

DOCUMENTO DEL BANCO INTERAMERICANO DE DESARROLLO

**BRASIL**

**PROGRAMA DE INVERSIONES EN INFRAESTRUCTURA ENERGÉTICA CELESC-D**

**(BR-L1491)**

**PERFIL DE PROYECTO**

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De conformidad con la Política de Acceso a Información, el presente documento está sujeto a divulgación pública.

## PERFIL DE PROYECTO

### BRASIL

#### I. DATOS BÁSICOS

<b>Nombre del Proyecto:</b>	Programa de Inversiones en Infraestructura Energética CELESC-D	
<b>Número de Proyecto:</b>	BR-L1491	
<b>Equipo de Proyecto:</b>	Arturo Alarcón (ENE/CBR) Jefe de Equipo; Sylvia Larrea - Jefe de Equipo Alterno; Leopoldo Montañez; Juan Carlos Cárdenas; Joel Hernández; Marina Massini; Stephanie Suber (INE/ENE); Andrea Monje (SCL/GDI); Edwin Tachlian; Jorge Seigneur (FMP/CBR); Zachary Hurwitz (VPS/ESG); y Cristina Celeste Marzo (LEG/SGO), bajo la supervisión de Ariel Yépez (INE/ENE) y Hugo Florez Timoran (CSC/CBR).	
<b>Prestatario y Organismo Ejecutor:</b>	Centrais Elétricas de Santa Catarina – Distribuição (Celesc-D)	
<b>Garante (obligaciones financieras):</b>	República Federativa do Brasil	
<b>Garante (obligaciones de hacer):</b>	Estado de Santa Catarina	
<b>Plan Financiero:</b>	BID (Capital Ordinario-OC):	US\$ 276.000.000
	Celesc-D	US\$ 100.000.000
	Total:	US\$ 376.000.000
<b>Salvaguardias:</b>	Políticas activadas:	OP-102, OP-703, OP-704, OP-710, OP-761, OP-765
	Clasificación:	"A"

#### II. JUSTIFICACIÓN GENERAL Y OBJETIVOS

- 2.1 El Estado de Santa Catarina (EdSC) con 99.000km<sup>2</sup> y cerca de 6,9millones de habitantes, es uno de los principales polos industriales y el octavo estado en términos de Producto Interno Bruto (PIB) de Brasil. Las principales industrias son cristales, cemento, electrónica, buques, motores eléctricos, vehículos, tuberías y accesorios plásticos. El sector comercio y servicios contribuye 62% de PIB del estado, y el sector industrial 34%. La electricidad es un insumo principal para el sector comercial e industrial, por lo que el crecimiento económico del estado está correlacionado con la demanda eléctrica.
- 2.2 Centrais Elétricas de Santa Catarina – Distribución S.A. (Celesc-D) es una compañía de capital mixto, cien por ciento propiedad del Grupo Empresarial

CELESC S.A., controlado por EdSC. Celesc-D tiene la concesión<sup>1</sup> para la distribución de electricidad en 92% del EdSC (264 de 295 municipios), y del municipio de Rio Negro (Estado de Paraná), con 2,8 millones de clientes (~6,5 millones de habitantes). Es la décima distribuidora de Brasil en número de usuarios (3,5% del mercado), y la séptima en relación a demanda eléctrica (4,7% la demanda del país).

- 2.3 En 2015 la demanda atendida por Celesc-D fue 22.845 Gigawatts-hora (GWh), con facturación de R\$12,2 billones (US\$3,5 billones), basada en consumo industrial (43%), residencial (23%) y comercial (16%). Entre 2011 y 2014 la demanda creció 4,2% en promedio anual, mientras que entre 2014 y 2015 existió una caída de 2,5%, explicada principalmente por menor consumo del sector industrial (-5,3%), debido a la desaceleración económica. Considerando la reactivación de la economía brasileña, es previsible que el crecimiento de la demanda eléctrica en los próximos años retorne a niveles anteriores. Bajo un escenario conservador de crecimiento de demanda eléctrica (2,5% anual), se prevé un consumo de 28.839GWh en 2025, generando la necesidad de inversiones de expansión y modernización de la red de distribución.
- 2.4 **Problemática.** El contrato de concesión entre Celesc-D y ANEEL fue renovado en 2015, hasta julio de 2045. Dicho contrato impone condiciones de mejorar la calidad y continuidad del servicio, cuyo incumplimiento puede significar desde multas hasta la pérdida de la concesión. Estas obligaciones son evaluadas anualmente con dos indicadores: (i) Duración Equivalente de Interrupción por Unidad Consumidora (DEC), medida en horas/usuario/año; y (ii) Frecuencia Equivalente de Interrupción por Unidad Consumidora (FEC), medida en cortes/usuario/año. Celesc-D tiene un histórico de cumplimiento de estos indicadores; no obstante, considerando los valores actuales y las nuevas metas, los indicadores de DEC y FEC deben mejorar sustancialmente al 2020 (Tabla 1). El crecimiento de la demanda eléctrica genera presión adicional sobre estos indicadores, particularmente en equipos que ya están sobrecargados o cumplieron su vida útil. El contrato requiere también el cumplimiento de indicadores financieros que garanticen la sostenibilidad de Celesc-D. A la fecha, Celesc-D está en condiciones de cumplir estas condiciones financieras (ver [enlace](#)).

**Tabla 1. Metas DEC y FEC (contrato de concesión Celesc-D).**

DEC (HORAS)						FEC (INTERRUPCIONES)					
2016	2017	2018	2019	2020	(A)	2016	2017	2018	2019	2020	(A)
14,77	13,79	12,58	11,56	11,30	14,67	11,04	10,44	9,84	9,25	8,65	10,15

(A) Valor a septiembre 2016.

<sup>1</sup> En Brasil la distribución eléctrica es un servicio público, regulado por contratos de concesión suscritos entre las distribuidoras y la Agencia Nacional de Energía Eléctrica (ANEEL) que establecen reglas para definición de tarifas, niveles mínimos de calidad y confiabilidad del servicio, derechos de los consumidores, y obligaciones y penalidades.

- 2.5 Adicionalmente, según la última revisión tarifaria<sup>2</sup>, Celesc-D tiene un límite de 7,42% para pérdidas eléctricas de distribución reconocidas por la tarifa, siendo 5,97% pérdidas técnicas y 1,45% pérdidas no técnicas. Debido al aumento de tarifas en 2015, a la crisis económica de Brasil, además de los errores de medición, en el último año se observó un aumento en el fraude, conexiones clandestinas y adulteración de medidores. Las pérdidas aumentaron 1% entre 2015 y 2016 llegando a 8,6% (6,03% pérdidas técnicas y 2,57% pérdidas no técnicas). Este valor está 1,18% sobre el límite tarifario, principalmente en pérdidas no técnicas, representando un monto estimado de US\$28.9 millones anuales, cubierto directamente por Celesc-D en el concepto de pérdidas eléctricas fuera de los límites tarifarios.
- 2.6 **Justificación.** Celesc-D requiere ampliar y modernizar sus activos de distribución para garantizar el suministro eléctrico para la demanda proyectada, con los niveles exigidos en los indicadores de calidad. Las obras necesarias se focalizan en la mejora de la red de distribución, mediante instalación de nuevas líneas y subestaciones (SE), particularmente en los polos industriales de mayor consumo. Asimismo, requiere instalar y modernizar los sistemas de medición para reducir pérdidas no técnicas. Además, necesita actualizar los sistemas de información y gestión para mejorar sus indicadores de calidad y continuidad de servicio. En este contexto, Celesc-D ha solicitado al Banco un financiamiento de US\$276 millones, para el Programa de Inversiones en Infraestructura Energética, con una contrapartida de US\$100 millones.
- 2.7 **Objetivo.** El objetivo general del Programa es contribuir al crecimiento económico del EdSC. El objetivo específico es garantizar el suministro eléctrico para la demanda proyectada, con altos estándares de calidad, por medio de inversiones en modernización y expansión de la red de distribución de Celesc-D. El Programa plantea dos componentes:
- 2.8 **Componente I. Ampliación y Modernización de Líneas de Distribución y Subestaciones** – financiará la adquisición de equipos y las obras necesarias para ampliar y modernizar el sistema de distribución de Celesc-D, incluyendo: (i) instalación de 28 nuevas SE; (ii) ampliación de 36 SE existentes; (iii) ampliación de 39 líneas de distribución (452km aproximadamente).
- 2.9 **Componente II. Modernización del Equipamiento de Distribución y Sistemas de Gestión Empresarial** – financiará reemplazo de equipos en la red de distribución que cumplieron su vida útil, incluyendo adquisición e instalación de: (i) 1.306 equipos de distribución (transformadores, pararrayos, re-conectores, interruptores, capacitores, reguladores, filtros, baterías); (ii) 1.386.000 medidores de electricidad (580.000 para nuevos clientes y 806.000 destinados a la renovación de medidores); y (iii) equipos de hardware y software para modernizar los sistemas informáticos de gestión Celesc-D.

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<sup>2</sup> Las tarifas son definidas periódicamente por ANEEL, para cada área de concesión, considerando costos de inversión, administración, operación y mantenimiento, incluyendo compra de energía. Las tarifas prevén un límite máximo para las pérdidas.

- 2.10 **Administración, supervisión y monitoreo** – financiará costos de administración, supervisión, monitoreo socio-ambiental del Programa, así como auditoría y evaluación<sup>3</sup>.
- 2.11 El Programa será financiado como un programa de obras múltiples, con un préstamo BID de US\$276 millones a Celesc-D, con garantía soberana de la unión y contragarantía del EdSC, así como contrapartida por US\$100 millones.
- 2.12 **Resultados esperados.** Se espera que Celesc-D amplíe y modernice su red de distribución para atender la demanda eléctrica prevista hasta 2022, asegurando que los indicadores FEC y DEC, y las pérdidas eléctricas estén en los límites establecidos por el regulador.
- 2.13 **Estrategia del Gobierno de Brasil.** El Plan Decenal de Energía 2014-2024 establece proyecciones de demanda, expansión de generación y sistemas de transmisión, tomando en cuenta condicionantes socios-ambientales y medidas de eficiencia energética<sup>4</sup>. La planificación y expansión de la red de distribución es responsabilidad de las empresas distribuidoras, en el marco de contratos de concesión.
- 2.14 **Alineación Estratégica.** La operación está alineada con el objetivo estratégico de aumento de la productividad y la competitividad de la Estrategia del Banco con el Brasil 2016-2018 (GN-2850), a través de la provisión de infraestructura para el servicio público de electricidad, ya que la calidad y confiabilidad en el suministro eléctrico afecta directamente la calidad, el costo y la competitividad de los productos que produce el EdSC. Adicionalmente está alineado con los objetivos identificados en la actualización de la Estrategia Institucional 2010-2020 (AB-3008), a través de la oferta de infraestructura para suministro estable de energía. El programa está alineado con las áreas prioritarias de la Estrategia de Infraestructura Sostenible para la Competitividad y el Crecimiento Inclusivo (GN-2710-5), al financiar expansión y refuerzo de infraestructura de distribución eléctrica que contribuye a satisfacer la demanda proyectada. El programa contribuirá al Marco de Resultados Corporativos 2016-2019 (GN-2727-4) (CRF) mediante el indicador auxiliar de producto: (i) líneas de distribución y sub-transmisión construidas. En relación con el Marco Sectorial de Energía (GN-2830), la operación está alineada con el área prioritaria de seguridad energética, en apoyo a mejorar la calidad y reducir las pérdidas eléctricas de distribución.

