## Environmental and Social Management Framework

### IDB Program "Catalyzing Private Investment in Sustainable Energy in Argentina"

### Introduction

### Program Description and Objectives

The objective of this program ("the Program") is to support the achievement of the ambitious renewable energy penetration goals (8% by 2018, 20% by 2025) established by Renewable Energy Law 27.191, by contributing to i) the successful financial close of the first few wind and solar photo-voltaic (PV) projects to be built as part of the new regulatory regime, and ii) the development of capacities of relevant public and private entities. In view of the difficulties that securing long-term project debt posed in previous renewable energy public tenders conducted in Argentina, the Inter-American Development Bank (IDB) is taking an active role in the mobilization of that type of financing in the context of RenovAr, the new renewable energy public tendering program. The objective is that projects can access adequately termed debt, with sufficiently long tenors, to ensure financial viability and allow them to go forward. With this, IDB expects to contribute to the long-term development of renewables in various ways. First, by supporting early movers, helping demonstrate financial and technical viability of these projects under the rapidly evolving regulatory and investment conditions in Argentina, and that non-/limited-recourse financing can be properly structured for these projects. Second, by helping develop local capacities and resources (e.g. knowledge, strategies) to carry these projects and the broader renewable energy program forward.

To pursue this objective, the Program will have two components:

**Component 1 – Financing of Renewable Energy Power Projects.** This component will be focused on providing and mobilizing long-term debt financing for at least five projects, to cover the gap in availability of this type of financing and help projects timely reach financial close. For this purpose, the IDB will consider projects awarded a PPA as part of the RenovAr tenders (and those contracted between private parties that still contribute to Law 27.191's renewable penetration target) against objectives and criteria set for the Program.

**Component 2 - Enhancing Policy, Regulation, Planning, and Project Financing capacities.** This component will be focused on providing targeted technical cooperation to both public and private sector entities, to help build the capacities, knowledge, and strategic planning resources needed to achieve successful implementation of RenovAr and other government renewable energy development programs aimed at delivering on the goals set by Law 27.191.

### Objectives of the ESMF

The Environmental and Social Management Framework (ESMF) describes how the environmental and social impacts and risks of the Program will be managed and supervised when funding from GCF is accessed. The ESMF presents the general context of the Program, the expected impacts and risks of the projects, the minimum requirements for the mitigation measures and management plans as well as the

capacity, roles and responsibilities, appraisal and supervision processes and resources available to manage the risks of the institutions involved in financing the projects under the Program.

The Inter-American Development Bank (IDB) will maintain supervision responsibilities in accordance with the Accreditation Master Agreement (AMA) with regard to the Program. At the project level, relevant IDB environmental and social safeguards standards will be applied in accordance with the AMA and/or such other related arrangements.

The ESMF follows the standards of IDB's Environmental and Safeguards Compliance Policy (OP703), as applicable to private sector investments, those of other relevant IDB safeguards policies and sector guidelines and good international industry practice (GIIP) such as the International Finance Corporation (IFC) Performance Standards on Environmental and Social Sustainability and World Bank Group (WBG) Environmental, Health and Safety (EHS) Guidelines.

#### Environmental and Social Baselines

The renewable energy projects to be financed under this Program will be located in areas of high wind and solar generation potential throughout Argentina. A preliminary qualitative analysis was performed looking into conditions in Argentina for feasibility of solar PV and wind energy projects that could feed into the Program. Based on a methodology and assessment developed by the International Renewable Energy Agency (IRENA), a score was determined for each geographical point for their suitability of development of wind and solar PV projects. This methodology included environmental and social relevant factors such as population density, land ownership, presence of protected areas or emblematic landscapes, proximity to transmission lines and other access infrastructure, along with other factors such as resource availability.

A land availability analysis was performed based on maps from IRENAs Global Atlas for Renewable Energy. IRENA defines 500 people/km<sup>2</sup> as the upper threshold for feasibility of renewable energy project development. In Argentina, only a couple of metropolitan areas have densities higher than 500 people/km<sup>2</sup> and would –according to IRENA's criteria- not qualify for project development. Land in Argentina is largely available from a population density standpoint. The first RenovAr tender also required bidders to have secured land rights to the project areas. Notwithstanding this, an in-depth assessment of land acquisition and resettlement will be conducted during the appraisal of each project to confirm alignment with standards of relevant IDB policies (OP703 Environmental and Safeguards Compliance Policy and OP710 Involuntary Resettlement Policy).

Figure 1. Population density. Source: IRENA Global Atlas for Renewable Energy



A solar and wind resource analysis was performed based on maps from IRENAs Global Atlas for Renewable Energy confirming that Argentina has excellent wind and solar resources, feasible for project development. Argentina's Global Horizontal Irradiation (GHI) ranges from around 1000kWh/m<sup>2</sup> per year in the south to more than 2500kWh/m<sup>2</sup> in the northwest with around 1500kWh/m<sup>2</sup> per year in the rest of the country (see Figure 2). GHI levels are excellent in the northwest and good in the rest of the country. Argentina's onshore wind resource is considered excellent and one of the best worldwide due to its consistency and speed. Nearly 70% of Argentina's territory exceeds average wind speeds of 6 m/s at 80m hub height. Vast areas in middle and southern Patagonia have average speeds of more than 9 m/s and up to 12 m/s, and the Atlantic Coast of the Province of Buenos Aires counts with speeds higher than 7m/s (see Figure 3).





*Figure 3. Average wind speed map for Argentina at 80m. Source: IRENA Global Atlas for Renewable Energy* 



Consistent with the resource availability studies, the first round of the RenovAr tender resulted in the highest concentration of wind power projects presented in the Province of Buenos Aires and Patagonia region (see Figure 4). Regarding solar projects, most bids were presented for projects in Northwestern Argentina (see Figure 4).



Figure 4. Wind (left, green) and Solar (right, yellow) Power Offers received under RenovAr 1

Given the geographical extent of the renewable energy projects potential in Argentina, a site-specific baseline is not available at this time. Projects considered for financing under the GCF Program will undergo the appraisal process and will be evaluated against the standards of IDB's Environmental and Safeguards Compliance Policy (OP703) as well as other IDB safeguard policies and best practice standards such as the IFC Performance Standards. Each project under the GCF Program will be required to develop an Environmental Impact Assessment (EIA), which will include a sound environmental and social baseline for the project site and its area of influence, including the associated facilities.

