveillance Plan (PVA) was granted by SEMARNAT on April 30, 2019 establishing an extension of the term for a 14-month-period from January 27, 2020.

#### 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 Environmental and Social Assessment and Management System

For the activities and operations of the photovoltaic solar power installations, Alten Corp. has elaborated at corporate level an Environmental and Social Management System (ESMS) based on the principles of ISO14001 and OHSAS 18001 management systems and using -as a reference- the IFC Performance



Standards (PS). This Corporate ESMS comprises a set of policies, procedures, and instructions that aim at achieving the Company's E&S objectives and targets.

As part of its ESMS Manual (ESMS-COR-M001), Alten Corp. has, the following policies, applicable to all of its operations, and facilities: i) Environment, Health and Safety, and Social (EHSS) Policy; ii) Community Relations Policy; iii) Human Resources Policy; and iv) HIV-AIDS Policy. These policies are communicated to employees throughout the entire organization at all levels, including subcontracted employees and other stakeholders (e.g., shareholders, affected community), through EHS induction and display at the Alten offices and project sites.

For the Project, Alten has created a preliminary Project-specific ESMS which includes policies, social investment procedures and community grievances mechanisms; plus an Environmental Management Plan (EMP) included in the MIA-R, which was developed to comply with national environmental regulatory requirements and at a conceptual level.

Therefore, in order to fully achieve compliance with PS-1, Alten needs to continue developing the Project-specific ESMS and evaluate its completeness according to the IFC Implementation Manual and Toolkit<sup>1</sup>. Finally, depending on the results of this evaluation, the Project-specific ESMS will have to be strengthened in each of its components, in compliance with the ESHS requirements, applicable by the General Law of Ecological Balance and Environmental Protection (GLEBEP) and the Federal Labor Law (FLL) of Mexico.

#### 4.1.b Policies

Alten has prepared a Project-specific EHSS Policy which provides a framework for the environmental and social assessment and management process, as well as other specific policies for complying with the applicable National laws and regulations.

However, to fully comply with PS-1, Alten must update its Project-specific EHSS Policy, identifying: (i) who, within Alten's organization, will guarantee compliance with the policy and be responsible for its execution; (ii) a program that establishes how the policy will be monitored and communicated to all levels of the organization; and (iii) a program to measure continuous improvement in its implementation.

### 4.1.c Identification of Risks and Impacts

The Project MIA-R and EvIS, in compliance with Mexican environmental impact regulations<sup>2</sup>, address the Project's main impacts. In addition, at the Corporate level and as part of its Corporate Environmental and Social Management System Manual, Alten Corp. has also created a procedure for the identification of risks and impacts in their projects.

The MIA-R and EvIS determined the Project's Area of Influence (PAI) using a perimeter distance criterion: total area likely to be affected by both on-site and off-site impacts from project activities, assets, and facilities, including associated facilities. However, according to the requirements of CENACE, the electrical interconnection substation to be used, has been modified to connect in the Neoen Project substation. This change, consequently, will also modify the alignment of the Transmission Line (TL); therefore, an updated PAI should be established and the potential risks and impacts of the new TL alignment should be determined.

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<sup>&</sup>lt;sup>1</sup> Environmental and Social Management System, Implementation Manual - General; IFC; version 2.1; November 2015. Environmental and Social Management System Toolkit - General; IFC; version 1.2; November 2015.

<sup>&</sup>lt;sup>2</sup> Regulation of the General Law of Ecological Balance and Environmental Protection in matters of Environmental Impact Assessment (DOF, 10.31.2014)



Even though the MIA-R established that one of the most important impacts during construction is noise, a baseline of the current noise conditions in the area of influence has not been included. Therefore, Alten must establish the baseline conditions and evaluate the noise levels in sensitive receivers (community) as part of the permanent monitoring during the construction and operation phases.

Notwithstanding a study of the hydrological conditions of the Project area has been undertook, it is not conclusive on the flooding risk and potential structures that could be affected. Hence, Alten must prepare an updated Flood Risk Analysis using hydrological studies as a reference, including return periods with a conservative range (100 years) and considering the hydrological balance of the El Salado formation near the Project.

Given that the execution and operation of the Project is dynamic, Alten, in compliance with PS-1, will perform a continuous update of the ESHS risks matrix for each phase of the Project (design, construction, O&M and decommissioning), of all its operations, in order to obtain, monitor and control the operating permits or licenses.

# Cumulative Impact Analysis

The MIA-R and EvIS, include a cumulative impact assessment considering the impacts from other on-going or planned projects identified in the area of influence, which does not meet international standards. Therefore, Alten will conduct a Project-specific Cumulative Impacts Assessment (CIA), in addition to the methodological requirements in the legislation on environmental impact assessment in Mexico, based on the "Manual of Good Practices for the Evaluation and Management of Cumulative Impacts: Guide for the Private Sector in Emerging Markets" of the IFC. The cumulative impact assessment will consider as well, the impact to aquatic birds and wildlife in temporary water bodies which can be used by migratory and sensitive species.

## 4.1.d Management Program

The Project's MIA-R and EvIS were developed to comply with Mexico's E&S legal requirements, including environmental and social measures that are written in a way to allow for flexibility based on project needs. In addition, Alten Corp has created a Corporate Environmental Management Procedure to give guidance on how to develop an Environmental Management Plan (EMP) for any new Alten PV Solar Project. This EMP includes a procedure to cover: i) waste generation; ii) water consumption and wastewater discharge; iii) air emissions; iv) soil impacts; v) biodiversity protection; and vi) hazardous materials use.

However, according to the environmental license, Alten must develop specific programs for each of the impacted environmental components and should compile a Project-specific Environmental and Social Management Plan (ESMP), for both the construction and operation phases, using documents such as the Corporate EMP, the approved MIA-R Environmental Programs, and World Bank EHS Guidelines for reference, which must include the following: i) a soil protection and restoration program; ii) water quality management and conservation actions; iii) an air quality monitoring and noise control program; iv) vehicles and machinery maintenance programs; v) a waste management program; vi) a flora rescue and restoration program; vii) a wildlife removal, rescue and relocation program; and viii) a closure and decommissioning program.

These specific Programs should ensure that all ESHS impacts and risk are fully addressed, and include all Project phases, detailed description of the objectives, actions, timeline, responsible party, methodology, monitoring schedules and locations, and key performance indicators, among other requirements.

Alten must also develop a Project-specific solar panel final disposal plan, which promotes the recycling of solar panels at the end of the Project's lifecycle, contain proposed strategies for the final disposal or include



a factory buy back or recycling program, and include details for specific permits following local and international regulations.