### III. ASPECTOS TÉCNICOS Y CONOCIMIENTO DEL SECTOR

- 3.1 La ejecución del Programa será realizada directamente por Celesc-D, a través del establecimiento de una unidad específica. Celesc-D también utilizará recursos humanos, técnicos y materiales de sus diversos sectores e instancias técnicas y administrativas. El equipo del Banco realizará una evaluación de la

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<sup>3</sup> Celesc-D tiene una iniciativa de género que busca aumentar las oportunidades profesionales de las mujeres. El equipo de proyecto está coordinando con Celesc-D para apoyar dicha iniciativa, en uno de los componentes del Programa.

<sup>4</sup> [Plan Decenal de Energía de Brasil](#).

capacidad institucional para determinar los riesgos de ejecución y medidas de mitigación necesarias. Durante la preparación de la propuesta de préstamo se evaluará con Celesc-D la posibilidad de financiamiento retroactivo.

- 3.2 El BID tiene un amplio conocimiento del sector eléctrico brasileño y en los últimos 6 años ha financiado varios préstamos y cooperaciones técnicas, por más de US\$1.250 millones, incluyendo proyectos de energía renovable, rehabilitación de hidroeléctricas, transmisión y distribución eléctrica. Particularmente, el programa RS-Distribución (BR-L1284), actualmente en ejecución en el Estado de Rio Grande do Sul<sup>5</sup>, plantea actividades similares a las de este préstamo, permitiendo la aplicación de lecciones aprendidas.

#### **IV. RIESGOS AMBIENTALES Y ASPECTOS FIDUCIARIOS**

- 4.1 Basado en información disponible al momento, se consideraron los posibles impactos ambientales y sociales y medidas de mitigación asociadas al Programa, descritos en la Estrategia Ambiental y Social – EAS (Anexo III). De acuerdo con la Política de Medio Ambiente y Cumplimiento de Salvaguardias (OP-703), el Programa actualmente se clasifica categoría “A”, con riesgo de desastres naturales “alto”, y activa las políticas OP-102 (Acceso a la información), OP-704 (Gestión del riesgo de desastres naturales), OP-710 (Reasentamiento involuntario), OP-761 (Equidad de género), y OP-765 (Pueblos indígenas). Sin embargo, si durante la preparación del Programa y el proceso de debida diligencia ambiental y social se encuentra información que implica impactos y riesgos menores, la clasificación del Programa podría cambiar a “Categoría B” el riesgo de desastres naturales a “medio,” y algunas políticas podrían ser desactivadas. Las obras contempladas en el Programa serán ejecutadas por Celesc-D de manera dispersa en el área de concesión e, individualmente, causarán impactos negativos localizados, para los cuales se dispone de medidas de mitigación efectivas. Los principales impactos negativos potenciales estarán asociados a la etapa de construcción e incluyen: (i) posible reasentamiento involuntario y/o posibles impactos al bienestar de poblaciones ubicadas en el Derecho de Vía; (ii) erosión del suelo y de vegetación; (iii) posible fragmentación de hábitat natural y efectos de borde a flora y fauna; (iv) emisiones de ruido, polvo, y luz; (v) producción de residuos líquidos y sólidos; (vi) posible disposición inadecuada de materiales tóxicos; (vii) riesgos de seguridad y salud operacional; (viii) posible contaminación de recursos hídricos; (ix) posibles impactos acumulativos, incluso a hábitat de Mata Atlántica, restinga, humedales, y/o manglares; y (x) posibles impactos de desastres naturales a infraestructura y bienestar de comunidades aledañas. La EAS contempla revisión y aceptación de la Evaluación Estratégica Ambiental (EEA) y Marco de Gestión Ambiental y Social del Programa antes de la Misión de Análisis; aceptación por el BID y divulgación de Estudios de Impacto Ambiental y Social para cada proyecto de la muestra antes de la Misión de Análisis; debida diligencia ambiental y social para confirmar impactos y riesgos de los proyectos de la muestra y que las medidas de mitigación identificadas sean adecuadas

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<sup>5</sup> 82% comprometido, 55% desembolsado.

para cumplir con las políticas del BID; ejecución de dos consultas públicas sobre la EEA en centros de mayor población del estado y realización de consultas públicas individuales para proyectos de la muestra según requerido por su clasificación final de riesgo, antes de aprobación por el Directorio Ejecutivo. El proceso de debida diligencia definirá una estrategia para la consulta pública y relacionamiento con comunidades afectadas dentro del Programa.

- 4.2 Celesc-D no tiene experiencia reciente con implementación de préstamos de entidades multinacionales, si bien ejecuta cerca de US\$100 millones anuales en proyectos de inversión. La evaluación de capacidad institucional determinará las necesidades de apoyo y capacitación sobre políticas y procedimientos de adquisiciones y gestión financiera del Banco.

## **V. OTROS TEMAS**

- 5.1 Celesc-D presentó ganancias netas en nueve de los diez años desde su constitución en 2006<sup>6</sup>, siendo una empresa solvente con ingresos garantizados. En 2012, Celesc-D fue afectada por medidas regulatorias que impactaron el sector de distribución brasileño, cuando se extinguieron algunas concesiones de generación, rebajando tarifas y dejando las distribuidoras expuestas al mercado de corto plazo. La situación financiera de Celesc-D repuntó en 2013 y 2014, registrando un lucro de R\$384 millones (US\$160 millones<sup>7</sup>) en 2014. En 2015 la recaudación fue R\$82 millones (US\$25 millones<sup>8</sup>), debida principalmente a: (i) disminución temporal de la demanda, principalmente del sector industrial (reflejo de la crisis económica); (ii) incremento de pérdidas comerciales; y (iii) crisis hidrológica, que obligó a la empresa a comprar energía térmica más cara, incrementando costos de suministro de energía que no pudieron transferirse inmediatamente a los usuarios (ajuste tarifario de agosto 2015). En 2016 y 2017, se esperan resultados positivos con la recuperación del consumo de energía, y normalización del régimen hidrológico. Durante la preparación del préstamo se evaluará la sostenibilidad financiera del Programa, así como la proyección de principales indicadores financieros de Celesc-D incluyendo el repago del préstamo para determinar riesgos y medidas de mitigación.

## **VI. RECURSOS Y CRONOGRAMA DE PREPARACIÓN**

- 6.1 Para avanzar con la preparación de la operación, se realizará la diligencia técnica, económica y ambiental de una muestra representativa de proyectos del Programa, en coordinación con consultores ya contratados por Celesc-D. La revisión de estos aspectos prevé contratación de consultorías por parte del Banco por US\$85.000. Por otro lado, las misiones de análisis y negociación del equipo del Banco prevén presupuesto de US\$61.300.

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<sup>6</sup> [Informes de resultados Celesc-D.](#)

<sup>7</sup> Tipo de cambio (TdC) 2014, 2,4 R\$/US\$

<sup>8</sup> TdC 2015 3,5 R\$/US\$

- 6.2 Según el cronograma previsto, se distribuirá la Propuesta para el Desarrollo de la Operación (POD) al Comité de Calidad y Riesgo (QRR) el 17 de mayo de 2017, Borrador de Propuesta de Préstamo (DLP) al Comité de Políticas Operativas (OPC) el 16 de junio de 2017, y presentar Propuesta de Préstamo (LP) al Directorio Ejecutivo el 26 de julio de 2017.



CONFIDENCIAL

<sup>1</sup> La información contenida en este Anexo es de carácter deliberativo, y por lo tanto confidencial, de conformidad con la excepción relativa a “Información Deliberativa” contemplada en el párrafo 4.1 (g) de la “Política de Acceso al Información” del Banco (Documento GN-1831-28).



## Safeguard Policy Filter Report

### Operation Information

Operation		
BR-L1491 Energy Infrastructure Investment Program for the Celesc		
Environmental and Social Impact Category	High Risk Rating	
A	{Not Set}	
Country	Executing Agency	
BRAZIL	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Country Office Brazil	ENERGY SECTOR REHABILITATION AND EFFICIENCY	
Team Leader	ESG Lead Specialist	
ARTURO ALARCON	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$0	0.000 %
Assessment Date	Author	
2 Dec 2016	zacharyh ESG Lead Specialist	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	13 Mar 2017	
QRR (Estimated)	17 Apr 2017	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

### Safeguard Policy Items Identified

#### [B.1 Bank Policies \(Access to Information Policy– OP-102\)](#)

The Bank will make the relevant project documents available to the public.

#### [B.1 Bank Policies \(Disaster Risk Management Policy– OP-704\)](#)

The operation is in a geographical area exposed to [natural hazards](#) ([Type 1 Disaster Risk Scenario](#)). Climate change may increase the frequency and/or intensity of some hazards.



# Safeguard Policy Filter Report

## B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The sector of the operation is vulnerable to natural hazards. Climate change may increase the frequency and/or intensity of some hazards.

## B.1 Bank Policies (Gender Equality Policy– OP-761)

The operation has the potential to affect negatively women or gender equality ([Negative gender impacts may include the following](#))

## B.1 Bank Policies (Resettlement Policy– OP-710)

The operation has the potential to disrupt the livelihoods of people living in the project area of influence (not limited to involuntary displacement, see also Resettlement Policy)

## B.2 Country Laws and Regulations

The operation is expected to be in compliance with laws and regulations of the country regarding specific women's rights, the environment, gender and indigenous peoples (including national obligations established under ratified multilateral environmental agreements).

## B.3 Screening and Classification

The operation (including [associated facilities](#)) is screened and classified according to its potential environmental impacts.

## B.4 Other Risk Factors

There are [associated facilities](#) (see policy definition) related to the operation.

## B.5 Environmental Assessment Requirements

An environmental assessment is required.

## B.6 Consultations

Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation by women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.

## B.7 Supervision and Compliance

The Bank is expected to monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.

## B.10. Hazardous Materials

The operation has the potential to impact the environment and occupational health and safety due to the production, procurement, use, and/or disposal of hazardous material, including organic and inorganic toxic substances, pesticides and persistent organic pollutants (POPs).

## B.11. Pollution Prevention and Abatement

The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases).



## Safeguard Policy Filter Report

### B.15. Co-financing Operations

The operation or any of its components is being co-financed.

## Potential Safeguard Policy Items

### B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation has the potential to exacerbate risk to human life, property, the environment or cause economic disruption ([Type 2 Disaster Risk Scenario](#)).

### B.1 Bank Policies (Gender Equality Policy– OP-761)

The operation will offer opportunities to promote [gender equality](#) or [women's empowerment](#).

### B.1 Bank Policies (Indigenous People Policy– OP-765)

The operation has the potential to negatively affect indigenous people (also see [Indigenous Peoples Policy](#)).

### B.4 Other Risk Factors

The operation may be of high risk due to controversial environmental and associated social issues or liabilities.

### B.9 Natural Habitats and Cultural Sites

The operation will result in the degradation or conversion of Natural Habitat or Critical Natural Habitat in the project area of influence.

### B.9 Natural Habitats and Cultural Sites

The operation will result in the degradation or conversion of Critical Cultural Sites in the project area of influence.