Project baselines will be required to include sufficient and adequate data to be able to determine the environmental and social impacts of projects, as per the standards of IDB's safeguards policies. Baseline data will be collected by professionals with expertise in each field of environmental and social studies and will include a combination of information from literature review, field data collection from the project's area of influence and data gathered through consultation with stakeholders. For example, for wind projects, a sound bird and bat baseline will be required with fieldwork effort including at least one migratory season. The environmental and social baseline will be comprehensive and include the full suite of characteristics required for a proper baseline, such as:

- **Physical baseline**: meteorological conditions, air quality, noise, geology, geomorphology, hydrology, hydrogeology, landscape, soil.
- **Biodiversity baseline**: flora and fauna baselines, ecosystems and ecosystem services, protected areas and other key biodiversity areas.
- **Social baseline**: demographics, infrastructure, health, education, economy, social structures, institutions, Project-Affected People, land ownership, indigenous people, vulnerable people, cultural resources.

#### Policy and Legal Framework

The projects financed under the GCF Program will be subject to the standards required by IDB safeguard policies, which include the IDB Environment and Safeguards Compliance Policy (OP-703); Natural Disaster Risk Management Policy (OP-704); Involuntary Resettlement Policy (OP-710); Operational Policy on Indigenous People (OP-765); Operational Policy on Gender Equality in Development (OP-761) and sector guidance documents. In addition, good international industry practice and guidelines will be applied in the review of projects under the GCF Program, including among others, the IFC Performance Standards (PS) on Environmental and Social Sustainability, and the World Bank Group Environmental Health and Safety (EHS) Guidelines (General and Industry Sector EHS Guidelines).

Projects will be required to be designed and carried out in compliance with environmental laws and regulation of the host country, Argentina, including national obligations established under ratified Multilateral Environmental Agreements.

Projects' environmental and social risks and impacts will be assessed for compliance with host country laws and regulations and the standards of applicable IDB safeguard policies and only those that meet the requirements will be financed.

Argentinean environmental law is established at the national province and municipal levels, as a result of the federal organization in the Constitution, where Provinces have the legislative and enforcement authority.

Key environmental and social norms at the national level include:

- National Constitution Articles 41, 43, 121 and 124, among others;
- International treaties ratified by Argentina, such as: protection of cultural heritage, CITES, Convention of Vienna, Protocol of Montreal, Convention on Migratory Species, RAMSAR Convention, Convention of Basilea, UNFCCC, CBD, Kyoto Protocol, etc.
- Law of minimum budgets, including waste management, elimination of PCBs, general environmental law, water management, access to information, protection of native forest.
- Law on national parks
- Law on air quality conservation and Argentinean Fund to promote CDM
- Law on conservation of wildlife
- Law on defense of forests, national parks, monuments and natural reserves
- Law on protection of cultural heritage
- Law on promotion of preferred industries
- Law of traffic
- Law on occupational health and safety
- Law on occupational accidents and illnesses
- Law on integrated system for prevention of risk at work
- Law on national regime for wind and solar energy
- Law on promotion of renewable sources for renewable energy generation

As of December 2015, the environmental authority was elevated to a ministerial level through the creation of the Ministry of Environment and Sustainable Development (Decree No 13/2015).

Resolutions from the former Energy Secretariat include among others:

- Resolution 0475/87 requires project sponsors to present an EIA to the Subsecretary of Energy Planning
- Resolution 15/92 Environmental Management Manual for the Electric Transportation System
- Resolution 77/98 expands the requirements in the above resolution

Resolutions from the National Entity of Electricity Regulation (ENRE) include among others:

- Resolution 1724/98 Procedure to measure electromagnetic fields (EMF) and noise
- Resolution 1725/98 Establishes the Environmental Management Plan as a requirement to be complied with by the project sponsor
- Resolution 555/01 requires the development of a documented Environmental Management System using as a reference Norm ISO 14001, which should be certified and audited annually note that this Resolution was amended several times with more specificity regarding its application

- Resolution 30/04 Regulation for public hearings
- Resolution 122/2014 requires a public hearing for the expansion of transmission lines
- Resolution 274/2015 requires the development of an EIA for transmission lines declared of public interest and require a certificate of Convenience and Public Need for easements.

At the provincial level, each province's Constitution and legal framework establishes specific requirements for environmental, social, health and safety matters regarding renewable energy developments, including the review and approval of the EIA and issuance of province-level permits. At the municipal level, other permits and authorizations are required, including public consultation requirements, waste management, construction permits, among others.

Each project will be required to develop an Environmental Impact Assessment (EIA), which will include an institutional and regulatory framework that will specify the applicable institutions, laws and regulations for that project in a particular province and municipality. Compliance with national, province and municipal laws and regulations will be required for projects financed under the Program.

## Environmental and Social Risks and Mitigation Measures

### Environmental and Social Impacts and Risks

The potential key environmental, social, health and safety, and labor issues and risks associated with this Program are those related to the wind and solar PV generation projects to be financed under the GCF Program.

For each project considered for financing under the GCF Program, relevant IDB environmental and social safeguards standards will be applied in accordance with the Accreditation Master Agreement and/or such other related arrangements. Each project under the GCF Program will be required to develop an Environmental Impact Assessment (EIA), which will identify and assess the specific impacts and risks associated with that project. Impact assessments will be required to assess impacts using tools accepted as good international industry practice (GIIP), including for example mathematical models, expert analysis, matrices, consultation, among others.

Key impacts and risks expected from the wind and solar projects are:

#### Wind projects (land-based):

Wind energy projects can result in adverse environmental or social impacts, which will vary in nature, intensity and duration based on the specific characteristics, location and size of the wind farm, as well as the specific environmental and social context. Depending on the area, the construction of access roads and transmission lines to connect the wind farms to the grid could intensify the adverse impact of these projects. The general risks and impacts during construction can include: (i) habitat disturbance; (ii) soil erosion; (iii) soil and water pollution; (iv) air emissions and dust generation; (v) increased heavy traffic; (vi) noise and vibrations; (vii) loss of vegetation; (viii) occupational health and safety hazards for the workforce; (ix) community health and safety issues; (x) changes in local economy; (xi) changes in local societal structure/ dynamics; (xii) community expectations and conflicts; and (xiii) access to land/ land

use changes. During operation, the risks and impacts can include: (i) bird and bat mortality due to collision with turbines and electrocution with transmission lines; (ii) habitat fragmentation from access roads and transmission lines; (iii) visual and landscape impacts, including shadow flicker effect; (iv) noise from mechanical and aerodynamic movement; (v) lighting and shade from blades; (vi) community health and safety hazards; and (vii) land use changes. In some specific cases, it may involve use of indigenous land/ territories; community/ stakeholder opposition and/or heightened expectations for local benefits.

