## BASIC INFORMATION

### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
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<td>Southern Africa</td>
<td>P160427</td>
<td>Temane Regional Electricity Project</td>
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<table>
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<tr>
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<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
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<table>
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<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
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<tr>
<td>Investment Project Financing</td>
<td>Ministry of Economy and Finance</td>
<td>Ministry of Mineral Resources and Energy, Electricidade de Mozambique, Sociedade Nacional de Transporte de Energia</td>
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### Proposed Development Objective(s)

The Project Development Objective is to enhance transmission capacity for domestic and regional markets and increase electricity generation capacity through private sector participation.

### Components

- Temane Transmission Project
- CTT Power Generation Plant
- Technical Assistance and Capacity Building

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## PROJECT FINANCING DATA (US$, Millions)

### SUMMARY

<table>
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<tr>
<th>Description</th>
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<td>Total Financing</td>
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<td>of which IBRD/IDA</td>
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### DETAILS

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<th>Amount</th>
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**Payment/Security Guarantee**

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Environmental Assessment Category

A-Full Assessment

Decision
The review did authorize the team to appraise and negotiate

Other Decision (as needed)

**B. Introduction and Context**

**Country and Regional Context**

1. **Mozambique is a low-income country, strategically located in the Southern Africa region.** With 30 million people, it occupies an area of 800,000 km² and more than 2,500 km of coastline along the southwestern rim of the Indian Ocean. It is one of the poorest countries in the world, with gross domestic product (GDP) per capita of US$475 in 2018. About 70 percent of the population live and work in rural areas. The country is endowed with ample arable land, water, energy, gas and mineral resources; three deep seaports; and a relatively large potential labor pool. It is also strategically located, bordering six countries—four of them landlocked and hence dependent on Mozambique as a conduit to global markets. In addition, the country’s strong ties to the regional economic engine of South Africa underscore the importance of Mozambique’s economic, political, and social development to the stability and growth of Southern Africa.
2. Mozambique is emerging from a period of elevated macroeconomic volatility, following the revelations of previously undisclosed public debt in 2016, which triggered a significant economic downturn. Mozambique’s economy is dominated by agriculture, which accounts for a quarter of the GDP and employs three-quarters of the population, including more than 90 percent of rural residents. After registering average GDP growth of 7.3 percent over the preceding decade, the economy experienced a sharp downturn in 2016–2017, with growth falling to 3.8 percent. Aided by strong monetary policy, currency stability since mid-2017 helped reduce inflation from its peak of 26 percent in November 2016 to 3.9 percent in 2018.

3. The economy is expected to continue to grow at a more moderate pace, but the fiscal outlook remains fragile. GDP growth is projected to firm up gradually toward 4 percent by 2020, with upward revisions contingent on progress in exports of liquified natural gas. A reduction in direct budget support from donors and project lending equivalent to 5 percent of GDP and an increase in the cost of domestic financing were unanticipated fiscal shocks. The overall fiscal deficit fell from 7.1 percent of GDP in 2016 to 4.6 percent in 2017 due to increased revenue collection efforts and spending controls. However, an increase in domestic borrowing and the accumulation of arrears to private suppliers highlight the difficulties in controlling public finances, and budgetary pressures will continue to be elevated. When taken together with the high cost of debt service and the persistent fiscal risks from state-owned enterprises, a fragile fiscal outlook becomes evident.

4. Poverty is expected to remain high. The population share of the poor measured at US$1.9 per day per capita (2011 purchasing power parity) is projected to decline by less than 1 percentage point—from 60.8 percent to 59.9 percent—between 2017 and 2020. Such stagnation of poverty reduction is expected because GDP growth in per capita terms is weak, dominated by export-oriented extractive industries, and concentrated in relatively more prosperous urban areas. Due to high population growth and the absence of adequate safety nets, the absolute number of poor households are expected to increase.

5. Mozambique’s Five-Year Government Program (2015–2019) highlights agricultural and industrial development as the basis for socioeconomic development of the country. The five-year Government plan presents five strategic pillars to achieve accelerated economic growth and social development and targets expanding infrastructure as a key element to enhancing the productive sectors of the economy, promoting economic diversification, and improving access to markets. The strategy calls for expanding access to electricity services to all Mozambicans by 2030 to support the young and growing population with productive opportunities. The strategy also calls for increasing energy exports and relying on public-private partnerships (PPPs) to achieve the objectives of the energy sector development.

Regional Context

6. Mozambique is part of the Southern Africa region that boasts of diverse and significant resource endowments. The Southern Africa region covers a vast geographical area of about 9 million km² and is home to over 340 million people, with total GDP of about US$690 million (2017). The 16 countries in the region are members of the Southern African Development Community (SADC), which was established in 1992 to promote socioeconomic integration and political and security cooperation.¹ South Africa is the region’s economic engine. A number of the lower income but large countries such as the Democratic Republic of Congo, Mozambique, Tanzania, Zambia, or Zimbabwe are endowed with large and diverse natural resources and have significant potential to drive the growth and economic diversification of the region.

¹ The SADC was established in 1992. The SADC member countries are Angola, Botswana, Comoros, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia, and Zimbabwe (https://www.sadc.int).
7. **Regional integration is Southern Africa’s political and economic priority, and energy has been identified as one of the priority areas.** Equitable regional integration has been one of the principal founding objectives of the SADC, with a vision of moving the region toward a common market, monetary union, and eventually an economic union with single currency. Energy has been identified as one of the SADC’s key areas for regional development and integration to exploit the economies of scale, diversity in the energy resource endowments, and complementarities of these resources in terms of costs and resilience to external shocks, whether market or climate related.

