

PUBLIC INSTITUTIONS MANUAL (PART D OF PROJECT OPERATIONS MANUAL)

ELECTRICITY ACCESS SCALE-UP PROJECT (EASP) (UECCC SCOPE - EASP Components 2, 3, and 4)

March, 2024

Acronyms

CTFClean Technology FundE&SEnvironmental and SocialEASPElectricity Access and Scale-Up ProjectESCOEnergy Service CompanyESMSEnvironmental and Social Management SystemGoUGovernment of UgandaGRMGrievance Redress MechanismKPIKey Performance IndicatorMEMDMinistry of Energy and Mineral DevelopmentMoDMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	CSF	Credit Support Facility
EASPElectricity Access and Scale-Up ProjectESCOEnergy Service CompanyESMSEnvironmental and Social Management SystemGoUGovernment of UgandaGRMGrievance Redress MechanismKPIKey Performance IndicatorMEMDMinistry of Energy and Mineral DevelopmentMoDMinistry of DefenseMoESMinistry of Education and SportsMoFPEDMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	CTF	Clean Technology Fund
ESCOEnergy Service CompanyESMSEnvironmental and Social Management SystemGoUGovernment of UgandaGRMGrievance Redress MechanismKPIKey Performance IndicatorMEMDMinistry of Energy and Mineral DevelopmentMoDMinistry of DefenseMoESMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	E&S	Environmental and Social
ESMSEnvironmental and Social Management SystemGoUGovernment of UgandaGRMGrievance Redress MechanismKPIKey Performance IndicatorMEMDMinistry of Energy and Mineral DevelopmentMoDMinistry of DefenseMoESMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	EASP	Electricity Access and Scale-Up Project
GoUGovernment of UgandaGRMGrievance Redress MechanismKPIKey Performance IndicatorMEMDMinistry of Energy and Mineral DevelopmentMoDMinistry of DefenseMoESMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	ESCO	Energy Service Company
GRMGrievance Redress MechanismKPIKey Performance IndicatorMEMDMinistry of Energy and Mineral DevelopmentMoDMinistry of DefenseMoESMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	ESMS	Environmental and Social Management System
KPIKey Performance IndicatorMEMDMinistry of Energy and Mineral DevelopmentMoDMinistry of DefenseMoESMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	GoU	Government of Uganda
MEMDMinistry of Energy and Mineral DevelopmentMoDMinistry of DefenseMoESMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	GRM	Grievance Redress Mechanism
MoDMinistry of DefenseMoESMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	KPI	Key Performance Indicator
MoESMinistry of Education and SportsMoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	MEMD	Ministry of Energy and Mineral Development
MoFPEDMinistry of Finance, Planning and Economic DevelopmentMoHMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	MoD	Ministry of Defense
MoHMinistry of HealthMoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	MoES	Ministry of Education and Sports
MoWEMinistry of Water and EnvironmentMTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	MoFPED	Ministry of Finance, Planning and Economic Development
MTEFMedium-Term Expenditure FrameworkO&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	MoH	Ministry of Health
O&MOperations and MaintenanceOPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	MoWE	Ministry of Water and Environment
OPMOffice of the Prime MinisterPBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	MTEF	Medium-Term Expenditure Framework
PBCPerformance-Based ConditionPCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	0&M	Operations and Maintenance
PCUProject Coordination UnitPFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	OPM	Office of the Prime Minister
PFIParticipating Financial InstitutionPIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	PBC	Performance-Based Condition
PIUProject Implementation UnitPUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	PCU	Project Coordination Unit
PUEProductive Use EquipmentPOMProject Operations ManualRBFResults-Based Financing	PFI	Participating Financial Institution
POMProject Operations ManualRBFResults-Based Financing	PIU	Project Implementation Unit
RBF Results-Based Financing	PUE	Productive Use Equipment
0	POM	Project Operations Manual
	RBF	Results-Based Financing
RHDs Refugee and Host Community Districts	RHDs	Refugee and Host Community Districts
SHS Solar Home Systems	SHS	Solar Home Systems
UECCC Uganda Energy Credit Capitalisation Company		
UNBS Uganda National Bureau of Standards	UNBS	-
UNHCR United Nations High Commissioner for Refugees	UNHCR	United Nations High Commissioner for Refugees

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1 INTRODUCTION

This Public Institutions Manual constitutes PART D of the Electricity Access Scale-Up Project (EASP) Project Operations Manual (POM) for Uganda Energy Credit Capitalisation Company (UECCC), as highlighted in Table 1.

EASP POM PARTS	Contents
PART A - Introduction and Annexes	Description of EASP, roles of stakeholders, and so on
PART B - Credit Support Facility Manual	Line of Credit (LoC) to participating financial institutions (PFIs), direct lending, guarantees
PART C - RBF Manual	Results-based financings (RBFs) for solar home systems (SHS), improved cookstoves, and productive use equipment (PUE)
PART D - Public Institutions Manual	Solar Electrification and Clean Cooking Solutions for Public Institutions
PART E - Technical Assistance Manual	Scope and implementation of technical assistance program

The Public Institutions Facility is a separate window under EASP and may synergize with the other instruments offered under EASP, namely the credit support facility (CSF), guarantees, RBF grants, and technical assistance grants. Eligible entities may apply for funding under multiple UECCC windows. However, the application process and selection criteria are different for each window and approval under one window does not guarantee approval under other windows.

The Public Institutions Facility provides access to grants for off-grid solar systems and clean cooking solutions for public institutions, including in Refugee and Host Community Districts (RHDs).

Electrification of public institutions. The off-grid public institutions that will be electrified are in the health care, education, and water sectors. The Beneficiary Ministries are the Ministry of Health (MoH), Ministry of Education and Sports (MoES), and Ministry of Water and Environment (MoWE). These ministries will lead the electrification program in coordination with the Ministry of Energy and Mineral Development (MEMD) and UECCC and the Office of the Prime Minister (OPM) in case of public institutions in RHDs. The Beneficiary Ministries will enter into a long-term service agreement with the energy service companies (ESCOs) for the provision of electricity services via stand-alone solar systems that meet the predetermined Key Performance Indicators (KPI)s for a period of 10 years. The KPIs are summarized in Table 3 and Annex 1 of this document and will be further detailed in the Service Agreement. The Beneficiary Ministries will identify sustainable fixed quarterly performance-based payments for the provision of electricity services during the contract period. The Beneficiary Ministries will pay the ESCOs such fixed energy performance-based payments subject to fulfillment of predetermined KPIs on a quarterly basis. Failure to meet KPIs may result in lower payments or in a payment waiver for that billing period as specified in the Service Agreement. To promote the sustainability of the energy service

provision to public institutions, UECCC will provide grants to the ESCOs that will fund up to 70% of the capital cost of the systems. The fixed quarterly energy performance-based payment that will be paid to the ESCO will cover the annualization of the amortized balance of the capital cost (including provisions to account for the time value of money), the costs of O&M, and the replacement of system components. The fixed quarterly energy performance-based payment represents the sole payment that the Beneficiary Ministries will perform for the installation, supply, operation and maintenance of a given system during the contract period. If the payments are made in full and on time by the Beneficiary Ministries, the World Bank will issue no-objection for the reimbursement of the quarterly performance-based payments, which will be held in a dedicated account in the Ministry of Finance, Planning and Economic Development (MoFPED). The reimbursement of the quarterly performance-based payment payments to Government will be in alignment with PBC4 as detailed under the Financing Agreement (to a limit of US\$5 million).

Clean cooking in public institutions. The public institutions in the clean cooking program may include hospitals and health centers, schools, police stations, and prisons. MEMD will lead the program in coordination with the Beneficiary Ministries and self-accounting agencies, the MoH, MoES, MoD, Uganda Police and Uganda Prisons, and UECCC. UECCC will provide grants to fund all of the capital cost of clean cooking solutions. The clean cooking solutions program will be guided by MEMD's needs assessment and rollout plan. The principles governing the rollout are as follows:

- (a) The program will be implemented in phases to allow adjustment based on lessons learned.
- (b) Biomass cookstoves will be the most common type of technology employed.
- (c) Schools will form the largest proportion of public institutions selected.

2 ELECTRIFICATION OF PUBLIC INSTITUTIONS

2.1 Purpose of the Facility

This Facility will support electrification of Public Institutions including public schools, public health centers, public water supply systems, and others through stand-alone solar technologies. This Facility will benefit the MoES, MoH, and MoWE to contract solar electricity service providers/contractors (ESCOs) to electrify schools, health centers, and water supply schemes (Public Institutions). This component will address the capital financing, O&M requirements, and component replacement to ensure that installed stand-alone solar systems perform throughout their expected lifecycle and the electrified Public Institutions will benefit from reliable electricity service. A nationwide mapping of the energy demand and supply of public institutions undertaken by MEMD to identify the KPIs and contractual modalities is critical for the successful implementation of these solar electrification schemes. This study may be updated further by the Beneficiary Ministries.

The Beneficiary Ministries will select the ESCOs following a competitive bidding process. The Beneficiary Ministries will identify facilities to be electrified, as well as the system requirements and parameters that will enable ESCOs to create system designs. System requirements will be

specified in the bidding documents and may include allowable system configurations, warranty requirements, efficiency losses, and more. Parameters will be identified in the service agreements and will include KPI target values, such as minimum performance levels and expected peak load, types and amounts of loads to be required, and more. ESCOs will propose the system design based on the requirements and the parameters identified by the Ministries. To facilitate system design, the Ministries will aggregate facilities into standardized categories according to the established parameters.

The Beneficiary Ministries will identify sustainable guarterly fixed energy performance-based payments for pre-determined system requirements and parameters, established for each standardized facility category. An inflation index for the performance-based payment will be included in the Service Agreement. The fixed energy Performance-based payments will be paid to the ESCOs quarterly and will represent the sole payment that the Beneficiary Ministries will perform for the installation, supply, operation, and maintenance of the stand-alone solar systems during the contract period. The ESCOs will participate in competitive bidding process for a defined lot of Public Institutions with related system requirements, parameters, and performance-based payments. To facilitate the supply, installation, operation, and maintenance of the systems, ESCOs can access grant funding from UECCC. During the bidding process, the ESCOs will compete on the amount of grant requested to carry out the supply, installation, operation, and maintenance of the system for a given lot of Public Institutions to be electrified for the length of the contract period; the bidding process will favor the ESCOs that request the least amount of grant for a given lot of Public Institutions. The grant shall not surpass the maximum amount allowable under this POM, set at 70% of the capital expense of the proposed system.

The tender documents for the bidding process will include a UECCC Grant Agreement template detailing the terms and conditions of the Grants. An initial provision of US\$5.5 million grant for each of the three (3) Beneficiary Ministries is earmarked to electrify public institutions to be selected by the respective ministries. Altogether, this will make a total grant provision of US\$16.5 million. Additional dedicated funding is available for public institutions located in refugees and host districts (RHD). If the Ministries exhaust the available funding during implementation, they may request UECCC to raise the need for additional funding with the Steering Committee of EASP. If UECCC concurs, it will submit a request for additional funding to the Steering Committee, based on the implementation performance achieved to date. The Government, through the Ministry of Finance, Planning and Economic Development (MoFPED), will provide adequate budgetary allocations through its Medium-Term Expenditure Framework (MTEF) for the MoH and MoES to ensure timely payment of performance-based payments as invoiced by the ESCOs.¹ Additional funding support up to a limit of US\$5 million will be provided through Subcomponent 4.1 in the form of a performance-based grant payable to the Government of Uganda on the condition that the Beneficiary Ministries made timely payments to the ESCOs for the quarterly energy performance-based payment in compliance with the Service Agreements. The performancebased grant will cover 100% of the annual performance-based payments made in full and on time performed during the first 4 years of implementation, and 50% of the fifth year, subject to the

¹ This does not apply to MoWE which will operate and maintain the systems through the umbrella utilities.

closing date of the Financing Agreement. The grants will be disbursed by the World Bank on a yearly basis and preserved in an account within MoFPED, which shall be used for payment of the performance-based payments for the remaining duration of the contract. Opportunities to leverage climate finance instruments can be used to enhance sustainability of long-term energy service provision.

The eligible beneficiaries will include off-grid health centers (II, III, and IV), public schools, and water pumping stations including those located in RHDs.

For Public Institutions located in RHDs, MEMD and the Beneficiary Ministries will support ESCOs to coordinate with the OPM and United Nations High Commissioner for Refugees (UNHCR) to facilitate the installation of the solar electricity systems and O&M for the MoH and MoES.

2.2 Reporting, Monitoring and Evaluation

UECCC and MEMD will be responsible for reporting on the Results Framework indicators listed in **Error! Reference source not found.** Remote monitoring of sites in real time will be required to collect data on system reliability and usage to verify achievement of the KPIs listed in Table 3. Details about system measurements and how they are used to evaluate the KPIs are included in Annex 1 to this POM. The target values for the KPIs will be specified in the Service Agreement.