#### Solar PV Projects:

Solar PV projects have more limited environmental and social impacts; however, the intensity of the impacts can vary depending on the location. The general risks and impacts during construction can include: (i) habitat disturbance; (ii) soil erosion; (iii) soil and water pollution; (iv) air emissions and dust generation; (v) increased heavy traffic; (vi) noise and vibrations; (vii) loss of vegetation; (viii) occupational health and safety hazards for the workforce; (ix) community health and safety issues; (x) changes in local economy; (xi) changes in local societal structure/ dynamics; (xii) community expectations and conflicts; and (xiii) access to land/ land use changes. During operations, impacts are primarily associated with (i) land use conversion and habitat loss; (ii) habitat fragmentation from access roads and transmission lines; and (iii) waste management associated with the disposal of solar panels. In some specific cases, access to water and water availability; use of indigenous land/ territories and community/ stakeholder perception and expectations for local benefits can be an issue.

## Mitigation Measures following Best Practice

Relevant IDB environmental and social safeguards standards will be applied in accordance with the Accreditation Master Agreement and/or such other related arrangements. Each project under the GCF Program will be required to develop an Environmental Impact Assessment (EIA), which will include mitigation measures that draw from the results of the impact assessment and good international industry practice. Projects considered for financing under the GCF Program will undergo the appraisal process and will be evaluated against the standards of IDB's Environmental and Safeguards Policy, as well as best practice such as the IFC Performance Standards. The WBG EHS General Guidelines and Guidelines for Wind Energy and Electric Transmission and Distribution will be used as a reference together with other guidelines and standards developed by the IDB and other international institutions.

### Environmental, Health and Safety

Internationally accepted guidance on environmental, social, health and safety mitigation measures for renewable energy projects can be found in the WBG EHS Guidelines.

The WBG EHS General Guidelines are applicable for the construction and decommissioning phases of projects and provide guidance on mitigation measures and monitoring standards for projects. The EHS General Guidelines are technical reference documents with general industry-specific examples of good international industry practice. The guidelines contain performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable cost. The applicability of the EHS Guidelines should be tailored to the hazards and risks of each project on the basis of the results of the impact assessment in which site-specific variables, host country regulations, assimilative capacity of the environment and other factors should be taken into consideration.

The General EHS Guidelines address mitigation measures associated with:

#### Environmental

- Air emissions and ambient air quality
- Energy Conservation
- Wastewater and Ambient Water Quality
- Water Conservation
- Hazardous Materials Management
- Waste Management
- Noise
- Contaminated Land

#### **Occupational Health and Safety**

- General Facility Design and Operation
- Communication and Training
- Physical Hazards
- Chemical Hazards
- Biological Hazards
- Radiological Hazards
- Personal Protective Equipment (PPE)
- Special Hazard Environments
- Monitoring

#### **Community Health and Safety**

- Water Quality and Availability
- Structural Safety of Project Infrastructure
- Life and Fire Safety (L&FS)
- Traffic Safety
- Transport of Hazardous Materials
- Disease Prevention
- Emergency Preparedness and Response

For wind power projects specifically, the WBG EHS Guidelines for Wind Energy (2015) provide the specific guidance and the WBG EHS Guidelines for Electric Power Transmission and Distribution (2007) apply for projects involving transmission lines.

In general, many ESHS impacts from renewable energy projects and its associated facilities can be avoided by careful site selection and alternatives analysis. Avoiding projects located within protected areas or Important Bird Areas (IBAs) can significantly reduce the level of impacts and risks of a project. Similarly, avoiding resettlement, cultural heritage sites and indigenous territories can highly improve the sustainability of a project.

Due to the nature of renewable energy projects, which are located in resource rich areas, cumulative environmental and social impacts are particularly important to consider. If no relevant country-specific guidance is available in relation to cumulative impacts assessment, international sources of good practice guidance on this topic should serve as references. Cumulative impacts assessments are especially warranted when multiple wind energy facilities are sited in close proximity to sensitive receptors such as areas of high biodiversity value.

The following main mitigation measures are considered from the WBG EHS Guidelines for wind power projects:

#### Landscape and visual impacts:

- Consider turbine proximity, layout, size, and scale in relation to the surrounding landscape and surrounding visual receptors such as residential areas
- Incorporate community input into the layout and siting
- Maintain uniform size and design of turbines
- Minimize ancillary structures on site

#### Noise during operations:

- Engineering design standards and turbine siting. Modern turbines have lower mechanical noise.
- Operating turbines in reduced noise mode.
- Building walls/appropriate noise barriers around potentially affected buildings
- Curtailing turbine operations above the wind speed at which turbine noise becomes unacceptable in the project-specific circumstances.

#### **Biodiversity:**

Careful site selection and layout should reduce adverse impacts on biodiversity. Any significant residual adverse impacts will need appropriate mitigation, which could include the following:

- Modify the number and size of turbines and their layout in accordance with site-, species-, and season-specific risks and impacts. Fewer taller towers may reduce the collision risk for most birds and reduce vegetation clearing for construction. The location of associated infrastructure– such as transmission lines, substations, and access roads should also be accordingly informed by biodiversity risk and impact assessments.
- If the wind energy facility is located close to areas of high biodiversity value, active turbine
  management such as curtailment and shut-down on-demand procedures should be considered
  as part of the mitigation strategy, and factored into financial modeling and sensitivities at an
  early stage. This method of mitigation should be adaptive and guided by a well-developed postconstruction monitoring program. Curtailment and shut-down on-demand measures should be
  first conducted as an experiment, with control turbines that are not curtailed and with both sets
  carefully monitored, to determine whether or not the curtailment is producing the desired
  fatality reduction. Technology-led turbine shut-down should be considered in certain cases,
  although any such system should be subject to a period of observer-led ground truthing and
  evaluation through a process of adaptive management.

- Avoid artificially creating features in the environment that could attract birds and bats to the wind energy facility, such as water bodies, perching or nesting areas, novel feeding areas, and staging or roosting habitats. Capping or fixing any cavities in walls or buildings helps to remove potential bat roosting sites.
- Avoid attracting birds to predictable food sources, such as on-site or off-site waste disposal areas, or landfills; this is especially relevant when vultures or other carrion-eating birds are present. These types of mitigation measures may also need to be carried out in the surroundings of the wind energy facility in order to be effective.
- Consider adjustments of cut-in wind speeds to reduce potential bat collisions. The feasibility of this measure should be informed by species- and site-specific data. A slight increase in cut-in wind speed may have the potential to achieve significant reductions in bat fatalities, with minimal reduction in generation or financial returns.
- Eliminate "free-wheeling" (free spinning of rotors under low wind conditions when turbines are not generating power).
- Avoid artificial light sources where possible. White, steady lights in particular attract prey (e.g., insects), which in turn attracts predators. If lights are used, red or white blinking or pulsing lights are best. Steady or slow blinking lights are to be avoided. Timers, motion sensors, or downward-hooded lights help to reduce light pollution.
- Bury on-site transmission lines.
- Install bird flight diverters on transmission lines and guy wires from meteorological masts to reduce bird collisions when located in or near areas of high biodiversity value and/or where birds of high biodiversity value are at risk of collision.
- Use "raptor safe" designs for power line poles to reduce electrocution risk.
- Assess the current state of the art of bird and bat deterrence technology, and consider implementing any proven effective technologies where appropriate.

