Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 28-May-2020 | Report No: PIDC29133

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Africa	P173763		Second Djibouti-Ethiopia Power System Interconnection Project (P173763)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
AFRICA	Sep 21, 2020	Jan 20, 2021	Energy & Extractives
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Republic of Djibouti - Ministry of Economy and Finance	Electricité de Djibouti	

Proposed Development Objective(s)

The Project Development Objective (PDO) is to enhance reliable and affordable electricity trade between Ethiopia and Djibouti.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	75.00
Total Financing	75.00
of which IBRD/IDA	45.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	45.00
IDA Credit	45.00

Non-World Bank Group Financing

Other Sources	30.00
African Development Bank	30.00

Environmental and Social Risk Classification	Concept Review Decision
Substantial	Track I-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Over the last two decades, Djibouti has achieved steady economic growth and improved social outcomes, largely by exploiting its geostrategic location**. Economic growth has accelerated in recent years, with real GDP growing at more than 7 percent a year on average in 2014-2018, thanks to large public investments in capital-intensive infrastructure to exploit the country's geostrategic location, against the backdrop of rapid debt accumulation. However, growth has not been inclusive and has had limited success in eradicating poverty and unemployment. Poverty remains widespread, with one out of six people still living in extreme poverty, and the rates of unemployment and under-employment remain high, at 47 percent in 2017[1]. Over the medium-term, economic performance is expected to continue to be solid with the Government's strategic positioning of the country as a regional trade and logistics hub within the broader Horn of Africa. World Bank economists currently forecast growth during 2019-2025 to average more than 8 percent per year.

2. **Djibouti is the smallest state and one of the youngest nations in the Horn of Africa.** Located at the heart of the Horn of Africa, with access to the geostrategic Strait of Aden, Djibouti has sought regional and global strategic partnerships to advance its development agenda. This included developing major port and transport infrastructure to service the fast-increasing trade of its large landlocked neighbor, Ethiopia, but also positioning the economy as a logistics hub with a broader regional reach. A recent Addis Ababa-Djibouti Railway was inaugurated on January 1, 2018, providing landlocked Ethiopia with access to the sea, linking Ethiopia's capital of Addis Ababa with Djibouti and its Port of Doraleh. Djibouti is also playing an active role in the ongoing Horn of Africa (HoA) Initiative.

3. **Five Horn of Africa countries (Djibouti, Eritrea, Ethiopia, Kenya and Somalia) have launched the HoA Initiative to forge closer economic ties, building on the improving political climate in the sub-region.** The initiative was formalized on October 18, 2019 on the sidelines of the Annual Meetings. The countries agreed on priority projects and programs that will constitute the initiative (requiring financing of up to $15 billion), which is being developed by the countries with support from the African Development Bank, the European Union and the World Bank. The vision of the HoA Initiative is: "To work together to build a prosperous, integrated and peaceful Horn of Africa". HoA countries are strongly committed to further deepening economic integration under four priority pillars: (Pillar 1) improving regional infrastructure connectivity (chiefly energy, transport, and ICT); (Pillar 2) promoting trade and economic integration; (Pillar 3) building resilience; and (Pillar 4) strengthening human capital development. The HoA Initiative involves annual meetings/ fora with an annual rotating Chair (Djibouti having the Chair for Year 2020). The timing of this

[1] Ibid.

initiative follows the 2018 peace accord between Eritrea and Ethiopia, and strong economic growth rates witnessed by HoA member countries[2].

4. **The HoA Initiative gives importance to economic corridors as a way of increasing trade, economic diversification and specialization and generating robust economic activity along the corridors.** The economic corridors under Pillar 1 of the HoA Initiative are closely aligned with trade and economic integration priorities of Pillar 2 in order to deliver economic transformation and creation of jobs. The economic corridors under Pillar 1 of the HoA Initiative are closely aligned with trade and economic integration priorities of Pillar 2 in order to deliver economic transformation and creation of jobs. The economic corridor program of the HoA Initiative is expected to provide strong regional economic development benefits, namely: (i) regional spillover and win wins; (ii) linkages with global trade; (iii) inclusion of complementary, transformative interventions along the corridor; and (iv) increased role of private financing and PPP structures.