8. **The SAPP is now the most advanced power pool in Africa in promoting regional electricity trade.** Recognizing the importance of regional energy integration, in 1995 the SADC created the SAPP, whose members include the SADC’s 12 non-island countries. The main objectives of the SAPP are to promote cooperation in the regional electricity planning and operation, facilitate regional trading, increase access to electricity in rural areas, and ensure attractive investment environment. The SAPP has established a sound governance structure at the policy and operating levels, developed functioning multilateral competitive markets, and established a Coordination Center, which advises on feasibility of transmission arrangements for bilateral trade, operates the competitive markets, and monitors the operation of the power pool and adherence to the operating rules.²

**Sectoral and Institutional Context**

9. **The power sector in Mozambique is guided by the Electricity Law of 1997 that keeps the state authority over the sectoral policies and regulations.** The law allows private investment in the sector. The Council of Ministers approves tariffs and fiscal regime for the sector and major concessions. The Ministry of Mineral Resources and Energy (Ministerio de Recursos Minerais e Energia, MIREME) is the government agency responsible for energy policy and planning, sector performance, and governance. Electricity of Mozambique (Electricidade de Moçambique, EDM) is the state-owned, vertically integrated utility with operations in generation, transmission, and distribution countrywide. The Energy Fund (Fundo de Energia, FUNAE) is a public body subordinated to MIREME with the aim of promoting the development and use of different forms of low-cost energy and the sustainable management of energy resources. In addition to the Electricity Law, private investments in the electricity sector are also governed by the PPP Law of 2011. In May 2017, the Parliament approved the creation of the Energy Regulatory Authority (Autoridade Reguladora de Energia, ARENE) in an effort to separate regulatory and policy functions. ARENE is to replace former National Council for Electricity (Conselho Nacional de Electricidade, CNELEC), which had an advisory role in regulation. The new regulatory body has been given the authority—among other things—to regulate the electricity tariff, promote and monitor competition in the power sector, and monitor and enforce the terms and conditions of the licenses or concession contracts in the power sector. Its authority extends over the regulation of the power sector—as well as the storage, distribution, and sale of liquid fuels—and the distribution and sale of natural gas at a pressure of 16 bar or less. ARENE is currently building its capacity and is yet to become functional and assume the authorities prescribed by the law. Figure 2 presents the current structure of the sector.

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² The SAPP is the first and the most advanced power pool on the continent. Sub-Saharan Africa has three other power pools, with varying degrees of institutional development and physical integration: West African Power Pool (WAPP), East African Power Pool (EAPP), and Central Africa Power Pool (CAPP).
Mozambique’s energy vision encompasses both regional and domestic priorities


- Scaling up the energy infrastructure and production for domestic markets and energy exports (gas and electricity)
- Expanding domestic access to electricity from the current level of 31 percent, which should provide a major impetus to the country’s economic and social development.

11. Mozambique has become a regional energy hub and is strategically placed to continue being one in the future. With gas reserves at Rovuma basin, Mozambique holds the third largest proven natural gas reserves in Africa after Nigeria and Algeria, and it could well be the largest gas resource holder on the continent. A Renewable Energy Atlas, published in 2014, identified 8 GW in ‘priority’ renewables projects (5.6 GW in hydropower, 1.3 GW in solar energy, and 1.1 GW in wind power), with the overall potential being significantly larger. These resources far exceed projected long-term domestic demand and resources have been harnessed to

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3 The total renewable energy potential was estimated at 23,000 GW, dominated by solar energy. The ‘priority’ projects are those that could be developed around the existing and planned transmission infrastructure. Mozambique also has significant coal reserves, estimated at 20 billion tons, including high-quality coking coal. Mozambique exported 13 million short tons of coal in 2017 (https://www.eia.gov/beta/international/analysis.php?iso=MOZ).
meet the regional needs as well. The 2,075 MW state-owned HCB station in the Tete region of northern Mozambique sells about 70 percent of its electricity to South Africa, with the balance sold mainly to EDM, with some relative limited exports to the SAPP. About 80 percent of natural gas currently produced at Mozambique’s onshore gas fields at Pande and Temane, which exceeds 190 million GJ per year, is exported to South Africa through a pipeline built in 2004. These electricity and gas exports are generating significant foreign exchange revenues to the country and have established Mozambique as an important regional energy hub. Recent discoveries of massive off-shore gas reserves in the Rovuma basin have attracted global energy players, positioning the energy sector as a key engine of Mozambique’s future economic growth through global and regional exports.

12. Development of Mozambique’s power sector has been export driven from its inception. A key milestone in the history of Mozambique’s energy sector has been the construction of HCB in 1975. The plant was designed at the outset as a regional project, as the bulk of its production was destined for South Africa. A large part of HCB production—which totals between 14 and 17 TWh annually—continues to be exported to South Africa under a long-term contract with ESKOM, through a dedicated 1,400 km long high-voltage direct current (HVDC) line built together with the plant. This was followed by the construction of two 400 kV transmission lines between South Africa and Maputo (one line passing through Eswatini) in 1998 to supply electricity to the Mozaal aluminum smelter. The lines are owned and operated by the Mozambique Transmission Company (MOTRACO), jointly owned by the utilities of Mozambique (EDM), South Africa (ESKOM), and Eswatini (SEC). MOTRACO also wheels electricity to the EDM network in southern Mozambique, as electricity generated by HCB and destined for consumption in the southern EDM system cannot reach southern Mozambique other than through ESKOM’s and MOTRACO’s networks. Mozambique is also connected with Zimbabwe through a 400 kV line, diversifying country’s interconnections with the SAPP network. As a result, electricity trade has been a prominent feature of Mozambique’s electricity balance (annex 2).

13. The GoM has pursued a strategy for financing the power generation projects through PPPs. Mozambique’s Electricity Law (1997) and PPP Law (2011) for large-scale projects and business concessions provide a legal framework for private investments in the power sector, under which Mozambique has financed several IPPs. Mozambique has added 415 MW in four generation plants since 2015, the first significant additions to the power generation fleet in 40 years since HCB was built in 1975. Three of the four plants, with total capacity of 315 MW, were developed, financed, and constructed with the private sector participation as IPPs with long-term power purchase agreements (PPAs) with EDM. Another IPP, a 41 MW solar photovoltaic (PV) plant at Mocuba, is under construction and another solar PV project of similar size at Metoro is in advance stages of preparation. These power generation projects, totaling about 500 MW, have enabled Mozambique to meet its domestic demand, remove most of the short-term contracts with rental plants (the ‘emergency generation’), and maintain its position in the SAPP regional market.

14. Government’s commitment to achieve universal access to electricity by 2030 has elevated the importance of domestic demand. Access to electricity has expanded more than three times in the past 12 years. Only 8 percent of Mozambican population had access to electricity in 2006. By 2018, the access rate jumped to 31

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4 Similarly, Mozambican gas sector development started in 2004, for exporting gas from the Pande and Temane gas fields to South Africa. Most of the gas—147 PJ out of 183 PJ currently produced—is transported by an 865 km pipeline for consumption to South Africa, with several offtake points in Mozambique for the remaining 36 PJ.

5 International Finance Corporation (IFC) was the sole lead arranger in the 41 MW Mocuba IPP project which included long-term financing from IFC, IFC-administered blended finance from the concessional Climate Investment Funds, and Emerging Africa Infrastructure Fund.

