PROJECT INFORMATION DOCUMENT AND INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

Date prepared/updated: May 3, 2017 Report No.: 115272

I. Basic Information

1. Basic Project Data

Country: Federal Democratic Republic of Ethiopia	Project ID: P162607		
	Additional Project ID *(if any)*:		
Project Name: Renewable Energy Guarantees Project			
Task Team Leader: Rahul Kitchlu, Jukka-Pekka Strand			
Estimated Appraisal Date: December 1, 2017	Estimated Board Date: March 15, 2018		
Managing Unit: GEE01	Lending Instrument: Guarantee		
Sector: Energy and mining			
Theme: Financial and private sector development			
IBRD Amount (US$m.): IDA Amount (US$m.): 50 (represents IDA allocation required for issuing $200 million of IDA guarantees) GEF Amount (US$m.): PCF Amount (US$m.): Other financing amounts by source:			
Environmental Category: B			
Is this a transferred project	Yes [ ]	No [x]	
Simplified Processing	Simple [x]	Repeater [ ]	
Is this project processed under OP 8.00 (Rapid Response to Crises and Emergencies)		Yes [ ]	No [X]

2. Project Objectives:

The PDO of the proposed Renewable Energy Guarantees Project (REGREP) is to support increased renewable energy generation capacity of Ethiopia through private participation.

3. Project Description:

Reversing the Low Access Rate: Despite major strides in the past decade, Ethiopia's electricity sector continues to fall short of the promise of effective service delivery, with the second highest energy access deficit in Africa. In 2005, the GoE launched the 'Universal Electricity Access Program' (UEAP), which constitutes one of the most significant grid expansion programs in Africa. Under UEAP, between 2005 and 2015, electricity grid was spread to about 6,000 towns and villages from the initial 667, and grid coverage reached 60 percent of the towns in the country. However, the on-grid household electrification rate remains quite low at approximately 15 percent, with over 60 million people left without access to electricity. While in the past, the GoE focused on expanding the grid network and the power supply capacity, it intends to redouble its focus on electrification. The GoE is preparing a 'National Electrification Plan' (NEP) which aims to significantly scale-up the pace of on-grid connections and achieve universal electrification in Ethiopia by 2025. Consequently, the domestic demand for electricity is expected to continue to grow at more than 15 percent (per annum) in the coming years.

Ensuring Sufficiency and Diversity of Supply: Currently, Ethiopia's clean energy based, self-sufficient electricity sector is an outlier in the region. Ethiopia is endowed with renewable energy resources, with huge potential for hydro, solar, wind, and geothermal power. Already, the available capacity, mostly hydropower, has reached 4,256 MW (second highest in sub-Saharan Africa). Other large scale hydropower projects, most notably the Grand Ethiopian Renaissance Dam (GERD 6,000 MW), are now under construction. However, actual energy supplied from these hydropower plants is subject to uncertainty and fluctuations due to variations in seasonal and annual rainfall amounts, as well as climate change (e.g. impact of the El Nino factor in 2015/16 led to country-wide blackouts). Given the expected strong growth in demand for energy, other complementary clean energy resources must be developed to mitigate the risk of overreliance on, and variability of hydropower. A diversified mix of supply resources (including solar, wind, and geothermal power) can not only ensure sufficiency of supply but can also act as a mitigant to climate change, in line with Pillar Three of Ethiopia's 'Climate Resilience Green Economy (CRGE) Strategy' (2011). To this extent, GoE targets to have about 15-20 percent of its energy supply from non-hydropower based renewable resources (during GTP-II). Based on these planned additions to generation capacity, including that provided by solar, wind, and geothermal sources, Ethiopia is expected to have over 7,000 MW of installed capacity by 2020, which would provide sufficient energy (over 20,000 GWh) to supply the expected growth in demand.

Opening Doors for Private Participation: Following decades of self-managed and self-financed investments in the energy sector, GoE is now looking to aggressively crowd in the private sector. Historically, all electricity infrastructure development has been centrally planned and publicly financed. This has caused significant macro-financial constraints which are widely seen as unsustainable in the long run. In addition, the utilities have also struggled to keep up with the pace of upgrades required (systems, tools, and human resources) to match the growth in the sector. While the utilities have generally performed well on technical aspects of designing and executing large-scale infrastructure development projects, much more needs to be done to develop skills for newer renewable technologies. Consequently, the GoE is looking to invite private sector to participate in the power generation segment (as independent power producers, IPPs), and to bring in commercial capital and sustainable financing structures, augment technical know-how, as well as improve the implementation speed of the energy sector.