5. **In addition to deeper integration with the HoA, the Government of Djibouti[3] is implementing an ambitious domestic long-term strategy to spur economic growth, create jobs, and reduce poverty: 'Vision Djibouti 2035'.** 'Stratégie de Croissance Accélérée et de la Promotion de l'Emploi', SCAPE 2015-2019, lay out the central goals and challenges for Djibouti, namely, to achieve economic diversification, to enhance the governance and capacity of its public institutions, to develop its human capital, and to address risks to national unity and security. The objectives are to reduce unemployment to 10 percent, reduce extreme poverty by one-third, and provide access to basic services, such as energy and water to the entire population by 2035. The expansion of public sector investment in the modernization and strengthening of energy infrastructure and services is expected to be one of the key drivers for economic growth. The SCAPE 2015-2019 identifies gender as a cross-cutting issue. Specifically, women face challenges in accessing jobs, suffer from constraints on their mobility and on leading income-generating initiatives. According to the Djibouti Country Partnership Framework, gender inequalities in access to productive resources and economic opportunities still persist. Also, according to the Gender Data Portal (WB), female labor force participation rate is at 55 percent while the male one is at 71 percent.

6. **The Government of Djibouti (GoDJ), confronting the COVID-19 pandemic, has prepared a COVID-19 emergency preparedness and response plan for the recovery to the health and economic urgencies.** On March 18, 2020, the GoDJ confirmed its first case of COVID-19, and on March 19, entered a complete lockdown to join the global action to prevent the spread of the disease. The power utility is on the verge to face substantial fall in electricity demand and reduced revenue collection due to declining levels of employment and household income. At the same time, being heavily dependent on HFO for its domestic generation, the dramatic drop of oil prices currently witnessed in the market can alleviate to some extent the financial situation of EDD during this period of time. Investments in the energy sector can also play a key role in mitigating COVID-19 impacts by safeguarding access and continuity of electricity service to the critical facilities and to the affected population.

Sectoral and Institutional Context

7. **Vision Djibouti 2035 outlines the country's long-term development strategy.** A key ambition is for the country to transition towards a green growth path, with a goal of 100 percent renewable energy by 2035. Hydropower (from Ethiopia), solar, geothermal, and wind energy will be the basis for the new decade's supply-demand balance (see Figure 1 below on Djibouti's capacity mix - current and projected). HFO generators in Marabout, Boulaos and Jaban'as

[2] Africa's gross domestic product expanded by an estimated 3.5% last year, while Ethiopia reached 7.7%, Djibouti 5.6%, Kenya 5.9% and Eritrea 4.2%. Somalia was the exception at 2.9%.

[3] The Government is preparing a revised 5-year strategy, the SCAPE 2020-24, which will consolidate the efforts under its predecessor by focusing on three strategic pillars: inclusion of all Djiboutians, connectivity of Djibouti, and integration of Djibouti.

(now providing up to 100MW of peak energy supply) will be retired, and used as backup units in case of emergency. Gas will play the role of a transition fuel, with a dual fuel (gas/ HFO) 50 MW power plant now in construction in Damerjog. A first interconnection line with Ethiopia became operational in 2011, and its capacity (non-firm energy) was increased from 50 to 80 MW. A 60 MW wind project in Ghoubet (first IPP in the energy sector) with a MIGA guarantee will start operating in July 2021. A 30 MW Solar PV IPP project with battery storage is now being developed by private investors at in Grand Barra. On the demand side, the electricity consumption growth rate is estimated between 5 to 10 percent, driven by the country's economic development and a robust access program.