6 Before commissioning the IPPs, EDM had 250 MW under the short-term rental contract, of which only 40 MW is retained for supplying Nacala and Cabo Delgado areas.
percent and electricity services have reached all 128 administrative centers across the country. Off-grid services have also started to develop to serve isolated areas. In October 2018, the President launched the National Electrification Strategy (NES) to be implemented through Programa Nacional de Energia para Todos ('National Electricity Program for All'), representing a renewed momentum toward Mozambique achieving universal electricity access by 2030. The strategy, endorsed by a number of key donors in the sector, envisages ramping up the annual electricity connections to 350,000 by 2020 and to 590,000 on average between 2025 and 2030 to achieve universal access, with an estimated overall investment of US$6.5 billion. It is expected that 70 percent of the population will be connected to the grid while 30 percent will be provided with off-grid energy solutions. The NES established a National Electrification Account that would pool the funding for the Government’s electrification plan to be implemented by EDM (on-grid electrification) and FUNAE (off-grid electrification). The funding is to be provided by contributions from the GoM’s budget, generation concessions fees, taxes on electricity exports, concessional financing from development partners,\(^7\) and contribution from existing electricity consumers through an electrification levy. The NES envisages integration of private sector investment in the access program, especially in the off-grid space.

15. **Mozambique needs to expand both transmission grid infrastructure and generation capacity to meet domestic demand and contribute to supply in the regional market.** Electricity demand in Mozambique grew at an average compound annual rate of 11 percent between 2005 and 2016. The growth flattened in 2017 and 2018 as a result of the economic slowdown but is expected to pick up pace in the coming years as the economy recovers and electrification accelerates. Figure 3 shows grid-based demand projections, with a conservative estimate of demand growth of 5 percent per year for the next six years. The projections indicate that EDM’s capacity to maintain electricity exports will diminish and its capacity to meet domestic demand with requisite security (as measured by the capacity reserve) will be compromised unless sizable generation is added by 2023. Mozambique’s grid is stressed and fragmented, constraining expansion of access and addition of generation.

\(^7\) The World Bank is supporting implementation of the NES with a separate IDA operation ProEnergia (P165453), in cooperation with Sweden, Norway and European Commission.
16. **The SAPP needs to invest in regional transmission network.** A SAPP regional study⁸ found that the region could achieve significant savings in investments through strengthening of regional network, which would allow sharing the generation reserve capacity and optimizing generation portfolio at the regional level. Transmission constraints are also keenly felt in the SAPP short-term competitive trading markets, which prevent a significant amount of trading taking place.

17. **Availability of energy is essential to expanding access across the SAPP.** Average access to electricity in the SAPP was only 37 percent in 2016 (27 percent if South Africa is excluded)—lower than the Sub-Saharan African average of 40 percent—with the level of access quite uneven across countries. South Africa is the only member where it exceeds 80 percent and in only three other countries it exceeds half of the population: Botswana (61 percent), Namibia (52 percent), and Swaziland (66 percent). In the remaining countries, it ranges between 11 percent (Malawi) and 41 percent (Angola). Electrification programs are a developmental priority in all the countries, with a shared objective of achieving near-universal electrification by 2030, consistent with the UN Sustainable Development Goals. A recent study for the SAPP forecasted that, in the base case, electricity demand in the SAPP, measured by peak demand, will grow from 49 GW in 2017 to 113 GW in 2040 (figure 4). The study reckons that generation capacity will need to expand to 130 GW (compared to 54.7 GW in FY2017) by 2040, considering the need to secure adequate reserve to meet the projected demand with the requisite reliability.

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Figure 4. Peak Demand Projections of the SAPP

![Figure 4](image-url)


18. **Availability of lower-carbon energy sources can reduce carbon intensity of electricity generation in the SAPP region.** About 70 percent of electricity generation in the SAPP countries is based on coal plants (75 percent in South Africa), resulting in a high carbon intensity of electricity generation of 0.95 tCO₂ per MWh. As a comparison, the carbon intensity of gas-fired, modern combined cycle gas turbine (CCGT) power plants using natural gas as fuel (that this project supports) is about 0.35 tCO₂ per MWh. The SAPP countries do recognize the need to shift away from coal and decarbonize electricity. Natural gas, as a dispatchable and lower-carbon technology with affordable cost, will play an important role in managing the decarbonization, complementing and enabling the scale up of hydropower, solar, and wind power technologies.

C. Proposed Development Objective(s)

**Development Objective(s) (From PAD)**

19. The PDO is to enhance transmission capacity for domestic and regional markets and increase electricity generation capacity through private sector participation.

**Key Results**

20. The project is expected to achieve the following results:

   (i) Increased transmission capacity (MVA)
   (ii) Increased generation capacity (MW)
   (iii) Private and commercial capital mobilized (USD million).
D. Project Description

21. The project includes the following components:

- **Component 1:** This component includes construction of approximately 560 km of a 400 kV, single-circuit power transmission line between Maputo and Vilanculos (near Temane). The line will connect to CTT located at Temane through a 25 km Vilanculos-Temane transmission line, financed under the project’s CTT component. At the Maputo substation, the TTP line will connect to the existing transmission infrastructure to deliver power to the Maputo transmission and distribution network (that is, to Mozambique’s southern subsystem) and to the SAPP network, which has strong interconnections with the Maputo area. The TTP also includes substations at Vilanculos, Chibuto, and Matalane to allow for future connections to the transmission network at 110 kV, 275 kV, and 66 kV, respectively, facilitating large-scale electrification and lower-voltage integration of the country’s transmission system. The financing available for Component 1 will cover the electrical and civil works, switchgear, transformers, reactive power equipment (bus and line reactors), control-protection-communication systems, Supervisory Control and Data Acquisition (SCADA), and auxiliary system equipment along the entire transmission route and in all substations, including required spares for transmission lines and substations. (See the maps in annex 2 for a geographic depiction of the project.)