Initiating Investment Climate Reforms: The GoE is undertaking several steps to ensure that key legal and regulatory changes, adequate commercial and procurement framework, as well as institutional arrangements are put in place to prepare for private participation. The GoE has prepared an 'umbrella' regulation which paves the way for public-private partnerships (PPPs). Following extensive review, the final draft PPP Proclamation is expected to be presented to the National Parliament for approval in the coming months. The GoE is also preparing a transparent and competitive procurement framework (auction-based bidding procedures, for relevant technologies, as feasible) which is expected to become the default methodology for procuring IPPs. The GoE is working closely with key sector stakeholders to review existing commercial and banking regulations that may impact development of IPPs in the country. Finally, a dedicated IPP unit has been established at the EEP, which would become the primary counter-party to the IPPs. The scale and scope of the ongoing reforms will require persistent support of the GoE as well as international expertise and experience.

Improving Investor Confidence: Overall, the perceived risk by private investors related to investments in Ethiopia power sector remains high. As the GoE is preparing to open the energy sector market to private participation, there is a strong need to mitigate the high level of uncertainty as well as risks that frontrunner transactions could face. In the longer term, as Ethiopia's energy sector reforms progress through the transitional phase, and the market matures, it is expected that

the need for risk mitigation approaches (such as IDA guarantees) will decrease. The energy sector institutions need to establish a successful track records of financial, operational, and contractual performance. This would in turn improve the credit-worthiness of the sector and the viability and attractiveness of the sector as a whole for private participation.

World Bank Group Response: The World Bank Group (WBG) has already been providing comprehensive policy advice and technical support to the ongoing reform program, and has initiated a 'Joint Implementation Plan' (JIP) to coordinate support. The WBG's support includes IDA's multifaceted advisory assistance for: policy enactment as well as legal and regulatory reform (PPP Proclamation as well as IPP legal framework development), planned capacity development for the IPP unit at EEP, continued technical assistance for utility reform and long-term financial sustainability of the sector. In addition, the GoE has requested mobilization of IDA guarantees to support the frontrunner IPP transactions by providing credit enhancement on behalf of EEP (more details below). IFC has signed an agreement to develop (transaction and financial advisory services) up to 500 MW of solar IPPs - the 'Scaling Solar Initiative'. IDA, IFC, and MIGA, are developing a Joint Implementation Plan (JIP) to provide a coordinated 'one-stop-shop' solution combining knowledge, expertise, financing, and guarantees, as needed, to the GoE for the development of the energy sector.

The proposed REGREP would consist of: (i) IDA payment guarantees; and/or (ii) IDA loan guarantees back-stopping certain sovereign/sub-sovereign obligations in the context of renewable energy projects developed by IPPs.

- *The payment guarantees* will enable EEP to provide adequate security expected to be requested by IPP project sponsors through the issuance of Letters of Credit (LC). The LCs are expected to cover up to [6 months] of IPP revenues (as to be agreed under the Power Purchase Agreements, PPAs). The final size and other terms will be based on discussions with the Government and private sector partners.

- *The loan guarantees* would be offered to commercial banks, which finance the IPPs, mitigating risks related to off-taker or Government performance. Loan guarantees would be deployed with an objective to help mobilizing new sources of private financing for Ethiopia's energy sector in line with the WBG's Cascade Principles.

Based on the timing of the transactions being developed that are likely to reach financial close in FY18 (see Table 1 for a list of transactions in the pipeline), REGREP would provide up to US$ 200 million of payment and loan guarantees (equivalent to US$ 50 million allocations out of Ethiopia's IDA envelope) to be provided in support of up to 500 MW (5x 100 MW) of frontrunner IPPs. These transactions could mobilize up to US$ 1 billion of investments and lending for new renewable energy projects in Ethiopia.

These transactions would consist of the first phase of Scaling Solar Initiative (200 MW) as well as 2-3 additional solar and/or other renewables IPPs (300 MW) being tendered by the EEP independently of Scaling Solar Initiative. The exact form and allocation of the guarantee support for each transaction would be determined during project preparation and interaction with the market, the GoE, and other stakeholders. The REGREP will be structured as a guarantees program where it is expected that the frontrunner IPPs will be appraised in parallel and presented to the Board jointly, if they proceed along similar timeframes, targeting financial close during FY18.