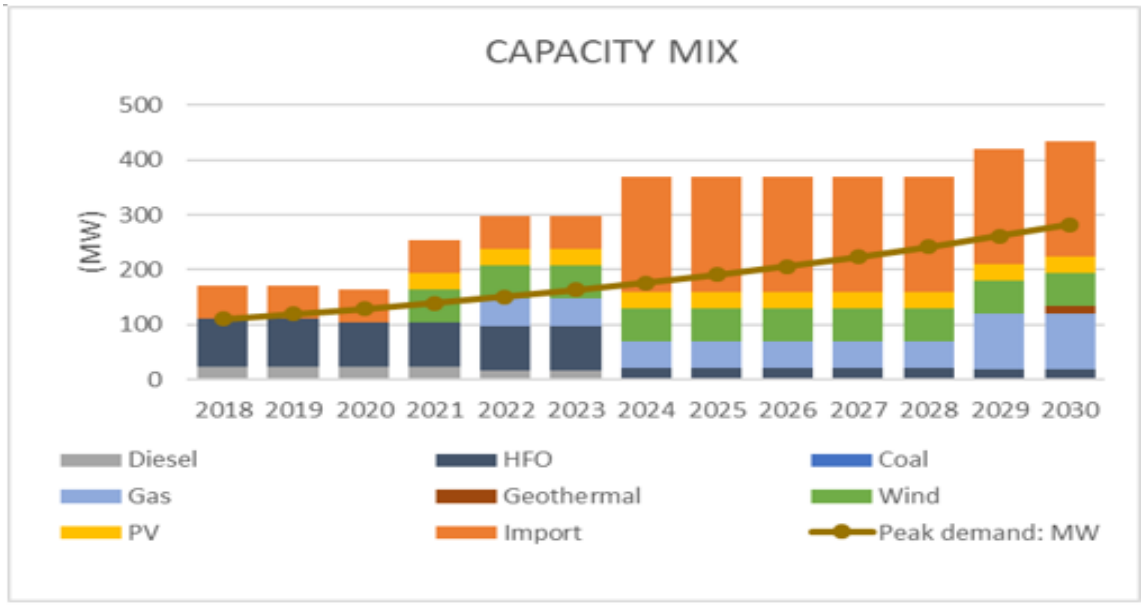


Figure 1: Djibouti's capacity mix (current and projected)

8. **Djibouti's energy sector is thus rapidly evolving from an enclaved country dependent on imported expensive petroleum products to an interconnected country with access to affordable foreign (hydro) and future domestic (mostly renewable) resources.** This sectoral transformation facilitates the scale-up of renewable energy development in Djibouti. During the past few years, US$14 billion have been invested in large infrastructure projects with the objective of becoming a regional commercial hub, centered on Djibouti's strategic location as a port city. The supply of affordable energy is required to sustain these investments and further economic progress. Despite being a non-firm supply, Djibouti currently imports affordable hydro-based power from Ethiopia, which covers 80 percent of the country's needs. To become more energy independent, the Government of Djibouti is spearheading the development of domestic renewable energy, i.e. solar, wind and geothermal, to meet its ambitious goals and transition towards a sustainable energy future.

9. **The electricity sector reflects the very specific situation of Djibouti: 70 percent of the population lives in Djibouti-city and 11 percent in regional cities**. That is the reason why there is almost no distribution grid beyond Djibouti-city and those major cities. Power plants (Boulaos and Marabout) are in Djibouti-city and consumers are directly connected to them. The electrification rate is about 50 percent, mainly because of the retail price of electricity (USD 0.15 / kWh for the poorest people and USD 0.31 / kWh for residential customers) and because of the lack of distribution facilities available where people live. The first interconnection with Ethiopia covers about 80 percent of the supply at a very low PPA[4] tariff (USD 0.06-0.07 / kWh). While HFO/ diesel generation represents about 20 percent of the supply, it

[4] The PPA tariff is a seasonal and time-of-use differentiated tariff:

accounts for about half of the total cost of generation for EDD. The difference between the overall supply cost and the retail tariff covers transmission and distribution, commercial activities, taxes and EDD's operational costs for maintenance and operation that are relatively high given the small size of the system and of the national electric utility.