- **Component 2:** CTT power generation plant: This component includes construction of a 400-MW gas-to-power generation plant. In considering the technology selection, the CTT sponsors have sought to optimize an output profile that will provide maximum value to EDM in terms of meeting load profile requirements. EDM is also seeking to maximize the energy production from the available gas (from gas discoveries in nearby Temane/Pande/Inhassoro area). On the basis of these requirements, the project sponsors have opted to use gas turbine technology, with a minimum of 300 MW being CCGT plant (which would be operating substantially as base load capacity), with the remaining part of the overall plant capacity of up to 100 MW based on open cycle gas turbines (OCGT). The CTT power generation plant will also include ancillary facilities, such as a short gas pipeline (up to 2 km in length) to connect the plant with the gas connection point, water supply pipeline to one or more water borehole(s), paved access road to the CTT site and gravel maintenance roads within the transmission line and pipeline servitudes, and temporary beach landing structures at Inhassoro area for delivery of heavy and oversized equipment to build the power plant. Natural gas for the power plant will be supplied from the nearby Temane and Inhassoro gas fields, developed by Sasol Petroleum Mozambique Limitada (”SPM”) and Empresa Nacional de Hidrocarbonetos E.P. (“ENH”) (Gas Sellers), pursuant to a Production Sharing Agreement dated 26 October 2000 (the “PSA”) between the Gas Sellers and the Government of the Republic of Mozambique (GoM).

- **Component 3:** Technical assistance and capacity building: This component will include financing for (a) project management expenses, owner’s engineer contract, assistance with contract management and procurement, and supervision of health and safety aspects during construction; and (b) implementation of environmental and social safeguards measures, as well as mitigation of GBV risks and implementation of GBV action plan.

E. Implementation
Institutional and Implementation Arrangements

22. The project will be implemented over a 5-year period. SNTE, a wholly-owned subsidiary of EDM, will implement the TTP (Component 1), and the corresponding elements of Technical Assistance (Component 3). The CTT power plant (Component 2) will be implemented by CTT Project Company, as a private sector project. EDM and MIREME will implement their respective elements of Technical Assistance (Component 3).

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

TTP from Vilanculos to the Maputo will pass mostly through undifferentiated woodland, miombo woodland natural habitat with a very low population density, agricultural land and semi-urban areas of low biodiversity value. The line passes near a critical habitat area of miombo hardwood forest, but will not cross it. The selected line corridor does not pass through conservation areas, important wetlands or Important Bird Areas (IBAs). No schools or health centers are located within the right of way (RoW) of the transmission line. CTT power plant is located in the District of Inhassoro, in the northern part of the Inhambane Province, about 30 km southwest of the town of Inhassoro, approximately 20 km inland of the coastline. The vegetation in the project area consists mainly of a mixture of tall and short woodland and bush with grass areas and river habitat alongside the Govuro River. Most of the CTT plant, as well as the 25-km transmission line connecting the plant to the TTP project at Vilanculos substation are located on land that has been transformed through human activity with limited natural habitat that will be disturbed by the project. Heavy equipment for the power plant and transmission substations at Temane and Vilanculos will need to be transported from the countries of origin to Mozambique by ships, then off-loaded to barges, which will bring the equipment to a landing site near Inhassoro, where the equipment will be loaded on trucks and transported to the power plant site by roads. The CTT project sponsors have confirmed that there are technically feasible arrangement to execute the marine transport without affecting the Bazaruto Archipelago National Park (BANP), located near Inhassoro, which involve offloading equipment from ships to barges at port of Beira. The final selection of the marine transport route and barge landing site will be done through a study that will assess environmental and social impact and design appropriate mitigation measures. The study will be undertaken and completed before IDA Guarantee for the CTT power plant is signed (expected in late 2019) and well before construction starts (in early 2020). The study and its findings and recommendations will need to be acceptable to the World Bank.

G. Environmental and Social Safeguards Specialists on the Team

Robert A. Robelus, Environmental Specialist
Clarisse Torrens Borges Dall Acqua, Environmental Specialist
Paulo Jorge Temba Sithoe, Environmental Specialist
Maria Do Socorro Alves Da Cunha, Social Specialist
<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
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| Environmental Assessment OP/BP 4.01 | Yes | Component 1 – Temane Transmission Project (TTP) and Component 3 - Technical assistance and capacity building are both subject to OP/BPs Safeguards Policies.  
Component 2 – Central Termica Temane (CTT) is being processed under World Bank Performance Standards – OP/BP 4.03, as further described in annexed ESRS.  
The Project is classified as Category A due to the nature and scale of the project Component 1 - Temane Transmission Project (TTP -560 km transmission line) and Component 2 - Guarantee for Central Termica Temane (CTT - generation plan). This policy applies to the public sector lead Component 1 due to the magnitude of the environmental and social risks during construction, including workers as well as community health and safety, and potential cumulative and wider area impacts or longer term environmental and social impacts. A full Environmental and Social Impact Assessment (ESIA) has been prepared for the TTP, including assessment of potential social impacts, aiming to adequately identify and manage potential environmental and social issues. The ESIA has been prepared by independent consultants different from those involved in the feasibility study and project design.  
Special care will be taken with regard to Health & Safety aspects during construction and operation of both components 1. The TTP ESIA addresses in detail the responsibilities with regard to the implementation of the ESMPs and Health & Safety Plans to be prepared and implemented by the Contractors, and the supervision responsibilities of the Supervising Engineer and the SNTE. The Contractors are responsible to prepare and... |
implement site specific Construction ESMP (C-ESMP) in compliance with the project ESMP and Health & Safety Plans and employ qualified personnel with international experience in these fields. The Owner’s Engineer will be required to supervise the preparation and implementation of the C-ESMP and H&S Plans, and for this purpose will also employ qualified personnel with international experience in these fields. The ESIA has been subject to a sound public participation process and disclosed both in-country on March 18, 2019 and in the World Bank website on February 22, 2019.

Resettlement of households is expected (see OP 4.12 below). Furthermore, the magnitude of the project requires detailed social assessment and management to address labor and population influx, construction and operation impacts (including traffic and construction related) on neighboring populations, loss of land for agricultural production, and resource gathering, impacts on cultural heritage and related stakeholder engagement. Based on the results of the ESIA, including cumulative impacts, a set of social impact management instruments have been developed as part of the ESMP and will be implemented.

The following plans have been prepared for the TTP: RAP, labor influx management plan, a code of conduct (including standards and sanctions against SEA/GBV, sexual abuse and exploitation of minors discrimination, child labor, and forced labor, etc.), detailed ESMP including detailed H&S, emergency management plan, stakeholder engagement plan, grievance redress mechanism, local labor hiring plan, SEA/GBV prevention and response framework, cultural heritage management plan, including a chance find procedure (see OP 4.11 below). These plans cover all activities and facilities that are part of the projects related to the transmission line. A more detailed SEA/GBV prevention and response plan is being developed and will be in place before construction starts. ESHS management plans and guidelines for the operations phase have also been prepared and will be updated, implemented and
reported upon as set forth in the Project ESAP (Annex 1).

