

# Environmental and Social Risk Management Report Universal Green Energy Access Program (UGEAP)

June 2016



## Project Description and Background

1.1 The objective of the Universal Green Energy Access Program (“UGEAP” or “Program”) is to contribute over the coming 15 years to universal access to electricity in Sub-Saharan Africa by scaling up the available capital from local financial markets and international private sector investors for investments in renewable energy. UGEAP will therefore target investments which fall into three following Project Categories (“Target Investments”):

- Project Category 1: Off-grid green electrical energy, such as solar home systems
- Project Category 2: Green energy supply for mini- and micro-grids electrifying communities and remote villages
- Project Category 3: Green electrical energy supply to businesses e.g. in the industry and service sectors and selected on-grid projects.

UGEAP will partner with local and regional financial institutions (the “Partner Institutions”) in the delivery of capital to the Target Investments. To support the Partner Institutions overcoming certain constraints, such as limited access to long-term funding and their limited size, UGEAP will:

- Provide long term debt to the Partner Institutions that in turn will extend long term loans in local currency to energy supply companies (ESCOs). UGEAP will further share the credit risk on eligible loans with the local banks. This structure enables local banks in SSA to lend to innovative businesses by providing long-term funding and scaling up the Partner Institutions’ lending capacity.
- Lend directly to Target Investments in parallel with local banks through a syndication structure if and where transactions require further debt capital beyond the lending capacity of the local financial institutions.

UGEAP targets debt investments ranging from USD 1 MM to USD 30 MM in size to close the identified funding gap of long-term debt at project level. UGEAP is open to co-operate with any local and regional financial institution which complies with the investment eligibility criteria as well as to finance all eligible, creditworthy transactions in the three Project Categories. In a first phase, UGEAP will be active in Benin, Kenya, Namibia, Nigeria, Rwanda, Tanzania, Uganda and Zambia (each subject to non-objection by the National Designated Authority). Additional market analysis will determine the countries of investment in the subsequent phase (equally subject to a non-objection by the respective National Designated Authority).

1.2 Over the initial investment phase of 5 years, the UGEAP aims to raise USD 500 MM in committed capital for this purpose with an initial contribution for the first Phase of USD 80 MM from the Green Climate Fund (GCF).

## Project Status and Compliance

2.1 UGEAP will be structured as an investment fund to be managed by Deutsche Bank (DB)<sup>1</sup>. Part of the responsibilities of DB will be the origination and selection of investment opportunities as well as to execute those investments that have passed the due diligence process.

2.2 UGEAP, as one of the first programs developed by Deutsche Bank for the GCF to

<sup>1</sup> Roles and functions will be carried out by properly licensed and regulated entities within Deutsche Bank group.



invest into, will use, as it is expected for subsequent programs, the IFC Environmental and Social Performance Standards (“IFC Performance Standards”) as its Social and Environmental Guideline (“UGEAP S&E Guidelines”).

- 2.3 As a stand-alone investment fund, UGEAP will adopt a dedicated Social and Environmental Management System (“SEMS”, as described below) which is applicable to any activity UGEAP will pursue. In its function as investment manager, DB will be tasked to operate the SEMS as part of its fiduciary duty towards all investors into UGEAP. The SEMS is designed such that activities of UGEAP will be analyzed and monitored in line with UGEAPs S&E Guidelines in a reasonable way and commensurate with the nature, scale, and stage of the activity, and with the level of environmental and social risks and impacts.
- 2.4 Due to the nature of the activities of UGEAP, we expect that UGEAP overall will represent a low to medium risk for its shareholders from an S&E perspective.

### Environmental and Social Management

- 3.1 All projects UGEAP will have exposure to, either through local Partner Institutions or directly in syndicated loans along other financial institutions, will be subject to an environmental and social impact assessment in accordance with the IFC Performance Standards:

Assessment and management of Environmental and Social Risks and Impacts
Labor and Working Conditions
Resource Efficiency and Pollution Prevention
Community Health, Safety, and Security
Land Acquisition and Involuntary Resettlement
Biodiversity Conservation and Sustainable Management of Living Natural Resources
Indigenous Peoples
Cultural Heritage

- 3.2 Deutsche Bank as executing entity will classify each project that UGEAP shall invest into according to the categories as set out below:

For UGEAP’s exposure towards Partner Institutions:

FI-1	When a Partner Institution’s activities include, or are expected to include, substantial financial exposure to business activities with potential significant adverse environmental or social risks or impacts that are diverse, irreversible, or unprecedented.
FI-2	When a Partner Institution’s activities comprise of, or is expected to be comprised of, business activities that have potential limited adverse environmental or social risks or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through



	mitigation measures; or includes a very limited number of business activities with potential significant adverse environmental or social risks or impacts that are diverse, irreversible, or unprecedented.
FI-3	When a Partner Institution's activities include financial exposure to business activities that predominantly have minimal or no adverse environmental or social impacts.