#### Shadow flicker:

- Site wind turbines appropriately to avoid shadow flicker being experienced or to meet limits placed on the duration of shadow flicker occurrence, as set out in the paragraph above.
- Wind turbines can be programmed to shut down at times when shadow flicker limits are exceeded.

#### Occupational health and safety:

The following occupational risks will be considered and the mitigation measures described in the WBH EHS Guideline for Wind Power will be used as a reference:

- Working at Height
- Working over Water
- Working in Remote Locations
- Lifting Operations

#### Community Health and Safety:

The following community risks will be considered and the mitigation measures described in the WBH EHS Guideline for Wind Power will be used as a reference:

- Blade and Ice Throw
- Aviation
- Marine Navigation and Safety
- Electromagnetic Interference and Radiation
- Public Access
- Abnormal Load Transportation

Mitigation measures for the construction and operation of transmission and distribution lines are described in the WBG EHS Guideline for Electric Power Transmission and Distribution. The following areas are considered:

#### Environment:

- Terrestrial habitat alteration
- Aquatic habitat alteration
- Electric and magnetic fields
- Hazardous materials

#### **Occupational Health and Safety:**

- Live power lines
- Working at height
- Electric and magnetic fields
- Exposure to chemicals

#### **Community Health and Safety:**

- Electrocution
- Electromagnetic interference
- Visual amenity
- Noise and Ozone
- Aircraft Navigation Safety

#### Involuntary Resettlement

Projects that involve significant physical displacement and resettlement actions will not be eligible under this Program.

Projects under the RenovAr package are required to have obtained legal rights on the property where the project will be developed (i.e., direct purchase, rent or easement). It is expected that projects financed under the GCF Program will have negotiated agreements for land tenure with agreed compensation for land and economic displacement.

Relevant IDB environmental and social safeguards standards will be applied in accordance with the Accreditation Master Agreement and/or such other related arrangements. During project appraisal, the land acquisition process will be reviewed, including whether good-faith negotiations were obtained and whether any physical or economic displacement would occur. In the event that either physical or economic displacement, the project sponsor will be required to develop a Resettlement Action Plan commensurate with the level of impacts and risks and to follow the standards of IDB's Involuntary Resettlement Policy (OP710) and IFC's Performance Standard 5. Projects that do not comply with the above mentioned standards will not be financed.

The standards of the Involuntary Resettlement Policy (OP710) are the overall framework for assessment of resettlement issues of each project. The policy describes two fundamental principles.

1. Every effort will be made to avoid or minimize the need for involuntary resettlement. A thorough analysis of project alternatives must be carried out in order to identify solutions that are economically and technically feasible while eliminating or minimizing the need for involuntary resettlement. In examining the trade-offs between alternatives, it is important to have a reasonable estimate of the numbers of people likely to be affected, and an estimate of the costs of resettlement. Particular attention must be given to socio-cultural considerations, such as the cultural or religious significance of the land, the vulnerability of the affected population, or the availability of in-kind replacement for assets, especially when they have important intangible implications. When a large number of people or a significant portion of the affected community would be subject to relocation and/or impacts affect assets and values that are difficult to quantify and to compensate, after all other options have been explored, the alternative of not going ahead with the project should be given serious consideration.

2. When displacement is unavoidable, a resettlement plan must be prepared to ensure that the affected people receive fair and adequate compensation and rehabilitation. Compensation and rehabilitation are deemed fair and adequate when they can ensure that, within the shortest possible period of time, the resettled and host populations will: (i) achieve a minimum standard of living and access to land, natural resources, and services (such as potable water, sanitation, community infrastructure, land titling) at least equivalent to pre-resettlement levels; (ii) recover all losses caused by transitional hardships; (iii) experience as little disruption as possible to their social networks, opportunities for employment or production, and access to natural resources and public facilities; and (iv) have access to opportunities for social and economic development.

As per the standards of OP710, when the number of people to be resettled is very small (a determination that depends on the particular frame of reference and the level of disruption to the community), the affected group is not vulnerable and enjoys clear title to the assets affected, or the institutional setting and the market place offer reasonable opportunities for the replacement of assets or income, and intangible factors are not significant, a resettlement plan as such may not need to be prepared. In such cases, it may be possible to address relocation prior to project advancement through mutually agreed contractual covenants.

#### Indigenous People

Projects that significantly impact indigenous people will not be eligible under this Program.

Projects under the RenovAr package are required to have obtained legal rights on the property where the project will be developed. Therefore, negotiated agreements are expected on these projects and it is not expected that the projects would be sited on indigenous territories.

Relevant IDB environmental and social safeguards standards will be applied in accordance with the Accreditation Master Agreement and/or such other related arrangements. All projects will undergo the appraisal process and will be required to comply with the standards of IDB's Environmental and Safeguards Compliance Policy (OP-703), Operational Policy for Indigenous People (OP-765) and IFC Performance Standard 7. During appraisal, the need to conduct additional studies, consultation efforts or implement additional mitigation measures or management plans will be assessed in order to address impacts and risks to indigenous people and will indicate these requirements in the ESAP. Projects that do not comply with the above mentioned policies and standards will not be financed.

In order to be eligible for financing, operations need to comply with applicable legal norms, satisfy the safeguards established in the Indigenous People policy and be consistent with the standards of other relevant IDB safeguards policies. As established in OP765, the following specific safeguards will apply:

1. The project proponent will be required to conduct an evaluation to determine the seriousness of potential adverse impacts on physical and food security, lands, territories, resources, society, rights, the traditional economy, way of life and identity or cultural integrity of indigenous peoples, and to identify the indigenous peoples affected and their legitimate representatives and internal decision-making procedures. This evaluation will include preliminary consultations with potentially affected indigenous peoples.

