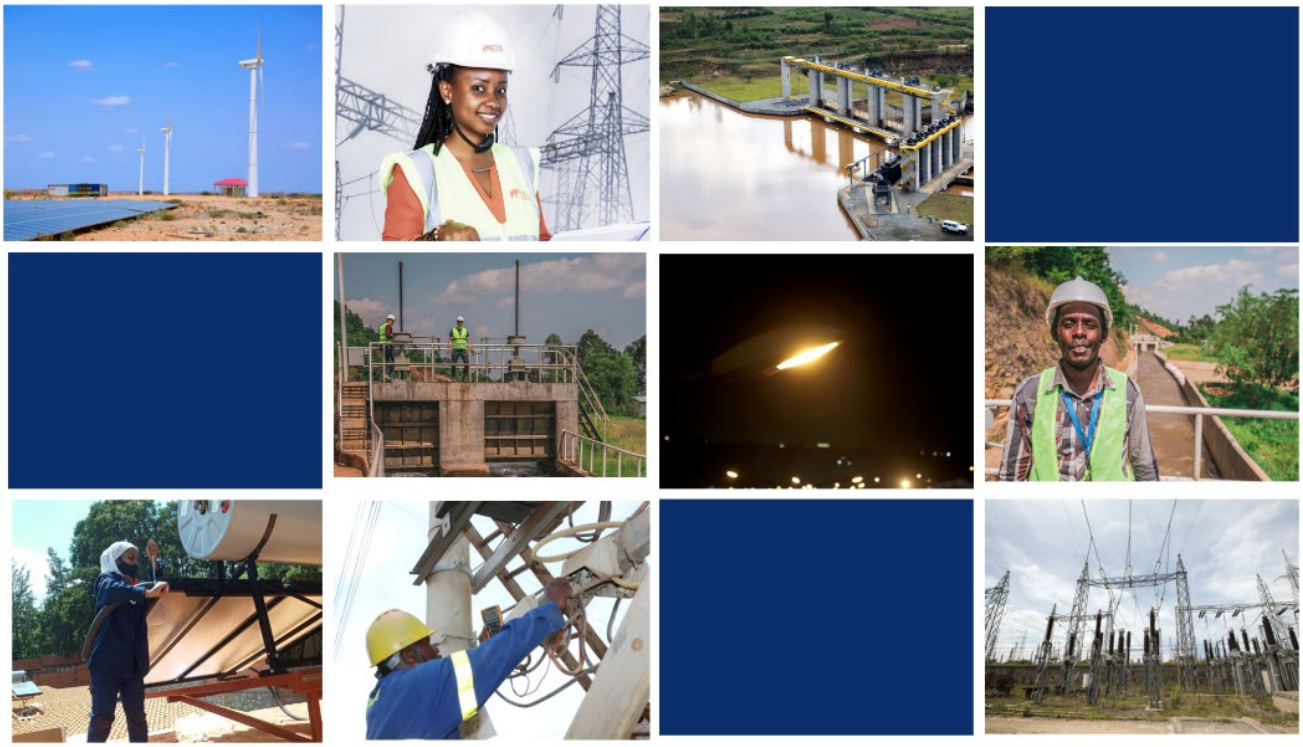

EAST AFRICA ENERGY PROGRAM – QUARTERLY PROGRESS REPORT

APRIL 1–JUNE 30, 2021

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ACRONYMS AND ABBREVIATIONS

ADF-PRG	Africa Development Fund–Partial Risk Guarantee
AFD	Agence Française de Développement
AfDB	African Development Bank
Africa50	Africa50 Infrastructure Fund
AGC	Attorney General's Chambers (Tanzania)
ALSF	African Legal Support Facility
ATC&C	aggregate technical, commercial, and collections (losses)
ATI	African Trade Insurance Agency
AWEaP	African Women in Energy and Power
BI	business intelligence
C&I	commercial and industrial
CAIDI	Customer Average Interruption Duration Index
CCS	Center for Climate Strategies, Inc.
CE	Indicator code: community engagement
CEO	Chief Executive Officer
CF	cooperation framework (Tanzania)
CFA	cooperation framework agreement (DRC)
CLEER	USAID Clean Energy Emission Reduction tool
COD	commercial operation date
COM	Indicator code: communications
COVID-19	coronavirus disease 2019 (SARS-CoV-2)
CP	condition precedent
DFC	US International Development Finance Corporation
DRC	Democratic Republic of the Congo
EAEP	East Africa Energy Program
EAPP	Eastern Africa Power Pool
EARP	Electricity Access Rollout Program (Rwanda)
EASP	Electricity Access Scale-Up Project
ECP	electricity connections policy
EDCL	Energy Development Corporation Ltd. (Rwanda)
EDIMS	Electronic Database and Information Management System
EEA	Ethiopian Energy Authority
EEP	Ethiopian Electric Power
EEU	Ethiopian Electric Utility
EKT	Ethiopia–Kenya–Tanzania
EMI	Ethiopian Management Institute
EMMP	Environmental Management and Mitigation Plan
EMTP	electromagnetic transients program (software)
ENEE	Ente Nazionale Energia Electrica (Puntland, Somalia)
ENK	Energie du Nord Kivu (DRC)
ENV	Indicator code: environment

EPC	engineering, procurement, and construction
EPRA	Energy and Petroleum Regulatory Authority (Kenya)
ERA	Electricity Regulatory Authority (Uganda)
ERP	enterprise resource planning (system)
ESA	Energy Storage Africa (Kenyan firm)
ESIA	environmental and social impact assessment
ESMF	Environmental and Social Management Framework
ESMP	Environment and Social Management Plan
ESP	electricity service provider
ESRES	Energy Security and Resource Efficiency in Somaliland
ET	Indicator code: Ethiopia
EUCL	Energy Utility Corporation Ltd. (Rwanda)
EWiEn	Ethiopian Women in Energy Network
EWT	Endangered Wildlife Trust
EWURA	Energy and Water Utilities Regulatory Authority (Tanzania)
FAT	factory acceptance test
FC	financial close
