



Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 02-Oct-2018 | Report No: PIDISDSA23804



BASIC INFORMATION

A. Basic Project Data

Country Somalia	Project ID P165497	Project Name Somali Electricity Access Project	Parent Project ID (if any)
Region AFRICA	Estimated Appraisal Date 14-Sep-2018	Estimated Board Date 30-Nov-2018	Practice Area (Lead) Energy & Extractives
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance, Federal Republic of Somalia	Implementing Agency Ministry of Finance, Somaliland, Ministry of Energy and Water Resources, FGS, Ministry of Energy and Minerals, Somaliland	

Proposed Development Objective(s)

The Project Development Objective is to expand access to electricity in targeted urban, peri-urban, and rural communities in Somalia

Components

Electrification of households and businesses through standalone solar home systems
Enabling electrification through solar-powered/hybrid mini-grids
Technical Assistance, Capacity Building & Project Management

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	5.50
Total Financing	5.50
of which IBRD/IDA	0.00
Financing Gap	0.00

DETAILS

Non-World Bank Group Financing



Trust Funds	5.50
Somalia Multi-Partner Fund	5.50

Environmental Assessment Category

B-Partial Assessment

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Somalia has a population of about 14 million, of which roughly 60 percent are nomadic and semi-nomadic pastoralists and 60 percent live in rural areas.** Most Somalis today live in poverty and vulnerability: 2.3 million live on the margins of food insecurity and 1.1 million are internally displaced. Close to three fourths of the Somali population live in poverty, about 43 percent in extreme poverty, and Gross Domestic Product (GDP) per capita was estimated to be only US\$446 in 2017, having grown at only 2% per year over the last four years. Humanitarian support is a life-saving reality for many in areas that are accessible to Non-Governmental Organizations (NGOs). However, humanitarian action alone cannot develop the sustainable livelihoods necessary for poverty reduction – Somalia needs infrastructure investments to enable basic service delivery to its citizens. Income per capita is 20 to 40 percent higher than GDP per capita due to remittances. Remittances alone in 2016 were estimated at US\$1.2–2 billion, equivalent to 23 to 38 percent of GDP. Remittances augment household income and create a buffer against shocks, however, remittances are vulnerable not only to changing habits of diaspora as a new generation comes of age but also to de-risking in the international financial system.
2. **Somalia has been largely decimated in the two and a half decades of conflict following the collapse of the Siad Barre government in January 1991.** Concentrated mainly in Southern Somalia, the conflict destroyed much of the country’s governance structure and economic infrastructure – undermining legitimate institutions and creating widespread vulnerability. In 2012, a new federal government was established in Mogadishu within the framework established by the Provisional Constitution. Following this political transition, the international community agreed to the Somali Compact with the Federal Government of Somalia (FGS), based on the New Deal, a guiding set of principles for peacebuilding and state building. A successful political transition was matched by parallel progress on the security front. With the help of the 22,000-strong African Union Mission to Somalia (AMISOM) force, Somali forces, including aligned clan militia, liberated parts of Southern Somalia, including strategic urban centers, from Al-Shabaab. Though weakened, Al-Shabaab retains significant terrorist capacity and has focused on asymmetric attacks targeting government and international targets, including in Kenya. While Southern



Somalia is still experiencing active conflict, Somaliland and Puntland have remained relatively peaceful, although Al-Shabaab infiltration into Puntland's mountainous areas has been growing.

3. **Somalia has a dynamic and highly entrepreneurial private sector that has filled the void of public institutions.** Private providers supply anything from infrastructure, security, health and education services. The economy is dominated by the livestock sector, which generates trade worth an estimated 40 percent of Somalia's GDP, and over 50 percent of exports. Important sources of export earnings include charcoal and agricultural products. The Somali economy relies heavily on overseas development assistance (ODA, US\$0.75 billion) and even more on financial remittances from its sizeable Diaspora – estimates range from US\$1.2–2 billion – that are sent via service providers, including money transfer businesses (MTBs) that lack appropriate regulation and supervision on the receiving side. The services MTBs provide include international money transfers for purposes of household consumption, on which close to half of urban households in some parts of the region are estimated to depend. MTBs have also acted as quasi-banks, providing a broader range of financial services to a significant proportion of the population. A significant proportion of remittances are not used for immediate expenditures, they are either put into real estate, small businesses, or otherwise reserved or invested. The growth of crowdfunding platforms created an additional increasingly popular channel for Somali diaspora to provide financial support to local beneficiaries.
4. **Public finances have improved in recent years, based on increasing formalization of customs arrangements and security.** The Federal Government demonstrated stronger fiscal discipline in 2017, avoiding the accrual of new budgetary arrears, and generating domestic revenues of \$143 million, beyond the target set in the IMF Staff Monitored Program (SMP). Over 70 percent of revenue collected is from customs duties, although the government has recently taken steps to implement sales tax collection at the port of Mogadishu and is looking to broaden the tax base in 2018. Despite increasing revenues, the Federal Government remains dependent on development partners to finance capital expenditures. Compensation of employees and spending on goods and services accounted for more than 80 percent of expenditure. 53 percent of the budget was used to compensate employees in 2017 while 34 percent was used to buy goods and services, mainly rations for the security sector.
5. **A foundation is being laid for Somalia's accession to the Highly-Indebted Poor Countries (HIPC) debt relief and associated arrears clearance.** Somalia is in debt distress with significant arrears to IFI's including the World Bank, IMF, and AfDB that make it ineligible for financing from IDA and many other concessional financing sources. In turn, this blocks the financing of national programs necessary to lift millions out of food insecurity, vulnerability, displacement, and poverty. Development partners, International Financial Institutions (IFIs) and the FGS are currently working to develop a clear and comprehensive roadmap towards IFI normalization and debt relief. With the formalization of relations between the Federal Government and the International Financial Institutions comes the prospect of addressing Somalia's substantial arrears, which will need to be cleared in a coordinated manner through a HIPC framework for regular IDA assistance to resume. This is a longer process, however in the short and medium-term grants are being used to deliver on country programs.
6. **The Multi Partner Fund (MPF) is the primary trust fund for World Bank-assisted operations in Somalia.** The MPF is operating as a ten-year program of support to the Somali transition, (January 2014 – December 2024), and is a vehicle for building and using country systems. It is the Bank's first



programmatic trust fund for Somalia (US\$ 225 million) and is expected to grow through additional donor contributions, with a total expected value of US\$ 350 million. It is currently supported by eleven donors (Commission of the European Communities, Sweden, Denmark, Italy, UK, Norway, Switzerland, Finland, USAID, Germany, and the World Bank's State and Peacebuilding Fund). **The MPF is administered by the Country Management Unit (CMU) and operates in close partnership with government, donors and international agencies** within the context of the Somalia Development and Reconstruction Facility (SDRF), the framework guiding the implementation of the Somali Compact and the New Partnership Agreement for Somalia. The SDRF is a coordination framework and financing architecture for implementing the Somalia National Development Plan (NDP) in line with the principles of the New Partnership for Somalia. Government and development partners use this platform to provide strategic guidance and oversight of development activities in Somalia. MPF investment priorities are identified through a process of ongoing consultations with government and development partners, and endorsed by the SDRF.