### B.9 Natural Habitats and Cultural Sites

The operation will use invasive species, or lead to a high risk of their accidental introduction in the project area of influence.

### B.17. Procurement

Suitable safeguard provisions for the procurement of goods and services in Bank financed operation will be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.

## Recommended Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.

## Additional Comments



## Safeguard Policy Filter Report

[No additional comments]



## Safeguard Screening Form

### Operation Information

Operation		
<b>BR-L1491</b> Energy Infrastructure Investment Program for the Celesc		
Environmental and Social Impact Category	High Risk Rating	
A	{Not Set}	
Country	Executing Agency	
BRAZIL	{Not Set}	
Organizational Unit	IDB Sector/Subsector	
Country Office Brazil	ENERGY SECTOR REHABILITATION AND EFFICIENCY	
Team Leader	ESG Lead Specialist	
ARTURO ALARCON	{Not Set}	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$0	0.000 %
Assessment Date	Author	
2 Dec 2016	zacharyh ESG Lead Specialist	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	13 Mar 2017	
QRR (Estimated)	17 Apr 2017	
Board Approval (Estimated)	{Not Set}	
Safeguard Performance Rating		
{Not Set}		
Rationale		
{Not Set}		

### Operation Classification Summary

Overridden Rating	Overridden Justification
Comments	



## Safeguard Screening Form

### Conditions / Recommendations

Category "A" operations require an Environmental Impact Assessment or a Strategic Environmental Assessment (see Environment Policy Guideline: Directive B.5 for EIA and SEA requirements) and at least two consultations with affected parties.

These operations will require an environmental assessment (EA), normally an Environmental Impact Assessment (EIA) for investment operations, or other environmental assessments such as a Strategic Environmental Assessment (SEA) for programs and other financial operations that involve plans and policies. Category "A" operations are considered high safeguard risk. For some high safeguard risk operations that, in the Bank's opinion raise complex and sensitive environmental, social, or health and safety concerns, the borrower should normally establish an advisory panel of experts to provide guidance for the design and/or execution of the operation on issues relevant to the EA process, including health and safety. However, these operations will also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.).

The Project Team must send to the ESR the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports.

### Summary of Impacts / Risks and Potential Solutions

Land conversion with significant negative impacts on species, habitats or ecosystems

**The Land Use Plan must be acceptable:** The borrower should be required to develop a plan that demonstrates how land use change will be mitigated and what consultation activities are to be carried out. The borrower should confirm that (a) there are no feasible alternatives acceptable to the Bank, (b) benefits substantially outweigh environmental costs, and (c) mitigation and compensation measures are acceptable to the Bank. This plan should be part of the ESMP and be developed with consultation from relevant stakeholders. The mitigation measures should be presented in Land Use Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. It should also explain what consultation activities are planned. The Plan must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.).

Moderate Greenhouse Gas Emissions are predicted.

**Greenhouse Gas (GHG) Assessment:** The borrower should promote the reduction of project-related greenhouse gas emissions in a manner appropriate to the nature and scale of project operations and impacts. The borrower should quantify direct emissions from the facilities owned or controlled within the physical project boundary and indirect emissions associated with the off-site production of power used by the project. Quantification and monitoring of GHG emissions should be conducted annually in accordance with internationally recognized methodologies (i.e. IPCC - <http://www.ipcc.ch/>). In addition, the borrower should evaluate technically and financially feasible and cost-effective options for the reduction/offset of emissions that may be achieved during the design and operation of the project. The Sustainable Energy and Climate Change Initiative (SECCI) can help with this task (<http://www.iadb.org/secci/>).

A [natural hazard](#) is likely to occur or be exacerbated due to climate-related changes and the likely severity of the impacts to the project is [significant or extreme](#).

A Disaster Risk Assessment that includes a Disaster Risk Management Plan (DRMP) must be prepared. The DRMP should focus on the specific risks the natural hazard poses to the project under climate change, and propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations. For details see the DRM policy guidelines.

Conversion or [degradation](#) of [critical natural habitat](#) causing [significant](#) negative impact on [threatened species](#).

As there is a significant risk of non-compliance with IDB policy OP-703 directive B9, alternative plans must be developed: As the Bank will not support operations that, in its opinion, significantly convert or degrade critical natural habitats, alternative options must be developed and evaluated to avoid this. These options must be discussed with ESG biodiversity specialists, relevant team members and others before proceeding.

Conversion or [degradation](#) of [critical natural habitat](#) causing significant negative impact on [migratory species](#).

As there is a significant risk of non-compliance with IDB policy OP-703 directive B9, alternative plans must be developed: As the Bank will not support operations that, in its opinion, significantly convert or degrade critical natural habitats, alternative options must be developed and evaluated to avoid this. These options must be discussed with ESG biodiversity specialists, relevant team members and others before proceeding.

Conversion or [degradation](#) of [critical natural habitat](#) causing significant negative impact on [protected areas](#) or areas of high conservation value.

As there is a significant risk of non-compliance with IDB policy OP-703 directive B9, alternative plans must be developed: As the Bank will not support operations that, in its opinion, significantly convert or degrade critical natural habitats, alternative options must be developed and evaluated to avoid this. These options must be discussed with ESG biodiversity specialists, relevant team members and others before proceeding.





## Safeguard Screening Form

Conversion or [degradation](#) of natural habitat causing significant impact on [ecosystem services](#).

As there is a significant risk of non-compliance with IDB policy OP-703 directive B9, justification must be provided that the conversion is unavoidable, the cost-benefit analysis favours the project, and that mitigation measures are acceptable:

The borrower must provide evidence that: (a) there are no feasible alternatives acceptable to the Bank; (b) project benefits substantially outweigh environmental costs; and (c) mitigation and compensation measures are acceptable to the Bank.

Without this evidence, the Bank cannot support any operation that leads to significant conversion or degradation of natural habitat. The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Conversion or [degradation](#) of natural habitat causing significant impact on [species composition](#).

As there is a significant risk of non-compliance with IDB policy OP-703 directive B9, justification must be provided that the conversion is unavoidable, the cost-benefit analysis favours the project, and that mitigation measures are acceptable:

The borrower must provide evidence that: (a) there are no feasible alternatives acceptable to the Bank; (b) project benefits substantially outweigh environmental costs; and (c) mitigation and compensation measures are acceptable to the Bank.

Without this evidence, the Bank cannot support any operation that leads to significant conversion or degradation of natural habitat. The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Conversion or [degradation](#) of natural habitat causing significant impact on ecological function.

As there is a significant risk of non-compliance with IDB policy OP-703 directive B9, justification must be provided that the conversion is unavoidable, the cost-benefit analysis favours the project, and that mitigation measures are acceptable:

The borrower must provide evidence that: (a) there are no feasible alternatives acceptable to the Bank; (b) project benefits substantially outweigh environmental costs; and (c) mitigation and compensation measures are acceptable to the Bank.

Without this evidence, the Bank cannot support any operation that leads to significant conversion or degradation of natural habitat. The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

In an area of exposure to [natural hazards](#) with a [moderate](#) impact severity, project activities and structures increase vulnerability of area of influence to [natural hazards](#) and exacerbates risks to property and the environment, or to the project itself.

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should focus on the potential for the project to exacerbate risks to people and the environment during construction and operation, and propose measures to manage or mitigate these risks. Measures should include siting and engineering options, disaster risk preparedness and response, as well as financial protection for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations. Focus should be given to replacing and enhancing resilience functions, with special attention given to reefs, dunes, mangroves, marshes, flood plains, drainage paths, slope vegetation, etc.

Likely to have [significant](#) emissions or discharges that would negatively affect [ambient environmental conditions](#).

**Management of Ambient Environmental Conditions:** The borrower should be required to prepare an action plan (and include it in the ESMP) that indicates how risks and impacts to ambient environmental conditions can be managed and mitigated consistent with relevant national and/or international standards. The borrower should (a) consider a number of factors, including the finite assimilative capacity of the environment, existing and future land use, existing ambient conditions, the project's proximity to ecologically sensitive or protected areas, and the potential for cumulative impacts with uncertain and irreversible consequences; and (b) promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants, including strategies that contribute to the improvement of ambient conditions when the project has the potential to constitute a significant source of emissions in an already degraded area. The plan should be subject to review by qualified independent experts. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.).



## Safeguard Screening Form

Potential to exclude or discriminate women or men from project benefits based on [gender](#) \*NOTE

**Incorporation of gender analysis into its social impact and risk assessments:** Where the Project or its context present potential for discrimination against women or men based on gender, Project preparation should include an analysis of exclusion or discriminatory factors (specific or as part of overall social assessment) and the Project should include information, dissemination, training and other corrective measures as appropriate aimed at overcoming barriers to afford women or men the same protection and access afforded to other groups and equal access to Project-generated resources and benefits (e.g. credit, employment, public services, etc.). The social impact and risk assessment and associated mitigation framework must address all the factors specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to directly or indirectly adversely and moderately impact the rights of [Indigenous Peoples](#).

**Mitigation Framework:** Impacts are considered moderate if the rights affected do not include land or other fundamental rights or the impacts are not adverse. Consult Indigenous Peoples legislation database at <http://www.iadb.org/Research/legislacionindigena/leyn/index.cfm>. Where project impacts affect the legal rights of indigenous peoples project preparation and implementation should include specific analysis and consultation/good faith negotiations regarding these issues and the Mitigation Framework must address them specifically. The Mitigation Framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to directly or indirectly cause adverse impact the territories, land and natural resources of [Indigenous Peoples](#). These impacts are presumed to be [significant](#) unless further analysis demonstrates otherwise.

**Mitigation Framework for impacts on land and natural resources:** Whenever an operation directly or indirectly affects the legal status, possession or management of territories, lands, or natural resources traditionally occupied or used by Indigenous Peoples, the borrower should develop safeguards against impacts that take into account the applicable legal norms, including: (i) prior consultation; (ii) participation mechanisms; (iii) measures to preserve the physical, cultural and economic integrity of the affected peoples and the sustainability of protected areas and natural resources, and to compensate for any damages; (iv) whenever possible, participation in Project benefits; and (v) when necessary, restrictions, and corrective or compensatory measures to complement legal and administrative protection. Project preparation and implementation should include specific analysis and consultation/agreements regarding these issues and the Mitigation Framework must address them specifically. The Mitigation Framework will be referenced in the legal documentation (covenants, conditions of disbursement, project completion tests, credit and operation regulations, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to exclude [Indigenous Peoples](#) from Project benefits on discriminatory basis.

**Mitigation Framework (specific)-consultation with Indigenous Peoples required:** Where the Project or its context present potential for ethnically based discrimination against IPs, Project preparation should include an analysis of discriminatory factors (specific or as part of overall social assessment) and the Project should include information, dissemination, training and other corrective measures as appropriate aimed at overcoming linguistic and other barriers to afford indigenous workers, entrepreneurs, beneficiaries or contractors the same protection and access afforded to other groups and equal access to Project-generated resources and benefits (e.g. credit, employment, public services, etc.). The Mitigation Framework must address all the factors specifically. The Mitigation Framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to introduce [gender](#) differentiated health and safety [risks](#), or to increase the risk of violence, sexual exploitation, human trafficking or sexually transmitted diseases

**Incorporation of gender analysis into its social impact and risk assessments:** Where project has the potential to introduce gender differentiated health and safety risks, or to increase the risk of violence, sexual exploitation, human trafficking or sexually transmitted diseases, project preparation and implementation should include specific analysis and consultation regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.