Results Framework Indicators	Project Implementation Unit (PIU) Responsible for Reporting the Results
Number of public institutions served	UECCC
Number of Service Agreements and Grant Agreements signed by UECCC	UECCC
Total grant amounts committed by UECCC	UECCC
Grant amounts disbursed by UECCC	UECCC
Service payment amounts from the MoH and MoES to ESCOs	MEMD
Total kW installed capacity	MEMD

Table 2. Results Framework Indicators

Table 3. Project Key Performance Indicators (KPIs)

System KPI	KPI Guidelines	Compliance responsibility
Available energy (Ea)	Available energy (Ea) per day ≥ Target performance (Ea _{target}) per day specified in the Service Agreement.	ESCO ²

System KPI	KPI Guidelines	Compliance responsibility
System Uptime (USYS)	System uptime ≥ a target amount of time specified in the Service Agreement.	ESCO
Depth of discharge (DoD)	Depth of discharge (DOD) ≤ maximum DOD recommended for the battery and specified in the service agreement	ESCO
Days fully charged (batteries) (DFC)	Days batteries are fully charged ≥ minimum days of full charge specified in the service agreement. Only applicable to lead-acid batteries.	ESCO ³
Energy consumed (Ec)	Energy consumed ≤ Maximum agreed upon value specified in Service Agreement	Public Institution
Peak load (PL)	Peak load ≤ a maximum power value specified in the service agreement	Public Institution

ESCOs will be required to include remote monitoring in real time. ESCOs will implement the remote monitoring and allow access to the data to the Beneficiary Ministries, UECCC, and Public Institutions. In case of limited phone coverage in remote areas, ESCOs will propose an alternative method to ensure operations and maintenance of the systems is proactively provided. In this case, historic system data will be collected and saved on site via a digital storage device, which shall be assessed to enable verification of KPIs. More detailed provisions are included in section 5 of Annex 1 to this POM.

Recommended features of the remote monitoring system:

- API integration for third-party integration: The proposed system must facilitate seamless integration with external systems through well-documented Application Programming Interfaces (APIs). The APIs should support secure and efficient API connectivity allowing data exchange and interoperability, adhering to industry-standard protocols and facilitating seamless data exchange with external systems.
- Capability for data download in CSV format for further analysis. The parameters must be clearly categorized with each individual parameter taking up a column for ease of analysis. Parameters must include battery voltage, panel current, panel voltage, inverter current, inverter voltage, power factor, battery temperature, room temperature, apparent power, real power.
- System alerts accessible to at least 3 people (email and/or SMS), including Public Institutions staffing as needed. These may include Low battery voltage alert, High battery voltage alert, Low Voltage Disconnect alert, High battery temperature alert, Inverter overload alert, Inverter shutdown alert, High room temperature alert and System online/ offline status alert.

³ Compliance with the Days fully Charged indicator is under ESCO's responsibility. However, compliance of the Public Institution is also required as Energy consumed should not exceed the maximum quantity of consumption outlined in the Service Agreement. Further details can be found in Annex 1 to the POM.

The ESCOs will report by using remote monitoring data and supplemental quarterly reports that the ESCOs will submit to the Beneficiary Ministries under the terms of the Service Agreement. The Beneficiary Ministries will provide MEMD and UECCC copies of these reports.

The Public Institutions shall inform the Beneficiary Ministries of any issues regarding system performance and the level of maintenance and customer service provided by the ESCO as soon as they arise. The Public Institutions shall also inform the Beneficiary Ministries of any environmental and social (E&S) issues or emergencies as soon as they arise. The data will be included in each Public Institution's existing reporting regime to the Beneficiary Ministries. The Beneficiary Ministries will provide MEMD and UECCC copies of these quarterly reports.

The Beneficiary Ministries, MEMD, and UECCC will implement a Communications Framework involving quarterly coordination meetings to be held in April, August, October, and January of each year (the months following the end of each quarter), to review performance and coordinate on managing the contracts and compliance with the contractual obligations.

The ESCOs will ensure that the KPIs under their responsibility are met over the quarterly billing period for individual facilities as established by the Service Agreement and according to the system measurements established in Annex 1 of this POM (see example in Table 4).

System KPI	KPI measurement	Compliance assessment	Results
Available energy (Ea)	Available energy (Ea) per day ≥ Target performance (Ea _{target}) per day specified in the Service Agreement.		
System Uptime (USYS)	System uptime ≥ Target amount of time specified in the Service Agreement.		
Depth of discharge (DoD)	Depth of discharge (DOD) ≤ maximum DOD recommended for the battery and specified in the service agreement	ESCO in compliance	Performance-based payment must be performed in full by Beneficiary Ministries
Days fully charged (batteries) (DFC)	Days batteries are fully charged ≥ target days of full charge specified in the service agreement. Only applicable to lead-acid batteries.		
Energy consumed (Ec)	Energy consumed ≤ Maximum agreed upon value specified in Service Agreement	Public Institution in	
Peak load (PL)	Peak load ≤ a maximum power value specified in the service agreement	compliance	

Table 4 – KPI compliance exemple 1 (ESCO compliant, Public Institution compliant)

Penalties for noncompliance with KPIs under the responsibility of the ESCOs are outlined in the Service Agreement. Penalties for noncompliance with KPIs under responsibility of the ESCOs will include pro-rating or a complete waiver of the performance-based payment due by the Beneficiary Ministries to the ESCOs related to the noncompliance period (see example in Table 5).

System KPI	KPI measurement	Compliance assessment	Results
Available energy (Ea)	Available energy (Ea) per day ≤ Target performance (Ea _{target}) per day specified in the Service Agreement.		
System Uptime (USYS)	System uptime ≥ Target amount of time specified in the Service Agreement.		
Depth of discharge (DoD)	Depth of discharge (DOD) ≤ maximum DOD recommended for the battery and specified in the service agreement	ESCO NOT in compliance	Performance-based payment must be pro- rated or waived according
Days fully charged (batteries) (DFC)	Days batteries are fully charged ≥ target days of full charge specified in the service agreement. Only applicable to lead-acid batteries.		to the amount specified in the Service Agreement
Energy consumed (Ec)	Energy consumed ≤ Maximum agreed upon value specified in Service Agreement	Public Institution in	
Peak load (PL)	Peak load ≤ a maximum power value specified in the service agreement	compliance	

Table 5 – KPI compliance example 2 (ESCO non-compliant, Public Institution compliant)

Penalties for noncompliance with KPIs under responsibility of the ESCOs will be determined by the level of attainment of KPI thresholds identified in the Service Agreement. For each KPI, the Service Agreement will establish a target value that will grant full attainment of the indicator, as well as lower values that allow the pro-rating or the waiver of the performance-based payment. Consequences for the failure to attain target values, including the prorating and waiver of the performance-based payment, will depend on the level of service provided against the aforementioned values. Tables 6 and 7 provide examples of possible performance-based payment pro-rating and waiver levels for the Available Energy (Ea) KPI. Target values, additional values and performance-based payment pro-rating percentages will be determined in the Service Agreement. The targets proposed in Table 6 are for illustrative purposes.

KPI target level for Available Energy (Ea)	Definition	Example performance- based payment pro-rating
Ea _{target} (target value)	Target performance (Ea _{target}) per day specified in the Service Agreement to receive full payment	100%
Ea _{mid} (Medium value)	Unsatisfactory performance level per day specified in the Service Agreement that prompts pro- rated payment	80%
Ea _{low} (Low value)	Lowest performance level per day specified in the Service Agreement that prompts pro- rated payment	60%

Table 6 – Example KPI target values for Available Energy KPI and possible pro-rating

Table 7 – Example levels of ESCO compliance for Available Energy KPI

System KPI	KPI measurement	Compliance assessment	Results and suggested performance-based payment pro-rating
	Available energy (Ea) per day ≥ Target performance (Ea _{target}) per day specified in the Service Agreement	ESCO in compliance	Performance-based payment must be performed in full by Beneficiary Ministries
Available energy (Ea)	Ea _{mid} ≤ Available energy (Ea) per day ≤ Target performance (Ea _{target}) per day specified in the Service Agreement.	ESCO NOT in full compliance	Performance-based payment must be 80% pro-rated
	Ea _{low} ≤ Available energy (Ea) per day ≤ Ea _{mid}	ESCO NOT in full compliance	Performance-based payment must be 60% pro-rated
	Available energy (Ea) per day ≤ Ea _{low}	ESCO NOT in compliance	Performance-based payment must be fully waived

In case of ESCO non-compliance with multiple KPIs, the final pro-rating of the performance-based payment will follow the pro-rating level assigned to the lowest KPI value achieved as outlined in Table 8.

System KPI	KPI measurement	Pro-rating assessment per indicator	Final pro-rating
Available energy (Ea)	$Ea_{low} \le Available energy (Ea) per day \le Ea_{mid}$	60%	
System Uptime (USYS)	USYS _{mid} ≤ USYS ≤ Target amount of time specified in the Service Agreement.	80%	
Depth of discharge (DoD)	Depth of discharge (DOD) ≤ maximum DOD recommended for the battery and specified in the service agreement	100%	60%
Days fully charged (batteries) (DFC)	Days batteries are fully charged ≥ target days of full charge specified in the service agreement. Only applicable to lead-acid batteries.	100%	

Table 8 – KPI compliance example 3	(ESCO non-compliant in multiple KPIs)
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ESCOs are required to address performance, E&S or other types of issues or emergencies raised by Public Institutions and Beneficiary Ministries in a timely manner. Public Institutions and Beneficiary Ministries may also resort to the grievance redress mechanism (GRM) to resolve any issues arising from the service provision under the Service Agreement.

Public Facilities will ensure that the KPIs under their responsibility are met during the quarterly billing period as established by the Service Agreement and according to the system measurements outlined in Annex 1 of this POM. Noncompliance with KPIs under responsibility of the Public Institutions may be an indicator of system misuse, for which remedies and responsibilities will be outlined in the Service Agreement. Notably, noncompliance with Public Institutions KPIs may pose risks to system performance and cause ESCO non-compliance with KPI under their own responsibilities. The Service Agreement shall provide penalties and remedies for such cases (see examples in Tables 9 and 10).

Provisions for future system size increases or modification shall be specified in the Service Agreement.

Table 9 – KPI compliance example 4 (ESCO compliant, Public Institution non-compliant)

System KPI	KPI measurement	Compliance assessment	Results	
Available energy (Ea)	Available energy (Ea) per day ≥ Target performance (Ea _{target}) per day specified in the Service Agreement.		Performance-based payment payment be	
System Uptime (USYS)	System uptime ≥ Target amount of time specified in the Service Agreement.		performed in full by Beneficiary Ministries. Public Institutions should	
Depth of discharge (DoD)	Depth of discharge (DOD) ≤ maximum DOD recommended for the battery and specified in the service agreement	ESCO in compliance	be educated and trained on how to use systems appropriately. Repeated incidents of the Public Institution exceeding agreed upon values shall be addressed quickly according to the penalties and remedies specified in	
Days fully charged (batteries) (DFC)	Days batteries are fully charged ≥ target days of full charge specified in the service agreement. Only applicable to lead-acid batteries.			
Energy consumed (Ec)	Energy consumed ≤ Maximum agreed upon value specified in Service Agreement	Public Institution NOT in	the Service Agreement, which shall be implemented by the	
Peak load (PL)	Peak load ≥ a maximum power value specified in the service agreement	compliance	Beneficiary Ministry.	

Table 10 – KPI compliance example 5 (ESCO non-compliant, Public Institution non-compliant)

System KPI	KPI measurement	Compliance assessment	Results
Available energy (Ea)	Available energy (Ea) per day ≤ Target performance (Ea _{target}) per day specified in the Service Agreement.	ESCO NOT in compliance due to Public Institution	Performance-based payment must be performed in full by
System Uptime (USYS)	System uptime ≥ Target amount of time specified in the Service Agreement.	misuse of the system ⁴	Beneficiary Ministries. Public Institutions should be educated and trained

⁴ In this example, it is assumed that ESCO was unable to provide the required Available Energy in the aftermath of Public Institution exceeding the maximum allowed Energy consumed. The terms of the contract regarding compliance for Ea include a "battery recovery grace period" after a high consumption event where either the maximum agreed upon Ec or peak load (PL) has been exceeded. These events could cause a system to not provide the agreed upon energy a day or two after the event occurs. For further details, please refer to Annex 1 to this POM.

System KPI	KPI measurement	Compliance assessment	Results
Depth of discharge (DoD)	Depth of discharge (DOD) ≤ maximum DOD recommended for the battery and specified in the service agreement		on how to use systems appropriately. Repeated incidents of the Public Institution exceeding
Days fully charged (batteries) (DFC)	Days batteries are fully charged ≥ tareget days of full charge specified in the service agreement. Only applicable to lead-acid batteries.		agreed upon values shall be addressed quickly according to the penalties and remedies specified in the Service Agreement,
Energy consumed (Ec)	Energy consumed ≥ Maximum agreed upon value specified in Service Agreement	Public Institution NOT in	which shall be implemented the Beneficiary Ministry.
Peak load (PL)	Peak load ≤ a maximum power value specified in the service agreement	compliance	

UECCC shall, on a quarterly basis, incorporate a summary of these reports into its performance reports (based on set project indicators and KPIs) to the GoU and World Bank. The reports will be in a format as given in Annex 4.