Sectoral and Institutional Context

7. **The Somali energy sector is one of the most underdeveloped in the region.** Low electrification rates, especially in rural areas, high cost of power, high technical and commercial losses, dependency on imported petroleum products for electricity generation, and reliance on biomass resources for cooking mean that only a very small fraction of the Somali population has access to affordable, safe, reliable, and predictable energy services. Both public and private sector energy actors are highly capacity constrained, weak legal and regulatory frameworks, limited financing and investment, and lack of data for effective decision making continue to hold back sector development.
8. **The federal and state energy ministries are still nascent in directing energy sector policies.** Federal Government of Somalia (FGS) has created a Ministry of Energy and Water Resources to define and implement overall energy sector policies and to regulate the sector. The ministry has limited staff and budget. The ministry's energy sector management department is poorly staffed. In Somaliland, a separate Ministry of Energy and Minerals has responsibility for Somaliland energy sector policy and oversight. It was reorganized, and water resources were transferred to another ministry, because the Ministry of Energy and Minerals has few qualified staff and thus limited capacity to manage the sector, including supervision of the Somaliland Electricity Agency (SEA). In Puntland state, the administration has no ministry of energy. Energy and water policy is instead managed by the Puntland State Authority for Water Energy and Natural Resources (PSAWEN), reporting directly to the office of the President (Puntland). PSAWEN is an autonomous agency with a mandate to oversee and regulate the electric power industry. However, PSAWEN has limited staff with adequate technical expertise to execute this mandate.
9. **The FGS has prioritized development of regulations to enable private sector investment in Renewable Energy and Rural Electrification.** The Ministry of Energy and Water Resources, with support of the World Bank Group, convened a meeting in February 2018 to identify the key priorities for the Somali Public Private Dialogue for the next 6 months. These include: (a) Drafting Somali National Energy Policy; (b) Drafting Somali National Energy Rules & Regulations; and (c) Drafting a National Electrification Strategy including inter-state energy trade. Other subsequent initiatives to be pursued will center on



operationalization of the policy and law particularly establishing an Energy Regulator to operationalize the rules, regulations and policy including establishing a licensing framework, as well as capacity building to enhance quality standards. In Somaliland, recent government efforts have led to the emergence of a nascent policy, legal, and regulatory framework through the recent completion of an Energy Policy in Somaliland, where a new Electricity Act is close to ratification¹.

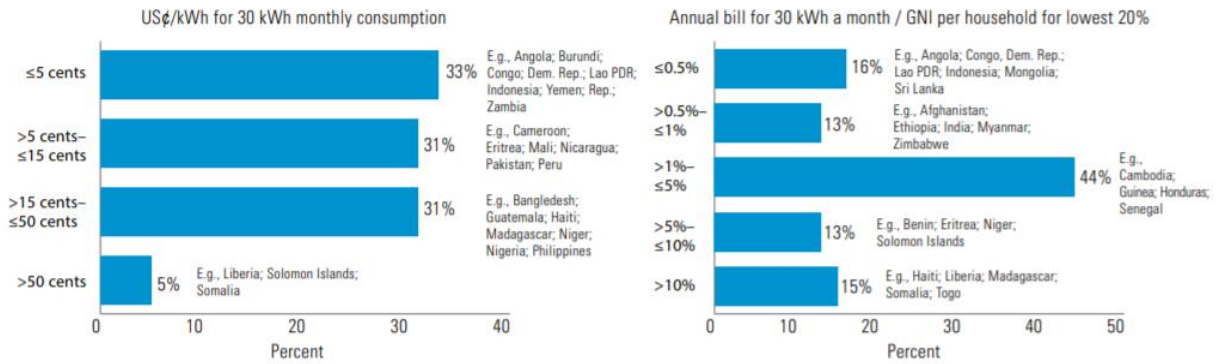
10. **Today, in urban areas, diesel-powered mini-grids owned by private entities or NGOs account for most of Somalia's power supply².** Though estimates vary, the total operational generating capacity across Somalia is estimated at around 103MW in 2015, serving 270,000 connections. The AfDB estimates installed capacity at 11.4MW in Puntland and 45.5MW in South-Central. Somaliland had 46.5MW annual installed capacity³ in 2014. The Somaliland Electricity Association (SEA) supplies 95 percent of mini-grid electricity in Somaliland. Composed of twelve members, it also sets tariffs and promotes renewables. The growth of private mini-grid energy services providers (all local entrepreneurs) has been accompanied by an increase in mergers and joint ventures, as well as increased integration of renewable energy into their generation mix as costs for these technologies have come down.
11. **The electricity access rate is estimated at 15 percent, meaning that around 11 million Somalis lack access to electricity services.** Urban access is estimated at 33 percent, and rural access at 4 percent. With an average household size of 5.9, this translates to approximately 1.8 million un-electrified households nationwide. Private sector players supply more than 90 percent of power in urban and peri-urban areas using local private mini-grids, having invested in diesel-based systems of between 500 kVA to 5000 kVA installed capacity per mini-grid. These mini-grids are usually zoned, with each operator building, owning, and operating the generation, transmission, distribution and maintenance, as well as collecting tariffs.
12. **Somalia's price of electricity can reach a maximum of \$1/kWh - one of the costliest places in the world to buy power.** The World Bank's flagship report on Regulatory Indicators for Sustainable Energy (RISE, 2016) found that Somalia ranks in the upper 5% globally for power cost, and in the upper 15% globally for power expenditure as a share of GNI per household (see figure below).

Global comparison of absolute energy cost and energy cost as a share of GNI per household

¹ The Electricity Bill was approved by the Somaliland House of Representatives on April 21, 2018. It would now be signed by the President into law.

² Federal Republic of Somalia, "Economic Recovery Plan 2014-2015", p.85.

³ African Development Bank; Somalia – Energy Sector Needs Assessment and Investment Programme, November 2015



Source: RISE, 2016

13. **Current mini-grids could provide a basis for a country-wide interconnected distribution system linked to the national grid with the potential for wheeling and cross-network power sales.** There are, however, significant information gaps regarding the status of the mini-grids, including profiles of incumbent operators (number of customers, hours of service, tariffs, connection costs, generation technology, quality of service metrics, expansion plans), understanding of applicable policy and regulations in the territories, and identifying appropriate greenfield sites for new mini-grid installations. Much could also be done to improve the existing services provided by incumbent operators, including helping to bring on additional generation technology, greening existing technology mix through hybridization, modernizing business models including through the use of smart and/or pre-paid metering technology, and reducing the losses in the distribution system. Incumbent operators could also be supported to densify their customer base within existing service territories. There is significant scope to create an interconnected grid network with existing mini-grids and also support the development of new mini-grid sites throughout the country.

14. **Even so, unfavorable economics imply that it is likely that a large part of Somali population will not be reached by grid or mini-grids even in the long term.** Many of these locations typically do not have sufficient demand from small industrial off-takers (for value addition or service-related activities linked to rural livelihoods) to justify the deployment of a mini-grid. A combination of high investments to develop new mini-grids, particularly in lower density localities, coupled with low ability to pay for energy services by households living below the poverty line further undermine the business case for such an approach. Furthermore, livelihoods in large parts of Somalia do not lend themselves to a fixed grid connection; many households are nomadic pastoralists who move from one place to the other in search for pasture and water and food or live in scattered settlements.