# 4.1.e Organizational Capacity and Competence

Although Alten has a basic organizational structure for its operations in Mexico, the Company has not yet established an organizational structure with defined roles, responsibilities, and authority to implement the ESMS for this Project. Therefore, before the commencement of construction, Alten should establish and implement an organizational structure, with specific personnel assigning clear lines of responsibility and authority for the implementation of the ESMS, as well as a Safety and Hygiene Commissions, in compliance with the Federal Labor Law and its Regulations<sup>3</sup>. The Company should also ensure that ESMS personnel possess the knowledge, skills, experience, and resources to implement the specific measures and actions required to comply with the national laws and applicable standards, and be able to implement a training and awareness program with specific sessions on IFC PS to align the Project -at management level- with these requirements, and request that the EPC Contractor provides a manager responsible for EHSS performance.

Hence, to fully comply with PS-1, Alten must create a Project-specific Environmental and Social Unit, which will be responsible for planning, implementing and monitoring all the E&S actions required by the GLEBEP; as well as define the functions, responsibilities and faculties of each E&S manager of such unit. Likewise, an introductory and refresher training program will be required at least once a year for all personnel responsible for EHSS and labor matters compliance. Additionally, Alten must ensure adequate human and financial resources, within the ESMS, for this Project-specific Environmental and Social Unit, and appoint as many qualified Environmental and Social Coordinators or Supervisors (or similar position depending on the responsibilities) for each work front, who, together with the Safety and Hygiene Commissions Coordinator, must directly and independently inform Alten's General Management about EHSS compliance.

## 4.1.f Emergency Preparedness and Response

Alten Corp has created an Emergency Preparedness and Response Procedure as a guidance on how to develop and put in place an Emergency Preparedness and Response Plan for any new Alten PV Solar Project. This procedure describes, in broad terms, the means to be used in order to secure an adequate emergency response and provides a flexible and practical approach to determine specific requirements and measures to be implemented in each Alten Project. However, it does not address all possible risks, and lacks detailed instructions and actions in case of flooding, hurricanes, and volcanic events.

Therefore and before the construction starts, Alten must prepare a Project-specific Emergency and Contingency Plan that includes, at least, the following: i) organizational structure; ii) activation plan; iii) response procedures; iv) training and drills; v) description of potential emergencies; vi) reporting and communications during the emergency; vii) responsibilities; viii) incident investigation and follow-up procedures; ix) contact information for emergency and support services; x) map of the workplace showing evacuation routes and meeting locations; xi) location of emergency equipment; xii) first aid station; xiii) rescue plan evaluation; and xiv) periodic revision of the plan. Also, it should prepare and adopt a Project-specific Emergency and Contingency Plan for the O&M phase, considering the experience and lessons learned during the implementation of the ESMP for the construction phase.

This Project-specific Emergency and Contingency Plan will consider the limited public resources available to respond to a possible major accident or event. Additionally, it must provide local authorities, emergency

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<sup>&</sup>lt;sup>3</sup> Federal Labor Law (DOF, 04-01-1970); last published revision (DOF, 11-30-2012) and the Federal Regulation for Workplace Safety and Health (DOF, 11-13-2014)



services, and neighboring communities with information on the nature and extent of environmental and human health effects that may result from emergencies associated with the Project, inside and outside the premises, as well as behavioral and safety measures to be taken in the event of an incident.

The Project-specific Emergency and Contingency Plan should include an evaluation of the firefighting system using as a reference the following guidelines:

- CFE-H1000-38 Mexican guideline for fire prevention, control and suppression in electrical substations; and
- NFPA<sup>4</sup> 850 standard, Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations

### 4.1.g Monitoring and Review

Alten is responsible for ensuring the implementation of the monitoring and control plans and programs described in the Project's ESMP or Action Plans. Alten Corp. has created the Environmental, Social and Health and Safety Monitoring Plan, which includes the general guidelines to implement a monitoring plan, aiming to minimize and control the potential environmental and social impacts of the Project. This Plan describes general monitoring activities to be conducted during the Project lifecycle.

According to the environmental license resolution issued by SEMARNAT Alten needs to update the Environmental Monitoring Plan (PVA, for its acronym in Spanish), containing the Project-specific ESMP.

Although these documents will provide a guide for the elaboration of a Monitoring Plan, Alten should develop a Project-specific Environmental Monitoring Plan (PVA, for its acronym in Spanish) for the construction phase, and ensure that the procedures for monitoring and measuring the effectiveness of the management programs are in place. These procedures should monitor (i) the key risks and impacts of the Project on employees, stakeholders and the natural environment as identified in the MIA-R general PVA; (ii) a Project-specific EHSS Compliance Matrix; and (iii) progress in implementation of the ESMP. Also develop a similar Project-specific PVA for the O&M phase, considering the experience and lessons learned during the implementation of the PVA for the construction phase.

For each phase of the Project, Alten should include monitoring processes and measure key indicators and other performance measures over time, to register the Project's performance and alert should significant increase in pollutant emissions occur or new impacts environmental impacts have been produced so that corrective actions can be adopted. Periodic progress reports and monitoring results should be submitted to the Company's management with the necessary information to determine compliance with the relevant legal requirements.

Alten will develop a Project-specific EHSS Compliance Matrix with its set of key performance indicators to measure the effectiveness of the ESMP and assure compliance with all legal and contractual obligations during its execution and O&M phases. The information to be included in such matrix includes: (i) contractual E&S obligations; (ii) status and validity of all necessary permits and licenses; (iii) the competent authority that should grant the authorization or issue the required permit or license; (iv) the dates of issuance and validity of the license or permit; (v) the person in Alten in charge of the monitoring and assuring the compliance; and (vi) future communication and compliance procedures. At the time of the ESDD, the pending licensing for the Project are:

<sup>&</sup>lt;sup>4</sup> National Fire Protection Association



- A modification on the Environmental licenses, regarding the correction of the TL alignment and substation used, issued by the Secretariat of the Environment and Natural Resources (SEMARNAT);
- Authorization to carry out activities related to the characterization, collection, transfer and storage of special handling waste and a Special Handling Waste Plan, issued by the Ministry of Environment, Sustainable Development and Land Use Management of the State of Puebla;
- Proof of Verification of Preventive Fire Fighting Measures, issued by the Heroic Fire Department of the Secretary Public Security of the State of Puebla;
- Land use authorization, construction permit (or similar) and/or operation notice, issued by the Municipality;

Finally, to comply with PS-1, Alten must prepare internally (internal audit) or through an external independent environmental and social expert endorsed by the National Environmental Authority (external audit), an Annual Consolidated EHSS Report on the compliance status with all environmental, social, and OHS policies and measures applicable to the Project's works, including the progress of the ESMS actions regarding the established key performance indicators, as well as the compliance status of IDB Invest's Environmental and Social Sustainability Policy, and of Mexico's environmental, social and OHS legislation.

# 4.1.h Stakeholder Engagement

Since the beginning of the Project, Alten has maintained a good relationship with the different stakeholders. The Company has developed the EvIS, which describes a Social Management System (SMS) with policies, code of conducts, social responsibility strategies, etc. However, as per the resolution issued by SENER, Alten has to conduct several meetings to inform stakeholders, including neighbors, about the life cycle of the Project and its potential positive and negative impacts for the community; as to inform to the community about the grievance mechanism for the resolution of possible conflicts.