2.3 Implementation Arrangements

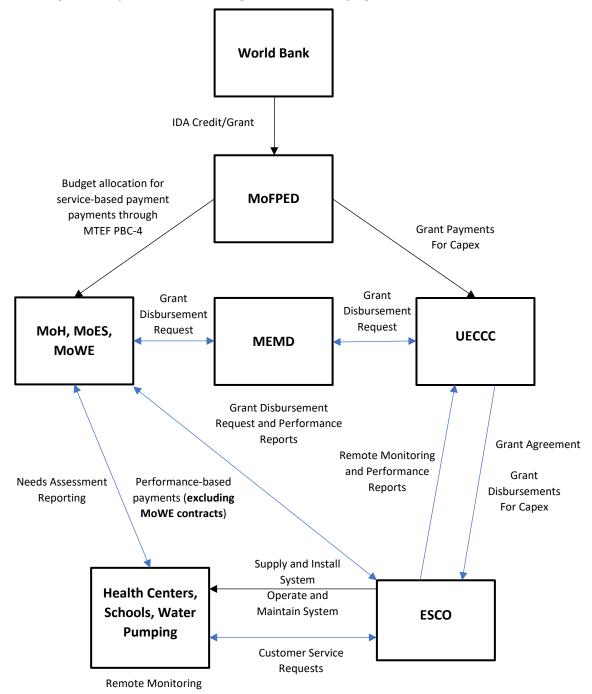


Figure 1. Implementation Arrangements - Electrifying Public Institutions

Note: PBC = Performance-based condition.

As shown in Figure 1, and further described in Section 2.5, following a competitive tendering process, the Beneficiary Ministries will identify the winning bidder and draft the Service Agreement and attach the draft Grant Agreement (based on the pro-forma in Annex 2) as an

annex to the Service Agreement. The Beneficiary Ministries will submit the draft Service Agreement and Grant Agreement to MEMD and UECCC for review. When the draft contracts have been cleared by MEMD and UECCC, UECCC will submit a 'no-objection' request for the Grant Agreement to the World Bank. Once the World Bank gives its 'no-objection' to the Grant Agreement, the Service Agreement will be signed between the Beneficiary Ministries and the ESCO, and the Grant Agreement will be signed between UECCC and the ESCO. The signing of the Service Agreement and Grant Agreement will proceed concurrently.

For the MoH and MoES, the ESCOs will supply, install, operate, and maintain the off-grid solar electricity supply systems in accordance with predefined system KPIs (see Table 3), as specified in the Service Agreement. For MoWE, the ESCOs will only supply and install the solar systems in water pumping stations, which will be operated and maintained under the MoWE umbrella system. This is illustrated in Figure 1.

UECCC will sign Grant Agreements with the selected ESCOs to provide grants to cover part of the capital cost of the systems (supply and installation). The E&S requirements will be included in the Grant Agreement in line with sections 1.3.6 and 1.3.3 of UECCC's ESMS. UECCC will be responsible for ensuring the management of E&S risks associated with the electrification for public institutions, including ensuring the safe disposal of components that meet their end-of-life during the project. As described in Section 2.2 (Reporting Monitoring and Evaluation), the Beneficiary Ministries will coordinate with MEMD and UECCC and share progress reports quarterly on Results Framework indicators, system KPIs, and compliance with Ugandan laws and regulations and World Bank governance and E&S Standards. The Beneficiary Ministries will be supported by supervision consultants to monitor installation and O&M performance of solar systems and certify Grant Payment Milestones. The grant payments will be made in installments with a defect retention period as set out in Tables 11 and 12.

2.4 Key Parties and Responsibilities

This section provides details on the responsibilities of each key party.

Ministry of Energy and Mineral Development

The responsibilities of MEMD include the following:

- (a) Support the identification of technical requirements and parameters for the electricity services delivered by stand-alone solar systems in consultation with the Beneficiary Ministries. System and component requirements may include applicable quality and safety standards, allowable system configurations, load types, warranty requirements, efficiency losses, and more. Parameters may include, but not limited to, include minimum performance levels, expected peak load, and number/type of loads to be electrified. Requirements may include allowable system configurations, warranty requirements, efficiency losses, and more. Facilities will be aggregated into tiers based on the technical parameters for service delivery.
- (b) Support the identification and selection of public institutions to be electrified under the project by the respective ministries.

- (c) May be co-opted to the evaluation committees of the ministries to review ESCOs against the eligibility criteria in the tender documents and Service Agreement.
- (d) Review the tender documents prepared by the relevant ministries to ensure that all agreed technical specifications, quality standards, system KPIs, and E&S safeguards are in place.
- (e) Review the draft Grant Agreement and Service Agreements before submission to UECCC for onward request of a World Bank "no objection".
- (f) Support the Beneficiary Ministries in reviewing the Supervision Consultants' verification reports of installed systems in terms of specifications, standards, and E&S safeguards and confirm compliance with the Service Agreement.
- (g) Support the routine supervision of installed solar systems by reviewing supervision reports and providing technical assistance if needed.
- (h) Review the grant disbursement requests and supervision consultant's attached verification reports jointly with Beneficiary Ministries and submit the grant disbursement requests to UECCC with attached verification reports and confirm to UECCC fulfilment of the milestones stipulated in the Grant Agreement.
- (i) Support Beneficiary Ministries in the validation of KPIs compliance.
- (j) Inform UECCC of all defaults under the Service Agreement.
- (k) Attend quarterly communications framework meetings, as set out in Section 2.2.
- (I) Engage with Internal Audit for the independent verification of information/evidence toward the fulfilment of PBC-4 related to the timely and full payment of performances-based payments by the Beneficiary Ministries.
- (m) Submit requests to UECCC for reimbursement of performance-based payments under PBC-4.

Ministry of Education and Sports and Ministry of Health

The responsibilities of the MoES and MoH include the following:

- (a) Select the public schools and health centers (II, III and IV) to be electrified under the EASP project.
- (b) Aggregate facilities in tiers based on the technical parameters identified in collaboration with MEMD, including target levels for KPIs.
- (c) Identify sustainable energy performance-based payments for each facility tier.
- (d) Competitively procure the ESCOs providing stand-alone solar systems under the supply, install, operate, and maintain contracting model.
- (e) Include the template Grant Agreement provided by UECCC between UECCC and ESCOs to form part of the tender documents to be shared with interested bidders.

- (f) The Contracts Committee of the respective ministries may invite UECCC and MEMD to articulate the terms and conditions of the Grant Agreement and invite UECCC to confirm that ESCO bidders satisfy the eligibility criteria under the Grant Agreement.
- (g) Facilitate engagements between UECCC and selected bidders to explain the requirements and terms of the Grant Agreement. The Grant Agreement will be signed in parallel with the Service Agreement between the ministries and ESCOs and will form an integral part of the Service Agreement.
- (h) Prepare the draft Service Agreement and send it to MEMD and UECCC for clearance. UECCC will then submit the 'no objection' request to the World Bank.
- (i) Sign the Service Agreement with the best evaluated bidders (ESCOs). The signing of the Service Agreement and Grant Agreement will proceed concurrently.
- (j) Procure supervision consultants to verify that the installed solar systems conform to the set technical standards, quality standards, and E&S safeguards and the milestones stipulated in the UECCC Grant Agreement, as well as review the verification reports supported by MEMD and verify that the solar systems are operating according to the agreed technical KPIs in the Service Agreement.
- (k) Submit grant disbursement requests received from ESCO to MEMD for review, with verification reports of milestones achieved.
- (I) Monitor the performance of the ESCOs against KPIs and inform MEMD and UECCC of any defaults, including E&S issues at each site.
- (m) Annually budget and make timely payments to ESCOs for performance-based payments for the solar systems as stipulated in the Service Agreements.
- (n) Attend quarterly communications framework meetings, as set out in Section 2.2.

Ministry of Water and Environment

The responsibilities of MOWE include the following:

- (a) Select the public water pumping stations to be electrified under the EASP.
- (b) Competitively procure the ESCOs to supply and install stand-alone solar systems for water pumping.
- (c) Include the template Grant Agreement provided by UECCC between UECCC and ESCOs to form part of the tender documents to be shared with interested bidders.
- (d) Before contract award, the Contracts Committee of the respective ministries may invite UECCC to articulate the terms and conditions of the Grant Agreement and confirm that ESCO bidders meet the eligibility criteria in the Grant Agreement.
- (e) Facilitate engagements between UECCC and selected bidders to explain the requirements under the Grant Agreement. The Grant Agreement will be signed

before the Service Agreement between the ministries and ESCOs and will form an integral part of the Service Agreement.

- (f) Prepare the draft Service Agreement and send it to MEMD and UECCC for clearance. UECCC will then submit the 'no objection' request to the World Bank.
- (g) Sign the Service Agreement with the best evaluated bidders (ESCOs). The signing of the Service Agreement and Grant Agreement will proceed concurrently.
- (h) Procure supervision consultants to verify that the installed solar systems conform to the set technical standards, quality standards, and environmental safeguards and the milestones stipulated in the UECCC Grant Agreement, as well as review the verification reports supported by MEMD and verify that the solar systems are operating according to the agreed technical KPIs in the Service Agreement.
- (i) Submit grant disbursement requests received from ESCOs to MEMD with verification reports of milestones achieved.
- (j) Ensure efficient operation and maintenance of the solar systems under the umbrella O&M system and report any E&S issues to MEMD and UECCC.
- (k) Monitor and submit reports to MEMD on the performance of the stand-alone solar pumping systems.
- (I) Attend quarterly communications framework meetings, as set out in Section 2.2.

Ministry of Finance, Planning and Economic Development

- (a) Provide or budget for funds in its MTEF for the O&M costs to be paid by the MoES and MoH to the ESCOs of public institutions.
- (b) Release funds to the MoES and MoH for payment to ESCOs against O&M costs of public institutions.

Uganda Energy Credit Capitalisation Company

The responsibilities of UECCC include the following:

- (a) Articulate the requirements of the Grant Agreement to the Contracts Committees of the Beneficiary Ministries.
- (b) Share the eligibility criteria for companies to be selected by the Ministries, for inclusion in the tender documents.
- (c) Review and clear the request for World Bank 'no-objection' to the Grant Agreement and submit the request to the World Bank with the final draft Service Agreement and Grant Agreement after these have also been cleared by the Beneficiary Ministries and MEMD.
- (d) Sign the Grant Agreements with the best evaluated bidders (ESCOs) to form an integral part of the Service Agreement to be signed between the ministries and

ESCOs. The signing of the Service Agreement and Grant Agreement will proceed concurrently.

- (e) Undertake a review of grant disbursement requests and the accompanying verification reports provided by Beneficiary Ministries and MEMD to confirm that the ESCOs have achieved Grant Payment Milestones for each lot.
- (f) Disburse Grants to ESCOs as per the Grant Agreement for achieved milestones.
- (g) Undertake periodic monitoring of installed systems in coordination with the Beneficiary Ministries and MEMD.
- (h) Prepare progress reports on grant commitments, disbursements, and ESCO compliance with the terms of the Grant Agreement including the Environmental and Social Management System (ESMS) requirements (annex to Part A of the POM) to MEMD.
- (i) Attend the communication framework quarterly meetings, as set out in Section 2.2.
- (j) Verify, in coordination with MEMD, that Beneficiary Ministries have made timely and full payment of the performance-based payments to ESCOs to meet PBC-4 requirements.
- (k) Disburse the PBC-4 reimbursement to the Government of Uganda (GOU), through MoFPED, on the condition that the Beneficiary Ministries made timely payments to the ESCOs for performance-based payments in compliance with the Service Agreement.

2.5 Procurement of ESCOs by the MoH, MoES, and MoWE

The steps in the procurement process are as follows:

- (a) Open Competitive Tendering is to be followed.
- (b) The MoH, MoES, and MoWE, with support from MEMD, shall agree on the system requirements and parameters, including target values for KPIs, standards, and performance-based payments for facility tiers. Remote monitoring will be required to collect data on the KPIs. An estimate of capital cost and maximum of grant allowed will be determined based on system requirements and parameters. The parameters and the requirements will align with the performance-based model to enable the ESCOs to create the system designs. Prescriptive requirements will be avoided when possible.
- (c) The MoH and MoES and MoWE supported by MEMD, will identify the Public Institutions to be electrified.
- (d) The MoH and MoES and MoWE, with support from MEMD and UECCC, will develop the statement of requirements, bidding documents, and evaluation criteria.

- (e) UECCC and Beneficiary Ministries will provide the standard template Grant Agreement and Service Agreement, respectively, as annexes in the bidding documents.
- (f) For MoES and MoH, the procurement process leading to the open competitive selection of ESCOs for the supply, installation, operation, and maintenance of standalone solar systems using the service-delivery model. The process will be led by the Beneficiary Ministries in collaboration with MEMD and UECCC. ESCOs will submit bids based on design parameters and requirements, including specification of the required CAPEX grant, demonstrate their conformity with financial, technical, and logistical requirements, as well as their capacity to deliver energy services to the target public facilities. Before award of Service Agreement, UECCC may articulate the Grant Agreement requirements to the ministries' contract committees. However, UECCC is not represented on the contract committees and does not participate in the evaluation of tenders.
- (g) Following the evaluation of bids, the Beneficiary Ministries will identify the winning bidder and revise the Service Agreement and attach the draft Grant Agreement (based on the pro-forma Grant Agreement in Annex 2) as an annex to the Service Agreement
- (h) The Beneficiary Ministries will prepare the draft Service Agreement and Grant Agreement and send this to MEMD and UECCC for clearance. UECCC will then submit the 'no objection' request to the World Bank.
- (i) Once the World Bank gives its 'no-objection' to the Grant Agreement, the Service Agreement will be signed between the Beneficiary Ministries and the ESCO, and the Grant Agreement will be signed between UECCC and the ESCO. The signing of the Service Agreement and Grant Agreement will proceed concurrently.