Obtaining of the required permits with regard to water use, waste disposal, etc. is the responsibility of the Contractor. Any permits to be obtained for construction, monitoring and updating licenses and permits are responsibility of the Owner’s Engineer. These issues are addressed in the TTP ESMP.

Component 3: Technical Assistance will include: (a) implementation support for TTP (and associated capacity building for SNTE, the implementing agency for TTP, a subsidiary of EDM); (b) Capacity building and selected analytical studies for EDM (such as update of investment master plan; etc.); and, (c) TA for the ministry of energy (MIREME) for their capacity building and selected analytical studies (e.g., competitive selection of private investors; regulatory capacity; etc.). Terms of reference for E&S capacity building are being closely coordinated with the bank and a new ESMS - Environmental and Social Management System will be implemented as part of the Borrower’s E&S commitment.

ESIA/ESMP includes a detailed ESHS Action Plan which sets forth the timing and responsibilities for implementation of, and reporting on, the required ESHS mitigation and management measures.

Impacts of component 2 are covered under OP4.03 Performance Standards for Private Sector Activities OP/BP 4.03

This policy applies to Component 2 of the Project - construction of privately-funded Central Termica Temane (CTT). The World Bank Performance Standards apply, and an Environmental and Social Review Summary (ESRS) was prepared by the Safeguards Bank team and disclosed on April 19, 2019 (attached as Annex 2).

The application of this policy seeks to ensure that all activities to be financed under the TTP take into account the conservation of biodiversity, as well as the numerous environmental services and products that natural habitats provide to human society. The TTP will cross areas of natural habitats, but will not
affect critical natural habitat areas. According to the proposed transmission line corridor (including substations proposed sites) and the environmental assessment studies undertaken, no established conservation area will be directly affected (these are located far away). SNTE and EDM will undertake monitoring and coordination with local authorities to discourage deforestation as a result of greater access to areas crossed by the transmission corridor.

The site-specific impacts identified include potential impact on miombo forest, a critical natural habitat, and the habitat fragmentation and impact on wildlife. Potential impact on miombo forest is avoided by rerouting the line to avoid direct impacts and habitat fragmentation and allowing continuous movement and connectivity of wildlife. Potential impact on miombo woodland will be mitigated by preparing and implementing a Biodiversity Management Program (BMP) to manage indirect impacts on miombo forest, miombo woodland and wildlife.

Impacts on bird and bat mortality will be mitigated through specific design measures on the transmission line to avoid the mortality of bird and bat species due to collisions and electrocution with high voltage power lines are also considered, through the adoption of adequate engineering solutions, such as: tower designs, preferring self-supporting suspension towers to suspension guyed V-towers, especially in natural habitats, near rivers, wetlands and waterbodies; use exclusively towers with horizontal track frames (self-supporting suspension tower, suspension guyed V-tower and self-supporting tension Y-tower near sensitive areas; the use of BFD (Bird Flight Diverters) will be used to signal the line. Red and white BFD with a 35cm diameter will be used. BFD’s will be installed in the line segments near wetlands, rivers and waterbodies; isolation of all conductors, to avoid electrocution; ensure the distance between cables, especially in tension towers, is greater than 3 m, to avoid electrocution; and install anti-landing devices in towers close to wetlands, river and waterbodies, to avoid storks nesting.
The ESMP also includes a Biodiversity Management Program (BMP), with monitoring and management actions for indirect biodiversity impacts, on vegetation (natural habitat and potential impacts on critical natural habitat) and wildlife, including birds. The BMP will include measures to continuously evaluate the Project’s impacts and the efficacy of the proposed mitigation. SNTE and EDM will prepare an overall Biodiversity Management Program (BMP), as described in the ESIA, according to Terms of reference agreed upon with the Bank and will put it into effect before the onset of construction activities. The BMP will establish baseline values for the managed/monitored activities and areas, aspects and species of interest, implementation schedule, and responsibility for carrying out the monitoring and corrective actions, supervision responsibilities, budget estimates, and source of funding.

<table>
<thead>
<tr>
<th>Forests OP/BP 4.36</th>
<th>Yes</th>
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<tbody>
<tr>
<td>The 560-km Temane transmission line crosses miombo woodland areas, therefore this policy is triggered in order to adequately safeguard miombo woodland values.</td>
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<tr>
<td>Some of the site-specific impacts include an eventual indirect impact on miombo forest, a critical natural habitat, habitat fragmentation, and impact on wildlife. Direct impacts on miombo forest are avoided incorporating a shift in the corridor in the design. Additional measures to avoid or reduce habitat fragmentation, allow continuous movement and connectivity of wildlife, and avoid bird and bat collision will be included in the BMP. Mitigation measures to protect this area will involve the local administrations and SNTE and EDM and will be further detailed in the BMP</td>
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<tr>
<th>Pest Management OP 4.09</th>
<th>No</th>
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<tbody>
<tr>
<td>Herbicides or other kind of pesticides will not be used for vegetation clearance or weed control, either during construction or in operational phases of the project.</td>
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<tr>
<th>Physical Cultural Resources OP/BP 4.11</th>
<th>Yes</th>
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<tbody>
<tr>
<td>The policy is triggered based of the likelihood of encountering physical cultural resources during project implementation, since project activities will involve civil works and movements of earth in areas that may contain sites deemed physical cultural resources.</td>
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</tbody>
</table>
resources by the communities living in such areas (e.g. graves, holy sites such as sacred groves, sacred forests, etc.). The ESMP includes procedures to address any eventual physical cultural resource findings to be included in all contractor contracts to address OP/BP 4.11 basic requirements to adequately handle unexpected physical cultural resources finds. Community concerns regarding cultural heritage and community cultural sites have been addressed in the ESMP and Stakeholder Engagement Plan (SEP). Gravesites and religious buildings identified will be managed and relocated in agreement with the communities/families affected and with support of specialized service providers. The necessary budget and activities are included in the RAP.