Based on Alten's Corp. corporate Community Relations Policy and on its Community Investment Management Procedure, the Company has developed its Project-specific Community Relations Policy and Community Investment Procedure, to provide Alten and its contractors and subcontractors, a management guideline for local community investment that aims to support business activities and mitigating environmental and social risks and impacts towards the community. However, the Company has not yet developed a Stakeholder Engagement Plan for the Project.

Therefore, must develop and adopt a Project-specific Stakeholder Engagement Plan (SEP), ranging from federal and state government and relevant institutions, to suppliers and local communities including vulnerable groups, to establish and maintain a constructive relationship with the Project's stakeholders. The SEP shall include a plan for communication with the surrounding neighbors, settlers located inside or outside the Project site, local farmers, local land users, people who use the access roads and potentially affected trails, and representatives of local organizations and local authorities, among others. The SEP shall also address the management of any potential impacts on livelihoods, access to land or assets and access to water.

Alten must provide documented evidence of public consultation and information disclosure to be undertaken through the Project-specific SEP, considering that consultation should be a two-way process, focused on inclusive engagement, producing results that are taken into account in the identification and assessment of risks and impacts, and describing how the complaints mechanism can be accessed. All concerns or potential adverse impacts on disadvantaged or vulnerable groups should be clearly documented and addressed.



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

Alten Corp. has developed a corporate Community Grievance Mechanism Procedure as guidance on how to develop and put in place a community grievance mechanism for any new Alten PV Solar Project. Based on such procedure, Alten has developed a Project-specific Community Grievance Mechanism, which does not have an information disclosure procedure that ensures keeping local communities updated regarding the Project and that is not yet fully operational (there are complaint mailboxes, but not widely available; there are not enough complaint forms and in some cases there were none). Therefore, Alten must improve its Project-specific Community Grievance Mechanism by including: (i) periodic report based on the Project-specific Communication Plan (included in the SEP), through which information regarding the progress of the Project and the most significant environmental and social aspects of it, are made public; (ii) and reinforce the implementation of the existing Community Grievance Mechanisms by installing multiple mailboxes in strategic points to facilitate their access and guarantee the possibility of anonymous use; and (iii) launch a general outreach and training campaign among the affected communities within the PAI to promote the use of this grievance mechanism and ensure its operationalization.

### 4.1.j Ongoing Reporting to Affected Communities

So far, Alten has not been providing periodic reports to the potential affected communities or the public in general regarding the EHSS performance of the Company. However, through the implementation of the Project-specific Community Investment Management Procedure, the ongoing reporting of EHSS performance to the affected communities or the public in general, will the activated.

#### 4.2 Labor and Working Conditions

# 4.2.a Working Conditions and Management of Worker Relationships

#### Human Resources Policies and Procedures

Based on Alten Corp. corporate Human Resources (HR) Policy, Alten has developed a Human Resources (HR) Policy specific for the Project that describes the general commitments of the Company in relation to human resources and labor rights and that complies with Mexican labor laws<sup>3</sup> and PS-2 requirements. This policy states that Alten, and its subsidiaries and subcontractors, will respect and guarantee, during the entire life cycle of the Project, the following premises: i) equal opportunities and job stability; ii) fair treatment and fair working conditions; iii) direct and indirect local work prioritization; iv) the same remuneration for the same work; v) promotion of technical and professional skills of employees; vi) gender equality in the hiring process; vii) information to all employees about the disciplinary rules, promotions, evaluations, benefits, bonuses and incentives, as well as any other relevant aspect of labor relations between Alten and its employees; viii) the health and safety of workers; ix) employee grievance mechanism; and x) specific plan for mitigating adverse impacts in case of employment slowdown.

### Working Conditions and Terms of Employment

The Project will require 20 workers during the preparation stage and a peak construction workforce of approximately 1,400 employees, between direct and indirect workers, who are expected to be sourced from local communities. As such, will not be requiring a temporary construction camp. Satisfactory accommodations for non-local workers are available in nearby cities and towns. During operation, Alten estimates to hire a team of supervisors to oversee the maintenance and monitoring activities of the Project and manage the supervision of contractors and subcontractors.

Alten ensures that their workers know their labor rights and are fully informed about them. During the hiring stage, all workers will receive written contracts.



However, Alten must develop a Project-specific Internal Employment Regulation, which should include, at least, the following sections: i) General Provisions; ii) Employees and employer, obligations and rights in general; iii) Contracting policy; iv) Working conditions; v) Holidays, resting periods and permits; vi) Occupational health and safety (OH&S); vii) Labor discipline; viii) Special sanctions; and ix) Procedure to apply sanctions. Likewise, Alten must launch a training and outreach program for the implementation and dissemination of this Internal Regulation to all its employees, and contractors and contractor's subcontractors' personnel.

Alten must also elaborate a Project-specific Local Hiring Policy that sets a minimum local hiring target (provided that required qualifications are available locally) and that clearly describes relevant information to manage expectations from local communities such as available positions, types of jobs, required qualifications and skills, and job duration. This policy should be included in the EPC Contract.

Finally, in order to fully comply with PS-2, Alten must establish: (i) hiring and terminating or reducing jobs procedures (to be adopted by all contractors and subcontractors for their workers) in accordance with local regulations and those of the International Labor Organization (ILO), including, at a minimum, rules to prevent child labor and forced labor; and (ii) procedures for managing and monitoring the performance of workers hired by third parties.

## Workers' Organizations

Mexican regulatory framework and ILO standards emphasize the workers' right to participate in collective bargaining with their employers. Therefore, workers wishing to join a labor union will be free to do.

## Non-discrimination and Equal Opportunity

The Project will abide by Mexican Law that requires non-discrimination and equal opportunity.

## Grievances Mechanism

Alten promotes an atmosphere of openness and communication in its work environments. Supervisors are directed to encourage their workers to express themselves if they identify deficiencies or have disagreements; there is even a Corporate Employees Grievance Mechanism Procedure in which Altens' staff and its contractors and subcontractors' employees can easily raise workplace concerns, complaints, claims or suggestions.

Based on this corporate-level Employees Grievance Mechanism, Alten must develop a Project-specific Employees Grievance Mechanism for Project's workers, which should: (i) be clearly described and communicated to workers; (ii) ensure anonymity; (iii) be documented and (iv) be auditable. Alten should also launch a general outreach and training campaign among the working population to promote said Grievance Mechanism and ensure its operationalization.

Alten shall also ensure that the Project-specific Employees Grievance Mechanism is available for all workers, employed either directly or by third parties. Where the grievance mechanism is provided by the third party, Alten should receive regular reporting on the grievances raised by workers. It should be disclosed at the time of recruitment and made easily accessible to the workers at any time and at no cost to the complainant. The grievance mechanism should allow for anonymous complaints. It should not impede access to other judicial or administrative remedies that might be available under the law, or to existing arbitration procedures.