Potential to introduce conditions that restrict the participation of women or men based on pregnancy, maternity/paternity, marital status

**Incorporation of gender analysis into its social impact and risk assessments:** Where project has the potential to introduce conditions that restrict the participation of women or men based on pregnancy, maternity/paternity, marital status, project preparation and implementation should include specific analysis and consultation regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.

Potential to introduce unequal requirements for access to benefits and economic opportunities based on [gender](#)

**Incorporation of gender analysis into its social impact and risk assessments:** Where project impacts will potentially introduce unequal requirements for access to benefits and economic opportunities based on gender, project preparation and implementation should include specific analysis and consultation/agreements regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Potential to introduce unpaid work unevenly between men and women (volunteer work or community participation).



## Safeguard Screening Form

**Incorporation of gender analysis into its social impact and risk assessments:** Where project has the potential to introduce unpaid work unevenly between men and women (volunteer work or community participation), project preparation and implementation should include specific analysis and consultation regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.

Potential to negatively impact the right to equality between women and men, or the specific rights of women under applicable law

**Incorporation of gender analysis into its social impact and risk assessments:** Where project impacts affect the rights to equality between women and men, or the specific rights of women under applicable law, project preparation and implementation should include specific analysis and consultation/good faith negotiations regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation.

Potential to offer men and women unequal access to inheritance or property rights

**Incorporation of gender analysis into its social impact and risk assessments:** Where project impacts will potentially offer men and women unequal access to inheritance or property rights, project preparation and implementation should include specific analysis and consultation/agreements regarding these issues and the social impact and risk assessment and associated mitigation framework must address them specifically. The mitigation framework will be referenced in the legal documentation (covenants, conditions of disbursement, etc.), require regular reporting, frequent and independent monitoring, and independent review of implementation, including participatory monitoring.

Project activities will moderately impact [water quality](#), [water quantity](#) and/or [water availability](#).

**Water Resources:** A targeted Water Resources Assessment should be undertaken, which in addition to undertaking the relevant analyses, must include justification for assigning a moderate risk classification. Project activities (and any associated facilities) will be required to be constructed and operated so as to avoid impacts to water quality, water quantity and/or water availability. Evidence of appropriate stakeholder consultation should also be provided. Monitoring requirements should be included in relevant legal documentation.

Project construction activities are likely to lead to localized and temporary impacts (such as dust, noise, traffic etc) that will affect local communities and [workers](#) but these are [minor](#) to [moderate](#) in nature.

**Construction:** The borrower should demonstrate how the construction impacts will be mitigated. Appropriate management plans and procedures should be incorporated into the ESMP. Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).



## Safeguard Screening Form

Risk of significant impacts/damage to cultural site(s)

**Protection of Cultural Sites:** Where impacts to cultural site are anticipated, the borrower should generally seek the advice of professional experts and a mitigation plan should be developed which includes the following basic elements: (a) demonstration that mitigation will comply with relevant legislation; (b) evidence that the borrower has the capacity/commitment to protect cultural sites ; (c) implementation of chance finds procedures; (d) establishment of consultation processes with affected communities and appropriate experts; and (e) appropriate controls on the removal of cultural sites . Additional special requirements will come into play if cultural site is likely to be affected by the investment. The legal documentations require monitoring, regular reporting and independent review of implementation. The borrower should develop an action plan that describes how cultural sites will be protected.

Safety issues associated with structural elements of the project (e.g. dams, public buildings etc), or road transport activities (heavy vehicle movement, transport of [hazardous materials](#), etc.) exist which could result in [moderate](#) health and safety [risks](#) to local communities.

**Address Community Health Risks:** The borrower should be required to provide a plan for managing risks which could be part of the ESMP; (including details of grievances and any independent audits undertaken during the year). Compliance with the plan should be monitored and reported. Requirements for independent audits should be considered if there are questions over borrower commitment or potential outstanding community concerns.

Security forces will be used and industry standards (e.g. Voluntary Principles on Security and Human Rights) in terms of selection and management of security staff will be followed.

**Manage Use of Security Forces:** The borrower should be required to provide an annual review of security measures (including details of grievances and any independent audits undertaken during the year).

The negative impacts from production, procurement, use and disposal of [hazardous materials](#) (excluding POPs unacceptable under the Stockholm Convention or toxic pesticides) are [moderate](#) to [significant](#) and will comply with relevant national legislation, [IDB requirements on hazardous material](#) and all applicable International Standards.

**Hazardous Materials Management Plan:** The borrower should document risks relating to the use of hazardous materials and prepare a hazardous material management plan (as part of the ESMP) that indicates how hazardous materials will be managed (and community risks mitigated). The borrower will be responsible for preparing the ESMP, which should include: a management plan that will address identification, labeling, handling, storage, use and disposal of the relevant hazardous materials. The plan might include confirmation from third-party specialists that risks have been adequately assessed and managed. An action plan should be defined and requires regular monitoring, reporting and independent review of implementation; this plan should be included in legal documentation (covenants, conditions of disbursement, etc.).

The project has or will have [moderate](#) negative impacts on [Indigenous Peoples](#).



**Mitigation Framework:** In situations where Indigenous Peoples (IPs) will be directly or indirectly affected by a project, the borrower should conduct an evaluation including a socio-cultural assessment to identify the impacts and determine their level of significance in order to: (a) consider all realistic and cost-effective options that avoid impacts with adverse effects (sites, technologies, supply chains etc.); and (b) if impacts cannot be avoided: (i) conduct culturally appropriate consultation and good faith negotiations, consistent with affected IP legitimate decision-making processes and (ii) minimize, mitigate or compensate for these impacts in a culturally appropriate manner. Specialist advice should be sought. The project's proposed action should be developed with the informed participation of affected IPs through a process of good faith negotiations, and contained in a time-bound Mitigation Framework. The borrower will be required to seek professional advice in the development of a Mitigation Framework and the necessary consultation and good faith negotiation activities. The Mitigation Framework should be referenced in the legal documentation (covenants, conditions of disbursement, project completion tests, credit and operation regulations, etc.) and require monitoring, regular reporting and independent review of implementation, including participatory monitoring.

The project has or will negatively affect [cultural sites](#) and alternatives have not been fully considered and/or affected stakeholders have not demonstrated approval through a documented process of [good faith negotiation](#).

**Cultural Sites:** Impact creates significant risk of non-compliance with IDB policies. Consult with environmental and/or social specialist(s), relevant team members and others before proceeding. Where a project may significantly affect cultural sites, the borrower will proceed only after the completion of good faith negotiation with affected community and documented evidence of these discussions and informed participation of those communities. In addition, any lesser impacts on cultural sites must be appropriately mitigated with the informed participation of the affected communities. In circumstances where activities are located within a legally-protected area or a legally-defined buffer zone (and where cultural sites is threatened), borrowers will, in addition to the requirements for cultural sites cited above: (a) not implement any actions that are contrary to defined national or local cultural sites regulations or the protected area management plan; (b) consult through informed participation with the protected area sponsors and managers, local communities and other key stakeholders; and (c) implement additional programs, as appropriate, to promote and enhance the conservation aims of the protected area. If these requirements cannot be met, the project will not comply with this requirement. The legal documentations require monitoring, regular reporting and independent review of implementation. The borrower should have developed an action plan that describes how cultural sites will be protected and what engagement will be undertaken with local communities.

The project includes dangerous and hazardous [working conditions](#) where there could be [significant](#) negative impacts to [workers](#) or communities.

**Ensure that the borrower Addresses Occupational Health and Safety:** The borrower should provide details of how occupational health and safety issues will be addressed (including those found in the supply chain as appropriate) in a timely and efficient manner as a condition of disbursement and annual audits by third party experts should be considered. This should be addressed using an occupational health and safety management plan.

The project is located in an area prone to [droughts](#) and the likely severity of the impacts to the project is [moderate](#).

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP) may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations.

The project is located in an area prone to [high winds](#), [blizzards](#), [wildfires](#), [heat waves](#) or [cold waves](#), and the likely severity of impacts to the project is [significant or extreme](#).

A Disaster Risk Assessment that includes a Disaster Risk Management Plan (DRMP) must be prepared. The DRMP should focus on the specific risks posed by any of these natural hazards to the project, and propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations. For details see the DRM policy guidelines.

The project is located in an area prone to [inland flooding](#) and the likely severity of the impacts to the project is [significant or extreme](#).

A Disaster Risk Assessment that includes a Disaster Risk Management Plan (DRMP) must be prepared. The DRMP should focus on the specific risks inland flooding poses to the project, and propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project to exacerbate risks to people and the environment during construction and operation. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the area's disaster alert and prevention system, general design standards, land use regulations and civil defense recommendations in flood prone areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. The amplified uncertainties due to climate change should also be considered.

The project is located in an area prone to [landslides](#) and the likely severity of the impacts to the project is [significant or extreme](#).

A Disaster Risk Assessment that includes a Disaster Risk Management Plan (DRMP) must be prepared. The DRMP should focus on the specific significant or extreme risks a major earthquake poses to the project, and propose measures to manage or mitigate these risks to an acceptable level. The measures should consider both the risks to the project, and the potential for the project to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations. For details see the DRM policy guidelines.





## Safeguard Screening Form

The Project might damage [critical cultural sites](#) and there are feasible alternatives

**Critical Cultural Sites:** Where a project may damage critical cultural sites and there are feasible alternatives, the borrower will seek alternative plans (design, location or other) that do not damage the critical cultural site.

The Project might impact [critical cultural sites](#), or significantly affect non-critical cultural sites

**Protection of Cultural Sites:** Where impacts to critical cultural sites are anticipated, the borrower shall take, acceptable to the project team, measures to mitigate such impacts and integrate into the project's ESMP. Where noncritical cultural sites are significantly impacted, appropriate measures to protect, mitigate, or compensate the noncritical cultural sites need to be integrated into the ESMP. Projects likely to encounter chance finds, should develop and implement specific procedures to handle chance finds occurrences, integrated into the project's ESMP. Category A projects should include in their EIA, when applicable, an analysis of the archeological potential of the areas of direct influence, and, as necessary, propose chance find procedures, based on internationally accepted practices.

The project will require [significant involuntary resettlement](#) and/or economic displacement (i.e. it is a [direct](#) impact of the project)

**Develop Resettlement Plan (RP):** The borrower should be required to develop a RP (as part of the ESMP) that demonstrates the following attributes: (a) detailed socio-economic survey and baseline of the affected households and groups; (b) successful engagement with affected parties via a process of Community Participation; (c) mechanisms for delivery of compensation in a timely and efficient fashion; (d) a livelihoods restoration program; (e) budgeting and internal capacity (within borrower's organization) to monitor and manage resettlement activities as necessary over the course of the project; and (f) a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, credit and operating regulations, project completion tests, etc.), require regular (quarterly, bi-annual or annual) reporting and independent review of implementation, including participatory monitoring.

Transport of [hazardous materials](#) (e.g. fuel) with [minor](#) to [moderate](#) potential to cause impacts on community health and safety.

**Hazardous Materials Management:** The borrower should be required develop a hazardous materials management plan; details of grievances and any independent health and safety audits undertaken during the year should also be provided. Compliance with the plan should be monitored and reported. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement etc). Consider requirements for independent audits if there are concerns about commitment of borrower or potential outstanding community concerns.