| Indigenous Peoples OP/BP 4.10 | No | There are no indigenous people in the TTP area as defined by OP/BP 4.10. |
| Involuntary Resettlement OP/BP 4.12 | Yes | To ensure proper due diligence and management of land acquisition and livelihood impacts, the Borrower has prepared a Resettlement Action Plan for the TL to deal adequately with issues of land acquisition and compensation, the physical displacement of people and/or impacts on livelihoods. Since the locations of camps, access roads or other ancillary facilities are not known at the time of appraisal, an Ancillary Facilities Resettlement Framework (AFRF) has been prepared and included as an Annex to the TTP RAP to enable the preparation of the respective site-specific RAPs (if needed) once the sites are identified. The AFRF Annex includes specific provisions to guide the Borrower in screening and site selection, and in the preparation and implementation of site specific prior to any construction works. The TTP component of the project involves a 100 meter wide land corridor partly along existing right-of-ways, although there will be sections which will require acquisition of new rights-of-ways, which will necessitate involuntary land acquisition resulting in loss of assets, and/or means of livelihoods or resources, and in involuntary resettlement of |
people. An estimated 898 social units are expected to be affected as a result of the TTP. For an estimated 410 of these, this includes being permanently physically resettled from their primary house. All resettlement parcels will be within the same general area where PAPs currently live and as close as possible to their original location. In rural areas replacement residential plots will be within 500 meters of current location. In addition, 167 units (103 houses under construction, 41 agricultural fields, 11 businesses, 9 small church buildings and 3 public infrastructures) will be permanently economically resettled and 307 units (agricultural fields) will be temporarily economically resettled. The remaining units are 12 family graves and two community cemeteries which will be wither protected in place or relocated as agreed with the affected families/communities. Other affected assets include trees, crops and other livelihood assets.

Mozambican Land Law establishes a partial protection zone (PPZ) of 100 meters (50 m on each side) of every transmission line, in which land use rights (DUATs) cannot be obtain and land use is subject to special permits. However, the outer 25m on either side are not needed for safety or technical reasons and reducing the ROW would reduce impacts on PAPs and also be consistent with current practice in Mozambique. EDM is working with MITADER and others to obtain a legal reduction of the PPZ/ROW. The RAP was prepared for the 100 m PPZ/ROW so that consultations, budget, resources cover the totality of the potential affected areas. If the reduction of the PPZ/ROW is legally granted, the RAP will be updated with Bank approval to cover reduced area. Additionally, affected people who only have agricultural plots within the PPZ (no residences or permanent structures) will be able to opt to maintain their activities within the PPZ under an agreement with EDM which provides them a special use license as established in the Land Law and assures them that if they are displaced or experience further land use restriction in the future, EDM will resettle and compensate them. Consultations indicate that affected persons in this situation will
opt to remain in the PPZ. They will be compensated for any temporary disruption of their activities.

The RAP for the TTP transmission line was duly consulted upon, cleared by the Bank and appropriately disclosed both in-country, and in the World Bank website on May 4, 2019. Any site specific RAPs prepared for specific ancillary sites during Project implementation under the AFRF Annex, will also be consulted upon, cleared by the Bank and disclosed prior to their implementation.

| Safety of Dams OP/BP 4.37 | No | There are no new or existing dams involved in the proposed project. |
| Projects on International Waterways OP/BP 7.50 | No | The Temane-Maputo transmission line will cross Limpopo River. However it is not expected that the project will create any impacts affecting the quality, quantity and integrity of this international waterway. |
| Projects in Disputed Areas OP/BP 7.60 | No | This policy is not triggered. The area in which the Project will be implemented is not known to include any disputed areas. |

### KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

#### A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The Temane Regional Electricity Project (TREP) will implement a first phase of the STE Backbone Project, enabling the integration of the country’s gas resources in domestic and regional markets, by the implementation of three components: Two large scale infrastructure interventions: Component 1 – Temane Transmission Project (TTP) and Component 2 – Central Térmica Temane (CTT) and technical assistance. Component 3 - Technical Assistance activities for project implementation support, capacity strengthening, and policy and regulatory analysis. The magnitude of the investment components of the project (TTP and CTT) requires detailed assessment and management to address environmental impacts, labor and population influx, construction and operation impacts on neighboring populations, loss of land for housing and agricultural production, mitigation of impacts on natural resources and ecological services related to livelihoods, management of any risks and impacts related to cultural assets, and related stakeholder engagement.

The TTP (Component 1) includes construction of approximately 560 km of 400-kV power transmission line between Vilanculos and Maputo, passing through Chibuto and Matalane. The line will connect to the CTT plant located at Temane through a 25-km Vilanculos-Temane transmission line, financed under the CTT project component. At the Maputo substation, the TTP line will connect to the existing transmission infrastructure to deliver power to the Maputo transmission and distribution network (i.e., to the Mozambique’s Southern Subsystem) and to the Southern
African Power Pool network through the transmission system of Motraco. The TTP line has been designed as a single circuit. The substations in Vilanculos, Chibuto and Matalane will be constructed to allow for future connections to the transmission network at 110 kV, 275 kV and 66 kV, respectively, facilitating large-scale electrification and lower-voltage integration of the country’s transmission system. The main environmental impacts and risks associated to Component 1 are: (i) during both construction and operation phases of Transmission Line, some biodiversity impacts on vegetation (natural habitat and potential impacts on critical natural habitat – miombo hardwood forests) and wildlife; and, (ii) health and safety conditions for electric power transmission, during construction and operation phases (labor conditions close to live power lines, working at height and electric and magnetic fields, and eventual exposure to chemicals); as well as impacts and risks associated to the ancillary facilities, such as access roads for the TL and substations, workers camps and borrow pits.

The main negative impacts of the Project are mostly associated with the clearance and establishment of the Right-of-Way (RoW). The project's negative impacts with medium or greater residual significance include: (i) the direct loss, degradation and fragmentation of important habitats and vegetation (mostly woodland habitats) caused by vegetation clearance in the RoW, particularly in the northern half of the alignment, closer to Vilanculos, where unfragmented large areas of woodland habitats still exist; (ii) the indirect additional degradation of natural habitats (mostly woodland habitats), along the RoW during the operational phase, in particular due to the expanse of agriculture and natural resources exploitation along the RoW, given the increased ease of access to presently inaccessible areas. This is again more relevant to the northern half of the alignment, as currently these areas are mostly inaccessible by local populations; (iii) the direct resettlement impacts caused by the establishment of the RoW, generating the need to relocate 415 families and compensate for affected built structures, farm lands and fruit trees; and, (iv) increased mortality of birds (particularly birds with large wing spans), due to collisions and electrocution with the line and towers.

With regards to positive impacts, two significant impacts were identified, both related to the socioeconomic environment, as follows: (i) the transfer of know-how and skills to the unskilled local workers that will be employed by the Project will result in long-term benefits for these families, and for the local workforce in general. This was assessed as a medium significance residual positive impact; (ii) the increased power supply created by the STE Project will have a positive impact on the local and regional economy. Currently, the power supply in some areas is poor or nonexistent. The STE Project will allow for the increase of power supply in the southern region of Mozambique and will enable a better distribution of power in areas which are currently not electrified. The development of the STE Project could also create business opportunities in the industrial sector, as developers will know that the STE Project will both increase the quantity and robustness of power supply, enabling a larger number of viable industrial projects. All these elements of economic stimulation will in turn result in the creation of jobs. This indirect effect, which is indeed the main goal of the Project, was assessed as a high significance residual positive impact.