#### 4.2.b Protecting the Workforce

Mexico is a signatory to several ILO conventions and international treaties related to workers' rights, including Conventions No. 138 on minimum age, Convention No. 182 on the worst forms of child labor, Convention No. 29 on forced labor and Convention No. 105 on the abolition of forced labor. Likewise, the country has extensive labor legislation that regulates, among other aspects, the duration of the workday, schedules, overtime, paid rest days, minimum remuneration, family allowance, legal bonuses, and the minimum aspects of OH&S at work.

# 4.2.c Occupational Health and Safety

Alten Corp. has created the Occupational Health and Safety (OH&S) Management Plan Procedure, where general guidelines are included to avoid or mitigate potential adverse OH&S impacts that may arise from project related activities. This plan, that applies to Alten's employees and their contractors, as well as the Company's operations and sites, includes the requirement that the EPC contractor provide an OH&S Plan with preventive measures covering all identified risks, such as: i) equipment safety; ii) electrical safety; iii) machinery and equipment; iv) working at heights; v) special hazard environments; vi) driving and vehicle safety; vii) general workplace safety provisions; viii) personal protective equipment (PPE); ix) emergency preparedness and response; x) fire and explosion; xi) occupational health surveillance; xii) noise and vibration; xiii) hazardous substances; and xiv) workplace exposure monitoring.

Despite the fact that this document is structured to provide a functional OH&S Plan, Alten should develop a Project-specific OH&S Plan for the Construction phase, identifying and evaluating risks and potential hazards arising from the activities to be carried out in accordance to job functions and the preventive measures that will be taken in each case in order to eliminate or control them. Also, Alten should prepare a similar Project-specific OH&S Plan for the O&M phase, considering the experience and lessons learned during the implementation of the OH&S Plan for the Construction phase.

Also, in order to fully comply with PS-2, Alten will develop a procedure for notifying emergency response services and local authorities about a major accident or fatality. Such procedure must include a Root Cause Analysis of each major accident or fatality, as well as the description of necessary corrective actions to minimize the risk of a new occurrence, as established in the accident investigation section of the OH&S Plan.

OH&S requirements are incorporated as part of EPC's contractual clauses through the EPC-ESHS Schedule and the Contractor Management Procedures, which defines minimum requirements for contractors and subcontractors when working on behalf of Alten on PV Solar Project sites as to minimize ESHS risks associated with procurement of products and equipment as well as contracted services. Once a supplier or contractor has been selected and approved, Alten drafts a contract including minimum ESHS requirements associated with the supplier or contractor service or activity being provided.

## 4.2.d Workers Engaged by Third Parties

Alten has a corporate-level Contractor Management Procedure which defines minimum requirements for contractors and sub-contractors when working on behalf of Alten on PV Solar Project sites. Also, Alten imposes the same safety requirements on its employees as it does its subcontractors. The Company extends a safe and healthy work environment to all parties, with contract specifications for contractors that include provisions that meet the Company OH&S requirements to minimize risk and liability to the Project. Even a procedure for monitoring contractor performance on the implementation of OH&S requirements has been developed for those works that take more than three months, and an annual performance review against the requirements of this procedure.



## 4.2.e Supply Chain

According to the corporate-level Contractor Management Procedure, Alten: i) identifies and prioritizes those material supplies and suppliers that have higher impacts on health, safety, environment and communities and works together with the Contractor in order to reduce such impacts; ii) monitors their primary supply chain on an ongoing basis in order to identify any significant changes and if new risks are identified, take appropriate steps to remedy them; and iii) when there is a high risk of significant issues related to workers employed by a primary supplier, it introduce procedures and mitigation measures to ensure that they are taking steps to prevent or to correct life-threatening situations.

### 4.3 Resource Efficiency and Pollution Prevention

# 4.3.a Resource Efficiency

### Greenhouse Gases

Alten Corp. has created the Greenhouse Gas Emissions Procedure to establish a methodology for the calculation of Greenhouse Gas (GHG) emissions during the entire life of the projects developed by Alten Corp. worldwide. According to this Procedure, Alten must develop and implement a Project-specific procedure to estimate GHG Emissions Inventory from the facilities owned or controlled within the physical Project boundary as well as indirect emissions associated with the off-site production of energy (during construction).

## Water Consumption

According to the MIA-R (2018), the water used during the construction phase will be mainly for road irrigation to avoid generation of dust. The total water consumption volume during the construction phase is 16,200 m³ (2,700 m³/month) supplied by water tanks (water tanker truck or cistern truck). During operation, water consumption is estimated as follows: Domestic uses: 3.8m³/day, provided by a local water company; Panel cleaning: 0.6 l/panel for a total of 545 m³/year and water will be provided by water tanks. In both phases, the water sources were not identified in the MIA-R (2018).

Alten Corp. has created the Water Management Procedure as guidance on how to manage water resources and wastewater generated during Alten operations. Alten shall develop measures to improve water management and its efficient use with the purpose to implement the responsible use of water; the prevention or minimization of adverse impacts to water resources; the protection of surface water bodies and groundwater. The Company will also engage with stakeholders regarding the use and conservation of water.

Alten should elaborate and implement a Project-specific Water Management Strategy during the lifecycle of the Project, aiming at the efficient consumption of water resource, and which has an analysis of the demand, frequency, types of use, efficient use, records of water consumption and monitoring measures. Alten should include a comparative analysis with the water demand of other solar projects in the country and in the region and evaluate the water consumption by the communities in the area of influence. In the case of water being purchased, the same considerations mentioned above must be taken to avoid conflict among those who use the same water resources that could jeopardize the availability of this resource at a local level.

#### 4.3.b Pollution Prevention

Alten Corp. has created the following procedures for pollution prevention at the corporate level: i) Environmental Management; ii) Air Emissions Management; iii) Water Management; iv) Waste Management; v) Soil Protection; vi) GHG Emissions Procedure; and vii) ESHS Monitoring.



In addition, as part of the MIA's EMP, environmental mitigation actions were prepared in alignment with requirements of the host country regulations. However, Alten should compile a Project-specific ESMP for the Puebla Project using the Corporate environmental procedures, the MIA's EMP, and the World Bank EHS Guidelines, as reference.

#### Waste Management

Alten must update the MIA's EMP and develop and implement a Project-specific Waste Management Measures (WSMM) Plan which shall ensure an integrated waste management during the project lifecycle, for both hazardous and non-hazardous waste. The plan should also set specific instructions and requirements for a proper segregation, storage and disposal of waste generated during the execution of works, in compliance with applicable country and local environmental laws.

## Hazardous Material Management

Alten must update the MIA's EMP to put in place a Project-specific Waste Management Measures (WSMM) Plan. Such plan should explore opportunities throughout the project lifecycle to use non-hazardous materials instead of hazardous materials, through a Hazardous Material Substitution Program. This is especially relevant where the risks arising from materials cannot easily be prevented or mitigated under normal use and disposal at the end of their lifecycle. Substitutions options have been found feasible, for example, for the use of polychlorinated biphenyls (PCBs) in electrical equipment and the facilities or methods for the use, handling, storage and transport of fuels, to avoid leaks, spills or other type of related incidence/accidents

# Pesticide Use and Handling

Alten will not use agrochemicals for the removal of the vegetation in the solar panel areas.