2.6 Terms and Conditions of Grant Agreement

The Grant Agreement will be signed between UECCC and best evaluated ESCOs based on the competitive selection process undertaken by the Beneficiary Ministries. The Grant Agreement covenants that the ESCO must comply with all the terms of the Service Agreement including compliance with World Bank anti-corruption requirements and the ESMS (annex to Part A of the POM), submission of all documentation required to verify each milestone completion and receive grant payments, and rights of site visits and inspection by UECCC or its agents. The Grant Agreement covers termination penalties due to default by the ESCO under the Service Agreement or the Grant Agreement or both and suspension or termination due to force majeure. If the ESCO abandons the installation without cause, the legal remedies of UECCC will include seeking repayment of the entire grant amount. A pro-forma Grant Agreement for solar electrification of public institutions is in Annex 2.

The Beneficiary Ministries will be responsible for monitoring performance of the ESCO during the operating phase in accordance with the terms of the Service Agreement. MEMD and UECCC will receive copies of the periodic performance reports from the Beneficiary Ministries and

notification of the maintenance payments made to the ESCO. MEMD will provide technical support to the ministries if needed. Grant payment milestones are determined as described below.

(a) Grant Payment Milestones for MoWE

The Grant Agreement between UECCC and ESCO will cover a portion of the capital costs for the supply and installation of stand-alone solar systems. MoWE will carry out the O&M through the umbrella system; therefore, MoWE will not enter into any Service Agreement with ESCOs. The relevant water utility ('Umbrella' entity) has revenues from water services that cover O&M, and therefore carries out the operation and maintenance. The ESCO's Supply and Install Contract covers supply and installation but not operation and maintenance. The Grant Agreement will therefore specify the following Grant Payment Milestones:

Milestone	Percentage of Grant Paid
Contract signing upon receipt of an Advanced Payment Guarantee by	30
the ESCO from an acceptable bank	
Inspection of goods delivered (cleared at warehouse)	30
Commissioning and operational acceptance of the system	25
End of year 1 of defect retention period	10
End of year 2 of defect retention period	5
Total Grant Payment	100

Table 11. Grant Payment Milestones for MoWE Systems

Following commissioning, the ESCO will hand over each site to MoWE for operation and maintenance. However, during the two-year defect retention period, the ESCO will be liable to repair all defects and ensure that the system meets contractual performance requirements; 15 percent of the grant will be retained during this period. At the end of year 1 of the defect retention period, the ESCO will receive 10 percent of the grant. At the end of year 2 of the defect retention period, the ESCO will receive 5 percent of the grant.

Since the concession covers multiple sites, the grant payments will be aggregated by achieved milestone over all the sites awarded to an ESCO in its Service Agreement. This will minimize the number of payments required for each Service Agreement.

(b) Grant Payment Milestones for the MoH and MoES

For the MoH and MoES, the ESCO will incur Supply and Installation (Capital) as well as Operations and Maintenance (O&M) costs, which will be spread over a long-term period (10 years).

The ESCO will have access to a grant of up to 70% (as indicated in Table 9) of the capital cost through UECCC.

The Grant Payment Milestones are shown in the following table:

Milestone	Cumulative Percentage of Grant Paid
Contract signing upon receipt of an Advanced Payment Guarantee by the ESCO from an acceptable bank	Up to 30%
Inspection of goods delivered (cleared at warehouse)	Up to 45%
Commissioning of the system	Up to 70%
Operational acceptance of the system (After 3 months)	Up to 90%
End of year 1 (Contingent upon ESCO effectively operationalizing the O&M plan)	Remaining balance (100%)

Table 12. Grant Payment Milestones for the MoH and MoES⁵

2.7 Operations and Maintenance

The ESCO will carry out the O&M for the MoES and MoH installations as part of a Service Agreement that includes supply, installation, operation, and maintenance for a period of 10 years.

The Beneficiary Ministries will be responsible for monitoring performance of the ESCO during the operating phase in accordance with the terms of the Service Agreement. The installed systems will include real-time remote monitoring (to monitor, prevent overloading, and for early detection of faults) to ensure agreed Key Performance Indicators are met, against which payments shall be made.

The Beneficiary Ministries will send UECCC and MEMD copies of the periodic performance reports from the ESCO and notification of the performance-based payments made to the ESCO.

Additional funding support via PBC-4 will incentivize timely payments in full to the ESCO for its performance-based payment costs. The government will provide adequate funding under the MTEF of the MoH and MoES, to cover recurring performance-based payment of public institutions. The process of performance measurement and reimbursement of costs under PBC-4 is set out in Section 2.11.

2.8 Grant Disbursement Process and Timeline

1. Upon achievement of payment milestones, the ESCO submits a grant disbursement request (Annex 2 - Schedule 3) to the Supervision Consultant, copying the Beneficiary Ministry, with respect to a lot under a Service Agreement. Required accompanying documents will include, for example, inspection report of goods delivered to the sites, supplier invoices, independent commissioning reports, and independent reports certifying correction of defects.

⁵ Percentage of grant paid for successful completion of each milestone shall be negotiated with the ESCO and specified in the Grant Agreement.

- 2. Within fourteen (14) calendar days of receiving the grant disbursement request, the Supervision Consultant undertakes the verification and submits the verification report and the payment certificate to the Beneficiary Ministries.
- 3. Within thirty (30) calendar days of receipt of the grant disbursement request from the ESCO, the Beneficiary Ministries jointly with MEMD review the grant disbursement request (Annex 2 Schedule 3) and supporting documents, then issue a verification report that is sent to UECCC by MEMD.
- 4. Within ten (10) calendar days from receipt of a complete grant disbursement request, supporting documents and verification report, UECCC undertakes a desk review of the submitted documents, then disburses the grant to the ESCO.

2.9 Performance-based Payment Process and Timeline

- 1. The ESCO shall submit quarterly performance-based payment requests to the beneficiary Ministries, with respect to a lot under the Service Agreement. The payment request will be supported by performance reports showing achievement of the KPIs.
- 2. Within ten (10) calendar days of receiving the performance-based payment request, the beneficiary ministry shall review the aggregated data from the remote monitoring platform to ensure that prorated payment is in line with the KPIs and agree with the ESCO the final payment amount (where required).
- 3. Within thirty-five (35) calendar days of agreement on the pro-rated payment amount with the ESCO, the beneficiary ministry shall disburse the agreed performance-based payment to the ESCO.
- 4. The applicable penalties / remedies will be included in the Service Agreement, in the event of failure to meet the above payment timelines.

2.10 Environmental and Social Safeguards Requirements

The Service Agreement and the Grant Agreement will require compliance with the World Bank Environmental and Social Standards and the ESMS of UECCC. In preparing the Grant Agreements and tender documents, reference will be made to section 1.3.3 and 1.3.6 of the ESMS and any other applicable sections of the ESMS. UECCC will monitor compliance based on quarterly reports from ESCOs, quarterly reports from Beneficiary Ministries, and participation with MEMD in site visits.

2.11 Conditional Reimbursement of performance-based payments

EASP provides an incentive to provide a budget for funds in the MTEF for performance-based payments to be paid by the Beneficiary Ministries on time and in full to the ESCOs of public institutions.

The performance of the ESCOs' installed systems under the Service Agreement is monitored by the Beneficiary Ministries, MEMD and UECCC. Remote monitoring will assist this process. The Beneficiary Ministries will verify technical system performance and adherence to KPIs. If the system is performing satisfactorily and customer service is satisfactory, the Beneficiary Ministries are required to pay the performance-based payments on time and in full (or according to the required pro-rating level). Further details on the achievement of KPIs are provided in section 2.2, as well as indicative pro-rating and waivers following the failure to fully meet KPI target levels.

MEMD will monitor and aggregate performance-based payments over the Service Agreements.

Annually, MEMD will verify that the performance-based payments from the Beneficiary Ministries to the ESCOs were made on time and in full (or according to the required pro-rating level). MEMD will then submit the evidence to UECCC, and UECCC will request 'no-objection' from the World Bank, which will then reimburse MoFPED by means of a performance-based grant, in alignment with PBC-4. If the payments have not been made on time and in full, the verification will detail the shortfall and payment timing delay in the verification report. The performance-based grant will be limited to no more than US\$5 million.

3 CLEAN COOKING FOR PUBLIC INSTITUTIONS

3.1 Purpose of the Clean Cooking Facility for Public Institutions

This Facility introduces a new business model for public institutions to move away from cooking on inefficient stoves to cleaner, more efficient cooking solutions.

Under this facility, private sector ESCOs will supply and install clean cooking solutions and remain responsible for providing maintenance services if required, to meet agreed performance and reliability levels. The Beneficiary Ministries and MEMD will select the public institutions and clean cooking solutions based on the MEMD clean cooking needs assessment and rollout plan. UECCC will provide grants to Beneficiary Ministries to cover the capital cost of the clean cooking solutions. The principles governing the rollout plan are as follows:

- (a) The program will be implemented in phases to allow adjustment based on lessons learned.
- (b) Improved biomass cookstoves will be the most common type of technology employed.
- (c) Schools will form the largest proportion of public institutions selected.

3.2 Implementation Arrangements

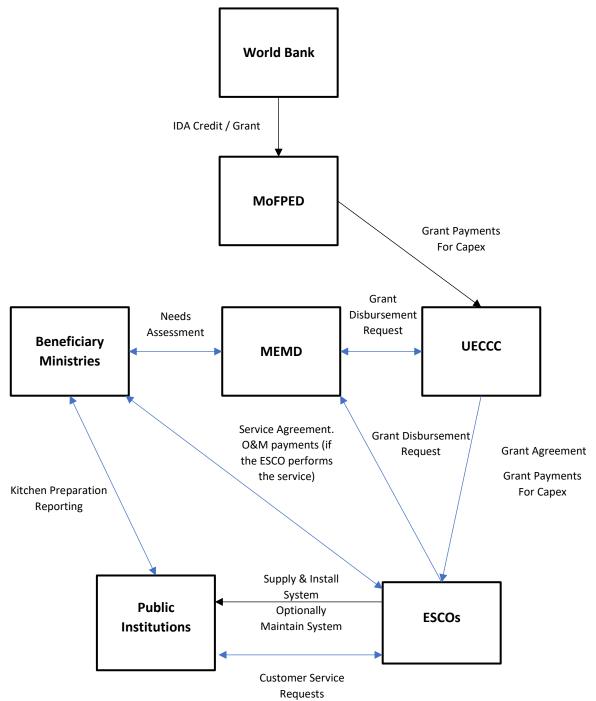


Figure 2. Implementation Arrangements

3.3 Key Parties and Responsibilities

This section provides details on the responsibilities of each of the key parties under the subcomponent. Figure 2 shows the implementation arrangements including the contracts and cash flows between the parties.

Ministry of Energy and Mineral Development

The responsibilities of MEMD will include the following:

- (a) Select the public institutions in consultation with Beneficiary Ministries and agencies to be supplied with clean cooking solutions under the project using the following criteria:
 - (i) Demonstrable need for a clean cooking solution: The institution must be using unclean cooking solutions that should be replaced.
 - (ii) Capacity to cover the switching and recurrent costs, including, but not limited to, fuel, appropriate kitchen, and maintenance costs of the clean cooking technology.
 - (iii) Health and safety: Institutions should have kitchen health and safety procedures and guidelines in place.

The above criteria will be assessed by a PASS Or FAIL.

- (b) Provide specifications, including standards for the clean cooking solutions, in accordance with technical standards provided under Part C - RBF Program for Clean Cooking Solutions, or the National Standards developed by UNBS, and specifications for a fit-for-purpose kitchen in consultation with the technical committee.
- (c) Competitively procure the ESCOs to provide cooking solutions under the supply, install, and maintain contracting model.
- (d) Include the Grant Agreement to form part of the tender documentation to be shared with interested bidders.
- (e) Before contract award, the Contracts Committee of MEMD will invite UECCC to articulate the terms and conditions of the Grant Agreement and confirm that ESCO bidders meet the eligibility requirements under the Grant Agreement.
- (f) Facilitate engagements between UECCC and selected bidders to explain the requirements and terms of the Grant Agreement.
- (g) Submit the final draft Service Agreement and Grant Agreement to the Beneficiary Ministries and UECCC for review and finalization. UECCC will prepare and submit the 'no-objection' request to the World Bank.
- (h) Procure independent consultants to verify that the installed systems conform with the set technical specifications, quality standards, and E&S safeguards and verify achievement of the grant disbursement milestones.

- (i) Review grant disbursement requests received from the ESCOs before onward submission for UECCC consideration.
- (j) MEMD will prepare quarterly technical monitoring reports to monitor the ESCOs jointly with UECCC and Beneficiary Ministries and Agencies.
- (k) Attend quarterly communications framework meetings.
- (I) Manage implementation of the phased rollout plan for 600 public institutions to benefit under EASP as follows:
 - (i) Phase 1: Selection of 600 public institutions to receive clean cooking solutions under the EASP.
 - Phase 2: Procurement of suppliers and installation of clean cooking solutions in 180 selected public institutions (30 percent), including maintenance and aftersales services where applicable.
 - Phase 3: Procurement of suppliers and installation of clean cooking solutions in 420 selected public institutions (70 percent), including maintenance and aftersales services where applicable.