2. When potential adverse impacts are identified, the project proponent will be required to incorporate the design and implementation of the measures necessary to minimize or prevent such adverse impacts, including consultation and good faith negotiation processes consistent with the legitimate decision-making mechanisms of affected indigenous peoples or groups, mitigation measures, monitoring, and fair compensation.

3. For cases of particularly significant potential adverse impacts that carry a high degree of risk to the physical, territorial or cultural integrity of the affected indigenous peoples or groups, the project proponent will be required to demonstrate that it has, through a good faith negotiation process, obtained agreements regarding the operation and measures to address the adverse impacts as necessary to support the sociocultural viability of the operation.

## Environmental and Social Risks Management Process

Every project under the GCF Program will undergo a screening and appraisal process prior to approval in order to verify the project's compliance with the applicable standards. Once a project is approved, it will undergo supervision during the life of the transaction to ensure compliance with the standards and policies.

The appraisal and supervision process include an environmental and social screening prior to eligibility; an environmental and social due diligence during appraisal that includes a site visit; drafting of environmental and social covenants and environmental and social monitoring during supervision.

During appraisal, three primary aspects of a transaction are considered: likely environmental and social risks and impacts; client's capacity and commitment to meet the requirements; and host country institutional and regulatory framework. The appraisal and supervision of a project is undertaken by one or more dedicated Environmental and Social Specialists. Additional support can also be sought from Independent Environmental and Social Consultants with specialized skills to support the review and monitoring of a transaction. The environmental and social due diligence results are synthesized in an Environmental and Social Review Summary (ESRS), which is publicly disclosed 30 days prior to approval and annexed to the Board Proposal submitted for approval.

Projects are categorized based on the level of risk (i.e., A, B and C), which dictates the appropriate extent of environmental and social impact assessment, information disclosure and stakeholder engagement required. Environmental and Social appraisal information is publicly disclosed on the website. For this Program, only projects that fall under Category B or C will be financed. No Category A projects will be considered under this Program.

Only the operations that meet the environmental and social requirements within a reasonable timeframe will be financed. Where the client needs specific actions to reach compliance, specific conditions or covenants will be included in the legal agreements with a designated timeframe through an Environmental and Social Action Plan (ESAP) and compliance will be reviewed accordingly. Supervision monitoring of compliance with the ESAP is conducted on a regular basis, prior to each disbursement and thereof annually through supervision missions, which can be supported by independent consultants. When necessary, Corrective Action Plans are prepared to bring the operation to compliance.

#### Environmental and Social Due Diligence

Relevant IDB environmental and social safeguards standards will be applied in accordance with the Accreditation Master Agreement and/or such other related arrangements. Projects will be reviewed against the standards of IDB's Environmental and Safeguards Policy as well as international best practices such as the IFC Performance Standards and World Bank Group Environmental, Health and Safety (EHS) Guidelines, including the General Guidelines and Industry-Specific Guidelines.

**Eligibility:** At the Eligibility stage, a preliminary category is provided to the project, based on the impacts and risks described in the EIA and other relevant documentation, including publicly available information. Only projects that are preliminarily Category B or C will be eligible. At this stage, an Environmental and Social Screening and Strategy (ESS) will be prepared, which indicates the most relevant environmental and social aspects or terms of reference for the due diligence.

Projects eligible under the Program will be Category B or C, defined as:

- Category B: have potential environmental and/or social impacts and risks that are less adverse than those of a Category A and which are generally limited to the project site, largely reversible and can be mitigated via measures that are readily available and feasible to implement in the context of the operation.
- Category C: are likely to result in very limited or no adverse environmental or social impacts or risks.

**Appraisal**: During appraisal, an environmental and social due diligence will be conducted by experienced Environmental and Social Specialists. Depending on the complexity of the project or the need for local expertise, an Independent Environmental and Social Consultant (IESC) may be hired to support the review. The due diligence will consist of a thorough review of relevant environmental, social, and labor and health and safety documentation, complemented with interviews with the project sponsor staff, consultants and contractors. During the site visit, the proposed project's area of influence will be visited and meetings with relevant stakeholders will be held. The ESDD will typically address the following aspects:

- Confirmation that the project has been designed following good international industry practice;
- Review of the site selection and analysis of alternatives for the project and its associated facilities;
- An assessment of the project's Environmental and Social Impact Assessment (ESIA) and supporting studies, in compliance with international standards;
- An assessment of the project's Environmental, Health and Safety Management System, including plans and procedures, to assess their adequacy in terms of responsibilities, training, auditing, reporting, and resources to be made available to ensure adequate implementation;
- Organizational capacity, including at the corporate level as well as at the project level;
- Completeness and adequacy of the environmental and social baseline studies, including but not limited to: biodiversity (with emphasis on birds and bats and their migratory paths for wind projects), noise, traffic, land use, natural disaster risk and cultural heritage;
- Assessment of environmental and social impacts and risks, including where possible, quantitative analyses through modeling and other methods;
- Assessment of potential adverse socio-economic impacts of land acquisition/ easement, construction activities, temporary loss of access to agricultural land required for the installation of the transmission line; evaluation of mitigation and compensation framework and measures for the current land owners along planned transmission lines;
- Cumulative impacts;
- Adequacy of the mitigation measures, management and monitoring plans and programs;
- Human resources and labor policies, including compliance with local regulations;
- Completeness and adequacy of public consultation, disclosure and stakeholder engagement, including vulnerable groups;
- Environmental, social, labor and health and safety requirements passed on to contractors;
- Assess health and safety practices for workers and if the Project is meeting good international industry standards;
- Evaluation of risks of natural disasters and emergency response.

The project's environmental and social aspects will be reviewed against the applicable safeguards, policies, standards and guidelines.

The results of the meetings with stakeholders will be documented and input received from stakeholders will be taken into consideration in the overall assessment of the project's compliance and opportunities for improved environmental and social performance. Typical stakeholder to interview will include local

authorities, local leaders, project-affected communities, other groups or entities with an interest in or an influence on the project.

As a result of the due diligence, an Environmental and Social Review Summary (ESRS) will be prepared and disclosed at least 30 days prior to approval on the website. The ESRS will include a link to the ESIA and other relevant project documents prepared by the project sponsor. The ESRS will include the main conclusions of the project's alignment with the applicable requirements. Any gaps or enhancements that need to be completed to align the project to the applicable requirements will be summarized in an Environmental and Social Action Plan (ESAP) and will specify the dates required for completion of each action. The ESAP will also be disclosed on the website as part of the ESRS.

While ESIAs will need to be conducted to meet also the requirements of the relevant jurisdiction, Appendix III to this document provides guidance for the development of ESIAs that will also be considered in reviewing such documents.