# 4.4 Community Health, Safety and Security

## 4.4.a Community Health and Safety

Alten has prepared an EvIS for the Puebla Project, which includes community health and safety considerations related to noise, particulate matter, radiation, traffic accidents, local workers health conditions and security within the communities. Additionally, Alten Corp, has a corporate Community Health, Safety, and Security Management Procedure, which includes general guidance to respond to potential impacts that may be identified in the EvIS and MIA-R, such as: i) changes to community health profile (including exposure to disease); ii) changes in availability and quality of water resources; iii) changes to livelihoods and income-generating opportunities and subsequent effects on community access to social and physical infrastructure; and iv) changes to community safety profile related to traffic, emergency responses, unplanned events, crime, and conflict. However, these documents are not Project-Specific.

Therefore, Alten should conduct an identification and assessment process of all potential risks and impacts on the community's health and safety during the Project lifecycle and produce a Project-specific Community Health, Safety and Security Plan that will address them. Such plan will be reviewed and disseminated to the communities potentially affected by the Project, as part of the Stakeholder Engagement Plan.

Risks associated with construction activities should include transport safety along roads and access corridors, impacts to water quality and quantity, inadvertent development of a new vector, and potential transmission of communicable diseases (e.g., respiratory and sexually transmitted infections resulting from the influx of project labor, if any). In addition, there can be significant household and community level



effects on the social determinants of health (e.g., drug, alcohol, gender violence and other psychosocial effects, associated with the rapid influx of labor during the Project construction phases to the nearby localities).

### Infrastructure and Equipment Design and Safety

Due to the nature of the Project, equipment design and layout do not represent safety risks for surrounding communities. However, the transportation of material and human resources to the Project sites presuppose an increase in local transit.

Therefore, Alten must elaborate and implement a Project-specific Traffic Management Plan, which identifies potential risks associated with traffic increase and includes relevant management measures, such as access roads, signaling; speed limits, and control.

## Emergency Preparedness and Response

The EvIS requires the preparation of an Emergency Report Plan based on the NOM-030-STPS-2009 national regulation.

Framed in the Alten Corp's Emergency Preparedness and Response Procedure, Alten will prepare, before the construction starts, a Project-specific Emergency and Contingency Plan appropriate to the nature, scale, and full scope of the foreseen activities. This plan should consider the limited public resources available to support a potential major accident and provide local authorities, emergency services, and neighboring communities with information on the nature and extent of environmental and human health effects that may result from emergencies associated with the Project, inside and outside the premises, and behavioral and safety measures to be taken in the event of an incident.

# 4.4.b Security Personnel

Alten will retain the services of a private security company to protect their workers and assets, and for preventive and defensive purposes. However, it has not yet developed and adopted a Security Forces Management Plan for the Project.

Therefore, Alten will prepare and implement a Project-specific Security Forces Management Plan using as a reference the IFC's *Good Practice Handbook Use of Security Forces: Assessing and Managing Risks and Impacts*, which shall include a risk and impact identification process considering political, economic, legal, military, and social issues. This plan will include community engagement and disclosure, awareness training around gender-specific culture, appropriate behavior of security personnel, instructions on when and how force may be used, firearms protocols (if applicable), human rights requirements, and investigation and reporting of security incidents in alignment with the voluntary principles of security and human rights.

In Mexico, security companies usually establish procedures and provide a record of investigation for every employee. Alten will provide a copy of the contracts subscribed with the security companies to verify, among other things, that conditions have been included allowing for Alten to perform: (i) reasonable investigations to ensure that security personnel do not have a criminal record and have not been involved in past cases of abuse; (ii) verify details of necessary training in relation to the use of force; (iii) verify restrictions on the use of firearms; and (iv) identify details of environmental and social awareness training, including issues of respect for human rights.

#### 4.5 Land Acquisition and Involuntary Resettlement

There will be no involuntary resettlement as a result of land acquisition for the Project site. Alten has acquired 941.57 ha of land for the Project (512.68 ha of private land and 428.89 ha of "ejido" plots) through



real state rights agreements: 30 Private Lease and Usufruct Agreements and 106 Agrarian Usufruct Agreements.

Also, there will be no economic displacement as a result of land acquisition for the Project site. The current use of the land acquired by Alten is agricultural and livestock, and many of the private land and the *ejido* plots are not cultivated due to the lack of rainfall in recent years. This is the reason why the land owner considered it a good economic opportunity to rent it for the Project, since this will ensure him a constant monetary income for them independent from the climate conditions.

The owners of ejido plots also reported that agriculture and livestock that currently happens on the site can be relocated to other ejido plots to which they have access. However, as a good practice based on the land agreement, Alten should consider the cycle of the crops when taking over the use of the land. In the same way, Alten through the Stakeholder Engagement Plan, must keep the land owners roster up to date.

#### 4.6 Biodiversity Conservation and Natural Habitats

#### 4.6.a General

The Project is located on cultivated areas (mainly dedicated to beans and corn) which are currently in use. According to the National Institute of Statistics and Geography's (INEGI) Series 2010 the Project site, is classified as annual and permanent temporary agricultural vegetation, and saline grassland.

#### 4.6.b Protection and Conservation of Biodiversity

Biodiversity baseline surveys were developed for the Project site area and for the Preliminary Area of Influence (PAI) during the dry season, from May 14 to 21, 2018. The MIA-R provides an overview of the biodiversity features of the area affected by the Project. However, most of the habitats have only been classified in terms of "modified", and "natural". In addition, there is no information relating to the area impacted by the new alignment of the transmission line (TL) defined by CENACE, which, according to information provided during the site visit, will be included in a revised modification of the existing MIA-R.

#### Flora

The Vegetation Units located at the Project site (total extension of 1,743.67 ha) reported in the MIA-R are: (i) annual and permanent agriculture: 1,664.56 ha (99.52% of the Project site); (ii) saline grassland, the only type of natural vegetation within the Project site, 78.68 ha (0.45% of the total area); and (iii) urban area: 0.43 ha (0.03% of the Project site)

In the Project area, 3 species with some degree of endemism to Mexico were registered and 8 protected species, (listed in NOM-059-SEMARNAT-2010). 4 species were registered in the IUCN Red List in the LC category (minor concern) and one in EN (endangered) category: the beehive cactus (*Coryphantha pycnacantha*).

#### <u>Fauna</u>

The Project and its area of influence are in the northeastern part of the state of Puebla, adjacent to the state of Veracruz, within the mountain region of central Mexico or "Transmexican Volcanic Belt" which in the mountainous areas is mainly composed of pine and oyamel forest, as well as grassland and táscate forest. The Transmexican Volcanic Belt is considered a biogeographic region characterized as a transition zone for biotic elements, that is, an area of great biodiversity due to the mixture of Neritic elements (those with North American affinity), Neotropical (with affinity of Central and South America) and endemic (those



that evolved *in situ*). This condition makes this region an area especially rich in terms of the number of species of fauna and rich in terms of endemism.