Beneficiary Ministries (including MoH, MoES, MoD, Uganda Police, Uganda Prisons)

The responsibilities of Beneficiary Ministries/Agencies will include the following:

- (a) Participate in the development of technical specifications in coordination with MEMD for the clean cooking solutions suitable for each ministry/agency.
- (b) Participate in the selection of the public institutions to be supplied with cooking solutions under the EASP.
- (c) Confirm with the selected public institutions to provide a suitable kitchen for installation of the clean cooking solution.
- (d) Coordinate and, jointly with public institutions, commit in writing to MEMD and UECCC to annually budget and pay, on time and in full, maintenance costs for the clean cooking solutions including provision of spare parts and replacements throughout the life of the installation.
- (e) Draft Service Agreement for the provision of electricity supply to ESCOs.
- (f) Provide feedback on the Grant Agreement so that UECCC can request for World Bank 'no-objection' to the Grant Agreement.
- (g) Attend quarterly communications framework meetings.

Uganda Energy Credit Capitalisation Company

The responsibilities of UECCC will include the following:

(a) Articulate the requirements of the Grant Agreement to the Contract Committee of MEMD and confirm whether ESCO bidders meet the eligibility requirements under the Grant Agreement.

- (b) Review the Service Agreement (if applicable) and Grant Agreement to check that the ESCO eligibility requirements have been met and submit the 'no-objection' request for the Grant Agreement to the World Bank, with the final draft Service Agreement and Grant Agreement.
- (c) Sign the Grant Agreements with the best evaluated bidders (ESCOs).
- (d) Undertake a desk review of grant disbursement requests and the accompanying verification reports received from MEMD to confirm that that Grant Payment Milestones have been achieved for each lot by the ESCOs and make corresponding payments.
- (e) Join periodic site visits to monitor installed systems organized by MEMD in coordination with the ministries/agencies.
- (f) Coordinate, as required, with MEMD, Beneficiary Ministries, MoFPED, OPM/UNHCR, and World Bank.
- (g) Prepare progress reports on grant commitments, disbursements, and ESCO compliance with the terms of the Grant Agreement, including the ESMS requirements (annex to Part A of the POM).
- (h) Jointly, with MEMD and Beneficiary Ministries or Agencies, monitor the performance of clean cooking solutions installed by ESCOs.
- (i) Attend quarterly communications framework meetings.

3.4 Procurement of ESCOs

The steps in the procurement process are as follows:

- (a) The procurement process leading to the competitive selection of ESCOs for the clean cooking solutions will be led by MEMD in collaboration with the Beneficiary Ministries/Agencies and UECCC.
- (b) MEMD, with support from the Beneficiary Ministries/Agencies and from UNBS regarding standards for cook stoves, shall determine the technical specifications and designs of the clean cooking solutions to be procured and the KPIs.

3.5 Terms and Conditions of Grant Agreement

The Grant Agreement covenants that the ESCO must comply with all the terms of the Service Agreement, submission of all documentation required to verify each milestone completion and receive grant payments, rights of site visits and inspection by UECCC or its agents, and implementation of the ESMS (annex to Part A of the POM) in compliance with World Bank Environmental and Social Safeguards Standards. The Grant Agreement covers termination penalties due to default by the ESCO and suspension or termination due to force majeure. If the ESCO abandons the installation without cause, the legal remedies of UECCC will include seeking repayment of the entire grant amount. A pro-forma Grant Agreement for clean cooking solutions is in Annex 3.

MEMD will lead the monitoring of performance of the ESCO during the operating phase in accordance with the terms of the Service Agreement and in coordination with the Beneficiary Ministries and UECCC. UECCC will receive copies of the periodic performance reports from the ESCO and notification of the maintenance payments made to the ESCO.

3.6 Grant Amount and Disbursement Milestones

The amount of the grant and the terms and conditions of grant disbursements will be based on the terms of the competitive tender and finalized during negotiation of the Service Agreement and Grant Agreement with the winning bidder.

The grant will cover 100 percent of the capital cost. A contribution from the public institutions will be a fit-for-purpose (suitable) kitchen before installation and the commitment to use the clean cooking solution and budget annually for the maintenance. The grant will not cover kitchen construction and/or improvements to kitchens other than the cooking solution itself.

Milestone	Percentage of Grant Paid
Contract signing upon receipt of an Advanced Payment Guarantee by the ESCO from an acceptable bank	30
Operational acceptance and customer training	50
End of defect retention period	20
Total Grant Payment	100

Table 13. Grant Payment Milestones - Clean Cooking

The defect retention period is a key condition of the Service Agreement and Grant Agreement. The defect retention period will be a minimum of six (6) months and a maximum of twelve (12) months depending on the clean cooking technology employed. The ESCO is required to train the customer's staff, hand over operation of the facility to the customer, and ensure that the facility meets the customer's requirements.

3.7 Grant Disbursement Process and Timeline

- 1. Upon achievement of grant disbursement milestones, the ESCO submits a grant disbursement request (Annex 3 Schedule 3) to MEMD with respect to lot(s) under the Grant Agreement. Required accompanying documents will include, for example, goods delivered note to the sites, invoices, independent commissioning reports, independent reports certifying correction of defects, and audited financial statements of expenditure.
- 2. MEMD instructs its consultant to verify whether the grant disbursement milestone has been met.
- 3. The consultant undertakes the verification and submits the verification report to MEMD.
- 4. MEMD reviews the verification report and confirms whether the disbursement conditions have been met.

- 5. Within twenty-five (25) working days from receipt of the grant disbursement request from the ESCO, MEMD submits the grant disbursement request and verification report to UECCC.
- 6. UECCC undertakes a desk review of the submitted grant disbursement request and supporting documents. UECCC disburses the grant to the ESCO within ten (10) working days of receipt of MEMD's confirmation of a complete and valid grant disbursement request.

3.8 Maintenance

The ESCOs will maintain the clean cooking installations during the defect retention period as part of the supply and install contract. The ESCOs will not, however, be liable for costs due to misuse or malicious damage of the cooking solution by the beneficiary institution.

The ESCO will not provide maintenance service of the clean cooking solution beyond the defect retention period.

UECCC will receive quarterly performance reports from MEMD during operation and may join MEMD and Beneficiary Ministries' supervision site visits.

3.9 Environmental and Social Safeguards Requirements

The Service Agreement (if applicable) and the Grant Agreement will require the ESCO to undertake the installation, commissioning, and maintenance of each site according to Ugandan law, the World Bank Environmental and Social Standards requirements, and the ESMS. The Grant Agreements and tender documents will make reference to section 1.3.3 of UECCC's ESMS and any other applicable sections of the ESMS.

3.10 Reporting, Monitoring, and Evaluation

UECCC and MEMD will be responsible for reporting the Results Framework Indicators and KPIs listed in Table 14.

The ESCOs will report performance and ESMS compliance in quarterly reports that will be submitted to the Beneficiary Ministries by the ESCOs under the terms of the supply and install contract and the Service Agreement if present. The Beneficiary Ministries will provide MEMD and UECCC with copies of these reports.

The public institutions shall inform the Beneficiary Ministries of any issues regarding system performance and the level of maintenance and customer service provided by the ESCO as soon as they arise. The public institutions shall also inform the Beneficiary Ministries of any E&S issues or emergencies as soon as they arise. The data will be included in each public institution's existing reporting regime to the Beneficiary Ministries. The Beneficiary Ministries will provide MEMD and UECCC copies of these reports.

The operational teams of the Beneficiary Ministries, MEMD, and UECCC, will implement a communications framework involving quarterly coordination meetings to be held in April, August, October, and January of each year (the months following the end of each quarter) to

review performance and coordinate on managing the contracts and compliance with the contractual obligations.

If the ESCO does not satisfactorily address performance issues, the public institutions and the Beneficiary Ministries may use the GRM to resolve the issues.

UECCC shall, on a quarterly basis, incorporate a summary of these reports into its performance reports (based on set project indicators) to Government of Uganda and World Bank. The reports will be in the format in Annex 4.

Results Framework Indicators	PIU Responsible for Reporting the Results	КРІ	Responsible for KPIs
Number of public institutions served Number in RHD	UECCC	Fuel quantity consumed	MEMD
Number of Service Agreements and Grant Agreements signed by UECCC	UECCC	Incremental fuel quantity saved	MEMD
Total grant amounts committed by UECCC	UECCC	Fuel cost	MEMD
Grant amounts disbursed by UECCC	UECCC	Incremental fuel cost saving	MEMD
		Annual days in operation	MEMD

 Table 14. Results Framework Indicators and Project Performance Indicators

UECCC will set ESMS requirements at tender stage in the pro-forma Grant Agreement and MEMD will include this in the tender documentation. UECCC will monitor ESMS compliance. UECCC will also review technical monitoring performance reports prepared by MEMD and included in the quarterly reports, as required by the Supply and Install Contract and Service Agreement if present.

MEMD will provide Copies of the monitoring reports to UECCC and the Beneficiary Ministries.

PUBLIC INSTITUTIONS MANUAL – ANNEXES

Annex 1 – Key Performance Indicators and system measurements

1. Key Performance Indicators (KPIs)

The following KPIs shall be used to assess Service Agreement compliance by the ESCO and public institution. Descriptions of these KPIs, as well as information relating to their determination and reporting, are provided below. The Service Agreement shall specify all target values and tolerances needed to determine compliance with the KPIs.

The Service Agreement shall provide that all KPIs under the responsibility of the ESCOs include a grace period after a high consumption event where either the maximum agreed upon energy consumed (Ec) or peak load (PL) has been exceeded – that is, if Public Institutions have not complied with their KPIs. These events could cause a system to not provide the agreed-upon energy in the days following the event. Repeated incidents of the facility exceeding agreed-upon values should be addressed quickly by ESCO and the Beneficiary Ministry, as described in the Service Agreement.

The key performance indicators for monitoring system performance over time are defined as follows:

System KPI	KPI Guidelines	Compliance responsibility
Available energy (Ea)	Available energy (Ea) per day ≥ Target performance (Ea _{target}) per day specified in the Service Agreement.	ESCO
	This metric may be evaluated as a number of days per month or percentage of time over quarter that the operator is in compliance.	
System Uptime (USYS)	System uptime ≥ target amount of time specified in the Service Agreement.	ESCO
	The threshold may be specified as a number of days where the system has been functional for the minimum time, or the total number of minutes the system shall be functional during the reporting period.	
Depth of discharge (DoD)	Depth of discharge (DOD) ≤ maximum DOD recommended for the battery and specified in the service agreement	ESCO

System KPI	KPI Guidelines	Compliance responsibility
Days fully charged (batteries) (DFC)	Days batteries are fully charged ≥ target days of full charge specified in the service agreement. Only applicable to lead-acid batteries.	ESCO ⁶
Energy consumed (Ec)	Energy consumed ≤ Maximum agreed upon value specified in Service Agreement.	Public Institution
	To ensure the facility does not misuse the system, the energy the facility consumes each day should not exceed a maximum agreed upon value, which may be equal to or greater than Ea _{target} , and may vary throughout the year. This metric may be evaluated as a number of days per month or percentage of time over quarter that the operator is in compliance.	
Peak load (PL)	Peak load ≤ a maximum power value specified in the service agreement.	Public Institution
	This metric is assessing the facility's compliance with the Service Agreement and may indicate the need for intervention or education if the peak load is routinely exceeded.	

For each KPI, the Service Agreement establishes a target value, as well as additional values for payment pro-rating. Pro-rated payments and payment waivers will depend on whether the ESCO attained the target values. An example of this scheme is presented in the table below for the Available Energy (Ea) indicator. Performance-based payment pro-rating levels will be determined by the Service Agreement.

Sample KPI target level for Available Energy (Ea)	Definition	Suggested performance- based payment pro-rating
Ea _{target} (target value)	Target performance per day specified in the Service Agreement to receive full payment	100%
Ea _{mid} (Medium value)	Unsatisfactory performance level per day specified in the Service Agreement that prompts pro-rated payment	80%

⁶ Compliance with the Days fully Charged (DFC) indicator is under ESCO's responsibility. However, compliance of the Public Institution is also required, as Energy consumed (Ec) should not exceed the maximum quantity of consumption outlined in the Service Agreement. Further details can be found in Annex 1 to the POM.

Ea _{low} (Low value)	Lowest performance level per day	60%
	specified in the Service Agreement	
	that prompts pro-rated payment	

System measurements

The following system measurements shall be used to assess Service Agreement compliance by the user and operator. Descriptions of the system measurements, as well as information relating to their determination and reporting are provided below.

System measurem	Unit of measure	Description	Determination method	Evaluati on	Documentation & reporting
ent	ment			period	requirements
Low Voltage Disconnect (LVD)	Volts (V)	Assessment of whether the battery discharge has been stopped to protect the battery, i.e., the battery has reached its LVD	Identify periods when the battery voltage is at or below the LVD, as indicated by voltage measurements or "flags" provided by the remote monitoring system	24 hours (midnigh t to midnight)	Criteria and system flags used to determine if the battery reached the LVD shall be provided. Flags or voltage should be logged at a frequency of at least 15 min intervals.
System Uptime (USYS)	Minutes per day (min/day)	Amount of time the system is available to power loads ⁷	Identify periods of system error, as indicated by "flags" provided by the remote monitoring system. Errors on both the PV (DC) side and the loads (AC) side of the system should be logged	24 hours (midnigh t to midnight)	Criteria and system flags used to determine if the system was offline shall be provided. Flags should be logged at a frequency of at least 15 min intervals.
Battery State of	Percentag e (%)	Available capacity remaining in a battery, expressed	Record the maximum SoC over	24 hours (midnigh t to	Determined from measurements logged at a

⁷ USYS is intended to identify instances where either the system has not reached its LVD, but energy is unavailable, or the stored energy (Es) is sufficient to be compliant with the available energy metric, but the energy cannot actually be consumed due to a malfunctioning inverter or similar issue. The time that the system is not providing power because the battery reached the LVD need not be considered when calculating USYS.