For any activity the UGEAP either directly or indirectly, i.e. through its Partner Institutions, will have exposure to the following categories:

A	A proposed investment is classified as Category A if the business activity has the potential for significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.
B	A proposed investment is classified as Category B if the business activity has the potential for limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.
C	A proposed investment is classified as Category C if it the business activity has minimal or no adverse environmental or social risks and/or impacts.

Deutsche Bank has been accredited by the Green Climate Fund ("GCF") for projects classified up to the highest risk category in accordance with GCF's classifications.

Given the envisaged activity of UGEAP, it is not expected that any investment or Partner Institution will fall into Category A / FI-1 respectively while through the syndicated loan structures, UGEAP may have exposure to larger installations that could potentially be categorised A. Projects of Categories 1 or 2 (off-grid Solar Home Systems and Micro-/mini-grids) are expected to be categorized C due to the small size of the single sub-projects, while the final categorization will be subject to the assessment of the respective project. Some sub-projects in Project Category 3 could potentially lead to Category B due to a certain project size which will be reached. As most projects replace diesel-fueled power generation, this will undo the negative effects on air quality associated with diesel generator emissions and will aid in cleaner energy production for the community or site plus associated positive social and health benefits.

- 3.3 All projects will, subject to their nature, scale, and stage of the activity, and with the level of environmental and social risks and impacts, either require an external and independent environmental impact assessment, or an assessment by experienced and adequately qualified staff of the DB Sustainable Investments team with, in case of need reasonably required, the assistance of external consultants and/ or based on information and capacity provided by the local Partner Institutions. For all projects, impacts in each standard will be highlighted and tracked throughout the project's lifetime. Additional to the IFC Performance Standards, UGEAP will set a list of excluded activities UGEAP will not finance or support through its investment activities ("UGEAP List of Excluded Activities").



- 3.4 UGEAP will maintain its own web-presence<sup>2</sup> and the Social & Environmental Guidelines will be made public once UGEAP is operational.
- 3.5 In line with the UGEAP's S&E Guidelines, all Partner Institutions as well as project companies UGEAP will have exposure to, are expected to have an appropriate SEMS to be in place. In case of deviations between UGEAP's S&E Guidelines and the counterparty's processes, remedial actions may be agreed in the loan documentation.
- 3.6 Annual reports of UGEAP's compliance throughout the investment cycle will be produced. The reports will be based on site visits and information received from the project developers and Partner Institutions.

### Environmental and Social Risks and Impacts

- 4.1 While UGEAP's SEMS will be valid for all activities of UGEAP, three projects (one for each Project Category) have been analyzed within the initial due diligence for the UGEAP ("Exemplary Pipeline Transactions"). Due to the nature of the project activities these transactions are expected to represent a low to medium risk. They include off-grid green electrical energy supply through solar home systems (Project Category 1), green energy supply for mini- and micro-grids electrifying communities and remote villages (Project Category 2), or green electrical energy supply to businesses (Project Category 3) and represent the types of transactions UGEAP will gain exposure to, either through its Partner Institutions or directly.
- 4.2 The three companies of the Exemplary Pipeline Transactions have confirmed that they comply with their internal S&E standards as well as all applicable legal and regulatory environmental, social, health and safety, and labor (ESHS&L) laws and regulations and expect the activities they finance to comply as well. The activities have further been benchmarked against UGEAP's S&E Guidelines and have been found to be in compliance. Annual certification will be required by investees (see below).
- 4.3 Annex 1 shows a sample summary of a generic analysis for Project Category 1.

### Environmental and Social Requirements

- 5.1 All investees of UGEAP, regardless if it is a Partner Institution or – in the case of direct lending – a corporate/ project company, are specifically required to ensure to:
  - Operate a SEMS which complies with expectations from UGEAP based on UGEAP's S&E Guidelines.
  - Comply with all applicable national environmental, social, health and safety, and labor regulatory requirements, and in relation to the financing of projects to ensure that each loan complies with: (a) in-country ESHS and labor regulations; (b) the UGEAP's List of Excluded Activities; (c) the Fundamental Principles of the Rights at Work.
  - Develop and/or present a set of internal guidelines and procedures to ensure effective waste management of old technology and equipment. This will include procedures for recycling, re-use, and discard of wastes. Additionally, it will include special procedures for the disposal of hazardous wastes in accordance with local law as a minimum while action plans might be agreed upon to lift practice to international standards.<sup>3</sup>
  - In line with UGEAP's processes SEMS will be analyzed and, were necessary, appropriate mitigation plans will be agreed upon to the satisfaction of the investment manager of UGEAP. A satisfactory SEMS includes dedicated staff responsible for compliance with applicable S&E standards and guidelines.