From the herpetofauna, some species were registered within risk categories in national and international listings. The species Huico of the Mexican West (*Aspidocelis costata*), Alicante lizard of the Popocatépetl (*Barisia imbricata*), Cascabel del Altiplano (*Crotalus scutulatus*), large scale flake lizard (*Sceloporus megalepidurus*) and Forest of Encinos (*Plestiodon lynxe*) skink, are under the category of special protection (Pr) according to NOM-059-SEMARNAT-2010. The Mexican pygmy rattlesnake (*Crotalus ravus*) and the mountain chameleon (*Phrynosoma orbiculare*) are in the category of endangered in Mexico (A). As for international listings, only the large-scale flake lizard species or Lagartija escamosa escamas grandes (*Sceloporus megalepidurus*) was registered as Vulnerable on the IUCN Red List. None of the registered species appear in any of the CITES Appendices. All the species recorded are endemic to Mexico except the Cascabel del Altiplano (*Crotalus scutulatus*) and the Esciniz de Bosque de Encinos (*Plestiodon lynxe*).

Regarding birds, 10 species with some category of endemism were registered, 2 quasi-endemic species, 6 semi-endemic species and 2 endemic species to Mexico. None of these species are listed in NOM-059 or in the IUCN Red List in any risk category. Only 3 species of hummingbirds are included in Appendix II of CITES. No endemic species to Mexico were found in the field surveys at the PS and the PAI.

And finally, for mammals only 2 registered species are assigned a risk category within NOM-059, the marbled squirrel (*Otospermophilus variegatus*) and the kangaroo rat of Phillip (*Dipodomys phillipsii*), both within the category "subject to special protection" (Pr). Among the international listings, the White-sided Jackrabbit (*Lepus callotis*) was categorized as vulnerable (VU) by the IUCN Red List. Finally, in the CITES Appendix II, there are the Bobcat (*Lynx rufus*) and the Puma (*Puma concolor*), which were registered within the study area. Regarding categories of endemism, two species of rodents are endemic, the kangaroo rat of Phillip (*Dipodomys phillipsii*) and the mouse of the rocks (*Peromyscus difficilis*).

#### Natural Habitats

Temporary water bodies or wetlands in the Project's area of influence were not properly evaluated, for that a Biological Survey Campaign will be included in the CIA (see Section 4.1.c). The same sampling methodologies and efforts will be used as of the MIA-R baseline study, but special attention will be given to the aquatic birds' species and wildlife in these temporary water bodies which can be used by migratory and sensitive species. The lowlands adjacent to Project's area of influence located at Northwest may be important for migratory bird species and for local fauna due to its their large extent.

#### Legally Protected Areas

The Project is not located within any Legally Protected Areas or Internationally Recognized Area. The closest legally protected area (18 km far away) id Cofre de Perote National Park, while the closest Ramsar site, Texolo Falls, is approximately 34 km far away.

### **Invasive Alien Species**

According to the information provided, the Project foresees no introduction of alien species as it will strictly adhere to Mexican regulations in terms of plants that will be replanted.

The occurrence of exotic flora species in roads ways, in the right of way of the transmission line and the solar panel areas will be monitored during the Project operation for defining mitigation measures in case of need. Nevertheless, general guidelines were established in the Biodiversity Management Plan at the corporate level by Alten.



#### 4.7 Indigenous People

As indicated in the EvIS, the Project will not directly or indirectly impact indigenous communities.

## 4.8 Cultural Heritage

According to Mexican legislation and as stated in the EvIS, the Project has requested the INAH certificate indicating that it will not produce any effects on archaeological heritage. This certification should be issued by the second semester of 2019 and until that happens, no construction is foreseen.

Even though no areas of archaeological interest have been identified within the Project's site, Alten will develop a Project-specific Chance Find Procedure (CFP) which will be implemented by the Contractor(s), as part of the ESMS in the event unknown cultural heritage sites are found as the result of ground disturbance during the site preparation and construction stage. The need to comply with the CFP will be included in the EPC Contract.

#### 5 Local Access of Project Documentation

The documentation relating to the project can be accessed at the following link: <a href="www.alten-energy.com">www.alten-energy.com</a>

#### **6** Contact Information

For project inquiries, including environmental and social questions related to an IDB Invest transaction please contact the client (see **Investment Summary**), or IDB Invest using the email <a href="mailto:divulgacionpublica@iadb.org">divulgacionpublica@iadb.org</a>. As a last resort, affected communities have access to the IDB Invest Independent Consultation and Investigation Mechanism by writing to <a href="mailto:mecanismo@iadb.org">mecanismo@iadb.org</a> or <a href="mailto:MICI@iadb.org">MICI@iadb.org</a>, or calling +1(202) 623-3952.

### 7 Environmental and Social Action Plan (in table form)

The Environmental and Social Action Plan (ESAP) is summarized in Appendix 1.



Annex 1: Environmental and Social Action Plan (ESAP)

No.	Reference	Measure	Final product/deliverable	Expected completion date
<b>PS 1:</b> A	Assessment and l	<b>Management of Environmental and Social Risks and Impacts</b>		
1.1	Environmental and Social Management System (ESMS)	Develop a Project-specific ESMS compliant with the IFC Implementation Manual and Toolkit	Copy of Alten's updated ESMS	Six months after the first disbursement.
1.2	Environmental, Social and Occupational Health, Safety and Security	1. Update the Project-specific Environmental, Health and Safety, and Social (EHSS) Policy considering the context and needs of Alten and the Project, and establishing who, within the organization, will guarantee its compliance and be responsible for its execution.	Copy of Alten's or the Project's EHSS Policy, if different	1. Three months after the first disbursement.
	Policy	2. Complement this EHSS Policy with monitoring and communications programs to all members and levels of the organization.	2. Evidence of the implementation of monitoring and communications programs to all members and levels of the organization	2. Three months after the first disbursement.
		3. Create a program to measure ongoing improvements on environmental and social policy implementation.	3. Continuous improvement program.	3. Three months after the first disbursement.
1.3	Risk and Impact Identification	1. Update the Project Area of Influence (PAI) to include and assess the potential risk and impacts of the Tl's modified alignment.	Updated PAI and     potential risk and     impacts of the new     ETL alignment	1. 30 days before construction of the ETL
		2. Update the Flood Risk Analysis using hydrological studies as a reference, including return periods with a conservative range (100 years) and considering the hydrological balance of the El Salado formation near the Project	2. Updated Flood Risk Analysis.	2. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement



No.	Reference	Measure	Final product/deliverable	Expected completion date
1.4	Cumulative Impact Analysis	1. Conduct a Project-specific Cumulative Impacts Assessment (CIA), based on the "Manual of Good Practices for the Evaluation and Management of Cumulative Impacts: Guide for the Private Sector in Emerging Markets" of the IFC. This assessment shall include the study of avifauna following the same sampling methodologies and efforts form the MIA-R baseline study, but giving special attention to aquatic birds and wildlife in temporary water bodies.	Copy of the Project- specific Cumulative Impact Assessment.	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
1.5	Management Programs	1. Develop a Project-specific Environmental and Social Management Plan (ESMP) for the Construction phase, taking into account provisions contained in the Corporate EMP, the approved MIA-R Environmental Programs, and World Bank EHS Guidelines for reference, that will also include: i) a soil protection and restoration program; ii) water quality management and conservation actions; iii) air quality monitoring and noise control program; iv) vehicles and machinery maintenance programs; v) a waste management program; vi) a flora rescue and restoration program; vii) a wildlife removal, rescue and relocation program; and viii) a closure and decommissioning program.	1. Copy of the Project-specific Environmental and Social Management Plan (ESMP) for the Construction phase.	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
		2. Develop a Project-specific Environmental and Social Management Plan (ESMP) for the Operation and Maintenance (O&M) phase, considering the experience and lessons learned during the implementation of the ESMP for the construction phase	2. Copy of the Project-specific ESMP for the O&M phase.	2. 30 days prior to the operation and maintenance (O&M) phase
		3. Develop a Project-specific Solar Panel Final Disposal Plan, which promotes the recycling of solar panels at the end of the Project's lifecycle and contains proposed strategies for the final disposal or include a factory buy back or recycling program and details for specific permits following local and international regulations	3. Copy of the Project- specific Solar Panel Final Disposal Plan	3. Six months after the first disbursement.
1.6	Organizational Capacity	1. Appoint a Project-specific Environmental and Social Unit, responsible for planning, implementing and monitoring all E&S actions required by the GLEBEP; defining the	Appointment of the Project-specific	1. 30 days prior to the start of the construction



No.	Reference	Measure	Final product/deliverable	Expected completion date
		functions, responsibilities and faculties of each E&S manager of said Environmental and Social Unit, for the implementation of the ESMS.  2. Design an introductory and refresher training program to update concepts at least once a year, for all personnel in charge of EHSS and labor matters compliance.	Environmental and Social Unit  2. Copy of the introductory and refreshing training program	phase, or 60 days after signing the loan agreement.  2. 30 days after to the start of the construction phase, or 60 days after signing the
		3. Appoint and maintain as many qualified Environmental and Social Coordinator or Supervisor (or similar position depending on the responsibilities) for each work front, who must directly and independently inform Alten's General Management about EHSS compliance.	3. Appointment of the Environmental and Social Coordinator/ Supervisor assigned to each work front.	loan agreement.  3. 30 days prior to the start of the construction phase, or 60 days after signing the loan agreement.
1.7	Emergency Preparedness and Response	1. Prepare a Project-specific Emergency and Contingency Plan for the Construction phase, based on the Corporate Procedures, including or enhancing the following aspects: i) organizational structure; ii) activation plan; iii) response procedures; iv) training and drills; v) description of potential emergencies; vi) reporting and communication during the emergency; vii) responsibilities; viii) incident investigation and follow-up procedures; ix) contact information for emergency and support services; x) map of the workplace showing evacuation routes and meeting locations; xi) location of emergency equipment; xii) first aid station; xiii) rescue plan evaluation; and xiv) periodic revision of the plan.	Copy of the Project- specific Emergency and Contingency Plan for the Construction phase	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
		2. Compile a similar Project-specific Emergency and Contingency Plan for the O&M phase, considering the experience and lessons learned during the implementation of the Emergency and Contingency Plan for the construction phase	2. Copy of the Project- specific Emergency and Contingency Plan for the O&M phase	2. 30 days prior to the O&M phase



No.	Reference	Measure	Final	<b>Expected completion</b>
1.8	Monitoring and evaluation indicators	1. Develop a Project-specific Environmental Monitoring Plan (PVA, for its acronym in Spanish) for the Construction phase, ensuring that the procedures for monitoring and measuring the effectiveness of the management programs are in place, that should monitor (i) the key risks and impacts of the Project on employees, stakeholders and the natural environment as identified in the MIA-R general PVA; (ii) a Project-specific EHSS Compliance Matrix; and (iii) progress in implementation of the ESMP	1. Copy of the Project-specific Environmental Monitoring Plan (PVA) for the Construction phase	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
		2. Develop a similar Project-specific PVA for the O&M phase, considering the experience and lessons learned during the implementation of the PVA for the Construction phase	2. Copy of the Project- specific PVA for the O&M phase	2. 30 days prior to the O&M phase
		3. Develop a Project-specific EHSS Compliance Matrix with a set of key performance indicators that should be monitored and met in order to measure the effectiveness of the ESMP and all the legal and contractual obligations of the Project during its construction and O&M phases.	3. Copy of the Project-specific EHSS Compliance Matrix with the list of key management performance and success indicators.	3. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
1.9	Project Compliance with applicable regulations	1. Prepare internally (internal audit) or through an external independent environmental and social expert endorsed by the National Environmental Authority (external audit), an Annual EHSS Consolidated Report on the compliance status with all environmental, social, and OHS policies and measures applicable to the Project's works, including the progress of the ESMS actions regarding the established key performance indicators, as well as the compliance status of IDB Invest's Environmental and Social Sustainability Policy, of Mexico's environmental, social and OHS legislation, and of the IFC's Performance Standards.	Copy of the Annual EHSS Consolidated Report.	1. Annually over the life of the loan.
1.10	Stakeholders Engagement	1. Provide an appropriate Project-specific Stakeholder Engagement Plan (SEP), ranging from federal and state government and relevant institutions, to suppliers and local communities including vulnerable groups.	1. Copy of the Project- specific Stakeholder Engagement Plan (SEP).	1. 30 days prior to the start of the construction phase, or 60 days



No.	Reference	Measure	Final product/deliverable	Expected completion date
		Provide documented evidence of public consultation and information disclosure to be undertaken though the Project-specific SEP	Copy of the evidence of public consultation and information disclosure	after signing the loan agreement.  2. Together with each Annual EHSS Consolidated Report
1.11	External Grievance Mechanism	Improve the Project-specific Community Grievance     Mechanism, by including periodic reporting based on the     Project-specific Communication Plan (included in the SEP)     and reinforcing its implementation by installing mailboxes     in multiple strategic points to facilitate their access and	Copies of the improved Project-specific Community Grievance Mechanism.	1. 60 days after signing the loan agreement.
		guarantee the possibility of anonymous use.	2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report
		3. Launch a general outreach and training campaign among the affected communities within the PAI to promote the use this Project-specific Community Grievance Mechanism and	3. Copy of the general outreach and training campaign	3. 60 days after signing the loan agreement.
		ensure its operationalization	4. Copies of the evidence of this implementation.	4. Together with each Annual EHSS Consolidated Report
	Labor and Work			
2.1	Working Conditions	1. Develop a Project-specific Internal Employment Regulation, which should include at least the following sections: i) general provisions; ii) employees and employer, obligations and rights in general; iii) contracting policy; iv) working conditions; v) holidays, resting periods and permits; vi) occupational health and safety (OH&S); vii) labor discipline; viii) special sanctions; and ix) procedure to apply sanctions	Copy of the Project- specific Internal     Employment     Regulation	1. 15 days prior to the start of the construction phase, or 45 days after signing the loan agreement.