Waste generation (excluding hazardous waste) is [significant](#) or there is no adequate waste management plan in place.

**Solid Waste Management:** The borrower should be required to prepare a Waste Management Plan (including management and organizational requirements) consistent with relevant national requirements and International Standards (as appropriate). This plan should be part of the ESMP. Specific attention should be placed on reducing and re-cycling solid wastes. As part of this an action plan should be defined and requires regular reporting and independent review of implementation; this plan should be included in legal documentation (covenants, conditions of disbursement, etc). Additionally, impacts of solid waste should be avoided in first instance (i.e. relocate or reconfigure proposed activities). If avoidance is not possible, impacts should be mitigated by management, offsetting impacts or other means. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.

Waste generation includes [significant](#) quantities of [hazardous materials](#)

**Solid Waste Management:** The borrower should be required to prepare a Waste Management Plan (including management and organizational requirements) consistent with relevant national requirements and International Standards (as appropriate). This plan should be part of the ESMP. Specific attention should be placed on reducing and re-cycling solid wastes. An action plan should be defined and requires regular reporting and independent review of implementation; this plan should be included in legal documentation (covenants, conditions of disbursement, etc). In the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.

## Disaster Risk Summary

Disaster Risk Level

**High**

Disaster / Recommendations



## Safeguard Screening Form

The reports of the Safeguard Screening Form (i.e. of the Safeguards Policy and the Safeguard Classification Filters) constitute the Disaster Risk Profile to be summarized in and annexed to the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.

The Borrower should consider including disaster risk expertise in the organization of project oversight, e.g. in the project's panel of experts. For the Bank's requirements, the Borrower addresses the screened disaster risks in a Disaster Risk Management Summary reviewing disaster and climate change risks associated with the project on the basis of a Disaster Risk Assessment (DRA). Based on the specified hazards and the exposure of the project area, it demonstrates the potential impact of the rapid onset events and/or slow onset changes for the project and its area including exacerbated risks for people and environment, given local vulnerability levels and coping capacities. Furthermore the DRM Summary presents proposed measures to manage or mitigate these risks in a Disaster Risk Management Plan (DRMP). The DRA/DRMP to which the DRM Summary refers may be a stand-alone DRA document (see Directive A-2 of the DRM Policy OP-704) or included in other project documents, such as feasibility studies, engineering studies, environmental impact assessments, or specific natural disaster and climate change risk assessments, prepared for the project. These documents should be accessible for the Project Team.

The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency.

Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options for climate change, and consult the INE/CCS adaptation group for guidance.

## Disaster Summary

### Details

The project has been classified initially as high disaster risk because the likely severity of impacts from at least one of the natural hazards is significant or extreme. During the disaster risk assessment the project may be reclassified. Please contact ESG or a Disaster Risk Management Specialist for guidance.

### Actions



## Safeguard Screening Form

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s).  
Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and  
Safeguard Screening Form to ESR.

Environmental and Social Strategy (ESS)	
Operation Name	Energy Infrastructure Investment Program for the Celesc
Operation Number	BR-L1491
Operation Details	
IDB Sector	Energy
Type of Operation	Transmission and Distribution
Impact Categorization	A
Disaster Risk Rating	High
Borrower	Celesc Distribuição S.A. (Celesc-D)
Executing Agency	Celesc Distribuição S.A. (Celesc-D)
IDB Loan US\$ (and total project cost)	\$276,000,000 (total project cost \$376,000,000)
Applicable Policies/Directives	OP-102; OP-703 (B.2, B.3, B.4, B.5, B.6, B.7, B.9, B.10, B.11, B.15, B.17); OP-704; OP-710; OP-761, OP-765
Operation Description <i>(recommended not to exceed 400 words)</i>	
<p>The proposed Program is a Multiple Works operation that contemplates the construction of 39 new transmission lines (69 kV and 138 kV) totaling 452 km, as well as the expansion of 36 existing substations and the construction of 28 new substations, located in diverse locations across the state of Santa Catarina, Brasil <b>(Figure 1)</b>. The construction timeline is organized in three groups per project type, as follows: <b>(i) Transmission lines:</b> Group 1, consisting of the construction of 14 transmission lines totaling 157.5km, to take place during years 1-2 at an estimated cost per project of R\$3,530,000; Group 2, consisting of the construction of 16 transmission lines totaling 203.9km, to take place during years 3-4 at an estimated cost per project of R\$5,320,000; and Group 3, consisting of the construction of 9 transmission lines totaling 90.7km, to take place during year 5 at an estimated cost per project of R\$3,200,000; <b>(ii) Substations:</b> Group 1, consisting of the expansion of 18 existing substations and the construction of 9 new substations, to take place during years 1-2 at an estimated cost per project of R\$850,000; Group 2, consisting of the expansion of 13 existing substations and the construction of 13 new substations, to take place during years 3-4 at an estimated cost per project of R\$750,000; and Group 3, consisting of the expansion of 5 existing substations and the construction of 6 new substations, to take place during Year 5 at an estimated cost per project of R\$280,000.</p> <p>The sample projects of the Program have been identified by the borrower in collaboration with the IDB and include 6 transmission lines totaling 156km (estimated at R\$79,291,086.70), and 17 substations (estimated at R\$ 101,016,951.03), representing 34% of the total program cost <b>(Annex 1)</b>. The scope of the Bank's Environmental and Social Due Diligence will be the entire five-year Program of Celesc-D, which includes 120 total projects, with the same objectives and timeline as the activities that would be financed by the Bank under the present Operation.</p> <p>The proposed Program also contemplates the construction of ancillary facilities, such as worker camps, access roads, waste management facilities, and construction easements, the details of which are currently unknown; the procurement of new and the disposal of old equipment and electric meters; and the procurement of information technology including software.</p> <p>Execution of the Program is projected to occur between 2018-2022, depending on the approval of financing. Given the limited information currently available, the largest and average work force and</p>	

length of presence in each project area, and whether there will be a permanent set of camps, is unclear; this information will be acquired and analyzed during Due Diligence.

Supervision of Program execution will be defined by Celesc-D, which has provisionally budgeted the following resources for technical and environmental supervision according to year: Year 1, R\$ 3,990,000; Year 2, R\$ 5,658,000; Year 3, R\$ 4,482,000; Year 4, R\$ 6,732,000; Year 5, R\$ 4,668,000. The IDB will undertake supervision of compliance of the Program with the applicable policies and directives according to requirements of the final risk classification as defined by OP-703 B.7 (Supervision).

### **Key Potential ESHS Risks and Impacts** *(recommended not to exceed 400 words)*

Potential impacts and risks associated with construction of transmission lines include: (i) livelihood impacts and/or resettlement of properties located on or adjacent to the sites along the Right of Way and access roads; (ii) erosion of soil and vegetation; (iii) fragmentation of habitat; (iv) edge effects on flora and fauna; (v) dust, noise, and light pollution; (vi) gas emissions and liquid and solid waste; (vii) impacts and risks to worker health and safety; (viii) contamination of superficial and subsurface water resources; (ix) cumulative impacts on valuable ecosystem components, potentially including Atlantic Forest, subtropical moist broadleaf forest (restinga), wetlands, and mangroves; and (x) natural disaster risks on the infrastructure and the livelihoods of project-affected communities, including inland flooding and landslides.

Potential impacts and risks associated with operation of transmission lines include: (i) risk of collision of avifauna; (ii) visual pollution; (iii) impacts and risks to worker health and safety; (iv) influx and settlement of households in the Right of Way; and (v) natural disaster risks on the infrastructure and livelihoods of project-affected communities, including inland flooding and landslides.

Potential impacts and risks associated with construction of substations include: (i) livelihood impacts and/or resettlement of properties located on or adjacent to the sites along the Right of Way and access roads; (ii) erosion of soil and vegetation; (iii) dust, noise, and light pollution; (iv) gas emissions and liquid, and solid waste; (v) improper disposal of toxic materials such as PCBs; (vi) impacts and risks to worker health and safety; (vii) contamination of superficial and subsurface water resources; (viii) cumulative impacts on valuable ecosystem components, potentially including Atlantic Forest, subtropical moist broadleaf forest (restinga), wetlands, and mangroves; and (ix) natural disaster risks on the infrastructure and livelihoods of project-affected communities, including inland flooding and landslides.

Projected impacts and risks associated with operation of substations include: (i) noise generation; (ii) visual pollution; (iii) impacts and risks to worker health and safety; and (iv) natural disaster risks on the infrastructure and livelihoods of project-affected communities, including inland flooding and landslides.

A number of federally-demarcated and declared indigenous lands (Kaingang and Guaraní) and federally- and state-protected conservation areas exist in the state of Santa Catarina (**Figure 2**). In addition, the state contains remnants of Atlantic Forest habitat, considered high in biodiversity and endemism, subtropical moist broadleaf forest (restinga), wetlands, and mangroves (**Figure 3**). Further, a number of Key Biodiversity Areas exist in the state of Santa Catarina, as does a significant wetlands surrounding the Rio Uruguai which figures as the southern border of the state (**Figure 4**). However, given the limited information currently available, it is impossible to determine the degree to which any of the projects will cause negative impacts on critical natural habitat, natural habitat, or cultural sites.

The Program has provisionally been classified as “High” Disaster Risk, due to the occurrence of severe flooding across the state of Santa Catarina. However, this risk rating may change during project preparation and due diligence if new information is made available, and/or may be applied on a subproject by subproject basis as part of a disaster risk management framework that will include a risk rating process.

The borrower has provisionally identified the need to obtain 745 hectares of Right of Way in relation to the transmission line projects, for which it has allocated a provisional budget of R\$20 million for land acquisition, as well as the need to obtain the Right of Way affecting 28 properties in relation to the substation projects, for which it has allocated a provisional budget of R\$62 million for land acquisition. In addition, the borrower has allocated 0.5% of the total projected Program budget, or R\$2,720,000, to pay for environmental and social mitigation actions. The total number of properties affected by the Program is unknown, and will be analyzed as part of the Due Diligence process.

### **Information Gaps and Strategy for Analysis and Management** *(recommended not to exceed 400 words)*

In December, 2016, Celesc-D provided the IDB with a “Relatorio de Estudos para a concepção do Programa e Elaboração da Carta-consulta.” This report details the Program scope and budget, enumerates a number of potential environmental and social impacts and risks, and briefly assesses borrower capacity for implementation of mitigation measures. However, to date, no programmatic or project-level ESIA has been developed, and no public consultations have been carried out on the Program nor on any project to be financed by the Program. Celesc-D has contracted the local consulting firm APPE (Assessoria Para Projetos Especiais) Ltda. to develop the final economic, technical, environmental, and social studies required for Program design and execution, including the development of a Strategic Environmental Assessment (SEA). The SEA will be delivered to the IDB by the beginning of February, 2017.

In addition, Celesc-D has committed to developing separate ESIAs for each project financed by the Program. Under the modality of Multiple Works, the Bank requires representative ESIAs for transmission lines and representative ESIAs for substations of ~30% of the total Program cost. The sample projects have been identified (**Annex 1**), and fit-for-disclosure ESIAs for each project in the sample will be developed by Celesc-D and disclosed on the IDB website prior to embarking on the Analysis Mission.