FCDO	UK Foreign, Commonwealth & Development Office (formerly UK Department for International Development, DFID)
FUWAVITA	Tanzania association for the deaf
FY	fiscal year
GCHM	grievance and complaints-handling mechanism
GCRC	Grid Code Review Committee
GDC	Geothermal Development Company
GE	General Electric
GEEL	Growth, Enterprise, Employment, and Livelihoods (USAID program, Somalia)
GIS	geographic information system
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)
GNDR	Indicator code: Gender
GOE	Government of Ethiopia
GOK	Government of Kenya
GOR	Government of Rwanda
GPS	global positioning system
GWDP	Gridworks Development Partners
HAI	Horn of Africa Initiative
HICD	human and institutional capacity development
HoA	Horn of Africa
HR	human resources
IA	interconnection agreement
ICT	information and communication technology
IFC	International Finance Corporation
inCMS	Kenya Power's customer-service management system
INEP	Integrated National Energy Plan (Kenya)

IP3	Institute for Public–Private Partnerships
IPCA	Institutional Performance Capacity Area
IPIU	EAEP's institutional performance-improvement unit
IPP	independent power producer
IT	information technology
IVA	independent verification agent
KE	Indicator code: Kenya
KenGen	Kenya Electricity Generating Company Ltd.
KETRACO	Kenya Electricity Transmission Company Ltd.
KIL	Kilembe Investments Ltd.
km	kilometer
KNEECS	Kenya National Energy Efficiency and Conservation Strategy
KPI	key performance indicator
KRECS	Kyegegwa Rural Electricity Cooperative Society (Uganda)
KSh	Kenyan shilling
kV	kilovolt
kVA	kilovolt ampere
kW	kilowatt
kWh	kilowatt hour
LCPDP	least-cost power-development plan
LEAP	long-range energy alternatives planning (software)
LOP	life of program
LPU	large power user
MAI	Mercados–Aries International
MEL	monitoring, evaluation, and learning
MEMWR	Ministry of Energy, Minerals, and Water Resources (Puntland, Somalia)
MININFRA	Ministry of Infrastructure (Rwanda)
MO	minimum output
MOE	Ministry of Energy
MoEM	Ministry of Energy and Minerals (Somaliland)
MOF	Ministry of Finance
MOU	memorandum of understanding
MoWIE	Ministry of Water, Irrigation, and Energy (Ethiopia)
MTB	meter test bench
MW	megawatt
N/A	not applicable
NDP III	Third National Development Plan (Uganda)
NECSOM	National Energy Corporation of Somalia
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
NRECA International	US National Rural Electric Cooperative Association
NRF	Norton Rose Fulbright
OHA	organizational health assessment
PA	Indicator code: Power Africa
PACO	Power Africa Coordinator's Office