**Closing and Disbursement**: The ESAP will be included as a condition to the loan agreement, together with other general environmental and social requirements in the legal documents. The conditions precedent (CP) to closing will be reviewed by the Environmental and Social Specialist for adequacy and completeness vis-à-vis the applicable requirements. Prior to each disbursement, the Environmental and Social Specialist will review the documentation provided by the project sponsor and verify if it satisfies the CPs for a given disbursement.

**Supervision**: During construction, projects will be supervised at least every six months to review compliance with the environmental and social covenants in the loan agreement, including compliance with relevant IDB safeguards and standards in accordance with the Accreditation Master Agreement and/or such other related arrangements. During operations, projects will be supervised at least annually, with a more frequent review during the first years of operation. An annual report will be prepared for projects based on information provided by the project and the supervision visits. Some projects may also have an IESC that will support the review.

Project cycle	Government Regulators role	IDB (Accredited Entity) role	IIC (Executing Entity) role	Clients role
Permitting	Issue regulation in terms of E&S requirements. Evaluate project's applications for issuance of E&S permits and authorizations, reviewing studies and information required by applicable regulation.			Prepare and submit E&S studies and application for required permits and authorizations.

Roles throughout the process are summarized in the table below:

Project cycle	Government Regulators role	IDB (Accredited Entity) role	IIC (Executing Entity) role	Clients role
Screening and Eligibility		Program monitoring and reporting according to Accredited Entity responsibilities established in the AMA and subsidiary arrangements with IIC as Executing Agency	SEG Officer assigned to transaction. Initial review against eligibility criteria and preliminary categorization. Preparation of Environmental and Social Strategy Summary (ESS), as per the requirements of IIC Sustainability Policy (i.e., compliance with IDB Safeguards and IFC Performance Standards).	Provide information needed for eligibility assessment.
Structuring and Approval		Program monitoring and reporting according to Accredited Entity responsibilities established in the AMA and subsidiary arrangements with IIC as Executing Agency	If needed, hire an independent E&S consultant. Conduct E&S due diligence including documentation review, site visit and meetings with stakeholders. Perform due diligence assessment against host country regulations, IDB Safeguards, IFC Performance Standards and WBG EHS Guidelines. Identify gaps. Prepare the Environmental and Social Review Summary (ESRS), including an Environmental and Social Action Plan (ESAP). Submit ESRS for Public Disclosure on IIC's website at least <b>30 days prior</b> to IIC's Approval. Participate in Credit Committee and prepare E&S section of Board Proposal. Issue clearance of E&S section of Board Proposal.	Provide information needed for due diligence assessment. Develop and/or implement E&S information, actions and plans as required for approval.
Closing and First Disbursemen t		Program monitoring and reporting according to Accredited Entity responsibilities established in the AMA and subsidiary arrangements with IIC as Executing Agency	Review E&S sections in Transaction Agreements (i.e., covenants, ESAP). Review and confirm E&S Conditions Precedent (CP's) for closing and first disbursement. If CP's are not met, prepare a Corrective Action Plan (CAP) with the Client that describes the actions to be taken to reach compliance by a given date. When applicable, request Consultant's E&S certificate. Issue clearance of E&S CP's.	Comply with conditions precedent, as required by Loan/guarantee agreement.

Project cycle	Government Regulators role	IDB (Accredited Entity) role	IIC (Executing Entity) role	Clients role
Other Disbursemen ts		Program monitoring and reporting according to Accredited Entity responsibilities established in the AMA and subsidiary arrangements with IIC as Executing Agency	Review and confirm E&S CP's for disbursement. If CP's are not met, prepare a CAP with the Client to reach compliance by a given date. When applicable, request Consultant's E&S certificate. Issue clearance of E&S CP's.	Comply with conditions precedent for subsequent disbursements.
Supervision	In accordance to provisions in local regulation, including acting as thereby defined (e.g. definition and/or application of sanctions) in cases of lack of compliance with such regulation.	Program monitoring and reporting according to Accredited Entity responsibilities established in the AMA and subsidiary arrangements with IIC as Executing Agency	If applicable, execute a Monitoring Agreement with an independent E&S consultant. During construction, review the project's compliance with the E&S conditions in the Transaction Agreement, including E&S covenants and ESAP on a regular basis (i.e., semi-annually). This includes a review of the Client's E&S Compliance Report and site visits, as necessary. If any deviations are identified, agree with the Client on a CAP for any risks identified. Conduct a review of construction completion. During operation, review the project's compliance with the E&S conditions in	Comply with Loan/Guarantee contractual E&S requirements and covenants.
			the Transaction Agreement, including E&S covenants and ESAP at least annually. This includes a review of the Client's E&S Compliance Report and site visits, as necessary.	

#### Multi-Stakeholder Engagement and Consultation

Projects will be reviewed against relevant IDB environmental and social safeguards standards that will be applied in accordance with the AMA and/or such other related arrangements. This includes requiring the client's engagement with affected communities and stakeholders through the disclosure of relevant project information, consultation, and informed, effective participation, consistent with the principles of good international industry practice (GIIP) such as the IFC Performance Standards. Stakeholder engagement must be commensurate to project risks and impacts and enable them to express their concerns in a timely manner as to the scope and effectiveness of environmental and social assessments, management plans and compensation schemes. Certain impacts related to resettlement, livelihood

losses and indigenous peoples may require agreements with stakeholders. Projects must also include a grievance management mechanism commensurate with the complexity and level of conflict associated with the project. Special attention is paid to participation by vulnerable groups (such as women, indigenous peoples, and other ethnic minorities, low income and illiterate groups, youth, the elderly, and persons with disabilities).

During appraisal, projects require a site visit, which includes interviews with clients' staff, contractors, consultants and relevant stakeholders. These stakeholders commonly include: project-affected communities; local and State authorities; local leaders; local workers; organized groups with an interest in the project; NGOs/associations; academics/ scientific groups; and vulnerable groups. A preliminary list of stakeholders will be requested from the project sponsor and will complement it with research gathered during the due diligence review. The results of meetings and interviews with stakeholders are taken into consideration for the appraisal and supervision requirements.

Information will be disclosed in accordance with GCF's disclosure requirements as stated in the Accreditation Master Agreement (AMA). In summary, disclosure requirements for projects that are Category B and C include:

- Category B: project EIA and other relevant environmental analyses and disclosure template including ESRS 30 days prior to Board Approval, and
- Category C: Disclosure template including ESRS 30 days prior to Board Approval.

Only Category B and C projects will be financed under this Program.

As ESRS are published on IIC's website an e-mail address will be indicated to receive questions or comments.