Based on the limited information currently available in the above-mentioned report, the Program is classified as “Category A” risk. However, if during the course of analysis of the SEA and of sample project ESIAs new information is received that demonstrates less significant risks and impacts and that it is feasible to execute the Program without incurring any category A risks, it is possible that fewer policies or directives may be triggered, in which case the classification may change to “B.”

To verify Program risk classification, the Bank will hire a consultant to review the Strategic Environmental Assessment (SEA) developed by APPE Ltda. in order to analyze the potential environmental, social, and disaster-related impacts and risks of the projects currently proposed for financing under the Program, and classify them according to the level of ESHS risks and impacts. The consultant will review the Environmental and Social Management Framework (ESMF) proposed in the SEA, and depending on the results, may develop additional studies, frameworks, or actions plans to ensure that the Program is in compliance with the policies and directives triggered prior to QRR. Based on the information currently available, the SEA and any additional study may likely include a Resettlement Action Framework, an Indigenous Peoples Development Framework, a



Cumulative Impacts Management Framework, a Disaster Risk Management Framework, a Gender Equality Framework, and/or a Stakeholder Engagement Framework.

In addition, OP-703 (B.6) requires Celesc-D to execute and document two public consultations regarding the Strategic Environmental Assessment, and public consultations for each representative project ESIA included in the sample depending on final project risk classification, prior to Board Approval. In the case any sample project causes negative impacts or risks on indigenous people, Celesc-D must obtain Free, Prior, and Informed Consent prior to Board Approval in compliance with OP-765 .

The due diligence process of the Bank will confirm that the assessments and proposed mitigation measures contained in the SEA, ESMF, and representative ESIA's and ESHS plans all comply with IDB policies.

In addition, each project is subject to environmental licensing by the state environmental agency Fundação do Meio Ambiente (FATMA). Celesc-D has stated that each project will obtain a preliminary environmental license (Licencia Previa) and an installation license (Licencia de Instalação) from FATMA prior to commencing civil works. Celesc-D will present both licenses for the Program's representative sample projects prior to first disbursement, and will obtain both licenses prior to commencing civil works on all subsequent projects.<sup>1</sup>

The structure of Celesc-D includes an Environmental Division responsible for the management and control of the environmental and social impacts and risks of all of its operations. The division systematically develops ESIA's and ESMPs for all medium- to low-impact projects. In the case of complex or high-impact projects, Celesc-D contracts third-party environmental consultants to develop ESIA's and ESMPs. In addition, Celesc-D has a set of environmental and technical guidelines for infrastructure development, and Manual of Procedures for Waste Management that applies to all projects. Borrower capacity to execute the proposed ESMF will be assessed by the consultant hired by the IDB to review the Program SEA and ESMF.

#### **Opportunities for IDB Additionality (if any)** *(recommended not to exceed 150 words)*

Potential opportunities for IDB additionality will be assessed based on the results of the Strategic Environmental Assessment. Potential opportunities include the creation of ecological offsets and community development programs.

#### **Annex Table: Operation Compliance with IDB Safeguard Policies**

See table below.

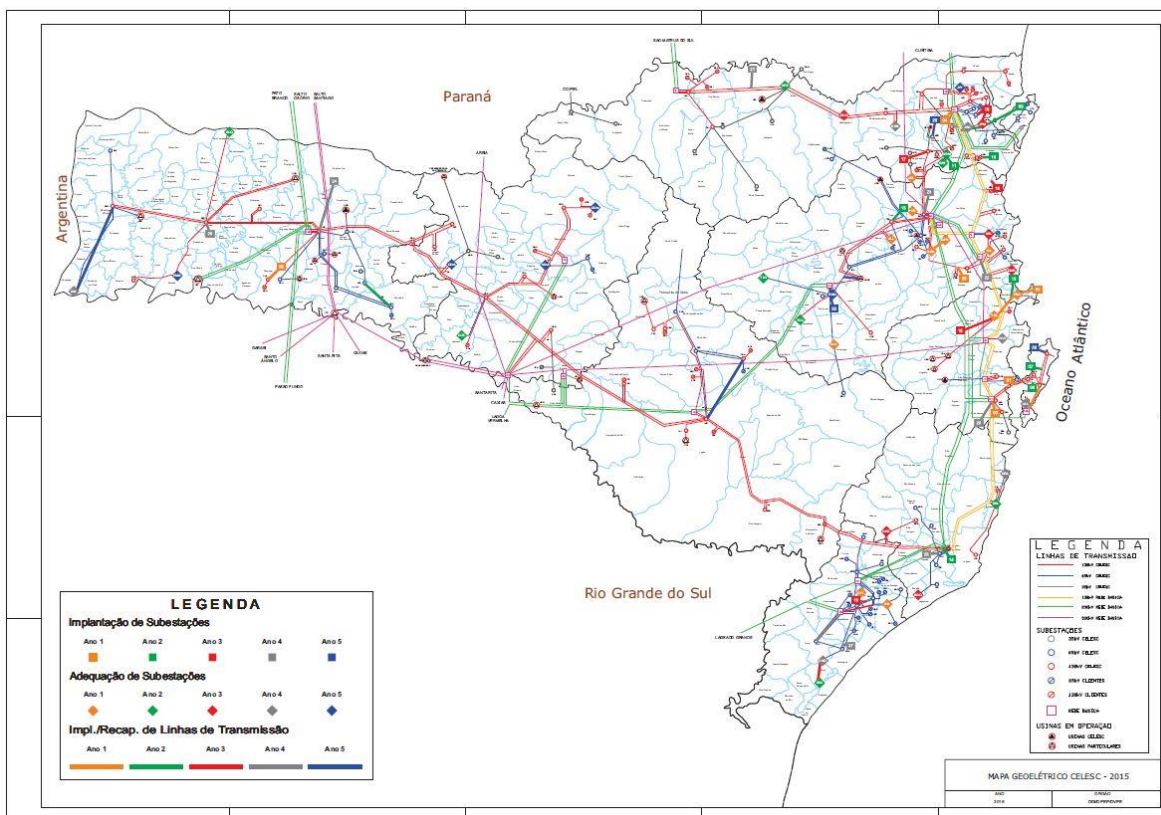
#### **Additional Annexes**

Maps and annexes follow below.

<sup>1</sup> This will be included as a contractual requirement in the Bank's operation.

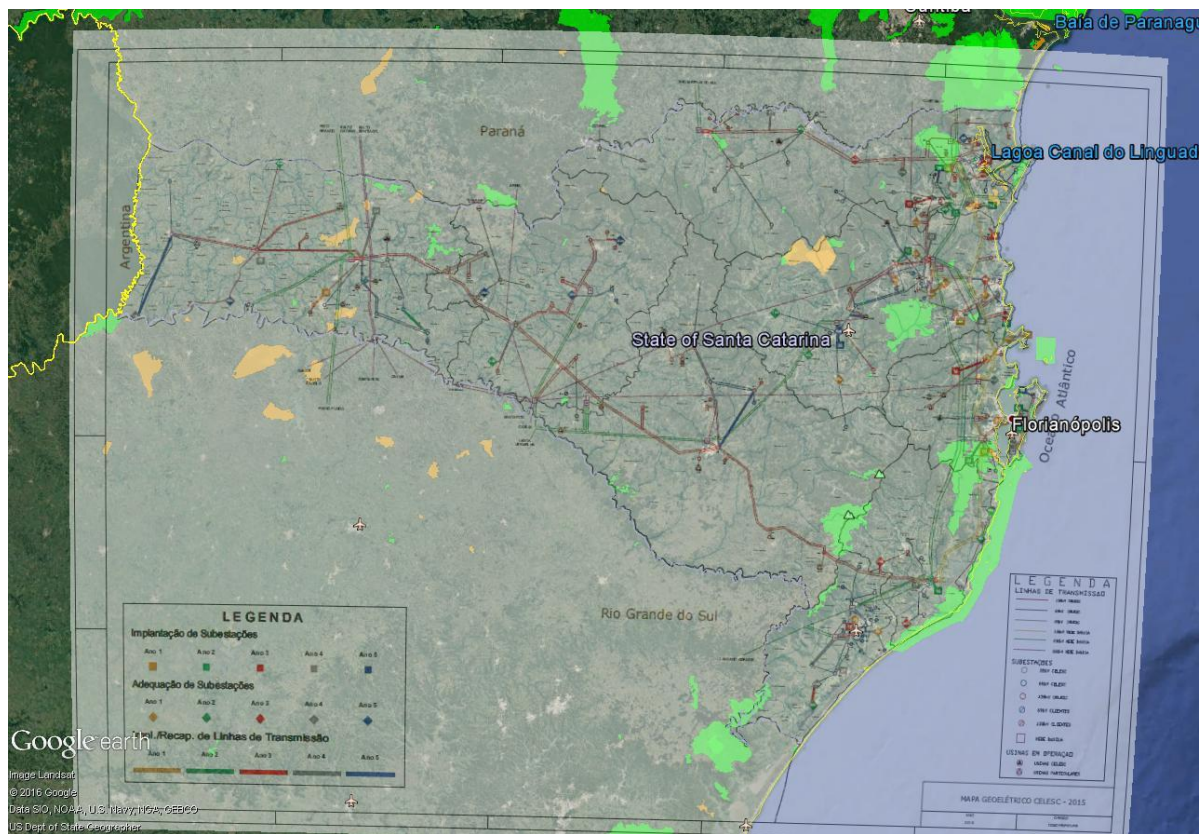


Figure 1. Map of transmission and substation projects proposed for financing by the Program (CELESC, 2016)



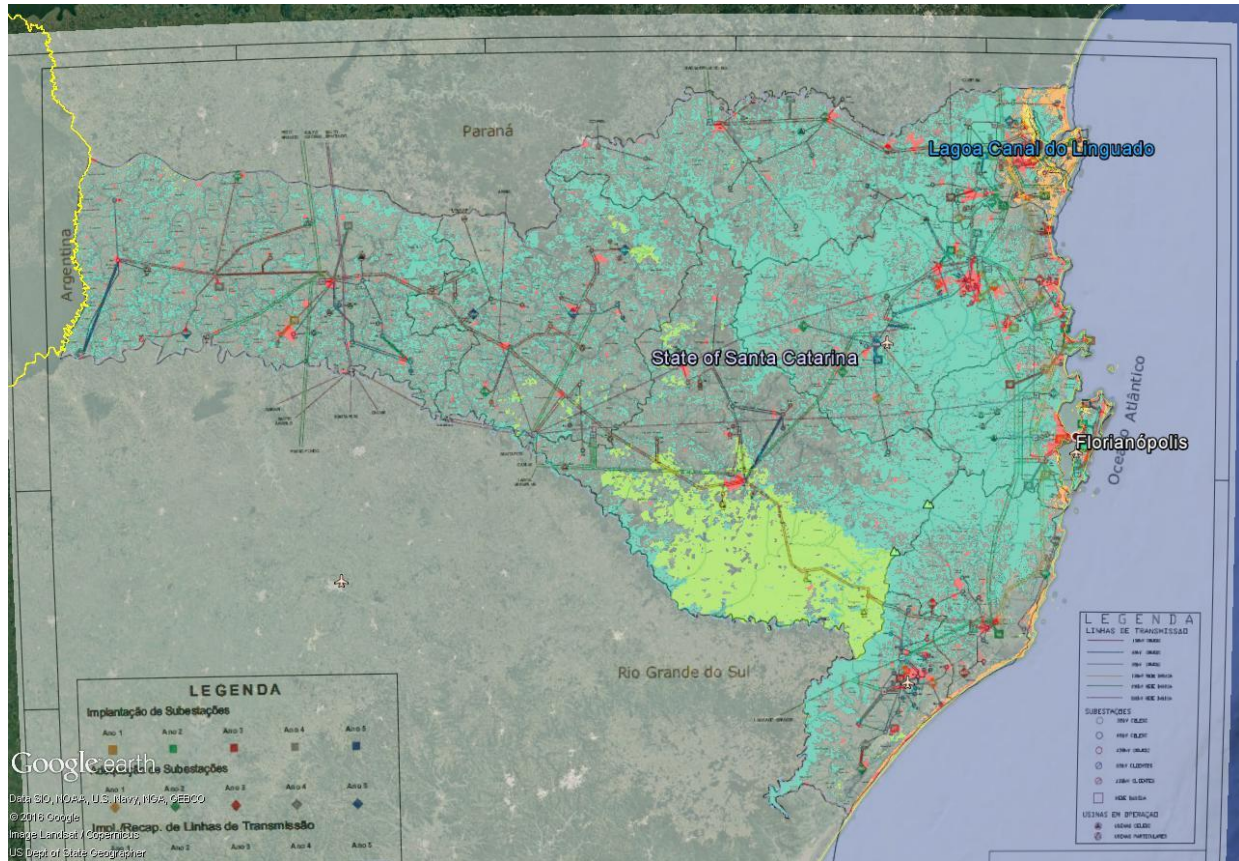
CELESC, November, 2016.