10. **The electricity sector is centered on Djibouti's National Electricity Utility (*Electricité de Djibouti*- EDD), the state-owned utility which currently operates under the oversight of the Ministry of Energy and Natural Resources[5].** Historically, the activity has been a monopoly. EDD is the only operator. However, since 2015, Law 88-AN-15-7 opened the market for the generation side, EDD remaining the single buyer. EDD has about 55,000 clients and has the monopoly of transmission and distribution of electricity. Every year, in addition to the ongoing Bank-financed Sustainable Electrification Program (P158505) aiming to connect some 2,000 new clients per year, EDD connects between 1,500 and 2,000 new clients to the grid. Through the Sustainable Electrification Program, EDD is planning on extending their grid to the lagging interior regions of the country and connect the poorest populations of the country to the national grid, aiming to reach 70,000 customers by 2024. EDD offers its clients the possibility to pay the connection fee in installments over 12 months through the electricity bill. Currently, the first high-voltage interconnection with Ethiopia and EDD's thermal capacity are the main sources of power supply. The national utility has 18 generating units running on heavy fuel oil (HFO) in Boulaos and 6 diesel units in Marabout.

11. **Two main issues are characterizing the electricity sector in Djibouti: high retail tariff for residential customers[6] and lack of available power capacity for industrial customers.** In the MENA region, Djibouti has the highest residential tariffs[7], most likely for three reasons: 1- Djibouti does not have petroleum products to produce electricity, 2- there are almost no subsidies for electricity, 3- EDD's operating costs are quite high given the small size of the system. Many commercial and industrial companies[8] have their own generators either to back up EDD's supply in case of load shedding during peak loads or to provide the power they need to operate daily. As an example, the free port of Djibouti financed its own power supply but is not entitled to sell its surplus energy. Military bases from the U.S., France and China among others also self-generate but have shown an interest to interconnect to Djibouti's network.

Box 1: Ethiopia's surplus hydropower resources and power sector

Ethiopia, located in the Horn of Africa and the second most populous country in Sub-Saharan Africa (SSA), extends over an area of 1.1 million km2 with an estimated population of about 100 million in 2015. It is endowed with significant renewable energy resources, with massive potential for hydro, solar, wind, and geothermal power. It is one of the few countries in SSA, if not the world, which generates all its electricity from renewable resources. Currently, it is the second highest available generation capacity in that region, mostly based on hydropower (with surplus power), that has reached 4,256 MW. And, other large-scale hydropower projects (with capacity exceeding 6,000 MW) are under construction. Ethiopia is expected to have over 9,000 MW of installed capacity by 2020, which would provide sufficient energy (over 25,000 GWh) to supply the expected demand (see Figure 2 below, which includes domestic and export demand estimates).

In addition to the abundant electricity generation capacity, the grid network has also expanded substantially,

- USD 0.06 / kWh for wet season off peak hours and
- USD 0.07 / kWh for dry season off peak hours and wet season peak hours

[5] Loi n°88-AN-15-7éme « portant réglementation des activités des producteurs indépendants d'électricité ».

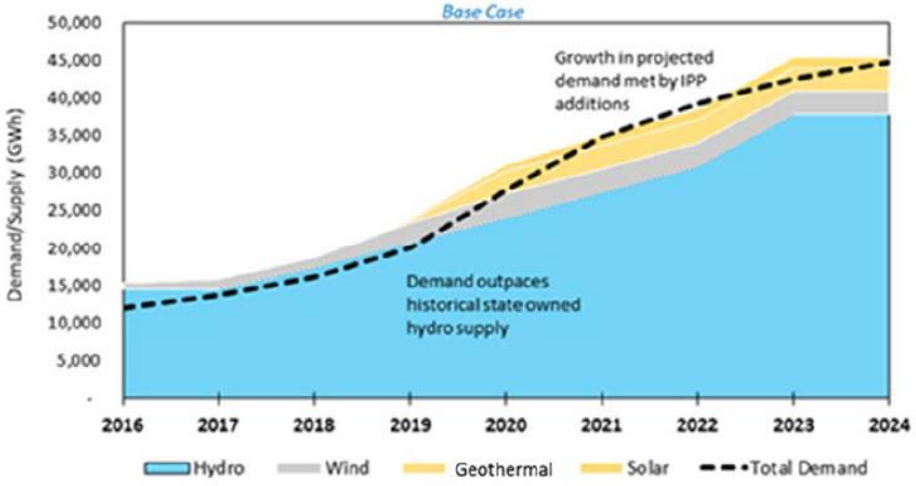
[6] Including connection cost.