In addition, IDB has a general site where information requests can be made: <u>http://www.iadb.org/en/information-request,18885.html</u>. Upon reception of queries, a ticket will be opened, and the questions internally directed to the relevant department at IDB. An indication will be given to the person submitting the query on the timeframe needed to provide a response.

The operations under the GCF Program will be subject to an Independent Consultation and Investigation Mechanism (ICIM), which may apply in cases of complaints that the applicable policies have failed to be followed and when as a result of such failure material adverse effects have occurred or might reasonably be expected to occur.

At the Program level, consultations have been held throughout 2016 with government officers, project sponsors, equipment suppliers, and financial institutions (both DFIs and commercial banks) to understand investment and financing challenges, in order to define an engagement strategy for the sector, and the relevance of seeking GCF support. Some of these discussions have also helped define the financial instruments and technical cooperation activities relevant to support the achievement of the Government of Argentina's objectives as defined in Law 27.191. In particular, consultations were held with:

• Government of Argentina: as part of the IDB Group's engagement with the Ministry of Energy and Mining to identify ways to support the RenovAr program, the relevance of the IDB Group's support

to help mobilize long term financing –including from the GCF- was confirmed. This resulted in the Government of Argentina submission of the Letter of No Objection for the Program.

- Other potential lenders: the IDB Group carried various rounds of consultation with other development finance institutions (multilaterals, bilaterals –including EXIM banks) and a number of commercial lenders to assess appetite of financing renewable energy projects under new conditions. This helped confirmed the limitations that some of these lenders could have in the short term (in terms of volume of financing, tenors, number of projects, etc.) and thus the relevance of expanding mobilization efforts to less traditional sources, such as the GCF, to help meet financing needs of emerging projects.
- Other industry stakeholders: in addition, the IDB Group has actively participated in recent workshops and conferences organized in Argentina to discuss with government officials and private companies needs for the IDB Group's support. The IIC has received significant consultations and input from project sponsors planning to participate in RenovAr in regards to the challenges and possibilities of accessing long-term financing for projects.

## Institutional Environmental and Social Capacity

The institutional capacity of project sponsors to implement environmental and social requirements under the GCF Program will be evaluated during the project appraisal/due diligence process. Only projects demonstrating adequate capacities as well as contractually committing to implement any required related measures will be considered for financing under this Program.

The review of institutional environmental and social capacity will include confirmation that the project sponsor has an organizational structure with defined roles, responsibilities and authority to implement their environmental and social management system (ESMS). Specific personnel, including management representative(s), with clear lines of responsibility and authority should be designated. Key environmental and social responsibilities should be well defined and communicated to the relevant personnel and to the rest of the project sponsor's organization.

Personnel within the project sponsor's organization with direct responsibility for the project's environmental and social performance will have the knowledge, skills, and experience necessary to perform their work. Personnel will also possess the knowledge, skills, and experience to implement the specific measures and actions required under the ESMS and the methods required to perform the actions in a competent and efficient manner. Where specialized skills are needed, the project sponsor will involve external experts to assist in the risk and impacts identification process as well as in the design of mitigation and management measures.

Relevant IDB environmental and social safeguards standards will be applied in accordance with the Accreditation Master Agreement and/or such other related arrangements. The appraisal/ due diligence will be conducted by experienced environmental and social professionals that are solely dedicated to the appraisal and supervision of projects. The role of the environmental and social officers includes the review of projects with regards to the standards of IDB's Environmental and Safeguards Compliance Policy as well as other international best practice guidance such as the IFC Performance Standards in

order to manage the risks and impacts of the projects considered for financing and to assist project sponsors in understanding and meeting them.

# Appendices

Appendix I. Excluded Activities List Appendix II. List of IDB Policies

Appendix III. Guidance for Development of Environmental and Social Impact Assessment (ESIA)

## Appendix I. Excluded Activities List

The IDB does not finance projects or companies involved in the production, trade, or use of the products, substances or activities listed below.

- Those that are illegal under host country laws, regulations or ratified international conventions and agreements
- Weapons and ammunitions
- Tobacco<sup>1</sup>
- Gambling, casinos and equivalent enterprises<sup>2</sup>
- Wildlife or wildlife products regulated under Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)<sup>3</sup>
- Radioactive materials<sup>4</sup>
- Unbonded asbestos fibers<sup>5</sup>
- Forestry projects or operations that are not consistent with the Bank's Environment and Safeguards Compliance Policy<sup>6</sup>
- Polychlorinated biphenyl compounds (PCBs)
- Pharmaceuticals subject to international phase outs or bans<sup>7</sup>
- Pesticides/herbicides subject to international phase outs or bans<sup>8</sup>
- Ozone depleting substances subject to international phase out<sup>9</sup>
- Drift net fishing in the marine environment using nets in excess of 2.5 km. in length
- Transboundary trade in waste or waste products<sup>10</sup>, except for non-hazardous waste destined for recycling
- Persistent Organic Pollutants (POPs)<sup>11</sup>
- Non-compliance with workers fundamental principles and rights at work<sup>12</sup>

<sup>&</sup>lt;sup>1</sup> This does not apply to project sponsors who are not substantially involved in these activities. "Not substantially involved" means that the activity concerned is ancillary to a project sponsor's primary operations.

<sup>&</sup>lt;sup>2</sup> This does not apply to project sponsors who are not substantially involved in these activities. "Not substantially involved" means that the activity concerned is ancillary to a project sponsor's primary operations.

<sup>&</sup>lt;sup>3</sup> <u>www.cites.org</u>

<sup>&</sup>lt;sup>4</sup> This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where it can be demonstrated that the radioactive source is to be trivial and/or adequately shielded.

 $<sup>^{\</sup>scriptscriptstyle 5}$  This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is<20%.

<sup>&</sup>lt;sup>6</sup> GN-2208-20, Environmental and Safeguards Compliance Policy, dated 19 January 2006, approved by the Board of Executive Directors on 19 January 2006.

<sup>&</sup>lt;sup>7</sup> Pharmaceutical products subject to phase outs or bans in United Nations, Banned Products: Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or not Approved by Governments. (Last version 2001, www.who.int/medicines/library/qsm/edm-qsm-2001-3/edm-qsm-2001\_3.pdf)

<sup>&</sup>lt;sup>8</sup> Pesticides and herbicides subject to phase outs or bans included in both the Rotterdam Convention (www.pic.int) and the Stockholm Convention (www.pops.int).