15. **Standalone off-grid solutions are therefore a viable complement to mini-grids.** These systems (also referred to as “solar home systems”, or SHS) typically include solar panels, a rechargeable battery, and LED lighting arrays, and many include mobile phone charging capabilities. Larger systems include an interface for connecting appliances such as efficient DC radios, televisions, fans, and other small appliances. Replacing traditional fuel-based energy sources (kerosene, candles, diesel generators) with quality solar products has a major positive impact on the local environment and household health, as well as disposable income. Market analysis shows that in Somalia these products are typically sourced from the Middle East and manufactured in China. The quality of these incumbent products is generally low, given that the vast majority have not been manufactured to internationally-recognized norms for



this type of technology. Improving the quality of products coming into Somalia, while keeping their cost affordable is therefore a priority action area. The current state of electricity access also demonstrates that there is significant market potential for these technologies.

16. **The supply chain for standalone off-grid solutions currently features five main actors.** (i) professional solar specialists, mostly focused on larger and institutional photovoltaic (PV) systems but also offering smaller consumer PV systems (pico-solar products); (ii) generalist retailers, through whom the bulk of pico-solar supply is channeled, who prioritize lower priced products; (iii) an emerging set of pico-solar specialists, looking to build out Pay As You Go (PAYG) business models and focused distribution networks; (iv) NGOs and humanitarian organizations who offer pico-solar to IDPs and other vulnerable populations, usually for free; and (v) few emerging mobile money and micro-financing operators who see an opportunity to offer financed, mobile-paid solar products alongside their other offerings. Other relevant players include mini-grid operators, who might have a role to play in future standalone distribution, and Liquefied Petroleum Gas (LPG) suppliers, who, with support from development partners, are set to expand their markets as part of an effort to mitigate charcoal use, and whose distribution models may closely overlap with those for small-scale solar. There is very limited data on the number off-grid products in Somalia, compounded by the fact that most sales occur through informal, undocumented channels. A market study undertaken during preparation for this project estimates sales of between 100,000 and 150,000 solar home systems per year, the vast majority of which are low-quality imitation products, especially single-light lanterns, sold by local retailers.

17. **There is a broad range of NGOs active in the sector.** Relief organizations including the Adventist Development and Relief Agency (ADRA), Candlelight for Environment, Education and Health (CEEH), Nordic International Support (NIS) Foundation, Norwegian Refugee Council (NRC), Horn Relief, Puntland Development and Research Centre (PDRC), CARE International and others engage in the off-grid solar sector in two principal ways: (i) commissioning large-scale solar PV systems from local suppliers for their own or project-specific use, thereby injecting cash into the local market; and (ii) procuring lanterns and solar kits which are distributed, often for free, to IDPs and other vulnerable populations, thereby also injecting cash into the local market, “seeding” the market with potential new solar buyers but also very likely distorting the market by causing “free goods” from relief humanitarian efforts to compete with activities developing commercial markets.

18. **Private-sector suppliers of standalone solar systems in Somalia face significant barriers to growth.** Despite strong potential, the market for off-grid solar continues to suffer from critical gaps and inefficiencies, notably limited access to business and consumer finance, as well as market spoilage due to low-quality imitation products and NGO giveaways. Given local banks’ limited appetite for what is still viewed as a nascent and risky sector, most solar businesses are still entirely self-funded or dependent on grants from international donor programs. Businesses are therefore unable to access the necessary debt finance to place larger inventory orders and operate at viable scale. Low consumer purchasing power has meant that consumers have overwhelmingly had to turn to low-cost, low-quality imitation products, which have proven unreliable and non-durable, thereby eroding broader confidence in solar as a technology. These challenges are particularly pronounced for distributors of smaller solar home systems, who have less predictable revenues and less established business models than engineering firms offering larger solar installations to affluent households and business and institutional clients.



19. **The Somali financial sector is also largely unregulated.** There is a limited degree of confidence in Somali financial sector regulatory and supervisory institutions, largely due to an absence of laws and enforcement capacity of regulatory frameworks, high informality, and ongoing insecurity. The lack of regulatory and supervision capacity threatens access of the Somali financial institutions to the global network of correspondent banks needed to channel remittances and ODA. Informal and unregulated provision of money transfers and banking services continues due to the lack of implementation of central bank and financial institutions laws enacted in the country. Some of the financial institutions act as quasi-banking institutions facilitating the transfer of funds within the region, ensuring the transfer of funds for domestic and foreign trade, and offering deposit and credit facilities. Financial institutions operating in Somalia do not hold settlement accounts with central banks for settlement purposes and there are no modern payment systems or anti-money laundering/combating the financing of terrorism (AML/CFT) laws. Mobile network operators also offer unregulated and unsupervised mobile payment services
20. **The World Bank has initiated activities to support electricity planning, investment, and regulation in the sector, as well as off-grid access.** The Bank is implementing a Somalia Power Sector Development Support (P146618) project to contribute towards developing the fundamental building blocks for establishing a modern energy sector in Somalia. Several activities are underway under this project:
- a. **Somalia power master plan development.** This activity will set priorities and sequencing investment in generation, transmission and distribution over a period of 20 years; and the development of 5 city power development plans. The plan will also analyze strategies for expanding rural and urban access to electricity to Somali households. This activity will be completed by November 2018.
 - b. **Renewable energy resource mapping.** This activity will include wind resource models, data bases, and energy potential maps with +/-20% certainty on the suitability of specific areas for wind power projects. The wind model for Somalia is very encouraging, but “bankable” wind projects able to attract private investment in the sector will require a higher level of certainty. In addition to wind maps, the Bank now has high quality solar maps under the Global Solar Atlas project for Somalia. The Bank would support the government to undertake additional identification studies to provide data to produce high quality wind and solar potential maps.
 - c. **Market study for off-grid solar.** This activity identifies key opportunities and constraints in launching off grid solar activities in Somalia under the Lighting Africa framework. The study, completed in February 2017, forms part of the basis for developing this project.
21. **The IFC is implementing additional technical assistance, including policy and regulatory reforms for the energy sector and Public Private Dialogue (PPD).** The Somalia Public-Private Dialogue forum was launched in June 2016 and received further impetus during the Somalia London conference in May 2017 during which, under the leadership of H.E the President of Somalia, a PPD declaration was signed between the government and the private sector. Inter alia, this declaration prioritized the development of the renewable energy sector as well as partnership between the public and private sectors. The TA for energy PPD will (i) lead to the formation of an Energy Working Group; (ii) agree on Terms of References (ToR) for the Working Group including its mandate, legitimacy and links with existing aid architecture; (iii) reach a common understanding of the main challenges facing government, the private



sector and other stakeholders in the energy sector; and (iv) identify 5-6 key priority areas with tangible, measurable actions that can be addressed in the short term. The energy working group was formed in February 2018, comprised of members from the FGS Ministry of Energy and Water Resources; state ministries (except Somaliland); and the private electricity service providers. The FGS agreed to the priority areas discussed above. The PPD inputs will be invaluable in the energy policy making process that would be supported by the project. The IFC would be interested to participate in the investment activities once arrears are addressed and IDA lending resumes.