PATRP	Power Africa Transactions and Reforms Program
PATT	Power Africa Tracking Tool
PAUESA	Power Africa Uganda Electricity Supply Accelerator
PEDA	Puntland Electricity Development Agency (Somalia)
PESRM	Power Africa Environmental and Social Review Methodology
PMO	project management office
PMU	Project Management Unit
POWERHer	network of Rwandan women energy engineers
PPA	power purchase agreement
PPAA	Public Procurement Appeals Authority (Tanzania)
PPP	public–private partnership
PPPDG	Public–Private Partnership Directorate General (Ethiopia)
PSS®E	Power System Simulator for Engineering
PSS®SINCAL	Siemens proprietary simulation software for analysis and planning of electric and pipe networks
PUE	productive use of energy
PV	photovoltaic
PWiE	Puntland Women in Energy (Somalia)
Q	quarter
QPEA GT	Quantum Power East Africa Geothermal Ltd.
QTAT	qualified transaction assistance tool
RAP	resettlement action plan
REA–Tanzania	Rural Energy Agency (Tanzania)
REA–Uganda [1]	Rural Electrification Agency (Uganda)
REG	Rwanda Energy Group
REGIDESO	Régie de Production et de Distribution de l'Eau et de l'Electricité (national utility, Burundi)
REPP	Renewable Energy Performance Platform
REREC	Rural Electrification and Renewable Energy Corporation (Kenya)
RESP	Rural Electrification Strategy and Plan
RFP	request for proposals
RISES	Regional Integration for Sustainable Energy Supply (World Bank program, Horn of Africa)
RPD	revenue-protection department
RPT	Indicator code: regional power trade
RTI	RTI International (registered trademark and trade name of Research Triangle Institute)
RURA	Rwanda Utilities Regulatory Authority
RW	Indicator code: Rwanda
SAIDI	System Average Interruption Duration Index
SAP	*systemanalyse und programmentwicklung* (system analysis and program development)
SDDP	stochastic dual dynamic programming

[1] REA: The country names have been added after the standard abbreviation to help distinguish these two different entities.

SEE Change	Self-Empowerment and Equity for Change
SEFA	Sustainable Energy Fund for Africa
SESRP	Somali Electricity Sector Recovery Project
SM	Indicator code: Somalia
SMART	specific, measurable, achievable, realistic, and time-bound
SNEL	Société Nationale d'Électricité (DRC National Electricity Company)
SOP	standard operating procedure
SOW	scope of work
SP	Studio Pietrangeli (subcontractor)
SVC	static VAR [volt-ampere reactive] compensator
TANESCO	Tanzania Electric Supply Company Ltd.
TaWoE	Tanzania Women in Energy (network)
TBC	to be continued
TCN	Third-Country National
TFRL	Tindinyo Falls Resort Limited (Kenya)
TIP	trafficking in persons
TOCOR	Task Order Contracting Officer's Representative
TOR	terms of reference
TPDC	Tanzania Petroleum Development Corporation
TWh	terawatt hour
TZ	Indicator code: Tanzania
UEAP	Universal Electricity Access Program (EEU, Ethiopia)
UEDCL	Ugandan Energy Generation Company Ltd.
UEGCL	Ugandan Energy Generation Company Ltd.
UETCL	Uganda Electricity Transmission Company Ltd.
UG	Indicator code: Uganda
UK	United Kingdom
USAID	United States Agency for International Development
USB	universal serial bus
USD	US dollar
USG	United States Government
USTDA	United States Trade and Development Agency
VAR	volt-ampere reactive
WESCO	Waamo Energy Service Company (Somalia)
W-GDP	US White House's Women's Global Development and Prosperity initiative (community of practice)
WiAP	Women in African Power
WIET	Women in Energy, Tanzania
WIRE	Women in Rwandan Energy
WWST	World Water and Solar Technologies
YALI	Young African Leaders Initiative
ZECO	Zanzibar Electricity Corporation
ZURA	Zanzibar Utilities Regulatory Authority