<sup>2</sup> URL still to be defined.

<sup>3</sup> Hazardous materials are those that could cause injury or death; or damage or pollute land, air, or water. They are defined as substances that are ignitable (flammable), corrosive, toxic, explosive, or reactive.



- Present an Annual Environmental and Social Compliance Report (ESCR) with information on the project portfolio, and with information on any particular risk issues identified with respect to projects and mitigation or corrective measures agreed with clients and/or taken by the borrower.
- Present an Annual Environmental and Social Compliance Certificate which undertakes that all relevant S&E Guidelines, including all applicable national environmental, social, health and safety, and labor regulatory requirements as well as UGEAP's S&E Guidelines have been complied with.



# Annex 1: Generic Sample Analysis for Project Category 1

Companies that offer solar home systems (SHS) to customers in predominantly remote areas, offer a clean and affordable alternative to unhealthy, environmentally harmful, and expensive fossil fuels by making available photovoltaic (PV) based systems through innovative business models. Typically, solar home systems are provided by these companies with a payment plan via established payment means (i.e. mobile phones), comprehensive customer service and innovative remote monitoring technology, including after sales services and maintenance.

For Project Category 1 projects, DB as investment manager and potentially in collaboration with UGEAP's Partner Institutions is expected to perform such an analysis for each Project Category 1 investment and needs to ensure that the borrower has provided evidence of satisfactory analysis. Scoring and measures will be based on the project specific findings.

Table 1: S&E Summary: Generic Analysis for a Project Category 1

PS	Environmental and Social Management Plan Assessment	Score (1-high; 3-low)	Findings and Corrective Measures
	Overall Project Categorization	tbd	Due to the typically very small size of each Solar Home System and its connection to a specific individual house, projects are usually classified as Category C.
1	Assessment and management of environmental and social risks and impacts	tbd	Category-specific risk is mainly related to consumer protection (technical through the appliance as well as economic through adequate affordability checks for potential customers to prevent over-indebtedness), working conditions, electronic waste production and the "gender-energy-poverty" nexus. Mitigating measures to be in place/ to be implemented: Partner companies need to develop and implement satisfactory internal processes regarding the assessment of environmental and social risks and impacts, including the implementation of an appropriate Social and Environmental Management System.
2	Labor and working conditions	tbd	Potential area of concern are minimum wages paid Mitigating Measure: Executing companies shall pay minimum legal wages Potential area of concern are safe working conditions Mitigating measures: training about safety measures needs to be performed and proven. Executing companies shall have internal health and safety policies including standard operation procedures and engineering controls, e.g. automatic circuit breaker and the executing company shall provide health insurance coverage for all employees. A potential area of concern is equal opportunity employment within executing companies, Mitigating measures: Executing companies shall focus on job opportunities for women, promote them actively and fosters their inclusion into male-dominated employment sectors, such as the technical areas.
3	Resource efficiency and pollution prevention	tbd	Industry specific area of concern is the electronic waste production. Measures: Disposal service for components that are surplus of installation and waste management system for old equipment needs to



4	Community health, safety and security	tbd	<p>be in place.</p> <p>Project Category 1 projects actively increase community health, safety and security by preventing burn injuries, structural fires and unintentional ingestion of kerosene by children, indoor pollutants, such as carbon monoxide, nitrogen dioxide and formaldehyde, through substitution of kerosene.</p> <p>Risk of theft and burglary after dark reduced through substitution of kerosene lamps, diesel generators, and the resulting pollution, lighting external facades and housing in order to improve community security. A potential area of concern is the security of the (electric) installation itself.</p> <p>Mitigating measures: Systems need to be installed by professional staff, product standards need to be in place, e.g. over current and short circuit protection, surge protection etc., Users need to be trained in usage and need to be given safety notes. Installations need to come with self-explanatory manuals including danger warnings.</p>
5	Land acquisition and involuntary resettlement	tbd	Solar Home Systems are usually installed on customers' homes or parcels and shall not be affected by land acquisition and/ or involuntary resettlement.
6	Biodiversity conservation and sustainable management of living natural resources	tbd	Solar home systems are not expected to have any biodiversity impact as systems are usually not installed in critical habitats but in existing human settlements.
7	Indigenous peoples	tbd	No cultural resources of indigenous people shall be used or affected by solar home systems.
8	Cultural heritage	tbd	No cultural heritage sites shall be used or affected in the regular case of installing SHS in private homes. In the event that would change in the future, appropriate actions will be taken and tracked.



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