**Figure 2. Program map overlaid with protected conservation areas (light green) and demarcated and declared indigenous territories (orange) in the state of Santa Catarina.**



IDB, November, 2016.

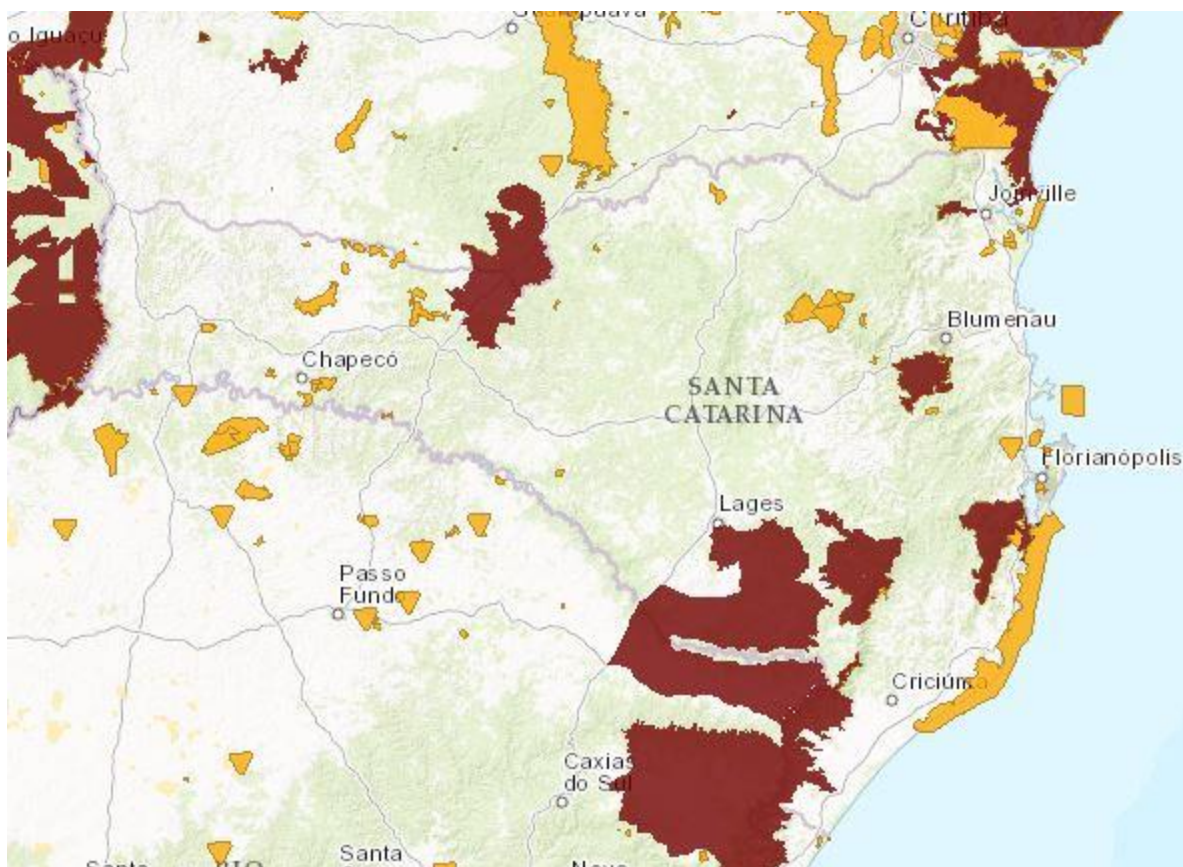
**Figure 3. Program map overlaid with land cover in Santa Catarina state, including Atlantic Forest (dark green) non-forest natural habitat (light green), Mangue (mangrove, orange), Restinga (subtropical moist broadleaf forest, yellow), and urban areas (red), 2014-15**



SOS Mata Atlântica, December 2016.



**Figure 4. Critical natural habitat areas in the Program area as defined by IDB screening.**



IDB, December 2016.

## Annex 1. Table of Sample Projects Considered in the Program

### Substations (in R\$)

SE 138/13,8kV FLORIANÓPOLIS CAPOEIRAS - IMPLANTAÇÃO DA SUBESTAÇÃO - 26,67MVA	7,057,155.80
SE 138/23KV BRUSQUE SÃO PEDRO - IMPLANTAÇÃO DA SUBESTAÇÃO - 26,67MVA	7,211,317.17
SE 138/23KV CHAPECÓ III - IMPLANTAÇÃO DA SUBESTAÇÃO - 26,67MVA	6,280,213.85
SE SÃO JOSÉ REAL PARQUE - IMPLANTAÇÃO DA SUBESTAÇÃO - 40 MVA	7,406,665.70
SED CANOINHAS RIO DA AREIA - 9,4MVA	3,073,760.22
SE 138/13,8kV FLORIANÓPOLIS SACO DOS LIMÕES - IMPLANTAÇÃO DA SUBESTAÇÃO - 26,67MVA	7,007,884.41
SE 138/69kV JOINVILLE BOA VISTA - IMPLANTAÇÃO DA SUBESTAÇÃO - 2 X 66,67MVA	13,980,874.84
SE 138/13,8kV CAPIVARI DE BAIXO - IMPLANTAÇÃO DA SUBESTAÇÃO - 26,67MVA	7,057,155.80
SE 138/13,8kV BOMBINHAS - IMPLANTAÇÃO DA SUBESTAÇÃO - 40MVA	7,135,272.16
SE 138/13,8kV GUARAMIRIM II - IMPLANTAÇÃO DA SUBESTAÇÃO - 26,67MVA	7,113,771.67
SE 138/23KV BLUMENAU GARCIA - AMPLIAÇÃO DA CAPACIDADE TRANSFORMADORA - 26,67MVA	4,274,815.55
SE 138/23KV GASPAR - AMPLIAÇÃO DA CAPACIDADE TRANSFORMADORA E ADEQUAÇÃO DA SUBESTAÇÃO - 26,67MVA	3,845,440.92
SE 138/23KV INDIAL - AMPLIAÇÃO DA CAPACIDADE TRANSFORMADORA - 40MVA SUBSTITUI 26,67MVA	4,159,964.06
SE 138/23KV POMERODE - AMPLIAÇÃO DA CAPACIDADE TRANSFORMADORA - 26,67MVA	4,022,464.06
SE 69/23KV TAIÓ - AMPLIAÇÃO DA CAPACIDADE TRANSFORM. E ADEQUAÇÃO DA SUBESTAÇÃO - 26,67MVA SUBST. 10MVA	4,317,807.91
SE 138/13,8kV JOINVILLE PERINI - AMPLIAÇÃO DA TRANSFORMAÇÃO - 26,67MVA	3,394,259.56
SE 138/23KV PALMITOS - AMPLIAÇÃO DA TRANSFORMAÇÃO - 26,67MVA	3,678,127.35

Transmission lines (in R\$, with length in km)

LD 69kV TUBARÃO - SANGÃO - IMPLANTAÇÃO DO TRECHO 2 - 19,2KM - CIRCUITO DUPLO (LANÇAMENTO DO CIRCUITO 1)	14,162,789.28	19.2
LD 138kV TIJUCAS - PORTO BELO C2 - IMPLANTAÇÃO DO TRECHO INICIAL - 12,8KM - CIRCUITO SIMPLES - 636MCM	5,837,248.06	12.8
LD 138KV JOINVILLE SC - SÃO FRANCISCO DO SUL II (TRECHO 2) - 35KM - CIRCUITO DUPLO LANÇAMENTO DO C1 - 477MCM	19,318,781.67	35.0
LD 138kV VIDEIRA - FRAIBURGO - CIRCUITO DUPLO - LANÇAMENTO DO 1º CIRCUITO - 23KM	10,448,100.91	23.0
LD 138kV PORTO BELO - BOMBINHAS - 12KM - CIRCUITO SIMPLES - 477MCM	6,661,789.44	12.0
LD 138kV SÃO MIGUEL DO OESTE II - ITAPIRANGA - 54KM - CIRCUITO SIMPLES - 477MCM	22,862,377.34	54.0

**Annex 2. Table: Operation Compliance with IDB Safeguard Policies**

Policies / Directives	Relevant Aspect of Policy / Directive	Is This Policy / Directive Applicable?	Rationale for Applying Policy / Directive Rationale	Actions required during Preparation & Analysis
<b>OP-703 Environment and Safeguards Compliance Policy</b>				
B.2 Country Laws and Regulations	Obtention of environmental licenses and permits	Yes	The borrower has not yet obtained the required environmental licenses and permits.	Include in the loan conditions a requirement to obtain a Licencia Previa and a Licencia de Instalação for each project to be financed by the Program prior to initiating civil works.
B.3 Screening and Classification	Environmental and social risk categorization and high risk categorization	Yes	The risk classification for each of the 103 projects has not yet been verified.	Verify risk classification of all sample projects prior to QRR.
B.4 Other Risk Factors	Associated facilities risks	Yes	The location, scope, and design of associated facilities is unclear in relation to program components.	Verify the impacts and risks related to associated facilities.
B.5 Environmental Assessment and Plans Requirements	Assessment of environmental impacts and risks, and mitigation action plans and strategy	Yes	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project first in the sample and then for each project before inclusion in the

				program.
B.5 Social Assessment and Plans Requirements	Assessment of social impacts and risks, and mitigation action plans and strategy	Yes	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project first in the sample and then for each project before inclusion in the program.
B.6 Consultation	Prior consultation with project-affected communities regarding impacts, risks, and mitigation strategy	Yes	Public consultation has not yet occurred on either the Program not any project to be financed.	Require consultation on the ESIA and ESMF prior to QRR. Require public consultation be documented in each project ESIA prior to QRR for the sample projects, and as part of the operation's loan conditions for non-sample projects.
B.7 Supervision and Compliance	Program and project supervision and monitoring.	Yes	Celesc-D has budgeted resources for technical and environmental supervision over the five-year period. IDB will supervise the Program according to final risk classification.	ESHS requirements will be included in the loan agreement .Supervision and monitoring will be carried out during Program execution.
B.8 Transboundary Impacts	Not applicable.	No	The Program scope only contemplates impacts within Brazil.	None