Charge (SOC)		as a percentage of the rated capacity. If the SOC is 100 %, the battery is fully charged	the evaluation period.	midnight)	frequency of at least 15 min intervals, with the minimum and maximum reported over each 24-hour period ⁸
Battery Depth of Discharge (DoD)	Percentag e (%)	Amount of ampere- hours (Ah) removed from a fully charged battery, expressed as a percentage of rated capacity. If the DoD is 100%, the battery is fully discharged	Record the maximum DoD over the evaluation period.	24 hours (midnigh t to midnight)	Determined from measurements logged at a frequency of at least 15 min intervals ⁹
Battery Days Fully Charged (DFC)	Percentag e of days per month (%)	Number of days over the evaluation period for which the battery reaches a full charge ⁹	Sum the number of days that the battery has reached SOC of 100 %	24 hours (midnigh t to midnight)	Documentation describing battery characteristics, including full charge, shall be provided. DFC determined from measurements logged at a frequency of at least 15 min intervals
Energy Consumed (Ec)	Kilowatt- hours (kWh)	Amount of energy used by the facility during an evaluation period	Direct measurement of the kWh used at the facility each day. Measurements can be made via a power meter or a calculation using measured current, voltage and power factor.	24 hours (midnigh t to midnight)	Documentation shall describe the measurements and equipment used to determine components of Ec. Data shall be logged at an interval that ensures sufficient accuracy.

⁸ Documentation describing how SoC and DoD are determined shall be provided and agreed upon during the contracting process, including protocols for initial calibration and recalibration of the monitor used to track SoC and DoD. The method for determining SoC and DoD will be dependent on the system and will need to be defined after equipment has been selected.

⁹ DFC measurement is only applicable to lead-acid batteries, as their useful life will be reduced if not routinely fully charged.

Peak Load	Watts (W)	Maximum	Measure the	24 hours	Determined from
(PL)		instantaneous	maximum power	(midnigh	measurements
		power required by	required over the	t to	logged at a
		loads during an	evaluation period.	midnight	frequency of at
		evaluation period)	least 15 min
					intervals, with a
					maximum recorded
					over each 24 hr
					period

2. Target Performance (Ea_{target})

The target performance (Ea_{target}) for a system is the agreed-upon level of energy available to power loads (specified in units of kilowatt-hours per day [kWh/day]). Ea_{target} is used as a threshold for determining compliance with the KPI of Available Energy (Ea). This value will be used as the basis for the original system design and be clearly stated in the Service Agreement.

In cases of non-compliance with Ea, if any party believes the cause for non-compliance is due primarily to the actual insolation or environmental conditions differing from the average historical values used for system design, procedures can be used to adjust the expected value of Ea_{target} to account for the change in insolation or temperature. Ea_{target} shall be adjusted by using design software with the actual system specifications as inputs, along with real-time insolation and weather data taken on site or from satellite-based datasets, to estimate the amount of energy the system should produce given the new insolation or temperature. The design software and input values used for this assessment shall be agreed upon by all parties. To complete this analysis, recent time-series solar data will be required. Due to the cost of real-time data, this calculation is only conducted in the case of a plausible dispute.

3. Missing and Invalid Data

Treatment of missing or lost data may be required if, for example, the monitoring system loses power temporarily, causing gaps in the data record. Procedures for notifying monitoring system failures shall be clearly identified in the service agreement. If data were missing or lost during a reporting period, these time periods shall be clearly identified, and the specific treatments used to address them provided and justified. The selected method of treatment for missing or invalid data will vary depending on the parameter and quantity of lost data. Missing or invalid data may be treated in one of the following ways (adapted from IEC 61724-1):

1. The invalid or missing data may be replaced by values estimated from the valid data recorded before and/or after the invalid or missing data

2. The invalid or missing data may be replaced with an average value for the analyzed interval

3. The data may be treated in a manner specified in the Service Agreement and/or other specification covering the installation

4. The analyzed interval may be treated as missing or invalid.

4. Accessing Data from the Remote Monitoring System

System measurement data used for assessing compliance with KPIs should be transferred wirelessly over internet or cellular networks. If for any reason wireless methods become unavailable, a record of the same data shall be available on a local storage device, which can be manually downloaded and processed to assess compliance with the KPIs. If the locally-stored data are different from what is transferred over the wireless system, procedures for calculating the KPIs from the locally-stored data shall be provided. The device used to store data locally shall have no less than 6 months of available storage before overwriting. This locally-stored data should also be able to be automatically transferred wirelessly if/when the remote connection is restored.

The frequency of data logging, data requirements, and data transfer shall be specified in the Service Agreement. The data and any summary statistics collected by the remote monitoring system shall be sufficient for verification of KPIs.

Annex 2 - Pro-Forma Grant Agreement Solar Electrification of Public

Institutions

BETWEEN

UGANDA ENERGY CREDIT CAPITALISATION COMPANY, having its principal place of business at Plot 29/32, Kampala Road, P.O. Box 29725, Kampala, Uganda (hereinafter referred to as **UECCC**), which expression shall, wherever the context so admits, include its agents, assignees, legal representatives, and successors in title of the one part

AND

RECITALS

- A. WHEREAS, the International Development Association ("World Bank") and Republic of Uganda (GOU) have signed the IDA Financing Agreement dated for USD..... for the Electricity Access Scale-UP project (EASP) and GOU has agreed to make available to the UECCC part of the Financing under the Subsidiary Agreement dated ______.
- B. **WHEREAS**, under the EASP, UECCC is to implement the Electrification of Public Institutions Programme ("the Programme") under which grants are provided for the Off-grid Solar Electrification of selected Public Institutions.
- C. **WHEREAS** the Programme is aimed at benefiting public institutions operating under Beneficiary Ministries and recommended for benefit from the Programme by the relevant Beneficiary Ministries.

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. **DEFINITIONS**

Save as otherwise expressly stipulated, the following terms shall bear the meanings indicated below:

· · · ·		
Acceptable Bank	A Tier I financial institution regulated by Bank of Uganda and forms one of the top four financial institutions by asset size	
Agreement	Refers to this Agreement executed between UECCC and the Energy Service Company	
Energy Service Company	A domestic company or an international company with a registered subsidiary in Uganda engaged in solar business	
Beneficiary Ministries	Either of the following as indicated in Schedule 1: (i) Ministry of Education and Sports (MoES), (ii) Ministry of Health (MoH), and (iii) Ministry of Water and Environment (MoWE)	
Financed Activities	The activities to be undertaken by the Energy Service Company under the Service Agreement that are funded under the Programme	
Grant Amount	The amount as indicated under Schedule 1 to be extended by UECCC to the Energy Service Company under this Agreement to cover the capital cost of supply, installation, and commissioning of the system	
Milestone	A deliverable by the Energy Service Company stipulated under Schedule 2 against which payment is to be made by UECCC	
MEMD EASP PCU	The unit designated under the Ministry of Energy and Mineral Development (MEMD) to undertake the role of overall supervision and coordination of the EASP	
The Programme	Public Institutions programme providing access to grants for off-grid solar electrification of Public Institutions operating under Beneficiary Ministries, including in Refugee and Host Community Districts (RHDs).	
Retention Amount	An amount equivalent to 15% of the Grant Amount extended to the Energy Service Company, payment of which shall be released upon receipt of confirmation from the Beneficiary Ministries and MEMD to the effect that defects identified if any in relation to the financed activities, have been satisfactory remedied.	
	The retention payments shall be made in accordance with the period as stipulated in Schedule 2.	
Service Agreement	The contract executed between the Beneficiary Ministries and the Energy Service Company to provide services under the Programme, including the supply, installation, and operation and maintenance of the system	

Service PeriodThe period for supply, installation, commissioning, operation, a maintenance of the system as stipulated in Schedule 1	
System	The stand-alone solar equipment, materials, appliances, and mechanisms supplied and installed by the Energy Service Company to the Selected Public Institution pursuant to this Agreement
Selected PublicA public school or health centers (II, III, and IV) or public water sInstitutionsystem selected by the Beneficiary Ministries.	
Supervision Consultant	An independent consultant appointed by Beneficiary Ministries to supervise the supply, installation and commissioning, and operation and maintenance of the system by the Energy Service Company
Verification Report	A report submitted by the Supervision Consultant to the Beneficiary Ministries and MEMD confirming the completion of a milestone under this Agreement

2. PURPOSE OF THE AGREEMENT

The purpose of this Agreement is to provide a funding mechanism within the framework of the Programme for the payment to the Energy Service Company for the supply, installation, commissioning, operations and maitenance of the system at a selected Public Institution pursuant to the Service Agreement. UECCC's payment obligations shall be subject to the Energy Service Company's fulfillment of clauses 4, 6, and 12 of this Agreement.

3. GRANT AMOUNT

Subject to the terms of this Agreement, UECCC shall disburse the Grant Amount to the Energy Service Company based on achievement of milestones and in installments as stipulated in Schedule 2.

4. CONDITIONS PRECEDENT TO SIGNING AND EFFECTIVENESS OF THIS AGREEMENT

This Agreement shall be signed and take effect upon the occurrence of the following:

- (a) Receipt from MEMD of a letter confirming that the Energy Service Company was competitively procured by the Beneficiary Ministries
- (b) Receipt of an executed contract between the Beneficiary Ministries for an Energy Service Company
- (c) Receipt by UECCC of the World Bank's 'no-objection' to
 - (i) The Service Agreement between the Beneficiary Ministries and the Energy Service Company
 - (ii) Grant Agreement between UECCC and the Energy Service Company
- (d) UECCC holds sufficient funds to fully finance the Grant Amount.

5. NATURE OF OBLIGATIONS

- 5.1 **Obligation of the Energy Service Company:** The Energy Service Company undertakes to UECCC that it shall
 - (a) Implement the funded activities in accordance with the terms and condition of the Service Agreement;
 - (b) Comply with the applicable national laws and the UECCC E&S requirements stipulated in clause 7 below;
 - (c) Carry out the funded activities with due diligence and efficiency and in accordance with sound technical, economic, financial, managerial, environmental, and social standards and practices satisfactory to the World Bank, including Anti-Corruption Guidelines applicable to recipients of funding;
 - (d) Permit UECCC or persons designated by UECCC to undertake monitoring of the installed system in the company of the Beneficiary Ministries and MEMD; and
 - (e) Before seeking any disbursement of the Grant Amount, ensure that
 - (i) There are no outstanding obligations and/or third-party claims arising from the funded activities and
 - (ii) It meets the eligibility criteria provided for under clause 8 on continuous basis.

5.2 Conditional Nature of Grant

The Energy Service Company's eligibility for disbursement of the Grant Amount shall be subject to satisfying the requirements of the Service Agreement between the Energy Service Company and the Beneficiary Ministries.

5.3 **Retention Amount**

To preserve the rights of the Beneficiary Ministries and UECCC, UECCC shall retain This retained amount shall be paid in accordance with the provisions in Schedule 2 after it is confirmed that all defects identified, if any, during the defects liability period have been fully remedied to the satisfaction of the Beneficiary Ministries, MEMD, and UECCC.

6. GRANT DISBURSEMENT

- (a) The Energy Service Company shall request disbursement of any proportion of the Grant Amount payable by submission of a grant disbursement request to UECCC through the Beneficiary Ministries and MEMD in the form and content under Schedule 3.
- (b) Disbursement of the Grant Amount shall only be sought against the fulfillment of corresponding milestones as stipulated under Schedule 2.

- (c) Proof of each milestone for the purpose of a disbursement request submitted in accordance with (a) and (b) above shall be confirmed by MEMD and supported by a verification report with respect to such milestone.
- (d) Before its submission to UECCC, each disbursement request shall be reviewed by the Beneficiary Ministries which shall certify the completion of the corresponding milestone, attach the relevant verification report by the Supervision Consultant, and submit the certified disbursement request to the MEMD EASP Project Coordination Unit (PCU) for review.
- (e) Upon receipt of the certified disbursement request, the MEMD PCU shall, in consultation with the Beneficiary Ministries, undertake a technical review of the verification report and confirm to UECCC the eligibility of the Energy Service Company for payment under the certified disbursement request.
- (f) UECCC will review the disbursement request for compliance with the terms of this Agreement and shall make a disbursement if it is satisfied that the disbursement request fully complies with the terms of the Agreement.

7. ENVIRONMENT SOCIAL HEALTH AND SAFETY (ESHS) COMPLIANCE

The Energy Service Company shall comply with the applicable national laws, the World Bank Environmental and Social Standards, and the UECCC E&S requirements stipulated in sections 1.3.3 and 1.3.6 of the UECCC's ESMS.

The Energy Service Company will develop and implement an Environment and Social Management Plan (ESMP) in a format provided by UECCC and monitor and report E&S performance to UECCC in a format provided by UECCC throughout the Service Period.