4. Project Location and salient physical characteristics relevant to the assessment of environmental and social risks and impacts:

The proposed project will focus on the implementation of Solar PV grid with the capacity of 500 MW by the selected Individual Power Producers (IPPs). The choice of IPPs will consider the eligibility criteria set out in OP 4.03 to ensure that the Private entity is fully responsible for identifying, assessing and managing the environmental and social risks associated with the project activity. In addition to the construction and installation activities of the solar PV plant, the project may have associated facilities, including short transmission line to connect a plant with the grid, transformers, access roads, water points (Surface and ground water), camp, buffer zone and etc.

The specific locations for the implementation of the proposed 500 MW Renewable Energy Guarantees Projects (REGPs) are not yet known, which the final specific sites will be identified during project preparation. However, at this stage the potential sites were identified for Scaling Solar-Phase 1 with 200 MW capacity and the other three potential sites with the capacity of 300 MW, which are outside of the Scaling Solar-Phase 1. These tentative sites are Dicheto (east of Semera, on the road to Djibouti), Dire Dawa (west of the city) and Ketom (near Awash 7 Kilo) under phase one SSI program, which have been shortlisted by IFC for the development of the 200 MW and the other three potential sites with the capacity of 100 MW each at Metahara, Mekele, and Humera sites.

The project will provide solar PV gird based electrification to households and commercial enterprises and deliver positive environmental and social impacts since the grids would improve and be expected to replace the existing lightening systems that are either fossil fuel-based such as diesel generators and kerosene lamps or woody biomass, which have a negative impact to the biophysical and social environment.

The OP/BP 4.03 World Bank Performance Standards (PS) for Private Sector Activities will be applied to each of the eligibleIPPs supported under REGREP. Based on the experience of similar IPPs, is anticipated that each of the IPPs activities would be assigned environmental assessment category “Category B”. The proposed investment under each IPPs are expected to have limited environmental and social impacts, which are site-specific, temporary, localized and none is expected to be significant. Those impacts can be avoided or mitigated by adhering to applicable performance standards, procedures, guidelines, and design criteria. The categorization is consistent with categorization of other similar projects within the energy sector.

Apart from the social and environmental benefits anticipated from the implementations of IPPs project, the anticipated construction and installation activities under the solar PV plant and the respective associated facilities would require land and could generate potential adverse environmental and social impacts to the nearby biophysical and social environment. The anticipated negative impacts related to the project activities could be due to construction and installation of solar PV grids, access roads, workers camp, distribution lines and networks, water points, buffer zone, etc. These impacts include: temporary air emissions (dust and vehicle emissions), noise related to excavation, impacts on endangered fauna and flora species, land acquisition, clearing of vegetation, abstraction of water (surface and ground water), health and safety of workers and community members residing nearby, access to land and water sources, generation of solid waste and wastewater. Measures related to chance finds and cultural heritage will need to be well addressed in the safeguards documents to safeguard any impacts on the cultural resources.

Considering the significance and nature of the aforementioned impacts, at the concept stage, it is estimated that seven of the eight PS could be relevant for the IPPs (to be confirmed as the final sites are identified and developed). The PS anticipated to be relevant are: PS1 Assessment and Management of Environmental and Social Risks and Impacts, PS 2 - Labor and working conditions, PS 3- Resource Efficiency and Pollution Prevention, PS 4 - Community Health, Safety, and Security, PS 5 - Land Acquisition and Involuntary Resettlement, PS 7 - Indigenous Peoples (as relevant, based on the final site selection), and PS 8 - Cultural Heritage. Detailed assessment of PSs that may be relevant would be determined during preparation.

IPPs will design and implement an Environmental and Social Management System for the construction and operations phase consistent with WBG PS requirements. The System will define roles and responsibilities, and other necessary elements (manual of procedures) to enable all operations to comply with Ethiopian laws and regulations and WBG PS. Amongst other elements, the management system would include a policy, an updated ESMP, an emergency preparedness and response plan, an emission monitoring program, occupational health and safety (OHS) as well as an external grievance mechanism.