EXECUTIVE SUMMARY

The East Africa Energy Program (EAEP) is a four-year program funded by the United States Agency for International Development (USAID) and implemented by RTI International in partnership with several subcontractors. EAEP compiled this quarterly progress report to outline work undertaken from April 1 to June 30, 2021. EAEP aims to achieve the following four objectives in East Africa: (1) optimized power supply, (2) increased grid-based power connections, (3) strengthened utilities and other power-sector entities, and (4) increased regional (cross-border) power trade. EAEP promotes gender equity, environmental mitigation and standards, and community engagement across all of its objectives. Further, EAEP's commitment to institutional performance improvement includes a focus on proper measurement and participatory development of activities, which in turn fosters ownership, better coordination, and long-term sustainability, as envisioned by USAID's Journey to Self-Reliance strategy.

With less than 1% of the population in Africa fully vaccinated, the COVID-19 pandemic is still causing major disruptions in East Africa. With all countries in the region reporting increased cases, health systems are struggling to test, isolate, and care for patients. Further, only 40% of health facilities in sub-Saharan Africa have access to modern electricity services, and of those that do, only 34% of hospitals and 28% of health clinics have reliable access. EAEP aligned its activities during this quarter to address COVID-19 impacts on the East Africa region. This redirection included support to public–private partnerships (PPPs) and independent power producers (IPPs), compilation of business-continuity and resumption strategies, tariff reviews, distribution-system safety, procurement management, scenario planning, and loss-reduction activities.

Livelihoods throughout East Africa are vulnerable to the drastic consequences of uncontrolled climate change. Within the next few decades, increases in average temperatures and changes in precipitation patterns threaten the region's food security, water supply, human health, and biodiversity of wildlife. In addition to dealing with poverty, rapid urbanization, and underdeveloped infrastructure, countries across the region must tackle climate change in order to avert the most dire future scenarios. Experts agree that after recovering from COVID-19, countries should focus on clean, renewable energy to reduce greenhouse-gas emissions and ensure a just energy transition for all citizens. The East Africa region has a long history of renewable energy production, and EAEP will continue to support the region's energy transition while increasing access to modern electricity services. Over 90% of the megawatts projected to reach financial close under EAEP are from renewable energy. EAEP is acting to complement East Africa's climate-change goals and works closely with host-country counterparts and other donors.

During this quarter, EAEP achieved the following high-level results:

- 100% of FY 2021 targets for number of host-government strategic planning documents for the power sector adopted, implemented, or revised with EAEP support; as well as 100% completion of the number of private sector companies, government entities, and utilities that establish and/or implement new or revised existing community engagement plans, policies, or strategies.

- A [redacted] revenue increase between Kenya Power and the Ethiopian Electric Utility (EEU) when compared to the same reporting period in FY 2020, which demonstrates a recovery from initial COVID-19-related revenue impacts.

- 363,532 additional connections were made across Kenya, Ethiopia, Uganda, and Zanzibar, bringing the total number of life-of-program (LOP) connections to over [redacted].

- An additional 308 km of transmission line - the Olkaria–Lessos–Kisumu line in Kenya commissioned.

- Scoping of transactions and utility developments in Somalia and Somaliland for first transactions that will be entered into the Power Africa Tracking Tool (PATT) in Power Africa's history.

This quarterly report depicts progress made, challenges faced, and flexibility in implementation during these testing times. The following two graphics depictachievement against EAEP's key performance indicators and showcases progress toward results made by EAEP during the third quarter (Q3) of fiscal year (FY) 2021.