B.9 Natural Habitats	Natural habitat and potentially critical natural habitat	Yes	No ESIA exists for either the Program or for individual projects. There is a potential that projects will intervene in Atlantic Forest, subtropical moist broadleaf forest (restinga), wetlands, and mangroves.	Contract a Strategic Environmental Assessment for the Program and require an ESIA be developed for each project. Review Terms of Reference.
B.9 Invasive Species	Use of invasive species for reforestation of suppressed vegetation	Yes	No ESIA exists for either the Program or for individual projects.	Contract a Strategic Environmental Assessment for the Program and require an ESIA be developed for each project. Review Terms of Reference.
B.9 Cultural Sites	Demarcated and declared indigenous lands, cultural heritage.	Yes	No ESIA exists for either the Program or for individual projects. There is the potential that projects may intervene in indigenous lands.	Contract a Strategic Environmental Assessment for the Program and require an ESIA be developed for each project. Review Terms of Reference.
B.10 Hazardous Materials	Avoid impacts associated with production, acquisition, use, and final disposal of hazardous materials	Yes	PCBs may be present at existing substations. Petrochemicals may be utilized during project construction.	Verify the borrower's capacity to manage hazardous materials and inclusion of requirements in project ESMPs in compliance with B.10.
B.11 Pollution Prevention and Abatement	Reduce or eliminate emissions, including gas, liquid, and solid	Yes	Celesc-D has a Manual of Procedures for Waste Management.	Verify the borrower's capacity to implement waste management and inclusion of requirements in compliance with B.11.



B.12 Projects Under Construction	N/A	No	Projects belonging to Group 1 are to commence construction in late 2017.	None
B.13 Noninvestment Lending and Flexible Lending Instruments	N/A	No	The program is investment lending.	None
B.14 Multiple Phase and Repeat Loans	N/A	No	The program is not multiple phase or repeat loans.	None
B.15 Co-financing Operations	Collaborate for unified requirements on environmental assessment and availability of information	Yes	The program may possibly be co-financed by the Agence Francaise de Developpement (AFD) and the República Federativa do Brasil.	Coordination with the E+S team at AFD during Due Diligence.
B.16 In-Country Systems	N/A	No	The program will not utilize In-Country Systems.	None
B.17 Procurement	Incorporate sustainable procurement into loan agreement, operating manual, and bidding documents.	Yes	No ESIA exists for either the Program or for individual projects. There is the potential that sustainable procurement may not be incorporated into ESMPs.	Include in loan conditions the sustainable procurement of goods in compliance with B.17.
<b>OP-704 Natural Disaster Risk Management Policy</b>				
Disaster Risk Assessment	Determination of disaster risk during Program preparation	Yes	No ESIA exists for either the Program or for individual projects.	Include an Disaster Risk Management Framework in the SEA and ESMF for the Program, and require a Disaster Risk

				Assessment be developed for each sample project ESIA
Disaster Risk Management Plan	Prevent and reduce vulnerability related to disaster risk	Yes	No ESIA exists for either the Program or for individual projects.	Include an Disaster Risk Management Framework in the SEA and ESMF for the Program, and require a Disaster Risk Assessment be developed for each sample project ESIA
<b>OP-710 Operational Policy on Involuntary Resettlement</b>				
Resettlement Minimization	Avoid or reduce resettlement to the maximum extent possible	Yes	No ESIA exists for either the Program or for individual projects, but the borrower has identified 745 ha of Right of Way for transmission lines and 28 properties affected by Right of Way for substations.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, including a Resettlement Action Framework. Review Terms of Reference.
Resettlement Plan Consultations	Consultation, availability of information, transparency, and participation of resettled populations in action plan	Yes	No ESIA exists for either the Program or for individual projects, but the borrower has identified 745 ha of Right of Way for transmission lines and 28 properties affected by Right of Way for substations.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, including a Resettlement Action Framework and if needed develop Resettlement Action Plans for the sample. Review Terms of Reference to include consultation on these RAPs.

Impoverishment Risk Analysis	Avoid impoverishment through resettlement to the greatest extent possible	Yes	No ESIA exists for either the Program or for individual projects, but the borrower has identified 745 ha of Right of Way for transmission lines and 28 properties affected by Right of Way for substations.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, including a Resettlement Action Framework and if needed develop Resettlement Action Plans for the sample. Review Terms of Reference to ensure inclusion of impoverishment risk and vulnerability analysis.
Resettlement Plan or Resettlement Framework (Prior to Analysis Mission/Board Approval)	Resettlement Plan or Resettlement Framework (Prior to Analysis Mission/Board Approval)	Yes	No ESIA exists for either the Program or for individual projects, but the borrower has identified 745 ha of Right of Way for transmission lines and 28 properties affected by Right of Way for substations.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, including a Resettlement Action Framework. Review Terms of Reference. to ensure inclusion of impoverishment risk and vulnerability analysis.
Livelihood Restoration Program	Restore livelihoods of resettled populations to equal or better conditions	More information required	No ESIA exists for either the Program or for individual projects, but the borrower has identified 745 ha of Right of Way for transmission lines and 28 properties affected by Right of Way for substations.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, including a Resettlement Action Framework and if needed develop Resettlement Action Plans for the sample. Review Terms of Reference. Require

				Resettlement Framework and plans for sample projects as applicable prior to QRR.
Consent (Indigenous Peoples and other Rural Ethnic Minorities)	Obtain Free, Prior, and Informed Consent from Indigenous Peoples that are involuntarily resettled or economically displaced	Yes, more information required to confirm presence and extent of impacts.	No ESIA exists for either the Program or for individual projects, but the borrower has identified 745 ha of Right of Way for transmission lines and 28 properties affected by Right of Way for substations.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, including a detailed review of the presence and potential impact on indigenous groups and other vulnerable rural groups, and development of specific mitigation frameworks for inclusion in ESMF/RAPs as applicable
<b>OP-765 Operational Policy on Indigenous Peoples</b>				
Sociocultural Evaluation	Identify potential affected indigenous peoples, lands, and resources and assess potential risks and impacts	Yes	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project.
Good-faith Negotiations		Yes	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each

				project.
Agreement with Affected Indigenous Peoples		Yes, subject to confirmation	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project. If IP lands or livelihoods are affected require process to obtain FPIC.
Indigenous Peoples Protection, Compensation, and Development Plan or Framework prior to Board Approval	Indigenous Peoples Protection, Compensation, and Development Plan or Framework prior to Board Approval	Yes, subject to confirmation	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project. Include verification process and plan development in TOR for inclusion in the ESMF
Discrimination Issues Assessed and Addressed		Yes, more information required	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project.
Transborder Impacts Addressed	N/A	No	The program only finances projects located within the state of Santa	None

			Catarina.	
Impacts on Isolated Indigenous Peoples Addressed	N/A	No	There are no isolated indigenous peoples located in the program area of influence.	None
<b>OP-761 Operational Policy on Gender Equality in Development</b>				
Gender-based Exclusion Addressed		Yes	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project.
Equal Access to Project Benefits/ Compensation Measures		Yes	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project.
Uneven Impact Burden Addressed		Yes, more information required	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project.
Disaggregation of Impact Data by Gender		Yes, more information required	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and

				require an ESIA be developed for each project.
Consultation of Affected Women		Yes	No ESIA exists for either the Program or for individual projects.	Contract the development of a Strategic Environmental Assessment and ESMF for the Program, and require an ESIA be developed for each project.
<b>OP-102 Access to Information Policy</b>				
Disclosure of Environmental and Social Assessments Prior to Analysis Mission	Disclosure of Environmental and Social Assessments Prior to Analysis Mission	Yes	No ESIA exists for either the Program or for individual projects.	Disclose representative ESIA's for sample transmission lines and representative ESIA's for sample substations prior to the Analysis Mission.
Disclosure of Final ESMP/ESMF, RP/RF, IPP/IPF before Board Approval	Disclosure of Final ESMP/ESMF, RP/RF, IPP/IPF before Board Approval	Yes	No ESIA exists for either the Program or for individual projects.	Disclose the required documents before Board Approval.
Provisions for Disclosure of Environmental and Social Documents during Project Implementation	Disclosure of Environmental and Social Documents during Project Implementation	Yes	No ESIA exists for either the Program or for individual projects.	Include in the ESMF and loan conditions the disclosure of environmental and social documents during project implementation.

### Índice de Trabajo Sectorial Propuesto

Item	Estudio/Apoyo Técnico	Descripción	Fechas	Enlaces Electrónicos
1	Informe	Etapa 1: Estudios para la Concepción del Programa y la Elaboración de la Carta de Consulta	Enero 2016	<a href="#">IDBdocs40785972</a>
2	Informe	Información Adicional a Ser Reenviadas a STN requeridas por la Secretaria Ejecutiva de COFIEEX	Mayo 2016	<a href="#">IDBdocs40786057</a>
3	Informe	Nuevas información y Aclaraciones Requeridas por la STN	Noviembre 2016	<a href="#">IDBdocs40786069</a>
4	Presentación	Programa de Infraestructura Energética CELESC	2016	<a href="#">IDBdocs40785976</a>
5	Informe	Informe Financiero Trimestral Auditado CELESC	Septiembre 2016	<a href="#">IDBdocs40785981</a>
6	Informe	Estrategia Ambiental e Social (Antecedentes)	Diciembre 2016	<a href="#">IDBdocs40785987</a>
7	Informe	Inversiones en Equipamiento- 2017 a 2021	Diciembre 2016	<a href="#">IDBdocs40785988</a>
8	Informe	Valor estimado do número de transformadores sobrecargados	Diciembre 2016	<a href="#">IDBdocs40785991</a>
9	Informe	Perdidas Eléctricas	Diciembre 2016	<a href="#">IDBdocs40785992</a>
10	Informe	Proyección de Demanda y Número de Usuarios	Diciembre 2016	<a href="#">IDBdocs40785997</a>
11	Informe	Lista de Obras SE LT Situación Licenciamiento	Diciembre 2016	<a href="#">IDBdocs40786009</a>
12	Informe	Inversiones por Categoría de Inversión	Diciembre 2016	<a href="#">IDBdocs40786061</a>
13	Apoyo Técnico	Análisis Económico y Financiero del Programa	Primer Semestre 2017	En proceso
14	Apoyo Técnico	Análisis Técnico de los Proyectos del Programa	Primer Semestre 2017	En proceso
15	Apoyo Técnico	Análisis Social y Ambiental del Programa	Primer Semestre 2017	En proceso
16	Análisis de capacidad de ejecución	Informe de evaluación de la capacidad de ejecución de CELESC	Primer Semestre 2017	En proceso



CONFIDENCIAL

<sup>1</sup> La información contenida en este Anexo es de carácter deliberativo, y por lo tanto confidencial, de conformidad con la excepción relativa a “Información Deliberativa” contemplada en el párrafo 4.1 (g) de la “Política de Acceso al Información” del Banco (Documento GN-1831-28).