[7] Price per kWh and connection fee.

[8] According to the WB Enterprise Surveys, while both firms – with a female, with a male as a top manager – experience electrical outages (with a slight difference), firms with a female top manager report higher losses due to electrical outages.

covering nearly 60 percent of towns and villages (representing about 80 percent of the population). In 2018, the on-grid access rate is estimated at about 20 percent, and the off-grid access rate at about 10 percent, leaving over 60 million people without access. Its ongoing power generation costs (based on low-cost, low-carbon sources) are fairly low (no recurrent fuel costs). The average domestic tariff rate is one of the lowest in Sub-Saharan Africa. Power exports are one of the main domestic electricity revenues. In the coming years, it is estimated that power exports to Sudan, Djibouti, Kenya, and Tanzania could boost the country's export revenue potential, estimated to be as much as US$600 million, per year, by the end of 2020.

Figure 2: Electricity Supply-Demand Balance in Ethiopia (2016–2024)



Source: World Bank estimates based on available information on progress of various projects.

Relationship to CPF

12. **The proposed Project directly contributes to Objective 1 of the proposed Country Partnership Framework for Djibouti (CPF) for the period 2020-2025.** Objective 1 aims at "reducing the cost of doing business". Djibouti's competitiveness is hindered by high input cost and low connectivity of utilities. For energy, the cost of electricity remains among the highest in the MENA and Sub-Saharan Africa regions, at 31 US cents per kWh for businesses. Supply shortages and power instability (enhanced by the lack of a second interconnection with Ethiopia closing the loop with the first) and inefficiency concerns further constrain energy provision and quality of service. The SCD and the Djibouti Vision 2035 identified energy as a paramount constraint to the economic development of the country and stressed the need to find sustainable solutions. The project has been identified as the least-cost option for power generation (about 7 US cents per kWh), increasing grid stability and the country's reserve margin needed to facilitate the deployment of renewables (and reduce VRE curtailment). It will reduce EDD's average electricity generation cost, which could be passed through to end-consumers. By providing a low-cost option for power delivery to EDD/ Djibouti (see the economic analysis section) and its residential and industrial customers, the project would contribute to the World Bank Group's twin goals of poverty elimination and shared prosperity. The project will contribute to the MFD agenda by stabilizing the grid and increasing the transfer capacity to allow IPPs under implementation (Ghoubet Wind) and under development (Grand Barra Solar PV) to optimize their production and competitiveness. Without this added transmission infrastructure, Djibouti would have greater difficulty balancing the grid, which would present higher costs and larger risks to the private sector wanting to invest in renewable energy.

13. **The proposed Project supports the Government of Djibouti's vision for development outlined in "Vision Djibouti 2035".** The Project contributes to the achievement of three key areas of the national vision document, namely (a) diversification and competitivity, (b) regional integration, and (c) transition towards a green growth path, with a goal of 100 percent renewable energy by 2035. The project will provide the lowest cost option for power delivery to EDD/ Djibouti, and contribute directly (through increased hydropower available to Djibouti), and indirectly (through increased grid reliability and reserve margin) to the development of renewables in the country.

14. **The proposed Project will further integrate Djibouti in the HoA and in the Eastern Africa Power Pool (EAPP) in line with the WBG Strategy on Regional integration for Africa and MENA.** It will also enable Djibouti to export electricity to the HoA, particularly from renewables including wind, geothermal, and solar power, and provide a transformational change for Djibouti's energy mix in the medium term. The proposed Project will contribute to strengthening regional ties in the electricity sector, and will also expand partnerships with global players, namely within the HoA (supported by WB, AfDB, and EU) and in the Eastern Africa Power Pool.

15. **Finally, the proposed Project is consistent with the WBG MENA Strategy, which seeks to promote peace and stability throughout the region by means of regional integration of sectors, including energy, and foster (re)construction and recovery.** The proposed Project will also contribute to the pillar of the MENA Strategy aimed at (re)construction and recovery through an approach that brings together external partners, by structuring the transaction to leverage global resources from the HoA and the region's infrastructure financing needs, especially in the context of the COVID19 epidemics.