As required by the GoE and the WBG, an Environmental and Social Impact Assessment (ESIA) and a Resettlement Action Plan (RAP) will be prepared by the IPPs in order to minimize and/or avoid the negative environmental and social impacts and to enhance the positive impacts that benefits the communities by large. The IPPs will conduct Environmental and Social Impact Assessment (ESIA). The ESIA would cover relevant environmental and social regulations and the key aspects of the WBG PS relevant to the project design, construction, operation, and decommissioning. The ESIA will include identification and assessment of environmental and social risks and impacts; and measures to avoid, mitigate or offset the impacts identified as well as socio-economic baseline and impact assessment of the communities around project site(s). As relevant, Environmental and Social Management Plan (ESMP) will be prepared and consulted upon before the start of civil works; and if needed, each IPP would prepare Resettlement Action Plan (RAP) / Labor Influx Management Plan (LIMP), as appropriate, and a Community Investment Plan (CIP).

All IPPs, whether as part of Scaling Solar or not, will be subject to thorough World Bank due diligence. The WB will independently vet all IPP candidates following its standard appraisal practices, including analysis of the projects' technical, financial and economic merits, and a review of potential environmental and social impacts and ensure supervision of safeguards compliance and reporting in accordance with the legal covenant, building on due diligence of the WBG PS requirements.

5. Borrower's Institutional Capacity for Safeguard Policies

The implementing agency will be the Ethiopian Electric Power (EEP). EEP has an Environment and Social Management Unit (ESMU), responsible for managing social and environment risks and impacts, and has accumulated vast experience preparing and managing environmental and social plans and resettlement action plans in the existing Bank-funded energy projects. To strengthen the existing capacity of EEP-ESMU, particularly on the preparation and implementation of the necessary safeguards instruments for solar PV grid projects, the Bank's ongoing activities will support capacity development on safeguards managements associated with proposed project construction and operation activities. The capacity building activities will be planned as required, including training of the staff, assignment of safeguards specialists, etc. Such capacity building activities would be financed from ongoing Bank operations. The Bank is working with EEP to strengthen its capacity to identify and implement an appropriate safeguards management and monitoring framework to ensure IPPs supported by REGREP comply with PSs.

6. Environmental and Social Safeguards Specialists on the Team:

John Bryant Collier, Senior Environmental Specialist, GEN01
Edward Felix Dwumfour, Senior Environmental Specialist, GEN01
Yacob Wondimkun Endaylalu, Environmental Specialist, GEN01
Chukwudi Okafor, Senior Social Development Specialist, GSU07
Samuel Lule, Consultant, GENDR

7. If PS 1 and PS 2 are NOT applicable, provide a brief explanation why:
N/A

II. PERFORMANCE STANDARDS THAT MIGHT APPLY

Performance Standards	Yes	No	TBD
PS 1: Assessment and Management of Environmental and Social Risks and Impacts	**X**		
PS 1 is applicable to the proposed project due to the potential environmental impacts emanated from the IPPs supported under REGREP. These impacts are expected to be moderate, localized and site-specific and easily mitigated through implementation of best safeguards management practices. Some of impacts like temporary air emissions (dust and vehicle emissions), noise pollution from excavation and construction activities and vehicle transit, solid waste and wastewater generation from construction activities and temporary worker accommodations are those expected to be generated from project and project related activities that require to be avoided/minimized and managed properly over the project period. IPPs will prepare ESIA/ESMP as required that meets the requirements of PS 1 and disclosed before the commencement of civil works. The ESIA/ESMP will be used as a basic safeguards instrument during project construction and operation phases to avoid/minimize the anticipated impacts. Developers and operators will follow and comply with PSs for construction and operation, with provisions for compliance by contractors and suppliers, as well as provision of relevant and functioning grievance mechanism. Further, an Enhanced Social Assessment and Consultation as an integral part of site specific ESIA study will be conducted for sites meeting PS.7 requirements.			
PS 2: Labor and Working Conditions	**X**		
This PS is applied due to the nature of the project that attributed by labor-intensive activities and issues like discrimination, equal opportunity, compliance with labor laws, prevention of child or forced labor might be raised over the project period, which will be needed to manage appropriately. IPP developers and operators will need to conform to labor and working condition requirements of this PS, by means of provisions in their ESIA/ESMP. Moreover, standalone labor influx management plan or under the ESMP based on the type and number of the required labor force to the project will be prepared to prevent or avoid risks and impacts generated from project induced influx of labor. The procedures will be used to ensure application to contracted workers, workers engaged by third parties, and workers in the supply chain of the IPPs as determined relevant.			
PS 3: Resource Efficiency and Pollution Prevention	**X**		
Development of solar generation will not affect GHG or air pollutant emissions and may represent avoided emissions if they are considered to be substitutes for diesel/kerosene, etc. All investments will be designed and operated according to the more stringent of Ethiopian standards or the WBG PS EHS Guidelines. Waste Management Plans will be prepared as part of ESIA/ESMP of developers, contractors, and operators. Given the nature and scale of the proposed project activities, which could have a potential to generate point and non-point sources pollutions and adverse impacts on the surroundings biophysical environment and human health, and use of natural resources, this PS is applied to ensure sound environmental and social risks and impacts identification, assessment process and implementations of best management practices.			