No.	Reference	Measure	Final product/deliverable	Expected completion date
		2. Launch a general outreach and training campaign for the implementation and dissemination of this Internal Regulation to all its employees, and contractors and contractor's subcontractors' personnel	Copy of the general outreach and training campaign     Copies of the evidence of this implementation.	<ul> <li>2. 45 days after signing the loan agreement.</li> <li>3. Together with each Annual EHSS Consolidated Report</li> </ul>
2.2	Local Hiring	1. Elaborate a Project-specific Local Hiring Policy that sets a minimum local hiring target and clearly describe relevant information to manage expectations from local communities such as available positions, types of jobs, required qualifications and skills, and job duration	•	1. 15 days prior to the start of the construction phase, or 45 days after signing the loan agreement.
2.3	Terms of Employment	1. Establish procedures for (i) hiring and terminating jobs applicable to all contractors and subcontractors; and (ii) managing and monitoring the performance of workers hired by third parties.	Copy of these procedures for Alten.	1. 15 days prior to the start of the construction phase, or 45 days after signing the loan agreement.
2.4	Employees Grievance Mechanism	1. Improve the Project-specific Employees Grievance Mechanism for Project's workers, so that it (i) can be clearly described and communicated to workers; (ii) ensure anonymity; (iii) be documented and (iv) be auditable.	Grievance Mechanism.	1. 15 days prior to the start of the construction phase, or 60 days after signing the loan agreement.
			2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report
		3. Launch a general outreach and training campaign among the working population to promote this employee grievance mechanism and ensure its operationalization	3. Copy of the general outreach and training campaign	3. 15 days prior to the start of the construction



No.	Reference	Measure	Final product/deliverable	Expected completion date
			4. Copies of the evidence of this implementation.	phase, or 60 days after signing the loan agreement.  4. Together with each Annual EHSS Consolidated Report
2.5	Occupational Health, Safety and Security	1. Develop a Project-specific Occupational Health and Safety OH&S) Plan for the Construction phase, identifying and evaluating risks and potential hazards in accordance to job functions, as well as identifying preventive to eliminate or control them.	1. Copy of the Project- specific Occupational Health and Safety (OH&S) Plan.	1. 30 days prior to the start of the construction phase, or 60 days after signing the loan agreement.
		2. Develop a similar Project-specific OH&S Plan for the O&M phase, considering the experience and lessons learned during the implementation of the OH&S Plan for the Construction phase	2. Copy of the Project- specific OH&S Plan for the O&M phase	2. 30 days prior to the O&M phase
2.6	Accidents and fatalities	Develop a Notification Procedure to report major accidents, including fatalities.	Copy of the report procedure for major accidents.	1. Within 24 hours after occurrence of the accident.
		2. Prepare a root cause analysis for each major accident or fatality and ensure the implementation of corrective actions.	2. Copy of the root cause analysis and its corrective actions.	2. Together with each Annual EHSS Consolidated Report
		ncy and Pollution Prevention		•
3.1	Greenhouse Gases	Develop and implement a Project-specific procedure to estimate GHG emissions by the Project.	<ol> <li>Copy of the Project-specific procedure to estimate GHG         Emissions Inventory     </li> <li>Copies of the evidence of this</li> </ol>	<ol> <li>60 days after signing the loan agreement</li> <li>Together with each Annual EHSS</li> </ol>



No.	Reference	Measure	Final	<b>Expected completion</b>
110.	Reference	Nicasure	product/deliverable	date
				Consolidated Report
3.2	the efficient consumption of water resource and is complemented by an analysis of the demand, the frequency types of use, the efficient use, has records of water	Management Strategy for the Project's lifecycle that aims at the efficient consumption of water resource and is complemented by an analysis of the demand, the frequency,	1. Copy of the Project- specific Water Management Strategy during the lifecycle of the Project	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
		comparative analysis with the water demand of other solar projects in the country and in the region and evaluate the water consumption by the communities in the area of influence.	2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report
3.3	Waste Management	Waste 1. Develop and implement a Project-specific Waste	1. Copy of the Project- specific Waste Management Measures (WSMM) Plan.	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
		of works, and is compliant with applicable in-country environmental laws and IDB Invest's Sustainability Policy.	2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report
3.4	Hazardous Material Management	1. Develop and implement within the Project-specific WSMM Plan a Hazardous Material Substitution Program to explore opportunities throughout the project lifecycle to use non-hazardous materials instead of hazardous materials.	Copy of the     Hazardous Material     Substitution Program	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
			2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report



No.	Reference	Measure	Final product/deliverable	Expected completion date
PS 4: 0	Community Heal	lth and Safety		
4.1	Community Health and Safety	1. Develop and Implement a Project-specific Community Health, Safety and Security Plan, that conducts a comprehensive site-specific identification and assessment process of all possible risks and impacts on community health and safety during the Project lifecycle and establishes preventive and control measures.	1. Copy of the Project- specific Community Health, Safety and Security Plan	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
			2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report
4.2	Traffic Management	1. Develop and implement a Project-specific Traffic Management Plan, which identifies potential risks associated with traffic increase and includes relevant management measures (access roads, signaling, speed limits, etc.).	Copy of the Project- specific Traffic     Management Plan	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
			2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report
4.3	Security Management	1. Prepare and implement a Project-specific Security Forces Management Plan using as a reference the IFC's Good Practice Handbook Use of Security Forces: Assessing and Managing Risks and Impacts.	Copy of the Project- specific Security     Force Management     Plan	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
			2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report
4.4	External safety	Include in contracts to be subscribed by Alten and the security companies provisions that will allow Alten to perform: (i) reasonable investigations to ensure that security	Copy of the contracts between Alten and	1. 45 days after signing the loan agreement.



No.	Reference	Measure	Final product/deliverable	Expected completion date
	protocols and policy	personnel do not have a criminal record and have not been involved in past cases of abuse; (ii) verify details of necessary training in relation to the use of force; (iii) verify restrictions on the use of firearms; and (iv) identify details of environmental and social awareness training, including issues of respect for human rights.	the security company(s).	
PS 8:	Cultural Heritag	e		
8.1	Community Health and Safety	Prepare and implement a Project-specific Chance Find Procedure (CFP) and associated training.	Copy of the Project- specific Chance Find Procedure (CFP)	1. 30 days prior to the start of the construction phase, or 60 days after signing the Loan Agreement
			2. Copies of the evidence of this implementation.	2. Together with each Annual EHSS Consolidated Report