C. Proposed Development Objective(s)

The Project Development Objective (PDO) is to enhance reliable and affordable electricity trade between Ethiopia and Djibouti.

Key Results (From PCN)

16. The results arising upon completion of the proposed Project are expected to include inter alia:

PDO level indicators:

- Increased Electricity Trade (Export/Import) Capacity (MW)
- Increase of Energy exchanged between Galafi and Nagad (in GWh)
- Average annual duration of power outages per year on the line (hours/year)[9]

D. Concept Description

17. Domestic electricity generation in Djibouti (currently dominated by fossil fuel/ thermal production) is highly dependent on international prices of petroleum products. This has a negative impact on the cost of electricity supply and the country's balance of payments. The high price of electricity is considered as one of the main factors limiting economic growth in Djibouti. The significant hydropower potential (one of the cheapest power supply options) of Ethiopia and the enormous investments made in the development of hydropower plants provides Ethiopia with opportunities to export hydropower to neighboring countries. The storage of Energy provided through its Hydro Dams can act as a regional "Battery" to help smaller networks such as Djibouti's to absorb more intermittent renewable supply than otherwise possible.

[9] The average duration of service interruption on the transmission line in hours per year.

18. A first double circuit 230kV tie line between Ethiopia and Djibouti has been completed in May 2011, which has been supplying about 80 percent of total power demand in Djibouti. Some demand is suppressed (clients such as industries are self-producing) and the capacity is currently insufficient for peak demand. The starting point of the first interconnection line is the Dire-Dawa III substation, which also serves adjacent towns located in the Eastern part of Ethiopia. As it is an industrial area, power demand is increasing, and when all expected future demand (dominated by industrial facilities, irrigation and the Ethiopia-Djibouti railway) materializes, the existing Koka – Dire Dawa III 230 kV single circuit and Koka Hurso 230 kV double circuit transmission lines would no longer suffice to evacuate power, thus calling for additional High Voltage transmission line capacity. At the same time, power demand in Djibouti is growing and new sources of supply would need to be secured by 2025 (in addition to the ongoing 60 MW Ghoubet Wind and 30 MW Grand Bara Solar PV projects).

19. Capacity for power trade would increase between Ethiopia and Djibouti from the current 80MW (strained to 95MW) to 220MW (equaling almost to a three-fold increase in power trade) with improved adequacy and reliability of supply, reserve capacity management, and operational efficiency. Power trade would allow to take advantage of Ethiopia's surplus of renewable energy and arbitrage against the current high cost of Djibouti's thermal generation. Ethiopia's export is currently priced at US$ 0.07/kWh, significantly lower than current thermal generation and about one third of the domestic tariff. Increased power trade and additional imports will also:
    - Mitigate the congestion risk of the existing "first" interconnection line due to limited transmission capacity and further stabilize power flows in Djibouti. As the second interconnection would connect with the first, the 'end of line' instability[10] that Djibouti is currently experiencing would be resolved;
    - Reinforce system stability and reliability of supply, including for emergency support through sharing of backup facilities in case of severe default on the existing line or any other technical issue, with operational gains for both countries;
    - Provide environmental and climate benefits with reduced reliance of Djibouti on fossil fuel;
    - Support and stabilize power discharged from existing and future power plants in Djibouti, including integration of intermittent renewable energy generation and providing firm capacity for Djiboutian load centers; and
    - Allow Djibouti to export in the region excess solar and wind power when these sources will be fully implemented and realize power trade in both directions, in turn decreasing the operational costs for both countries.

20. The interconnector will further develop the power trade infrastructure under the Eastern Africa Power Pool (EAPP)[11] umbrella and pave the way for potential future infrastructure developments and regional integration across the Horn of Africa costal line with the possible interconnection of Djibouti with Eritrea and Somalia (Djibouti has already expressed interest for an interconnection with Somalia). There are also opportunities for further expansion of power trade with the Arabic Peninsula, as Djibouti is strategically located for integration to Yemen and to the broader Gulf Countries through an undersea cable, pending developments in the security landscape.