- 22. The IFC is also currently in the early stages of initiation of advisory work on strengthening regulatory frameworks to stimulate private investment, including in Energy, in Somalia and Somaliland.** This work will focus on increasing competition by removing restrictive regulations in sectors through: (i) identification of restrictive regulations that prevent entry and expansion in key sectors; and (ii) advice on amendments to regulations and drafting of regulations and guidelines to remove restrictive regulations. In the energy sector, there are three priorities for private sector crowding-in: (i) development of city wide grids; (ii) development of off grid systems; and (iii) investment in renewable energy in wind and solar.
- 23. The proposed project will focus on improving energy access via standalone solar solutions for both households and small enterprises given the country and sector context, as well as the modest financing envelope.** This will take the form primarily of providing a package of incentives to support local entrepreneurs to develop new ventures or scale up existing activities. The project will especially target existing “first movers” who have already demonstrated independent interest and capability in the solar home systems sector. Two capacity building TAs are also included. First, to support studies and analytics aimed at complementing and building upon ongoing DfID and EU-led initiatives around mini-grids, and the findings of the Master Plan that is currently under preparation with World Bank financing; Second, to support capacity building within government agencies, while recognizing the need for robust third-party support to deliver the project activities.
- 24. The project is designed to integrate the learnings of the WB-IFC Lighting Africa program and showcases Maximizing Finance for Development (MFD) in action in a fragile context.** The project design draws on a number of current best-practice off-grid interventions, including: (i) a pilot engagement on standalone solar home systems that is anticipated to further prove and develop the market for future public and private sector engagement; (ii) a public sector intervention to scale-up private sector delivery of energy services; (iii) contribution to further scaling up the World Bank / IFC ‘Lighting Africa’ model for achieving off-grid electrification, particularly on quality assurance; and (iv) mobilizing external debt from private-sector financial institutions, it provides an important example of Maximizing Finance for Development (MFD) implementation in a fragile context.
- 25. The project will be complemented by an additional US\$ 2.7 million from the Japan Policy and Human Resources Development (PHRD) technical assistance program window.** One of the stated objectives of PHRD funding is to increase the delivery of off-grid electricity and/or other energy services in rural areas of African countries. To this end, PHRD grant will be allocated to project Components aiming to support and strengthen private sector delivery of off-grid solar energy technologies. The PHRD grant is being processed in parallel to SEAP preparation.

C. Proposed Development Objectives



26. **The Project Development Objective** is to expand access to electricity in targeted urban, peri-urban, and rural communities in Somalia.
27. **The PDO-level indicators are the following:**
 - a. People provided with new or improved electricity service (Core Indicator; 246,000 people); and
 - b. Generation capacity of energy constructed or rehabilitated (Core indicator, 0.34 MW).

D. Project Description

28. **The Project will be implemented across the entire Somali peninsula, covering Southern Somalia (Banaadir, Jubbaland, South West State, Hiiraan & Shabelle and Galmuudug), Somaliland, and Puntland.** While there are tremendous needs with respect to energy access, the fragile and complex operating environment necessitates a selective approach to supporting the effective delivery of affordable and sustainable energy services. Somali's private sector has impressively stepped up to deliver basic energy services in the aftermath of the protracted conflict of the 1990s. Nevertheless, these enterprises often lack the capital and latest technical, financing, and business model insights to scale their businesses. The core proposition of this project is that by leveraging these incumbent capabilities and activities, the overall quality of services they offer to their customers will be improved, especially as they are provided with technical and financial resources needed to deepen and broaden their geographic footprints.
29. **The intention to focus on off-grid standalone solar rather than mini-grids is deliberate considering the limited funding envelope as well as the yet unharnessed potential for the former.** The main technology that will be supported will be Lighting Global Quality Verified products, whose reliability and affordability should make them attractive options for households currently not connected to the grid. While mini-grids are the de-facto energy service provider of scale in the country, there are several other development partners actively engaged in this space, and the technical and financial resources required to make meaningful investments in this technology are beyond the scope of this project. As a result, mini-grid activities will focus on analytic work that will inform future investment activities and will complement ongoing mini-grid support from other development partners.
30. **Substantial market analysis was undertaken on the energy sector in Somalia leading up to and during project preparation.** This includes an off-grid lighting market assessment that was financed by the World Bank's Lighting Africa program and Multi Partner Fund, technical studies related to mini-grids by DfID under its Energy Security and Resource Efficiency in Somaliland (ESRES) Project, an energy sector needs assessment by the African Development Bank, a renewable energy study by UNDP, and a technical study for off-grid solar by the European Union.

Component 1 (US\$ 3M): Electrification of households and small businesses through standalone solar home systems

31. This component aims to reduce market barriers for the private sector to provide modern energy access through solar home systems and targets (i) poorer households and small businesses in areas that cannot afford to connect to mini-grid services; (ii) households and businesses in these areas that are not sufficiently close to a mini-grid to be economically connected; (iii) isolated villages and smaller settlements where mini-grids do not make economic sense; and (iv) nomadic pastoralists whose



livelihoods do not lend themselves to a fixed electricity connection.

32. The market for solar home systems in Somalia has significant potential. A study conducted in preparation for this project estimated current demand at around 140,000 – 180,000 units for a total value of around US\$ 14 million per year. The total potential (non-annualized) market size for solar home systems up to 500W was estimated at US\$ 108.4 million, corresponding to around 1.1 million units, and US\$ 79.6 million for systems up to 100W. This demand is further expected to rise as populations grow, off-grid mobile phone usage increases, and more and more Somalis become aware of the potential benefits of solar technology as a substitute or complement to conventional lighting sources such as candles, kerosene, flashlights, and unreliable (mini-)grid connections.
33. Nonetheless, the current market situation remains well below its potential. The vast majority of sales to date have come from low-quality, unreliable, and unsustainable imitation products. These are typically brought in via the UAE or Oman as part of general goods orders by informal, non-specialized traders with limited knowledge of quality solar products and few incentives to promote quality in a highly informal, unregulated, and price-driven market. A small but growing supply side for quality-approved solar devices has begun to emerge as local entrepreneurs have started to capitalize on growing demand for more durable, higher-performing products. To date, these distributors have managed to sell on the order of a few hundred systems (partnering with subsidiaries of established providers of Lighting Global Certified off-grid solar home system products) and have in some cases launched small initial pilots for alternative consumer financing arrangements such as pay-as-you-go to tackle consumer affordability constraints for their products. In addition to these dedicated off-grid distributors, a long tail of more generalist distributors continues to offer off-grid lighting products of variable quality on a more opportunistic basis.
34. Though the early activity of these companies shows promise for the Somali off-grid market, local distributors continue to face significant barriers to scale, including: (i) competition and market spoilage from low-quality imitation products; (ii) low levels of consumer awareness around solar technology, particularly regarding the long-term benefits of high-quality products and how to identify these; (iii) low affordability among end-consumers, exacerbated by limited access to consumer finance; (iv) high costs of rural distribution due to Somalia's large size, low population density, and poor transport infrastructure; and (v) limited access to capital for inventory and investing in business infrastructure, as local banks still prefer lower-risk, safer returns from more established industries.
35. Neither local nor international credit is currently available to Somali solar distributors due to the perceived high risk of doing business in the country. There are several reasons for this, including: (i) unfavorable loan terms and conditions; (ii) lack of capacity and limited understanding of customer needs amongst financial institutions; and (iii) lack of competition among banks. Many individuals and businesses report that they do not have enough or sufficiently reliable information for banks to assess their credit worthiness and cannot meet banks' strict collateral requirements to manage credit risk. As a result, businesses and individuals are largely self-financing and circumvent the formal sector for their financial needs.
36. This component will fund a range of market-building supply- and demand-side interventions in response to these challenges. The proposed interventions (indicative allocations to each intervention are shown based on initial analysis performed during project preparation, but are intended to remain flexible to react to changing market needs) are:



- a. *Results-based Expansion Grants (US\$ 2.2 million)*: Results-based grants to off-grid solar distributors, with payment based on the number of new Lighting Global-approved units sold. These grants will provide distributors with much-needed capital to build internal capabilities, invest in sales and distribution infrastructure, pilot new and innovative businesses and customer service models (including pay-as-you-go models that enable customers to pay in installments, thus spreading out payment over longer periods of time and improving affordability), and build up liquidity to act as collateral for future debt finance from local banks. Expansion Grants will be primarily targeted at businesses specializing in solar home system distribution, but could also be available to MFIs, local savings cooperatives, or other institutions looking to enter the solar distribution market.
- b. *Upfront Seed Grants (US\$ 0⁴)*: Since effective results-based financing requires that recipients have access to sufficient inventory, funding, and capacity to self-finance initial sales, a complimentary window will offer small upfront (i.e. paid in advance rather than results-based) Seed Grants to support the relatively long tail of smaller or less experienced Somali distributors who are either already active in the solar market or who might enter the market given additional incentives. Seed grants will enable these businesses to build up a minimum of inventory and infrastructure to launch sales and access the results-based Expansion Grant above. In addition, Seed Grant funding will be used to provide a range of business development services (mostly through external consultants) to early-stage Somali business in the off-grid solar sector, including support on designing and implementing off-grid business models (especially pay-as-you-go), preparing financial statements and projections, and connecting and negotiating with international off-grid solar equipment suppliers, industry bodies, and other service providers. Application for Seed Grant eligibility will be streamlined but will nonetheless entail a more rigorous evaluation process since funding is awarded before results are achieved. The funding for Seed Grants is expected to be made available by the Japan Policy and Human Resources Development (PHRD) technical assistance program window.
- c. *Quality assurance (US\$200,000)*: Interventions to limit the availability of and demand for poor-quality and/or counterfeit products, including TA activities for national and regional governments, potentially in preparation for eventual adoption of Lighting Global quality standards. The prolonged conflict in Somalia and absence of quality control regulations, standards and policies has turned the country into a hotbed of counterfeit products and dumping site of sub-standard goods. This component will support the recently established Somali Bureau of Standards as well as quality control initiatives in Somaliland, among others.
- d. *Consumer awareness (US\$600,000)*: Comprehensive consumer awareness campaigns with the objective of improving household understanding of how off-grid solar technology works, its benefits, how to operate, maintain and dispose of the products, and the importance of quality solar products and how to identify them.

⁴ The financing of this sub activity would be provided in a separate grant under the Japan PHRD



37. The bulk of grant funding to businesses will be deployed in the form of results-based financing (RBF) under the Expansion Grant. Well-administered RBF schemes are increasingly popular tools for both catalyzing and cleaning up off-grid solar markets. They work by offering clear financial incentives to distributors for the sale of high-quality (i.e., Lighting Global quality-verified) products on a first-come, first-served basis. This incentivizes distributors to shift away from the sale of ineligible low-quality products, and to expand their distribution networks to capture a larger share of the available funding. Distributors are also incentivized to expand as rapidly as possible as funding is capped and not pre-allocated. There are a variety of customization options available, including the specific formula for incentive calculations, the eligibility criteria for firms and product sales, and reporting and after-sales service requirements. For instance, the size of the incentive might be linked to the size of the system (as defined by SE4ALL's multi-tier energy access tracking framework⁵) or whether sales are in urban or rural areas. Firms will be required to keep and share complete records of product sales and commit to providing after-sales service that meets Lighting Global requirements. An independent verification agent (IVA) will be tasked with ensuring companies meet their obligations to customers and correctly report sales submitted to the Grant Manager.
38. The Expansion Grants and Seed Grants will be managed by a single Grant Manager, but separate Grant Managers will be procured for Somalia and Somaliland. Eligibility for grant funding will reflect regional considerations (e.g. accessing RBF funds in one region will require evidence that the sale occurred in that region). Procuring independent and experienced third-party Grant Managers will address Government technical capacity gaps, regional and clan dynamics, and the need to remain impartial and neutral in delivering a successful project. Separate Grant Managers for the two territories will ensure ownership and capacity building for each of the respective governments. Grant Managers will also be required to provide basic ongoing business development services to grant applicants to help strengthen applications and business models and ensure grant funds are being used effectively. Grant Managers for both regions will be expected to cooperate, exchanging market intelligence and information on prospective grant recipients as needed. Consumer awareness and quality assurance will similarly be separately implemented by FGS and GoSI in Somalia and Somaliland respectively.
39. Outcomes under these activities will be complemented and strengthened by the Somalia Capacity Advancement, Livelihoods and Entrepreneurship through Digital Uplift Program (SCALED-UP)-P168115, currently under preparation by the World Bank's Finance, Competitiveness & Innovation (FCI) Global Practice. SCALED-UP will work with local Somali banks to stimulate commercial lending to underserved sectors (including the off-grid energy sector) through the provision of credit enhancement in the form of guarantees and/or low-cost lines of credit. This enhancement will unlock private debt by buying down lender risk in Somalia's still nascent off-grid solar market. In addition, SCALED-UP activities will include assistance to local banks in building a pipeline of both potential lenders and borrowers, making introductions and linkages between banks and businesses, supporting distributors in making loan applications, and supporting financial institutions in performing diligence and evaluating loan applications. As limited access to debt for working capital is a crucial constraint for Somali off-grid companies, SEAP will benefit greatly from enhanced participation of Somali banks in the off-grid sector. Conversely, funding provided through the SEAP grants is expected to strengthen the financial position and growth prospects of local solar distributors, thereby making them less risky clients for local banks. The SEAP team will closely collaborate with FCI during SCALED-UP preparation and implementation to

⁵ See, for instance, https://www.seforall.org/sites/default/files/MTFpresentation_SE4ALL_April5.PDF



provide technical inputs and ensure harmonization of approaches.

40. Management of the Results-based Expansion Grants (component 1a) and Upfront Seed Grants (component 1b) will be recipient executed separately by both FGS and GoSI. FGS and GoSI will separately competitively select a firm or consortium of firms to provide the services under the scope of work of the Results-based Expansion Grants Manager and Upfront Seed Grants Manager. The individual components 1a and 1b would be jointly awarded to two firms or consortia, one firm or consortium covering FGS and a second firm or consortium covering Somaliland to address the technical capacity gaps, regional and clan dynamics and the need to remain impartial and neutral in delivering a successful project. Consumer awareness and quality assurance (component 1c and 1d) will similarly be separately implemented by FGS and GoSI in Somalia and Somaliland respectively, with each region's Results-based Expansion Grants Manager and Upfront Seed Grants Manager expected to provide inputs and guidance to these activities as necessary. The preferred firms or consortiums of firms for this role will undergo an OP 10.00 review to confirm their suitability for this mandate prior to finalizing the selection process. The firms will also be tasked with building environmental screening and implantation capacity of the technical staff within the ministries at the national and regional levels.