8. ENERGY SERVICE COMPANY ELIGIBILITY CRITERIA

- (a) Must be registered to operate in Uganda.
- (b) Have capability to maintain policies and procedures adequate to enable ministries and agencies UECCC and MEMD to monitor and evaluate Energy Service Company performance and system KPIs.
- (c) Maintain a financial management system and prepare financial statements in accordance with consistently applied acceptable accounting standards.
- (d) Must be capable of meeting ESHS compliance requirements, as defined in clause 7 above.
- (e) Must be capable of meeting required product quality standards certified for use in Uganda by the Uganda National Bureau of Standards (UNBS) or other international standards if applicable.
- (f) Must provide proof of a satisfactory consumer protection plan, including warranties within a stipulated period and after-sales services.

(g) Not blacklisted by the Public Procurement and Disposal of Public Assets Authority (PPDA), World Bank, and/or other multilateral development partners.

9. DURATION AND VALIDITY OF THE AGREEMENT

The Agreement shall endure until the occurrence of one of the following events:

- (a) Full disbursement of the Grant Amount
- (b) Expiry of the Service Agreement
- (c) Termination of the Agreement in accordance with clause 11.

10. SUSPENSION OF THE AGREEMENT BY UECCC

Notwithstanding the foregoing provisions, UECCC may suspend this Agreement upon occurrence of any of the following:

- (a) When the Energy Service Company is not compliant with the E&S requirements in Section 7 above
- (b) When the Beneficiary Ministry communicates in writing to UECCC regarding suspension of the Service Agreement of the Energy Service Company
- (c) Suspension of the IDA Financing Agreement by the World Bank and/or the Subsidiary Financing Agreement by the Government of Uganda.

11. TERMINATION OF THE AGREEMENT BY UECCC

Notwithstanding the foregoing provisions, UECCC shall terminate this Agreement upon occurrence of any of the following:

- (a) Receipt from the Beneficiary Ministries of a notice of termination of the Service Agreement with the Energy Service Company.
- (b) The Energy Service Company is declared insolvent or becomes bankrupt or enters any arrangement with creditors.
- (c) The Energy Service Company is in breach of the E&S covenants in Section 7 of this Agreement and fails to remedy such breach within a period stipulated under a notice by UECCC requiring that remedial action be taken.
- (d) The Energy Service Company has obtained the award of the Service Agreement or any portion of the Grant Amount through fraud or misrepresentation.
- (e) Termination of the IDA Financing Agreements by the World Bank and/or the Subsidiary Financing Agreement by the Government of Uganda.
- (f) Funds cease to be available under the Programme.

12. REFUND OF GRANT

If this Agreement is terminated as a result of clause 11(d) above, the Energy Service Company shall be required to refund to UECCC such amount as shall be assessed by the Supervision Consultant as the loss incurred by UECCC as a result of the fraud or misrepresentation.

13. CONFIDENTIALITY

- (a) Save as indicated in (b) below, neither Party shall directly or indirectly reveal, report, publish, or disclose confidential information to any person, firm, or corporation not expressly authorized by the other Party to receive such information or use such information.
- (b) UECCC may, at any time, provide information relating to the Grant Agreement to the World Bank, the Beneficiary Ministries, or MEMD or any other authorized arm of Government.
- (c) For the purposes of this Agreement, confidential information means
 - (i) Any information relating to the Grant Agreement including, but not limited to, forecasts, accounting records, or any other financial information which, if disclosed, could negatively affect a Party to this Grant Agreement. Confidential information also includes related information that may be disclosed in connection with financial information, including, but not limited to, identification and account numbers, PINs, passwords, the identity or financial status of investors or partners, or other information conveyed in writing or in discussion that is indicated to be confidential.
 - (ii) Any information which is non-public, confidential, technical, or proprietary in nature, including third-party information and, where applicable, technical, or business information, regardless of form, furnished or disclosed by the Disclosing Party to the Receiving Party whether or not the Receiving Party has indicated that such information is confidential but which the Receiving Party should reasonably expect to be confidential.
- (d) Confidential information shall not include information that
 - (i) Is now or becomes generally known or readily available to the public, other than through a breach of this Agreement;
 - (ii) Is subsequently, lawfully, and in good faith obtained from a third party owing no obligation of confidentiality to the Disclosing Party and without breach of this Agreement; or
 - (iii) The Receiving Party can establish was in its possession before the date of disclosure of such confidential information by the Disclosing Party; or
 - (iv) Is independently developed by the Receiving Party without use of or reference to any confidential information of the Disclosing Party.

14. MONITORING

In carrying out the activities under this Agreement, the Energy Service Company undertakes to provide access to UECCC and the World Bank or any persons authorized by them, upon issuance of notice to visit and carry out checks as they may deem necessary on the installations at the selected public institutions.

15. INDEMNITY

The Energy Service Company agrees and declares that UECCC is totally and absolutely free of any form of liability or responsibility for any act or omission in relation to this Agreement save where such act results from willful misconduct by UECCC acting in its corporate capacity as an institution under the Programme.

16. APPLICABLE LAW AND GOVERNING LANGUAGE

The law applicable to this Agreement shall be the Ugandan Law. The governing language of this agreement shall be English.

17. DISPUTE RESOLUTION

All disputes arising between the parties shall be resolved amicably by the parties, failing which the matter shall be referred to the courts of law in Uganda.

18. RELATIONSHIP OF THE PARTIES

The terms of this Agreement shall not in any way be construed as if there is a relationship or employer/employee relationship. The parties are independent of each other.

19. NOTICES

- (a) Notice shall be deemed to have been duly given, made, or sent when it shall be delivered by hand or mail, or fax, to the party to which it is required or permitted to be given or posted at the address of such party hereinafter specified or such other address as such party shall have designated by notice to the party giving such notice or making such request.
- (b) For the avoidance of doubt, the notices shall exclude requests for disbursement requests which are to be issued and served in accordance with Clause 6 of this Agreement.
- (c) The notices under clause (a) above shall be in writing addressed as follows:

For UECCC

The Managing Director,

Uganda Energy Credit Capitalisation Company

P.O. Box 29725

Kampala

For the Energy Service Company

.....

P.O. Box

IN WITNESS WHEREOF the parties hereto put the signatures and seals on the date first abovementioned.

For the Energy Service Company	For UECCC
Name:	
Title:	
Date:	
Witness	Witness
Sign	
Name:	
Title:	

Beneficiary Ministry	
Selected Public Institution	
Energy Service Company	
Grant Amount	
Service Period	
Defects Liability Period	Three (3) Months

Schedule 1 - Energy Service Company and Grant Amount

Schedule 2 - Grant Disbursements and Payment Milestones

The grant will be disbursed according to the following milestones. Grant disbursements requests will be submitted to UECCC by Beneficiary Ministries through MEMD.

		Milestone	Cumulative Percentage of
			Grant Paid
a)	A si	gned contract between Beneficiary Ministries and Energy Service	Up to 30%
	Cor	npany	
b)	Rec	eipt by UECCC of an Advanced Payment Guarantee issued by an	
	асс	eptable bank for the proportion of the grant amount to be paid in	
	adv	ance in form and substance acceptable to UECCC	
Pro	of o	f inspection including	Up to 45%
a)	AC	Goods Inspection Note of goods cleared at the warehouse by the	
	Ве	neficiary Ministries	
b)	A١	erification report by the Supervision Consultant	
a)	Сс	mmissioning of the system	Up to 60%
b)	A	commissioning report by the Supervision Consultant confirming	
	th	at the system conforms to the service and quality standards	
	pr	escribed the Beneficiary Ministries	
	a)	Operational acceptance of the system by the Beneficiary	Up to 80%
		Ministries	
	b)	Operational acceptance report issued by the Supervision	
		Consultant	
	a)	End of year 1 defect retention period	Up to 90%
	a)	End of year 2 defect retention period	Remaining balance (100%)

Schedule 3 - Grant Disbursement Request

This disbursement request shall be submitted to UECCC through the Beneficiary Ministries and MEMD by the Energy Service Company to request for disbursement of a grant payment based on achievement of a grant payment milestone. All fields of the form must be completed.

Name of Energy Service Company......Address.....Address....

Name and Address of Beneficiary Ministries

Names and addresses of each Public Institution and each site

Description of Grant Payment Milestone

Amount of Grant requested to be disbursed

Service Company Account Details

Supporting Documents (Attachments)

Documented Evidence of Achievement of the Grant Payment Milestone

(For example, Goods Inspection Note of goods cleared at the warehouse by the Beneficiary Ministries, independent verification report by the Supervision Consultant certifying completion of a milestone)

Declaration:

We, the undersigned, being the authorized representatives of [*name of Service Company*] do hereby declare that:

- 1. [name of Service Company] is not in breach of any of the conditions of the Service Agreement executed with (name of Beneficiary Ministries) or this Grant Agreement executed between UECCC and (name of Service Company) ('the Agreement').
- 2. [name of Service Company] is not in breach of any of the conditions of this Agreement.
- 3. All previous grant disbursements made to the [*name of Service Company*] have been utilized in accordance with this Agreement.

Signed this202......

Name: Signature: Position: Authorised Representative of the Energy Service Company (with powers of attorney)

Annex 3 - Pro-Forma Grant Agreement Clean Cooking Solutions to Public

Institutions

BETWEEN

UGANDA ENERGY CREDIT CAPITALISATION COMPANY, having its principal place of business at Plot 29/32, Kampala Road, P.O. Box 29725, Kampala, Uganda (hereinafter referred to as **UECCC**), which expression shall, wherever the context so admits, include its agents, assignees, legal representatives, and successors in title of the one part

AND

RECITALS

- A. WHEREAS, the World Bank and Government of Uganda (GOU) have signed the IDA and ESMAP Financing Agreements for the Electricity Access Scale-UP project (EASP) and GOU has agreed to make available to the UECCC part of the Financing under the Subsidiary Agreement dated ______.
- B. **WHEREAS**, under the EASP, UECCC is to implement the Clean Cooking Solutions **Programme** ("the Programme") under which grants are provided to selected Public Institutions for Clean Cooking Solutions.
- C. WHEREAS the Programme is aimed at benefiting public institutions operating under Beneficiary Ministries and or Agencies selected to benefit from the Programme by the Ministry of Energy and Mineral Development (MEMD) in consultation with the Beneficiary Ministries and or Agencies.
- D. WHEREAS, through a competitive procurement process undertaken by MEMD leading to the competitive selection of Energy Service Company for the supply, installation, and maintenance where applicable of Clean Cooking Solutions, M/S.....(the Energy Service Company) has been selected to participate in the Programme as a service provider subject to the terms of this Agreement.

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. **DEFINITIONS**

Save as otherwise expressly stipulated, the following terms shall bear the meanings indicated below:

Acceptable Bank	A Tier I financial institution regulated by Bank of Uganda and forms one of	
	the top four financial institutions by asset size	
Agency	Either Uganda Police or Uganda Prisons	
Agreement	Refers to this Agreement executed between UECCC and the Energy Service Company	
Energy Service Company	A domestic company or an international company with a subsidiary registered in Uganda engaged in the business of provision of clean cooking solutions	
Beneficiary Ministries	Either of the following as indicated in Schedule 1: (i) Ministry of Education and Sports (MoES), (ii) Ministry of Health (MoH), and (iii) Ministry of Defence (MoD)	
Financed Activities	The activities to be undertaken by the Energy Service Company under the Service Agreement that are funded under the Programme	
Grant Amount	The amount as indicated under Schedule 1 to be extended by UECCC to the Energy Service Company under this Agreement to cover the full capital cost for the supply, installation, and commissioning where applicable of the clean cooking solution.	
Milestone	A deliverable by the Energy Service Company stipulated under Schedule 2 against which payment is to be made by UECCC	
MEMD EASP PCU	The unit designated under the Ministry of Energy and Mineral Development (MEMD) to undertake the role of overall supervision and coordination of the EASP	
The Programme	Public Institutions programme providing access to grants for clean cooking solutions of Public Institutions operating under Beneficiary Ministries and Agencies, including in Refugee and Host Community Districts (RHDs).	
Retention Amount	An amount equivalent to 15% of the Grant Amount extended to the Energy Service Company, payment of which shall be released upon receipt of confirmation from the Beneficiary Ministries or Agency and MEMD to the effect that defects identified, if any, in relation to the financed activities have been satisfactory remedied. The retention payments shall be made in accordance with the period as stipulated in Schedule 2.	

Service Agreement	The contract executed between the Beneficiary Ministries or Agency and	
	the Energy Service Company to provide services under the Programme,	
	including the supply, installation, commissioning, and maintenance,	
	where applicable, of the cooking solution.	
Service Period	The period for supply, installation, commissioning, and maintenance	
	where applicable of the system as stipulated in Schedule 1	
System	The cooking solution supplied and installed by the Energy Service	
	Company to the selected Public Institution pursuant to this Agreement	
Selected Public	A public school or health centers (II, III, and IV) or army barracks, police	
Institution	stations, and prisons selected by the Beneficiary Ministries or Agency	
Supervision Consultant	An independent Supervision Consultant appointed by MEMD to supervise	
	the supply, installation, commissioning, and operation, where applicable,	
	of the clean cooking solutions by the Energy Service Company	
Verification Report	A report submitted by the Supervision Consultant to MEMD and	
	Beneficiary Ministries or Agency confirming the completion of a	
	milestone under this Agreement	

2. PURPOSE OF THE AGREEMENT

The purpose of this Agreement is to provide a funding mechanism within the framework of the Programme for the payment to the Energy Service Company for the supply, installation, and commissioning of the cooking solutions at a selected Public Institution pursuant to the Service Agreement. UECCC's payment obligations shall be subject to the Electricity Energy Service Company's fulfillment of clause 4, 6, and 12 of this Agreement.