[10] "End of line stability" relates to how the 230kV voltage will vary above and below permissible limits according to the load transferred on the line throughout the day. When there is no load on the line, the voltage could go up to 250kV, when it is fully loaded it might go down to 200kV. These are quite extreme voltage changes and EDD operators will need to switch reactors on and off to control voltage to the permissible range typically about -+ 5% to protect equipment and ensure that consumers do not suffer large voltage changes.
[11] Djibouti has been a member of EAPP since 2012.

21. As mentioned already, investments in the energy sector (including this new project) can play a key role in mitigating COVID-19 impacts by safeguarding access and continuity of electricity service to the critical facilities and to the affected population. Project implementation could contribute to the post COVID-19 response effort by providing jobs either directly (for the installation of the transmission line and for the extension of the substation) or indirectly (by giving opportunities to local businesses to provide food and drinks to workers). The timeline of project implementation will be discussed in more detail by appraisal. But already, it is expected that retroactive financing (up to 20% of the IDA Credit) will be sought by the client, and thus some procurement activities might be in a position to start by the time of Board Approval.

22. The proposed Project (preliminary estimated cost: US$ 75 million) will comprise the following components:

a) **Component 1: Transmission line from Galafi to Nagad and Nagad substation extension (preliminary estimated cost: US$72 million).** The following subcomponents would be financed:

- **Subcomponent 1.1: Galafi-Nagad transmission line (cost: US$68 million, IDA credit: US$43.5 million).**

  Construction of a new double circuit 230 kV transmission line from Galafi to Nagad of 190 km. Each circuit would have a rated power of 200 MVA. Galafi is on the Djiboutian side of the country's border with Ethiopia.

  Preliminary details of the proposed transmission line design is based on a bundled conductor design with a maximum rating 280MVA.

  The AfDB will co-finance the Djiboutian transmission investments and has proposed to finance 100 percent of the transmission investments in Ethiopia (comprising: (a) an additional 102 km section of the transmission line; (b) the Combolcha-Semera reinforcement[12]; and (c) an extension of the existing Semera Substation in Ethiopia).

- **Subcomponent 1.2: Nagad substation extension (cost: US$4.0 million, IDA credit: US$0 million)**.

  The scope of work at the proposed Nagad substation is to install a 170 m long double 230kV busbar (designed for operation with eight outgoing bays at 230kV, 50 Hz, 40 kA/3 sec, 2000A) at the existing substation site and fit two complete new outgoing 3150 A / 31,5 kA 230kV transmission line switch bays (comprising CTs, Surge arrestor, Circuit breaker, line isolator each fitted with a 10 MVAR fixed reactor and associated CT/Isolation facilities designed to compensate for the capacitance in the 292 km 230kV transmission line. In addition, the busbars will be fitted with a 25MVAR switchable reactor along with associated circuit breaker equipment as for the line switchbays. For each bay 2 control and protection cubicles will be fitted with a distance relays and metering facilities along with modems for interconnections with the SCADA system via the fiber optic wires. All the equipment along with foundations will be incorporated in one common grounding AC/DC auxiliary system used by both the 230kv and 63kV facilities.

b) Component 2: Technical Assistance, Capacity Building and Project Management (cost: US$3 million, IDA credit: US$1.5 million)

[12] The reinforcement of the connection of Combolcha to Semera is mandatory to avoid the risk of isolating the new interconnection from Ethiopia.

- This component will finance the cost of the project's implementation and oversight. Moreover, this subcomponent will include citizen engagement activities providing a voice to the project beneficiaries, including women and youth, and therefore involve bottom-up communication approaches, such as community meetings and beneficiary outreach in remote locations. The social safeguards consultant to be employed part time by the Project Implementation Unit (PIU) will also ensure the follow-up on engaging with beneficiaries and Grievance Redress Mechanism (GRM) compliance. An indicator will measure citizen engagement achievements—the number and percentage of grievances registered related to the delivery of project benefits addressed. A feedback loop will be kept open throughout the implementation phase and the World Bank will monitor the dialogue and response provided by EDD.

c) Component 3: Contingency Emergency Response Component (cost: US$0 million, IDA credit: US$0 million)

- Providing support upon occurrence of an Energy Sector Emergency through: (a) the carrying out of Emergency Recovery and Rehabilitation Activities; and/or (b) technical assistance to support EDD in its response to an Energy Sector Emergency. Funds could then be reallocated to help finance activities of Component 3, if necessary.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

(See as well the Concept Stage ESRS Document that is publicly disclosed).