Component 2 (US\$ 1M): Analytical work for enabling electrification through solar powered/hybrid mini-grids

41. This component will support the mini-grid sector in Somalia. The information available on existing mini-grids is scant, even though they are the default energy provider throughout the country. While the ongoing Power Master Plan Study (Master Plan), financed by the World Bank, will provide some clarity regarding the status quo, but additional sector studies will be required to define the appropriate way forward for mini-grid technology. While the Master Plan will provide the long-term vision for the sector, key development partners already have activities underway to support the scale up of mini-grids in Somalia. These include DfID's £20M ESRES Program, which in its first phase is supporting the hybridization of six mini-grid sites with a £5 million budget. Phase 2 will kick off in 2018 and will deploy the remaining £15 million. The EU has just completed another 6 community installations via the ADRA-implemented Somali Energy Transformation (SET) Project. With the considerable activities currently underway by other donors, the objective of this Component is to focus on supporting activities that will establish a pipeline of mini-grid projects and define delivery/business models for their implementation.
42. To this end, this component is expected to include the following activities:
 - a. Detailed geospatial mapping to undertake a more comprehensive inventorying of the current mini-grid situation in Somalia, identify potential future sites, and estimate future location-specific demand;
 - b. Review of property rights and land issues pertaining to energy infrastructure investment;
 - c. Pre-feasibility studies for hybridization, operational enhancements, and densification of brownfield (existing) mini-grid sites
 - d. Pre-feasibility studies for greenfield (new) sites identified in geospatial mapping
 - e. Developing structuring options for the financing, operation, and ownership of new mini-grids
 - f. Defining legal, institutional and financing arrangements for developing mini-grids.

Component 3 (US\$1.5M): Technical Assistance, Capacity Building and Project Management



43. This component will support a range of activities to strengthen the capacity of the Ministry of Energy and Water Resources of the Federal Government of Somalia and the Ministry of Energy and Minerals in Somaliland for overall energy sector management, power and access planning, and implementation of future development projects. These activities will include (i) targeted technical assistance in the form of energy sector studies; (ii) development of energy sector strategies; (iii) review/finalization of energy policies; (iv) additional analytical work; (v) improvement of respective internal ministry infrastructure and systems; (vi) capacity building through trainings, workshops, and study tours; and (vii) supporting the establishment of Project Implementation Units (PIUs) in the respective ministries to oversee Component 2 and potential future IDA-funded projects.
44. Capacity building activities funded under this component will be preceded by a detailed needs assessment exercise in the first year of the project to identify priority interventions. This assessment will build on initial capacity building and TA needs identified during project preparation and as part of the Power Sector Master Plan currently under preparation. These include TA to develop national engineering standards for power generation and distribution, developing a power sector regulatory framework, and training ministry staff on key policy issues, including:
- i. Preparing energy sector policy and planning;
 - ii. Preparing and promulgating tariff setting and licensing regulations for mini-grid operators;
 - iii. Establishing engineering standards such as electrical wiring and installation codes;
 - iv. Setting health and safety standards for workers and consumers in the electricity sector;
 - v. Conducting feasibility studies;
 - vi. Performing resource mapping and working with GIS;
 - vii. Environment and safeguards; and
 - viii. Fiduciary/Procurement processes.

E. Implementation

Institutional and Implementation Arrangements

45. **The operating environment in Somalia is challenging as government institutions are only now beginning to rebuild** at the federal and regional levels with semi-autonomous regional member states, which presents project delivery challenges at a national level. Developing capacity within government institutions to provide oversight of the energy sector remains a priority. The project will be implemented by (i) The Ministry of Energy and Water Resources, Federal Government of Somalia; and (ii) The Ministry of Energy and Minerals (MoEM), Somaliland, in close coordination with the federal member states and regions. FGS and GoSI will each competitively procure separate, independent Grant Managers to manage the Expansion Grants and Seed Grants under Component 1a and Component 1b. FGS and GoSI will be fully responsible for procurement activities in order to foster project ownership, including preparation of Terms of References, developing evaluation criteria for selection of firms, and review of deliverables. The Grant Manager for each IA will include an E & S Specialist to implement the ESMF for Component 1a and Component 1b.

46. **Project Implementation Units (PIUs) will be established within the Department of Energy at the**



respective Ministries of Energy in Mogadishu and Hargeisa. They will have the overall responsibility for project management, coordinating project implementation, monitoring and evaluation and reporting of results to stakeholders and developing environment and social safeguards frameworks and plans. PIU staff for the project will either be seconded from government or hired as consultants, through a competitive process. Short-term local and international consultants will be recruited to support the PIU as needed. The capacity in the PIUs will be enhanced through on-the-job training and mentoring by the Bank's technical staff working on fiduciary and safeguards and the task team leader. In areas such as procurement, it may be a challenge to find a specialist already familiar with Bank policies and guidelines; as such, a procurement specialist from an existing Bank-assisted project, SCORE will be used in the interim while the project procures a specialist. During implementation, an individual consultant will be hired for the first year of the project to the build capacity of the new specialist. The implementing entities will develop a Project Implementation Manual (PIM) to govern technical, financial and procurement functions of the project at the implementing agencies level.

Federal Government of Somalia

47. The PIU will consist of a small team headed by a Project Coordinator, and at a minimum include a Finance Specialist (from Accountant General Office), Procurement Specialist (at the onset, will use the WB-assisted SCORE project procurement specialist), Monitoring and Evaluation Specialist, an Environment and Social Safeguards specialist, Regional Coordinator (from the Dept. of Technical, Maintenance and Regional Coordination) under the ministerial set-up linking federal government and federal member states, and technical experts (engineers, etc.). The Bank's Capacity Injection Project (CIP) guidelines which provide a harmonized salary structure and used by all Bank projects and donors will be used.
48. The project will set-up a small and focused project steering committee to provide oversight of the project and take decisions on critical implementation issues. The current committee in place at FGS focuses on public private dialogue and is not suitable for the purposes of this project. It will be chaired by the Minister of Energy and Water Resources and will include Director General Energy, Project Coordinator and relevant PIU staff, representatives from the private sector and regional coordinator focal point.

Somaliland

49. The PIU will consist of a small team headed by a Project Coordinator, and include a Finance Specialist, Procurement Specialist, M&E Specialist, Environment and Social Safeguards Specialist; Communication Specialist and a Technical Expert. The government proposed that all positions in the PIU will be recruited internally or externally to the ministry, after discussions with the Civil Service Commission. The salary structure under development by the Bank's Somaliland Civil Service Strengthening Project is expected to be completed and adopted by all Bank projects and donors by the latter part of 2018. Cross support from other ministries is likely to happen, especially on financial management and procurement roles, as will be further discussed and agreed during project preparation.
50. The project will set-up a small and focused project steering committee to facilitate technical decisions, oversight, and take decisions on critical implementation issues. The current Energy Sector Coordination Forum focuses on fostering coordination among development partners working in the energy sector in Somaliland; and may not be suitable for the purposes of this project. It will be chaired by the Minister of Energy and Mineral Resources and will include DG Energy, Project Coordinator and relevant PIU staff,



representatives from the private sector and regional coordinator focal point.

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

The project would be implemented in Somalia, covering all regions including Somaliland, Puntland and Southern Somalia. Somalia’s northern regions (Somaliland and Puntland) have put in place functioning institutions that have succeeded in sustaining stability although considerable development challenges remain. Following the declaration of independence and semi-autonomy respectively, Somaliland and Puntland have developed hybrid forms of governance combining modern institutions with religious authorities, civil society, private sector and diaspora organizations, which have guaranteed higher levels of peace, security and institutional development. While substantial development challenges remain, the starting point for development work is nevertheless different in the north. However, Puntland and Somaliland seek very different futures: while Somaliland constitution envisages an independent existence, Puntland is committed to participate in Somalia’s federal system. Population densities are low and the lifestyle is predominantly pastoral and low level sedentary farming on the arid and semi-arid lands. These regions are deficient in terms of access to good roads, electricity, portable water and social services due to their remoteness from national infrastructural networks. Electricity supply is predominantly from unimproved sources (such as diesel or petrol powered gensets, kerosene, candles, and batteries) which do not meet the ever-increasing demand in these underserved areas.