3. GRANT AMOUNT

Subject to the terms of this Agreement, UECCC shall disburse the Grant Amount to the Energy Service Company based on achievement of milestones and in installments as stipulated in Schedule 2.

4. CONDITIONS PRECEDENT TO SIGNING AND EFFECTIVENESS OF THIS AGREEMENT

This Agreement shall be signed and take effect upon the occurrence of the following:

- (a) Receipt from MEMD of a letter confirming that the Energy Service Company was competitively procured by MEMD
- (b) Receipt of an executed contract between MEMD and the Energy Service Company
- (c) Receipt by UECCC of the World Bank's 'no-objection' to
 - (i) The Service Agreement between MEMD and the Energy Service Company
 - (ii) Grant Agreement between UECCC and the Energy Service Company

(d) UECCC holds sufficient funds to fully finance the Grant Amount.

5. NATURE OF OBLIGATIONS

- 5.1 **Obligation of Energy Service Company:** The Energy Service Company undertakes to UECCC that it shall
 - (a) Implement the funded activities in accordance with the terms and condition of the Service Agreement;
 - (b) Comply with the applicable national laws and the UECCC E&S requirements stipulated in clause 7 below;
 - (c) Carry out the funded activities with due diligence and efficiency and in accordance with sound technical, economic, financial, managerial, environmental, and social standards and practices satisfactory to the World Bank, including Anti-Corruption Guidelines applicable to recipients of funding;
 - (d) Permit UECCC or persons designated by UECCC to undertake monitoring of the installed system in the company of MEMD and the Beneficiary Ministries or Agency; and
 - (e) Before seeking any disbursement of the Grant Amount, ensure that
 - (i) There are no outstanding obligation and/or third-party claims arising from the funded activities and
 - (ii) It meets the eligibility criteria provided for under clause 8 on continuous basis.

5.2 Conditional Nature of Grant

The Energy Service Company's eligibility for disbursement of the Grant Amount shall be subject to satisfying the requirements of the Service Agreement between the Energy Service Company and MEMD.

5.3 Retention Amount

In order to preserve the rights of MEMD, the Beneficiary Ministries or Agency and UECCC, UECCC shall retain 20% of the Grant Amount up to the end of the defects liability period. This retained amount shall be paid in accordance with the provisions in Schedule 2 after it is confirmed that all defects identified, if any, during the defects liability period have been fully remedied to the satisfaction of MEMD, Beneficiary Ministries or Agency, and UECCC.

6. GRANT DISBURSEMENT

- (a) The Energy Service Company shall request disbursement of any proportion of the Grant Amount payable by submission of a grant submission request to UECCC through MEMD in the form and content under Schedule 3.
- (b) Disbursement of the Grant Amount shall only be sought against the fulfillment of corresponding milestones as stipulated under Schedule 2.

- (c) Proof of each milestone for the purpose of a disbursement request submitted in accordance with (a) and (b) above shall be confirmed by MEMD and supported by a verification report with respect to such milestone.
- (d) Before its submission to UECCC, each disbursement request shall be reviewed by MEMD which shall certify the completion of the corresponding milestone, attach the relevant verification report by the Supervision Consultant, and submit the certified disbursement request to UECCC.
- (e) UECCC will review the disbursement request for compliance with the terms of this Agreement and shall make a disbursement if it is satisfied that the disbursement request fully complies with the terms of the Agreement.

7. ENVIRONMENT SOCIAL HEALTH and SAFETY (ESHS) COMPLIANCE

The selected Public Institutions and Energy Service Company shall comply with the applicable national laws, the World Bank Environmental and Social Standards, and the UECCC E&S requirements stipulated in section 1.3.3 of the UECCC's ESMS.

Selected Public Institutions and the Energy Service Company will develop and implement an Environment and Social Management Plan (ESMP) in a format provided by UECCC and monitor and report E&S performance to UECCC in a format provided by UECCC.

8. ENERGY SERVICE COMPANY ELIGIBILITY CRITERIA

- (a) Must be registered to operate in Uganda.
- (b) Have capability to maintain policies and procedures adequate to enable MEMD, UECCC, and Beneficiary Ministries or Agencies to monitor and evaluate Energy Service Company performance and system KPIs.
- (c) Maintain a financial management system and prepare financial statements in accordance with consistently applied acceptable accounting standards.
- (d) Must be capable of meeting ESHS compliance requirements, as defined in clause 7 above.
- (e) Must be capable of meeting required product quality standards certified for use in Uganda by the Uganda National Bureau of Standards (UNBS) or other international standards if applicable.
- (f) Must provide proof of a satisfactory consumer protection plan, including warranties within a stipulated period and after-sales services.
- (g) Not blacklisted by PPDA, World Bank, and/or other multilateral development partners.

9. DURATION AND VALIDITY OF THE AGREEMENT

The Agreement shall endure until the occurrence of one of the following events:

(a) Full disbursement of the Grant Amount

- (b) Expiry of the Service Agreement
- (c) Termination of the Agreement in accordance with clause 11.

10. SUSPENSION OF THE AGREEMENT BY UECCC

Notwithstanding the foregoing provisions, UECCC may suspend this Agreement upon occurrence of any of the following:

- (a) When the Energy Service company is not compliant with the E&S requirements in Section 7 above
- (b) When MEMD communicates in writing to UECCC regarding suspension of the Service Agreement of the Energy Service Company
- (c) Suspension of the Clean Technology Fund (CTF) Financing Agreement by the World Bank and/or the Subsidiary Financing Agreement by the Government of Uganda.

11. TERMINATION OF THE AGREEMENT BY UECCC

Notwithstanding the foregoing provisions, UECCC shall terminate this Agreement upon occurrence of any of the following;

- (a) Receipt from MEMD of a notice of termination of the Service Agreement with the Energy Service Company.
- (b) The Energy Service Company is declared insolvent or becomes bankrupt or enters any arrangement with creditors.
- (c) The Energy Service Company is in breach of the E&S covenants in Section 7 of this Agreement and fails to remedy such breach within a period stipulated under a notice by UECCC requiring that remedial action be taken.
- (d) The Energy Service Company has obtained the award of the Service Agreement or any portion of the Grant Amount through fraud or misrepresentation.
- (e) Termination of the CTF Financing Agreement by the World Bank and/or the Subsidiary Financing Agreement by the Government of Uganda.
- (f) Funds cease to be available under the Programme.

12. REFUND OF GRANT

If this Agreement is terminated as a result of clause 11(d) above, the Energy Service Company shall be required to refund to UECCC such amount as shall be assessed by the Supervision Consultant as the loss incurred by UECCC as a result of the fraud or misrepresentation.

13. CONFIDENTIALITY

(a) Save as indicated in (b) below, neither Party shall directly or indirectly reveal, report, publish or disclose confidential information to any person, firm, or corporation not

expressly authorized by the other Party to receive such information or use such information.

- (b) UECCC may, at any time, provide information relating to the Grant Agreement to the World Bank, MEMD, Beneficiary Ministries or Agency, and any other authorized arm of Government.
- (c) For the purposes of this Agreement, confidential information means
- (i) Any information relating to the Grant Agreement including, but not limited to, forecasts, accounting records, or any other financial information which, if disclosed, could negatively affect a Party to this Grant Agreement. Confidential information also includes related information that may be disclosed in connection with financial information, including, but not limited to, identification and account numbers, PINs, passwords, the identity or financial status of investors or partners, or other information conveyed in writing or in discussion that is indicated to be confidential.
- (ii) Any information which is non-public, confidential, technical, or proprietary in nature, including third-party information and, where applicable, technical, or business information, regardless of form, furnished or disclosed by the Disclosing Party to the Receiving Party whether or not the Receiving Party has indicated that such information is confidential but which the Receiving Party should reasonably expect to be confidential.
 - (d) Confidential information shall not include information that
- (i) Is now or becomes generally known or readily available to the public, other than through a breach of this Agreement;
- (ii) Is subsequently, lawfully, and in good faith obtained from a third party owing no obligation of confidentiality to the Disclosing Party and without breach of this Agreement; or
- (iii) The Receiving Party can establish was in its possession before the date of disclosure of such confidential information by the Disclosing Party; or
- (iv) Is independently developed by the Receiving Party without use of or reference to any confidential information of the Disclosing Party.

14. MONITORING

In carrying out the activities under this Agreement, the Energy Service Company undertakes to provide access to UECCC and the World Bank or any persons authorised by them, upon issuance of notice to visit and carry out checks as they may deem necessary on the installations at the selected public institutions.

15. INDEMNITY

The Energy Service Company agrees and declares that UECCC is totally and absolutely free of any form of liability or responsibility for any act or omission in relation to this Agreement save where

such act results from willful misconduct by UECCC acting in its corporate capacity as an institution under the Programme.

16. APPLICABLE LAW and GOVERNING LANGUAGE

The law applicable to this Agreement shall be the Ugandan Law. The governing language of this agreement shall be English.

17. DISPUTE RESOLUTION

All disputes arising between the parties shall be resolved amicably by the parties, failing which the matter shall be referred to the courts of law in Uganda.

18. RELATIONSHIP OF THE PARTIES

The terms of this Agreement shall not in any way be construed as if there is a relationship or employer/employee relationship. The parties are independent of each other.

19. NOTICES

- (a) Notice shall be deemed to have been duly given, made, or sent when it shall be delivered by hand or mail, or fax, to the party to which its required or permitted to be given or posted at the address of such party hereinafter specified or such other address as such party shall have designated by notice to the party giving such notice or making such request.
- (b) For the avoidance of doubt, the notices shall exclude requests for disbursement requests which are to be issued and served in accordance with Clause 6 of this Agreement.
- (c) The notices under clause (a) above shall be in writing addressed as follows:

For UECCC

The Managing Director,

Uganda Energy Credit Capitalisation Company

P.O. Box 29725

Kampala

For the Energy Service Company

.....

P.O. Box

IN WITNESS WHEREOF the parties hereto put the signatures and seals on the date first abovementioned.

For the Energy Service Company	For UECCC
Name:	
Nume	
Title:	
Date:	
Witness	Witness
Sign:	
Name:	
Title:	

Beneficiary Ministries or Agency	
Selected Public Institution	
Energy Service Company	
Grant Amount	
Service Period	
Defects Liability Period	Months

Schedule 1 - Energy Service Company and Grant Amount

Schedule 2 - Grant Payment Milestones

The grant will be disbursed according to the following milestones. Grant disbursements requests will be submitted to UECCC by the Energy Service Company through MEMD.

	Milestone	Percentage of Grant Paid
a)	A signed contract between Beneficiary Ministries and Energy	30
	Service Company	
b)	Receipt by UECCC of an Advanced Payment Guarantee issued by	
	an acceptable bank for the proportion of the grant amount to be	
	paid in advance in form and substance acceptable to UECCC	
Ор	erational acceptance and customer training	50
Pro	oof from MEMD including verification report from the Supervision	20
Со	nsultant that the clean cooking solution is defect free at the end of	
the	e defects liability period	
Tot	tal Grant Payment	100

Schedule 3 - Grant Disbursement Request

This disbursement request is to be submitted to UECCC by Energy Service Companies through MEMD to request for disbursement of a grant payment based on achievement of a grant payment milestone. All fields of the form must be completed.

Name of Energy Service Company......Address.....

Name and Address of Beneficiary Ministries or Agency

Names and addresses of each Public Institution and each site

Description of Grant Payment Milestone

Amount of Grant requested to be disbursed

Service Company Account Details

Supporting Documents (Attachments)

Documented Evidence of Achievement of the Grant Payment Milestone

(For example, proof from MEMD including verification report from the Supervision Consultant confirming Operational Acceptance and Customer Training by the selected Public Institution, independent report verifying correction of defects)

Declaration:

We, the undersigned, being the authorised representatives of [*name of Service Company*] do hereby declare that:

- 2. [name of Service Company] is not in breach of any of the conditions of this Agreement.
- 3. All previous grant disbursements made to the [*name of Service Company*] have been utilised in accordance with this Agreement.

Signed this202......

Name: Signature: Position: Authorised Representative of the Energy Service Company (with powers of attorney)

Annex 4 - UECCC Reporting Template to MEMD and World Bank

Reporting Quarter / Year

XXXXXXXXXXXX

Number of Grant Agreements Signed for each Beneficiary Ministy/Agency

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

Total Amount of Grant Commitments

XXXXXXXXXXXX

Grant Commitments by Ministry/Agency

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

Total Amount of Grants Disbursed

XXXXXXXXXXXX

Grant Disbursements by Ministry/Agency

XXXXXXXXXXXX

XXXXXXXXXXX

XXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXX

Cumulative O&M Payments for the Year by Ministry/Agency

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX

Number of public institutions provided with off-grid access

Number of public institutions provided with off-grid access in refugee-hosting districts

Number of public institutions provided with clean cooking solutions

Number of public institutions provided with clean cooking solutions in refugee-hosting districts

Supervision Site Visits Joined in the Year

ESCO name

Contract Reference Number

Ministry

Written explanation of issues

Action taken

List of Contracts in Breach, Issues, Grants, Cancelled, and so on

ESCO name

Contract Reference Number

Ministry

Written explanation of issue

Action taken

UECCC assessment of Performance of PART D

Written assessment of PART D Performance, issues, challenges, actions recommended, actions taken