The main social impacts and risks are related, directly or indirectly, to the changes to land use in the construction sites, the clearance of the RoW and the construction activities themselves, which require the mobilization of a relatively large number of workers and the operation of heavy machinery and equipment along the linear construction area. In the operation phase, most transmission line impacts are associated with the presence of the overhead line
itself, as well as with the maintenance of the RoW and the greater access to communities and natural areas. Key social impacts and risks of the TTP include: (i) direct and indirect degradation of natural habitats (mostly woodland habitats), along the RoW during the construction and operational phase given the increased ease of access (mainly in the northern half of the alignment). This presents social impacts related to population influx and deterioration of the natural resource base on which local communities rely for their livelihoods; (ii) the direct resettlement impacts caused by the establishment of the RoW, including physically relocating approximately 410 families, economically resettling (permanently or temporarily) an additional 474 social units (103 houses under construction, 359 agricultural fields, 11 businesses, 9 small church buildings and 3 public infrastructures), and relocating or protecting and securing access to 12 family grave sites and two community cemeteries. Other livelihood assets including fruit trees and crops and other livelihood impacts will also occur; (iii) the need to manage expectations and worker and community health and safety with respect to the project labor force, including ensuring local hiring, and addressing community and workers health and safety issues related to, among others, influx of workers and followers, such as exposure to and spread of infectious and communicable diseases, and incidence of SEA/GBV, and other social pathologies, as well as risks related to traffic and heavy equipment movement and use of security personnel.

Component 2 - CTT includes construction of a 400-MW gas-fired power plant at Temane (near Vilanculos), and a 25-km, double circuit, 400-kV transmission line from the CTT plant at Temane site to the 400-kV substation at Vilanculos, linking the power plant to the TTP Transmission line project and, through it, to the national transmission grid. All ancillary facilities (beach landing for transport equipment, jetty and offshore anchoring points and barge routes, access roads and bridges, transmission lines, pipelines, borrow pits and quarries, waste disposal sites, worker camps, equipment staging areas, etc.) have been treated as part of the project. The environmental and social impacts and risks associated to Component 2 are discussed in the ESRS.

Component 3. Technical Assistance (TA): The TA activities that affect project development or policies, plans, institutional reform or capacity building related to ESHS matters will include TOR consistent with the Bank’s safeguard policies, but will otherwise have no significant downstream environmental and social impacts.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Regarding Component 1, TTP Transmission Line Project, the selected project corridor will pass mostly through agricultural land or bushland and semi-urban areas of low biodiversity value. Some of the site-specific impacts include an eventual impact on miombo forest, a critical natural habitat, habitat fragmentation and impact on wildlife. The mitigation measures include avoiding miombo forest and miombo woodland, avoiding or reducing habitat fragmentation and allowing continuous movement and connectivity of wildlife and avoiding bird and bat collisions. The project corridor does not cross any conservation areas, including Important Bird Areas (IBA). A critical natural habitat miombo forest was avoided by shifting the transmission line corridor. In terms of natural habitats or forests potentially affected by the TTP, none is expected to have critical or high conservation value (such as mangroves, wetlands, unique forests, etc.). The proposed transmission line impacts communities and households along the route, as the line route and substations cause some loss of land and assets or adversely affect access to land and other resources, including possibly access to natural resources.

With respect to cumulative impacts, known existing and future projects and human development trends, could have a cumulative effect with those associated with the STE Project, which were evaluated. The main potentially affected valued environmental components (VECs) include flora and vegetation, local communities and avifauna. The key relevant cumulative effect is the synergistic effect of loss and degradation of natural habitats due to the expansion of urban areas, and of agriculture and natural resources exploitation, as the establishment of the RoW will enable
population access to woodland areas which currently are difficult to access (as no roads exist within these large unfragmented areas of woodland). This is particularly relevant in the northern part of the STE project’s alignment, between Chibuto and Vilanculos, as the STE Project enables the influx of the population, with potentially significant cumulative effect in the long term.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

For Component 1 (TTP), the ESIA prepared by the Borrower and reviewed by the Bank, was prepared taking into account previous analysis and feasibility studies undertaken by EdM in the past 10 years on the broader transmission system development. The studies also examined the relative merits of gas transport vs. electricity transmission. Several possible transmission alternatives were investigated, both from an engineering and environmental and social point of view, in order to identify the best possible route for the transmission line. The current alignment of the Vilanculos – Maputo transmission line is thus the result of a long iterative design process, which also examined different alternatives of evacuating CTT electricity (options involving the northern or the southern subsystem, various configurations of the line, several options for routing in certain sections, etc.), selecting the proposed transmission line route Maputo-Matalane-Chibuto-Vilanculos-Temane as optimal. The studies confirmed the technical viability of the project and informed the technical design of the TTP transmission lines and substations.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

ESIA & RAP studies for the Transmission Line Project (TTP) and ESIA and RPF for CTT were prepared by appraisal in accordance with World Bank Safeguard policies and ESHS guidelines. EDM has prepared with the support of independent consultants, a full ESIA/ESMP for the TTP in accordance with World Bank Safeguard policies and ESHS guidelines. The ESIA/ESMP have been consulted upon and were cleared by the Bank and disclosed in the Bank’s Website on February 22nd, 2019 and by EDM on March 18, 2019. The Project Environmental and Social Action Plan (ESAP) and all other plans and method statements further detailing the mitigation measures, the timeline for their implementation and the respective reporting requirements are included in the TTP ESMP. The RAP was cleared by the Bank and disclosed on May 3, 2019.