G. Environmental and Social Safeguards Specialists on the Team

Tracy Hart, Environmental Specialist
Richard Everett, Social Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The project is assigned as a Category B Partial Assessment, as no major civil works will be financed and no physical or economic displacement will take place. The potential environmental and social impacts are reversible, localized, and can easily and cost effectively be mitigated.</p> <p>Since the specific locations/ sites of the subprojects are unknown at this stage of project preparation, the implementing agencies in FGS and Somaliland have</p>



prepared Environmental and Social Management Frameworks (ESMFs). The ESMF contain an environmental and social screening checklist to ensure that potential negative impacts are mitigated. The ESMF has been consulted upon (May 19 in FGS; and May 22 in Somaliland), and will be approved by WB and disclosed in country and World Bank infoshop prior to appraisal. The main reason for having two ESMFs is that both FGS and Somaliland will sign separate grant agreements with the Bank. Also, Somaliland would have separate disclosure arrangements.

Under Component 1, the core issue in regards to increasing the uptake of solar home systems (SHS) is the long-term implication of the increased number of battery energy storage systems (BESS). This impact requires a strategic solution through a program for battery disposal/recycling, in which SHS distributors play a role. The entire management process including de-manufacturing, collection, storage, recycling, transport and disposal may present a challenge to this project, given the scope of these management operations. The grant manager to be hired to implement component 1a and b would also be tasked with conducting environmental and social screening and implementation capacity of the technical staff within the ministries at the national and regional levels.

Under component 2, only analytic work will be carried out, and the minimum safeguard requirements and assessments as part of the pre-feasibility has been prepared and included in the ESMF.

Performance Standards for Private Sector Activities OP/BP 4.03	No	This policy is not triggered as the project will not be financing private sector infrastructural activities.
Natural Habitats OP/BP 4.04	No	OP 4.04 will not be triggered as the project activities will be within existing premises and component 2 activities will be analytical
Forests OP/BP 4.36	No	There are no forests in the project implementation area.
Pest Management OP 4.09	No	There will be no chemical pesticides procured or used in this project.



Physical Cultural Resources OP/BP 4.11	No	The project will only involve installation of solar PVs in homes and existing enterprises and studies for the mini-grids, which will not affect any PCRs.
Indigenous Peoples OP/BP 4.10	No	This policy is not applicable because there are no indigenous peoples in Somalia.
Involuntary Resettlement OP/BP 4.12	No	No physical and economic displacement is anticipated due to the nature of the project. There will be no land acquisition under Component 1 and 2. For Component 2 the focus will be on analytical works. The project will also exclude any activity that will require land acquisition.
Safety of Dams OP/BP 4.37	No	There will be no dam construction financed in this project. the project will not finance any activities that include dams or irrigation structures.
Projects on International Waterways OP/BP 7.50	No	Project sites are not located on or near any international waterways. Project will not finance any activities that involve international waterways
Projects in Disputed Areas OP/BP 7.60	No	The policy is not triggered because the project will not finance activities in 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:

There are no significant and /or irreversible adverse environmental and social issues anticipated from the subprojects to be financed under the Project. The main potential environmental and social impacts anticipated for the project. The core issue in regards to increasing the uptake of solar home systems (SHS) is the long-term implication of the increased number of battery energy storage systems (BESS). This impact requires a strategic solution through a program for battery disposal/recycling, in which SHS distributors play a role. The entire management process including de-manufacturing, collection, storage, recycling, transport and disposal may present a challenge to this project, given the scope of these management operations.

Additional risks would include weak labor practices among SHS companies, such as possible use of child or forced labor, or inadequate occupational health and safety (OHS) practices. Other project activities do not pose such or additional environmental risks, since they relate to analytical work, technical assistance, capacity building and training.

The proposed project will not result in land acquisition since the installation of solar systems will take place largely within existing households and small business, and no physical displacement or potential impact on livelihoods is anticipated. Concerning mini-grids, the project will focus on analytical work.

Social risks associated with the potential exclusion of poor and vulnerable households, including female-headed households and internally displaced people (IDPs), will be mitigated by engaging with communities, especially women, youth and the marginalized, early on through focus group consultations to ensure their needs will be incorporated



into the technical specifications of supported solar products; (b) an awareness campaign to communicate the benefits of solar and the Project in a way that can effectively reach out to various target audiences, including to those living in remote, rural areas as well as to firms along the supply chain who would benefit from potential financing and training offered through the project; and taking into consideration during the selection of MFIs their portfolio of financing services and ability to partner with community-based organization for outreach to vulnerable population groups, including women and the youth.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area: There are no significant potential indirect or long negative term impacts due to anticipated future activities in the project area. It should be noted that increased number of the energy storage units (containing batteries) may pose indirect impact that may affect project E&S sustainability in the long term. Additional indirect impacts would include weak labor practices among SHS companies, or inadequate occupational health and safety (OHS) practices. The project design integrates technical assistance - with associated budget - to develop strategic solutions for these challenges during project implementation. Other project activities do not have long-term impacts, since they relate to analytical work, technical assistance, capacity building and training.

The project is expected to reach 41,000 households, equivalent to around 246,000 people, around 22.5% of the current off-grid population. Of this number, 122,000 are expected to be women. The long term impact of the proposed project derives from increased access to modern electricity services and a substitution away from lower-quality or more-expensive alternatives. The long term indirect impact would include (i) Reduced lighting costs by replacing kerosene lamps which are expensive to operate. Kerosene is costly for low income households that buy it; (ii) Poverty alleviation: With more affordable and stable electricity in the otherwise off-grid areas, the beneficiaries will be engaging in income generating activities hence improving their economic status; (iii) Provision of employment: although minimal this project will have a positive impact on both direct and indirect employment levels in the country translating into incomes at the household levels which will trigger other spending and demand in the local economy; (iv) improved standard of living: Access to electricity will change the standard of living of the people as they can use domestic appliances like fridges, television sets; (v) Communications: access to electricity will lead to improved communication for the beneficiaries. This will be enabled by the fact that charging of mobile phones will be easier and cheaper. Access also to mass media like radio and T.V will provide opportunity for the households to access a wide range of information which is useful for decision making; (vi) Gender Considerations: Providing electricity to communities and homes will promote gender equality, women's empowerment, access to education, health care, reduced GBV and employment. The project will also enhance security in the rural areas as most homes will be lit up, a benefit that is more appreciated by women; and (vii) Avoided GHG emissions - the project will result in 69,100 tons of avoided CO2 emissions

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts. The alternative scenario of not implementing the project would imply the continued lack of access to modern energy or reliance on costly, scarce, and polluting fossil fuels, and the associated severe negative impacts on public health, socioeconomic conditions, and the environment.