Structure of the EAEP Quarterly Report

The first section of this report provides an overview of EAEP's objectives and cross-cutting results and achievements. The second section provides results, highlights, and activity details (in table format) by country and by cross-cutting area. Project Management Unit (PMU) achievements are outlined in the third section of the report. Finally, the report delves into the challenges and risks EAEP navigated during this quarter.

The end matter includes summaries of participant training and other participatory events (***Annexes A*** and ***H***), indicator performance data ***(Annex B),*** transactions ***(Annex C),*** success stories ***(Annex D),*** team travel ***(Annex E),*** a staffing matrix ***(Annex F),*** EAEP monthly reports ***(Annex G),*** and updates on environmental management ***(Annex I).***

Figure 1. EAEP selected activities from Q3 FY 2021

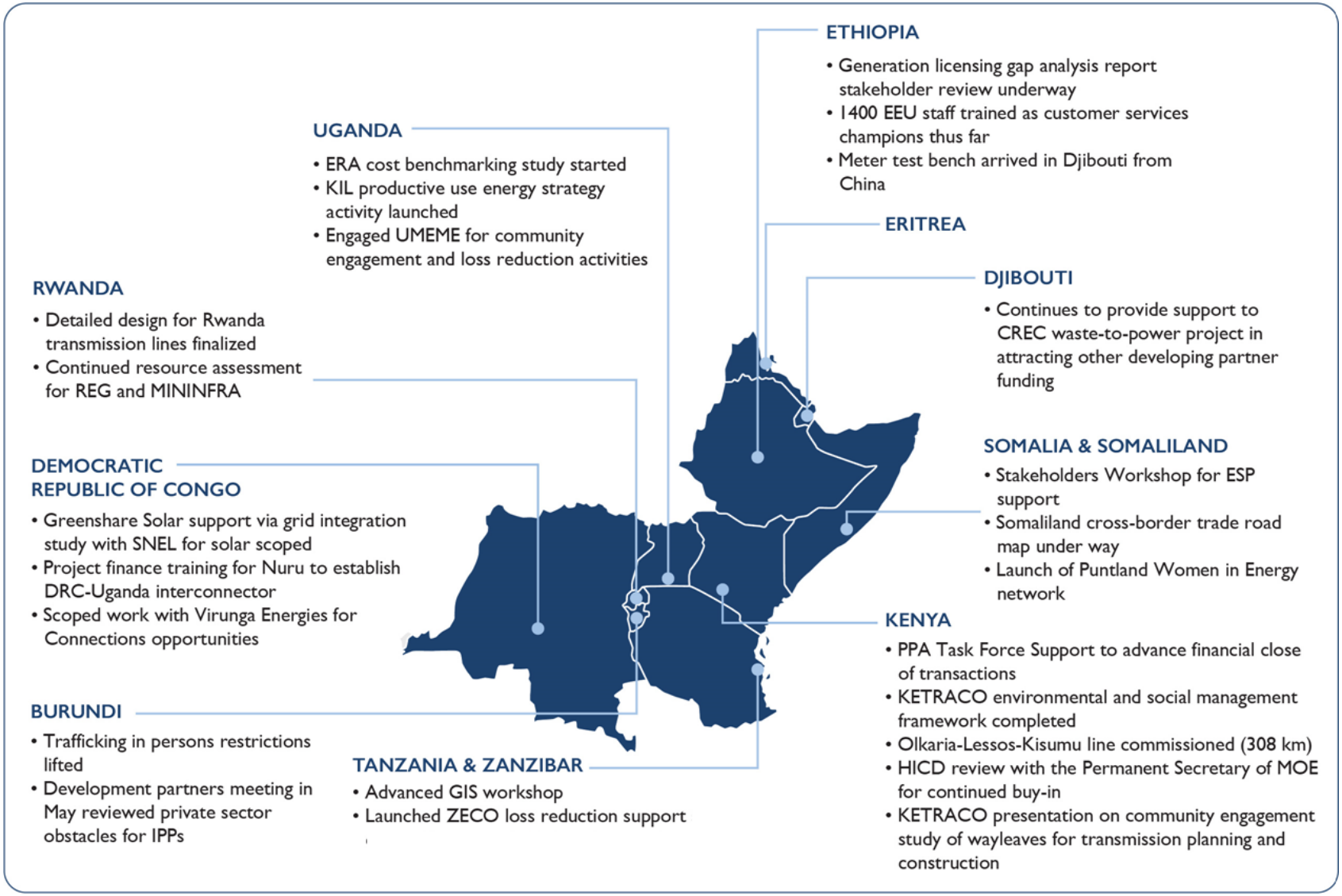
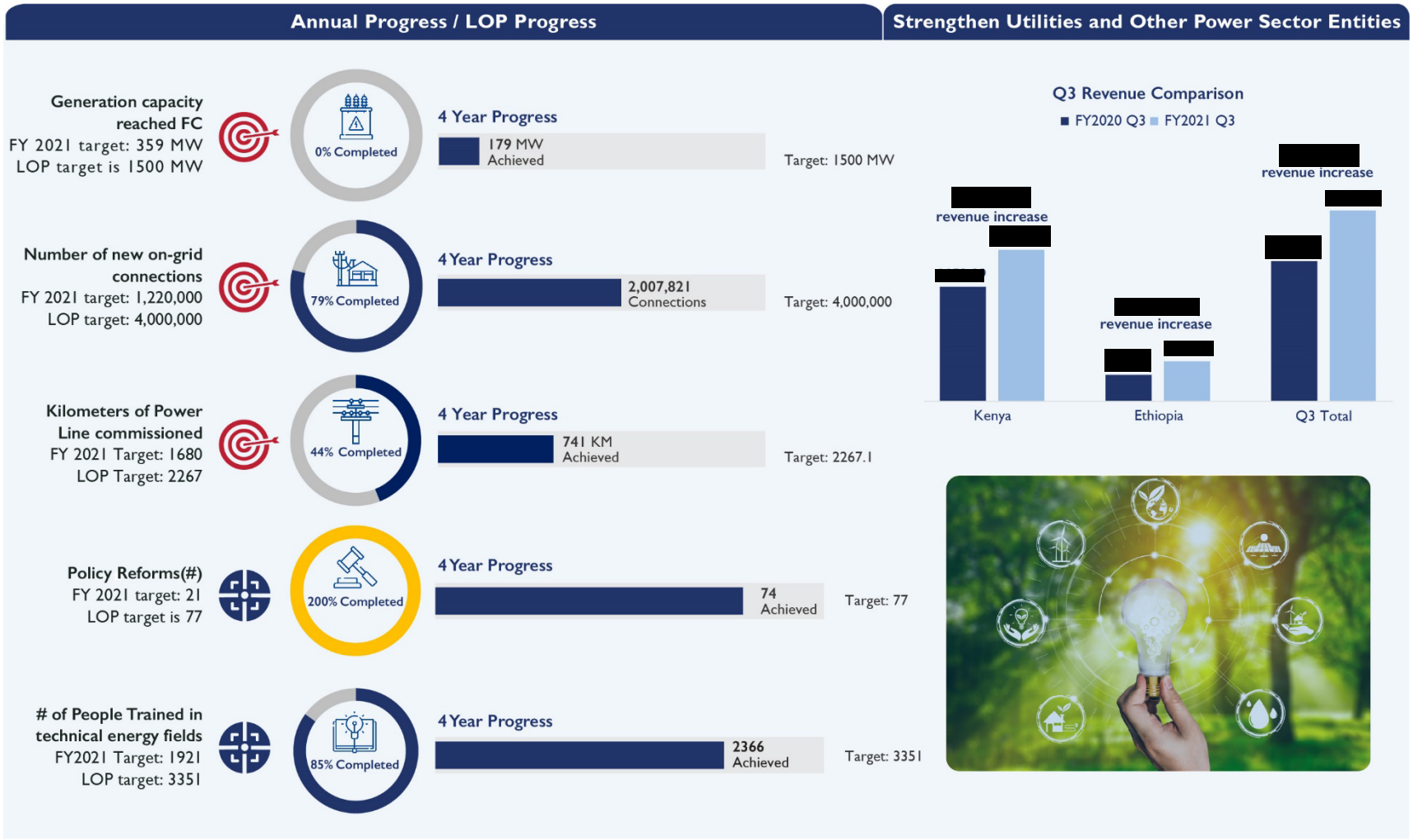