<sup>&</sup>lt;sup>9</sup> Ozone Depleting Substances (ODSs) are chemical compounds which react with and deplete stratospheric ozone, resulting in the widely publicized 'ozone holes'. The Montreal Protocol lists ODSs and their target reduction and phase out dates. The chemical compounds regulated by the Montreal Protocol include aerosols, refrigerants, foam blowing agents, solvents, and fire protection agents. (www.unep.org/ozone/montreal.shtml).

<sup>&</sup>lt;sup>10</sup> Defined by the Basel Convention (www.basel.int).

<sup>&</sup>lt;sup>11</sup> Defined by the International Convention on the reduction and elimination of persistent organic pollutants (POPs) (September 1999) and presently include the pesticides aldrin, chlordane, dieldrin, endrin, heptachlor, mirex, and toxaphene, as well as the industrial chemical chlorobenzene (www.pops.int).

<sup>&</sup>lt;sup>12</sup> Fundamental Principles and Rights at Work means (i) freedom of association and the effective recognition of the right to collective bargaining; (ii) prohibition of all forms of forced or compulsory labor; (iii) prohibition of child labor, including without limitation the prohibition of persons under 18 from working in hazardous conditions (which includes construction activities), persons under 18 from working at night, and that persons under 18 be found fit to work via medical examination; (iv) elimination of discrimination in respect of employment and occupation, where discrimination is defined as any distinction, exclusion or preference based on race, color, sex, religion, political opinion, national extraction, or social origin. (International Labor Organization: www.ilo.org)

# Appendix II. List of IDB Safeguards Policies

IDB's Safeguard Policies are publicly available on IDB's website located at:

http://www.iadb.org/en/topics/sustainability/about-us,19563.html

The following safeguards are available:

- Environment and Safeguards Compliance Policy and Guidelines
- Natural Disaster Risk Management and Guidelines
- Involuntary Resettlement and Guidelines
- Indigenous Peoples and Guidelines
- Gender Equality in Development and Guidelines
- Access to information Policy and Guidelines

# Appendix III. Guidance for Development of Environmental and Social Impact Assessment (ESIA)

The impact assessment document developed for each project will follow the legal requirements of each Province and will undergo the due diligence process to ensure compliance with all relevant regulation.

As per OP-703, B.5 Environmental Assessment Requirements, preparation of Environmental Assessments (EA) and associated management plans and their implementation are the responsibility of the borrower. The Bank will require compliance with specified standards for Environmental Impact Assessments (EIAs), Strategic Environmental Assessments (SEAs), Environmental and Social Management Plan (ESMP), and environmental analyses, as defined in this Policy and detailed in the Guidelines. The operation's executing agency or borrower is required to submit all EA products to the Bank for review. The operation's approval by the Bank will consider the quality of the EA process and documentation, among other factors.

- The EIA process includes, as a minimum: screening and scoping for impacts; timely and adequate consultation and information dissemination process; examination of alternatives including a no project scenario. The EIA should be supported by economic analysis of project alternatives and, as applicable, by economic cost-benefit assessments of the project's environmental impacts and/or the associated protection measures. Also, due consideration will be given to analyzing compliance with relevant legal requirements; direct, indirect, regional or cumulative impacts, using adequate baseline data as necessary; impact mitigation and management plans presented in an ESMP; the incorporation of EA findings into project design; measures for adequate follow-up of the ESMP's implementation.
- The SEA has the following objectives: (i) assure that the main environmental risks and opportunities of policies, plans or programs have been properly identified; (ii) engage early-on governments and potentially affected parties in the identification and analysis of strategic issues, actions, and development alternatives; (iii) define and agree on a sequence of actions to address systematically and strategically environmental issues and priority actions, summarized in an SEA action plan for adequate monitoring and follow up; and (iv) assure that adequate environmental information is available and collected for the decision making process. The SEA process should be triggered early in the decision-making process and prior to the implementation of the policies, plans or programs. Recommendations from the SEA process should be incorporated into an operation's activities.
- For operations requiring an environmental assessment but not subject to an EIA or an SEA, an environmental analysis should be performed including an evaluation of the potential environmental, social, health and safety impacts and risks associated with the operation, and an indication of the measures foreseen to control these risks and impacts. The financing of existing facilities will typically require an environmental assessment (EA) to assess the potential environmental and associated social impacts and risks due to the construction and operation of the projects or projects.

The IFC Performance Standard 1 and its Guidance Notes also provides guidance of the key process elements of an Environmental and Social Impact Assessment to be followed by the projects:

(i) initial screening of the project and scoping of the assessment process;

- (ii) examination of alternatives;
- (iii) stakeholder identification (focusing on those directly affected)
- (iv) gathering of environmental and social baseline data;
- (v) impact identification, prediction, and analysis;
- (vi) generation of mitigation or management measures and actions;
- (vii) significance of impacts and evaluation of residual impacts; and
- (viii) documentation of the assessment process (i.e., ESIA report).

The breadth, depth and type of analysis should be proportionate to the nature and scale of the proposed project's potential impacts as identified during the course of the assessment process. The ESIA must conform to the requirements of the host country's environmental assessment laws and regulations, including the relevant disclosure of information and public consultation requirements, and should be developed following principles of good international industry practice.

Additional good international industry practice references are provided below:

- EPA (U.S. Environmental Protection Agency). "NEPA (National Environmental Policy Act) Policies and Guidance." EPA, Washington, DC.
   http://www.apa.gov/compliance/recoveres/policies/papa/index.html
  - http://www.epa.gov/compliance/resources/policies/nepa/index.html
- European Commission. 2011. "Environmental Impact Assessment." Directorate-General for the Environment, European Commission, Brussels. http://ec.europa.eu/environment/eia/eia-support.htm.
- European Commission, Joint Research Centre. 2010. "IA Tools." http://iatools.jrc.ec.europa.eu/bin/view/IQTool/WebHome.html. The online platform has a repository of guidance, information, and best practices for the impact assessment of new policies and legislative measures.
- IAIA (International Association for Impact Assessment). 2011. Homepage. IAIA, Fargo, ND. http://www.iaia.org/publications/. The website provides a forum for advancing innovation, development, and communication of best practice in impact assessment.
- IEMA (Institute of Environmental Management and Assessment). 2011. Homepage. IEMA, Lincoln, UK. The not-for-profit membership organization was established to promote best practice standards in environmental management, auditing, and assessment. http://www.iema.net/.
- Netherlands Commission for Environmental Assessment. 2011.Homepage. Netherlands Commission for Environmental Assessment, Utrecht, Netherlands. http://www.eia.nl/. The organization helps environment and sector ministries, environmental assessment professionals, and nongovernmental organizations to achieve better environmental assessment practice.