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. The Environmental and Social Management Framework for this grant has been prepared by the Federal Government of Somalia; and Government of Somaliland, been consulted upon, and pending approval and disclosure (There are two



separate ESMFs, one for FGS and another for GoSL). The ESMFs incorporates aspects related to solid waste from solar PV systems and/or develop a project-specific environmental code of practice (ECoP) as a guidance on approach for the collection, transport, storage and disposal of spent batteries, with the aim of ensuring that risks to the environment and human health are prevented or mitigated. Apart from providing approaches to the management of spent PV batteries, such an ECoP will also seek to inform discussion and build awareness of all stakeholders, including rural community members, vendors/suppliers of products and service providers, around safe management of used batteries.

Because the status of battery disposal and recycling practices is not known, an assessment will be conducted prior to Project commencement on the current battery recycling and disposal options. If needed, technical assistance will be provided to local entities participating in the Project to mitigate the risk of improper disposal

Under component 1a and b, SHS companies would be required to prepare a basic ESMP to qualify for the grant support. This ESMS would focus on key E&S risks identified for this component, and in particular include requirement for adequate HR policy, OHS guidelines; and an articulated approach to used battery unit's collection, disposal/recycling. SHS companies will be provided with training and capacity building, for which funds have been allocated under the project TA component.

All solar products to be procured under the project must adhere to the quality standards and testing methods developed by Lighting Africa/Global . A criterion for the selection of SHS companies to participate in the project will be developed and Lighting Africa/Global compliance clauses will be included in funding agreements with the private sector. The criteria and compliance to Lighting Africa/Global quality assurance frameworks will form the E&S requirements to be established by the grant manager under component 1 of the project.

The project will ensure that terms of reference for hiring the Grant Manager for implementation of Component 1 contain clauses that relate to safeguards, occupational health and safety competencies, labour and specific tasks related to safeguard monitoring and enforcement. The selected grant manager will be responsible for coordinating and supporting the implementation of safeguards and will prepare a Project Implementation Manual (PIM) that will include a checklist for project activities including potential threats, and mitigation measures as well as capacity building for safeguards implementation and compliance monitoring. The Grant manager will submit the PIM to the FGS and GoSL for review, who will be required to submit to the Bank for clearance. Thus, any bidders for any of the funding available under this component will have to indicate, in their respective bids, how they intend to address environmental and social sustainability issues that could be associated with the provisions of those services. The selected bidders will be responsible for implementing the safeguards on the ground, including ensuring compliance with occupational health and safety imperatives, labour issues and dealing with de-manufacturing of out-of-use solar devices, e-waste disposal, and recycling.

For component 2, the consultants to be engaged for the prefeasibility must have a safeguard capacity within its team. The role of the safeguard consultant which should come out clearly in the TOR is among others to detail an E&S scope that will mainstream the following areas into the prefeasibility report;

- E&S risks
- Potential mini grid placing or siting
- Land acquisition
- Access
- Site selection process



- E&S Issues to be taken up during the subsequent phases

The project will also set up a Grievance Redress and Feedback Mechanism for people to report concerns or complaints, if they feel unfairly treated or are affected by any of the subprojects. As part of their ESMS, SHS distributors will establish and maintain a grievance mechanism for communities. Additionally, the project has developed a structured approach to addressing gender issues and gender-related actions and tools are integrated into each component.

The project will also be monitored to ensure that it puts adequate safeguards in place to address governance issues. The project's Task Teams will be required to consider as best practice, putting in place transparent and accessible selection criteria that will ensure that companies owned by women, youth and people with disabilities, have equal chance for consideration for funding under the project through the fund manager.

Borrowers capacity

The counterpart's capacity in planning, implementing and supervising any due diligence measures (environmental, social, technical and overall quality) is currently deemed very low. There is very limited capacity in terms of staffing, financial resources and skills on the World Bank's safeguard policies. The FGS has created a Ministry of Energy and Water Resources in Mogadishu, to be focused on developing energy sector policy and regulation of the sector. The ministry's energy sector management department has only a director and volunteer consultant. However, this consultant is knowledgeable about environmental and social safeguards and international standards, and could provide a focal point for beginning to develop PIU or in-house safeguards capability, given some capacity building and other project support. In Somaliland, capacity within the Ministry of Energy and Mineral Resources is limited, and therefore not able to provide sector management, including in safeguards. Puntland has no equivalent energy ministry, but does have the Puntland State Authority for Water, Energy, and Natural Resources (PSAWEN), a semiautonomous agency reporting to the Presidency and mandated to oversee and regulate the electric power industry, but PSAWEN has currently no technical capacity. Despite the current low level of safeguard capacity within the agencies responsible for the power sector at the FGS level and in Puntland and Somaliland, there is some nascent capacity in those government's agencies responsible for environmental matters. Given the relatively low to minimal level of environmental and social impacts anticipated by small-scale solar installations under this project, the addition of one or two knowledgeable and engaged safeguard specialists to a dedicated PIU or the staff of agencies responsible for electricity sector oversight could adequately cover safeguard requirements for this project.

The ESMFs prepared by respective implementing agencies provides more detail the staffing and capacity of the implementing agencies and propose a course of action to fill the staffing and capacity gaps during implementation. These include:

- (i) Under component 3, provide capacity building for safeguard focal points and implementing agencies' technical staff to serve as the base for strengthening their safeguards oversight capacity for possible future larger power projects;
- (ii) Given the complexity of the activities to be supported, along with capacity constraints within the government entities associated with them, the Grant Manager (firm) would competitively be selected to manage Component 1a and b of the project under Recipient Execution arrangements. This firm will oversee the rollout of the grants and consumer awareness campaign activities. A strong emphasis will be placed in their scope of work on capacity development of the technical staff within the ministries at national and regional levels. The Grant Manager will also be tasked with conducting environmental and social screening and implementation capacity of the technical staff within the ministries at the national and regional levels.



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

Project stakeholders are mainly Government, development partners, other energy sector stakeholders, Community members in both urban and rural community members, vendors/suppliers of products and service providers; and financial service providers.

Stakeholder consultations will be carried out and would focus on obtaining feedback from potential female beneficiaries, including female entrepreneurs. Consultations will be conducted both on a bilateral basis as well as through targeted workshops with groups of stakeholders. Consultations will be inclusive of various groups including women, men (including tribal leaders and men widely respected in the communities), youth, displaced populations and marginalized groups, to enhance their voice in the participatory planning process for defining technical specifications of solar products.

The Project Implementation Unit will establish a grievance redress mechanisms (GRM) that will allow general public in the project area, affected communities or individuals to file complaints and to receive responses in a timely manner. The system will also record and consolidate complaints and their follow-up. This system will, be designed for handling complaints perceived to be generated by the project or its personnel. It may also include disagreements about compensation and other related matters.

Stakeholder 's engagement and public consultation would be an on-going activity taking place throughout the entire project process. Public participation and consultation would take place through meetings, radio programs, requests for written proposals/comments, filling in of questionnaires, explanations of project to the locals, making public documents available at the federal, state and local levels

The ESMF have been disclosed on MoEWR website (September 24, 2018); and MoEM website (September 25, 2018) and the World Bank's Info Shop.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other		
Date of receipt by the Bank	Date of submission for disclosure	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors

<p>"In country" Disclosure</p> <p>Somalia</p> <p>25-Sep-2018</p> <p>Comments</p> <p>Disclosed in Somalia on September 24, 2018; Disclosed in Somaliland on September 25, 2018</p>
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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

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

CONTACT POINT

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APPROVAL

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Approved By

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