Figure 2. Q3 FY 2021 results across high-priority targets



This results dashboard highlights EAEP's performance against top Power Africa targets. The annual progress pie charts demonstrate Q3 performance against the FY2021 targets. The bar charts show EAEP life of program performance against the 4 year progress.

EAEP RESULTS FOR Q3 FY 2021, BY OBJECTIVE

The following sections describe results per programmatic objective. For a full list of targets, actuals, and a description of the achievements, see Annex B. Annex A contains the participant training report for this quarter; Annex H summarizes EAEP training events held.

OBJECTIVE 1: OPTIMIZED POWER SUPPLY

EAEP focuses on advancing key power projects to financial close (FC), building capacity within entities responsible for procurement, facilitating technical and financial agreements for vital transmission projects, and ensuring that EAEP's activities harmonize with the goals of host-country counterparts. Progress this quarter against minimum Objective 1 outputs included the following.

REMOVING BARRIERS TO FINANCIAL CLOSE

EAEP continued support to generation and transmission transactions across East Africa, and worked with private developers and power-sector entities to eliminate barriers to FC. In Rwanda, transactions currently being supported by EAEP need their power purchase agreements (PPAs) to be amended before they can reach FC, thereby limiting EAEP support to enabling-environment activities and follow-up with developers. In the Democratic Republic of Congo (DRC), EAEP continued to build the pipeline for bankable projects in the Power Africa Transaction Tracker with the qualified transaction assistance tool (QTAT) for the Talihya Nord hydropower project (9.5 MW). This project will serve the population of North Kivu, and EAEP is identifying key areas of support with the developer, Energie du Nord Kivu (ENK). In Kenya. the FC dates for up to 17 IPPs continued to be delayed, which will impact 561.8 MW for Power Africa. EAEP representatives became members of the task force mandated by the President to review PPAs for all transactions that did not reach FC before March 29, 2021. EAEP will continue participating on the task force and will encourage the unlocking of transactions within the six-month timeframe originally envisioned. In Ethiopia, the team successfully advocated for maintaining the legal expertise provided by Clifford Chance, which is supporting the Corbetti and Tulu Moye transactions through FC; however, foreign exchange and offshore banking continued to create obstacles for transactions in Ethiopia. Additionally, the elections and humanitarian challenges in Tigray further impeded progress toward FC for geothermal and solar transactions. In Burundi, EAEP focused on private energy producer support; however, trafficking-in-persons (TIP) restrictions were only lifted at the very end of Q3. With the lifting of TIP restrictions, EAEP will now be able to engage utility and government stakeholders regarding priority transactions, barriers to FC for private developers, and resource planning in Q4.

In June, EAEP held a follow-up brown-bag session with Power Africa Coordinator's Office (PACO) representatives regarding delays to FC for generation transactions. EAEP focused on barriers to FC across countries and technologies, emphasizing how Power Africa can continue to support MW through enabling environmental measures. Transactions nearing FC are outlined in Annex C.

EAEP Indicator 2. Generation capacity reached financial close: Number of MW from transactions that achieved financial close (PA #8) – generation

0 MW (0%) completed in Q3 FY 2021
FY 2021 target is 359.95 MW

EAEP Indicator 3. Generation capacity commissioned: Number of MW that have been commissioned (PA #10) *

0 MW (0%) completed in Q3 FY 2021
FY 2021 target is 513 MW

**Note: Kipeto Wind Project reached* commercial operation date (COD) after the Q3 cutoff date for reporting and will be reflected in the following quarter for Indicator 3.