23. The Proposed Environmental Risk Rating is "Substantial", due to the nature and scale of activities to be financed under the Project. Environmental risks and occupational health and safety hazards will mostly originate from activities under Component 1: Transmission line from Galafi to Nagad and Nagad substation extension. Most of the expected impacts are likely to occur during the construction (and subsequent operation) of the high voltage transmission line (TL) and the expansion of Nagad substation which will include the dismantling of electrical equipment. The foreseen adverse impacts are expected to be medium in magnitude and small to medium in spatial extent (sharing existing corridors for national highways or existing TL as much as possible). Most of the foreseen adverse impacts will be temporary, can be mitigated and are related to related to dust and noise; air and water pollution; construction wastes; and health and labor safety issues. While replacing old transformers, there might also be some serious health and environmental impacts related to presence of polychlorinated biphenyls (PCBs), which represent Persistent Organic Pollutants (POPs) and may provoke carcinogenicity, reproductive impairment, immune system changes, and the loss of biological diversity, if not handled properly and disposed of with care. The ESIA will indicate the Borrower's capacity to dispose of such hazardous waste material. Operational phase environmental risks, such as the risk of impact (or perception of impact) of electric and magnetic fields on population is considered low as siting of the existing substation is remote and at safe a distance from the closest urban center. Any plans for the use of pesticides to control vegetation under transmission lines during operation is not known at this stage and will be identified during project preparation. Finally, given that this TL is the second of the kind between Ethiopia and Djibouti and AfDB's financing of the rest of this new TL on the Ethiopian side, the ESIA currently under preparation is expected to address cumulative as well transboundary impacts.

24. Based on information in the 2017 ESIA, the project is not expected to have any negative impacts on areas of high value and sensitivity. The ESIA currently under preparation will need to confirm this as data on IBAT shows that the corridor of the transmission line may come close or potentially cross the southern tip of the Djal'lo terrestrial protected area north of Holl-Holl. Based on the information in IBAT, there are no birds/bats migratory routes that cross the corridor or are in close proximity to it.

25. The main social risks relate to impacts on land use and access to land, especially during construction. These impacts will mostly be economic and temporary in nature, as people will be able to use the land for pasture and low crops after construction. Given that the project does not finance distribution activities and that it will mainly feed existing networks in Djibouti-ville during operation, another potential risk is the exclusion of groups and individuals from the benefits of the project and in particular of affected persons and communities along the transmission line corridor. Another important risk already described above relates to occupational health and safety, with the risk of falls and electrocution during construction and maintenance. Labor influx and associated gender-based violence risks, and the health and safety of the communities in the project area are expected to be moderate. In this perspective, and while it is the first time that EDD will implement a project under the ESF, the social risks are deemed moderate.

26. While EDD has some prior experience implementing projects financed by the WB, AfDB and AFD, its experience developing this type of complex project is limited. It will also be EDD's first experience preparing and implementing a project under the ESF; however, the Borrower plans to strengthen EDD's capacity to implement the E&S instruments and to meet the ESF requirements.

27. AfDB will finance the portion of the transmission line on the Ethiopian side, from the border to Semera as well as the substation extension at Semera. Those two (2) activities on the Ethiopian side are to be considered associated facilities.

28. The combined environmental and social risk rating is Substantial.

CONTACT POINT

World Bank

Emmanuel Py, Lucine Flor Lominy
Senior Energy Specialist

Borrower/Client/Recipient

Republic of Djibouti - Ministry of Economy and Finance

Implementing Agencies

Electricité de Djibouti
Djama Ali Guelleh
Director
djama-agza@edd-dj.com

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: http://www.worldbank.org/projects

APPROVAL

Task Team Leader(s):	Emmanuel Py, Lucine Flor Lominy

Approved By

Practice Manager/Manager:	Erik Magnus Fernstrom	29-Apr-2020
Country Director:	Claire Kfouri	28-May-2020