Performance Standards	Yes	No	TBD
PS 4: Community Health, Safety, and Security	**X**		
Since site specific activities under the project have excavation and construction activities, vehicle transit, solid waste and wastewater generation from construction activities, this PS is applied. Site specific ESIAs and environmental audits will address community health and safety issues, including: social conflict and exposure to HIV/AIDS and other communicable diseases as a result of influx of workers and employment-seekers, air and noise emissions, exposure to hazardous materials, emergency preparedness and response, and loss of ecosystem services important to the community. Developers, operators, and contractors will be guided by this PS when arranging for security of their facilities. Occupational health and safety (OHS) is an issue that needs to be properly managed during construction and operation phase of the proposed project to minimize the risk of accidents leading to injuries and/or fatalities. In this regard, safety management plan shall be prepared under the ESMP to be used as a guideline for the implementation of best safety management practices.			
PS 5: Land Acquisition and Involuntary Resettlement	**X**		
Some land acquisition is possible, however, with solar IPPs, the location itself can be chosen flexibly to avoid the impact on valuables. PS 5 is applied and IPPs will adopt a risk mitigation hierarchy to manage the land acquisition risks. RAPs acceptable to the Bank will need to be prepared in those cases.			
PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources			**X**
Project activities are not expected to have any impact on natural resources or natural habitats. Solar IPP sites can be selected in such as manner so as to avoid impacting biodiversity. However, as the specific site is not yet known at this stage, the applicability of this PS will be determined before appraisal during the environmental and social risks, impacts identification, and assessment process.			
PS 7: Indigenous Peoples	**X**		
Solar IPP sites can be selected in such as manner so as to avoid adverse impact on underserved and vulnerable communities. Underserved and pastoral communities may be particularly vulnerable if their lands and resources are transformed. IPPs should anticipate and avoid adverse impacts on such communities or when avoidance is not possible, to minimize and/or compensate for such impacts.PS 7 will be applied to manage such risks. Accordingly, PS 7 is applicable at this stage because the proposed activities might be implemented in Afar region. Therefore, any IPP's operation in the applicable sites will include an Enhanced Social Assessment and Consultation as an integral part of site specific ESIA study reflecting the requirements of PS 7, including the process used to foster free, prior, and informed consultations to garner broad community support for the proposed activities by these groups considered underserved and vulnerable groups. The output of the Social Assessment as part of the ESIA and the identified mitigation actions will be incorporated in the project design as a Social Development Plan. This social development plan will ensure that the activities and the implementing IPPs will respect the dignity, rights and culture of groups meeting the PS 7 requirements and ensure that these people participate and benefit from the project in a sustainable manner.			
PS 8: Cultural Heritage	**X**		
Solar IPP sites can be selected in such as manner so as to avoid impacting heritage sites. In case of chance finds, measures related to chance finds and cultural heritage shall be considered during project design and preparation of safeguards instruments. However, to manage the possibility of chance finds, the ESIAs will include a chance find procedure which will guide IPPs prepare site specific safeguards instruments.			

III. SAFEGUARDS PREPARATION PLAN

A. Target date for the Quality Enhancement Review (QER), at which time the ESRS would be disclosed and the PAD-stage ISDS would be prepared: November 1, 2017.

B. For Category C or Category FI projects that do not require an ESRS, the target date for preparing the PAD-stage ISDS: **N/A**

C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing[1] should be specified in the PAD-stage ISDS: **N/A**

IV. APPROVALS

Signed and submitted by:		
Task Team Leaders:	**Rahul Kitchlu / Jukka-Pekka Strand**	**Date:**
Approved by:		
Regional Safeguards Coordinator:	**Nathalie Munzberg**	**Date: May 5, 2017**
Comments:		
Practice Manager:	**Sudeshna Banerjee**	**Date: May 11, 2017**
Comments:		
Country Director	**Carolyn Turk**	**Date: May 23, 2017**
Comments:		

1 Reminder: The Bank's Access to Information Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in-country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.