The ESIA for TTP spells out the responsibilities for the preparation and implementation of the ESMP and the Health and Safety Plan. Specific Contractor ESMPs (C-ESMP) will be prepared and implemented by all main contractors by the Owners Engineer. The ESMP also provides for a Biodiversity Management Plan (to be finalized prior to start of construction as established in the Project ESAP), with monitoring and management actions for the biodiversity components are required, to continuously evaluate the Project’s impacts and the efficacy of the mitigation measures. EDM will prepare the Biodiversity Management Program (BMP) and obtain WB no-objection before the onset of construction activities, under Terms of Reference for which EDM will also need to obtain WB no-objection prior to initiating the preparation of the BMP. The BMP will establish baseline values for the managed/monitored activities, implementation schedule, and responsibility for carrying out the monitoring and corrective actions, supervision responsibilities, budget estimates, and source of funding. Mitigation measures were defined to avoid or minimize the predicted impacts, of which the more relevant include a minor realignment of the line, in order to avoid a patch of critical habitat (miombo forest), the development of a RAP and the adoption of control measures in the design of line and towers, to minimize bird collisions. The mitigation of the indirect impact (expansion of population along the RoW during the operational phase) will require coordinated effort by several government agencies, to avoid the establishment of settlements in more sensitive areas and to control human activities with the potential to impact on biodiversity, such as hunting, harvesting, farming, etc.

The ESMP for the TTP includes a Waste Management Plan, a Traffic Management Plan, an Influx Management Plan, a
Worker’s Camp Management Plan and others specific plans. The ESIA includes commitments by SNTE/EDM to engage specialists for preparation of a specific plans to be completed and reviewed by the World Bank before construction. The Owner’s Engineer will be required to supervise the preparation and implementation of the Construction ESMPs and Health and Safety Plan and for this purpose will also employ qualified personnel with international experience in these fields. All Contractor employees will be required to sign a Code of Conduct setting out proper behavior expectations for employees including prohibitions and sanctions against sex with minors (<18 years of age), Gender Based Violence (GBV) and discrimination, etc. The contractors will report monthly to the Supervising Engineer regarding Environmental, Social and Health and Safety issues. The Supervising Engineer will report monthly to STNE on these aspects, while STNE will report every 6 months to the donors. STNE will have the overall responsibility for the adequate implementation of the CESMPs and H&S Plans.

All ancillary facilities for both components have been treated as part of the project for purposes of the ESIA, mapped (where possible), evaluated and included in the ESMPs and related plans and method statements. Specific provisions for site selection, management and decommissioning of ancillary facilities (access roads, borrow pits, disposal areas, camps, etc.) have been included in the ESMP and in the RAP.

SNTE/EDM Capacity.

As part of the TREP, additional training is envisaged both for EDM and SNTE staff, customized to the project’s specific requirements. EDM is hiring a team of consultants specialized in ESHS to design an Environmental and Social Management System (ESMS) for EDM/SNTE and oversee its implementation. The strengthening of the EDM’s Environmental and Social Unit (ESU) and implementation of the ESMS will ensure the availability of qualified safeguards and health and safety specialists and their capacity to handle the safeguards instruments that will guide the implementation of the project in full compliance with the World Bank Safeguards policies, applicable Environmental, Health and Safety Guidelines and the applicable Mozambique environmental and social regulations.

In addition, engineering/safeguards/health and safety supervision and monitoring and evaluation consultants will be hired to support SNTE in the implementation of the safeguards instruments, ESMPs and Health & Safety Plans and the GBV/SEA prevention and response action plan. The ESMPs will include specific requirements for contractors, including, among others, the preparation and enforcement of a Labor Management Plan, Influx Management Plan, Camp Management Plan, Grievance Redress Mechanism(s) for PAPs and for workers, Code of Conduct (including standards and sanctions against SEA/GBV, sexual abuse/exploitation of minors, child labor, forced labor, and discrimination based on gender, race, religion, etc.) and community and workers health and safety. The TTP Project ESAP (included in the TTP ESMP) provides for updating the plans and hiring the personnel in accordance with relevant project milestones.

For details on actions taken with respect to the CTT, please refer to the ESRS.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Key project stakeholders include provincial, district and local authorities, the local TTP labor force, and local communities including persons, households and groups potentially directly affected by the TTP.

A Public Participation Process (PPP) was implemented to support the development of the TTP’s ESIA. to (i) ensure the early and informed consultation of stakeholders at key stages of the ESIA, (ii) improve the results and increase the
credibility of the process, (iii) ensure compliance with national and international requirements for stakeholder engagement and public consultation during ESIA studies for major projects, and (iv) help to consolidate the efforts made by EDM to establish lasting relationships with affected communities and other stakeholders. Consultation was undertaken in two phases: early in the ESIA process (in the scoping phase; Environmental Pre-Feasibility and Scope Definition Study - EPDA Phase in May 2017) and again in the Environmental Impact Study (EIS) Phase-November 2018. Each time: documents were available for a 30-day period (15 days prior to and 15 days post public meetings); Public meetings and other stakeholder engagement activities were carried out; and issues raised in the public meetings were reflected in the reports drafted as part of the ESIA process. Chapter 8 of the ESIA (Volume II) includes a comment / response register that details all comments and suggestions received during the PPP and the way they were considered and/or addressed in the ESIA process. Most comments related to the resettlement impacts and process, employment and labor influx and were addressed by reference to the proposed mitigation measures and management plans. Questions regarding access to electricity by the traversed community were redirected to EDM and will be considered in future engagement including the proposed Community Development Plan. The TTP ESMP includes a Communications Framework which requires SNTE/EDM to develop and implement a Stakeholder’s Engagement Plan during Project construction and operation. For details on the consultation process for the CTT, please refer to the ESRS.

B. Disclosure Requirements

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<th>Environmental Assessment/Audit/Management Plan/Other</th>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
<th>For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors</th>
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<td>22-Feb-2019</td>
<td>19-Apr-2019</td>
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"In country" Disclosure
Mozambique
18-Mar-2019

Comments

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<th>Resettlement Action Plan/Framework/Policy Process</th>
<th>Date of receipt by the Bank</th>
<th>Date of submission for disclosure</th>
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<td>06-May-2019</td>
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"In country" Disclosure
Mozambique
07-May-2019

Comments
C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

**OP/BP/GP 4.01 - Environment Assessment**

Does the project require a stand-alone EA (including EMP) report?
Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?
Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?
Yes

**OP/BP 4.04 - Natural Habitats**

Would the project result in any significant conversion or degradation of critical natural habitats?
No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?
Yes

**OP/BP 4.11 - Physical Cultural Resources**

Does the EA include adequate measures related to cultural property?
Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?
Yes

**OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?
Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
Yes

**OP/BP 4.36 - Forests**

Has the sector-wide analysis of policy and institutional issues and constraints been carried out?
NA

Does the project design include satisfactory measures to overcome these constraints?
Yes

Does the project finance commercial harvesting, and if so, does it include provisions for certification system?
No
The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank for disclosure?
Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes

Have costs related to safeguard policy measures been included in the project cost?
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

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APPROVAL

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