BUILDING CAPABILITIES IN MEDIUM- TO LONG-TERM GENERATION AND TRANSMISSION PLANNING

The generation, distribution, transmission, and policy plans of East African countries are not necessarily aligned or based on accurate data. In Q3 FY 2021, EAEP continued to support the development of Ethiopian Electric Power's (EEP's) master plan with subcontractor WSP Global. EAEP hosted 20 generation and transmission planning and operations employees for the associated training on the deliverable. The discussion and interactive sessions were conducted with planning and operations departments to refine generation and transmission system data and model information. The final generation expansion plan will be delivered in Q4. In Rwanda, EAEP subcontractor Center for Climate Strategies (CCS) continued its weekly capacity-building sessions for select Rwanda Energy Group (REG) and Ministry of Infrastructure (MININFRA) staff, as part of the Rwanda resource assessment. In Somalia, EAEP held the first in-person stakeholder-engagement forum in Garowe from June 13 through 15, attended by five electricity service providers (ESPs) from South-Central Somalia and local government officials in Garowe. The primary objective of the forum was to obtain a more comprehensive understanding of key issues regarding generation and distribution in the power sector, so as to ensure that EAEP's support aligns with key issues and program targets. The ESPs identified planning support for future assistance and technical capacity building that will improve their ability to gain customers and reduce losses.

EAEP Indicator 17. Number of host-government power-sector strategic planning documents adopted, implemented, or revised, with EAEP support (PA #26)

1 completed in Q3 FY 2021
9 (100%) completed in FY 2021
FY 2021 target is 9

STRENGTHENING GOVERNMENT AND UTILITY CAPACITY TO NEGOTIATE, PRODUCE, AND MANAGE POWER GENERATION AND TRANSMISSION PROJECTS

In Q3 FY 2021, EAEP continued its regional PPP training, implemented by the Institute for Public–Private Partnerships (IP3) and attended by representatives working with PPPs in Djibouti, DRC, Ethiopia, Kenya, Rwanda, Somalia, Tanzania, and Uganda. EAEP anticipates that the regional training will be completed in Q4, and the program will follow up with all stakeholders regarding next steps to build PPP capacity. In Rwanda, for the Gisagara–Huye–Rukarara and Kirehe–Rwainkwavu lines, EAEP subcontractor Studio Pietrangeli (SP) completed the deliverables (final and full environmental and social impact assessment [ESIA], resettlement action plan [RAP], and Environmental and Social Management Plan [ESMP] reports, as well as capacity building). EAEP responded to a request from the managing director of Energy Development Corporation Ltd. (EDCL) to expand SP's initial scope of work to include a review of tender documents prepared by EDCL for the upcoming Bugesera Airport/Industrial Park transmission line. Under the expanded scope, SP completed the initial review of tender documents with written comments and suggested modifications for the Bugesera line. Combined, approximately 200 km of transmission lines will have been supported to reach FC once support is completed. In Kenya, EAEP finalized and submitted to Kenya Electricity Transmission Company Ltd. (KETRACO) the Environmental and Social Management Framework (ESMF), which gave the transmission company a new system to design, procure, construct, and maintain power lines in an environmentally and socially conscious manner, aligned with Kenyan and international standards. As part of the ESMF development, EAEP conducted an environmental audit of the Olkaria–Lessos–Kisumu line (308 km). The audit report has since become a reference document for KETRACO, project financiers, and regulatory agencies during the project's operations phase. Similar work will be replicated for other lines within KETRACO's operating area, and EAEP is also proposing this activity for other utilities in the EAEP region. In April, the Vance Center conducted its fifth joint training session for Ethiopia, Nigeria, and Kenya. The training covered identifying viable PPP projects; identifying and mitigating corruption risks; understanding law-enforcement trends; understanding the PPP Bill; learning about anti-corruption legislation; assessing Kenya's PPP success; and recognizing factors for sustainable development. These trainings will build the capacity of the respective countries to understand PPP and IPP projects in generation and transmission. Additionally, 19 Kenya Electricity Generating Company Ltd. (KenGen) staff who successfully participated in Norton Rose Fulbright (NRF) training from previous quarters were given certificates of participation in Q3.

EAEP Indicator 4. Number of competitive procurement processes for new generation capacity implemented with United States Government (USG) Power Africa assistance (PA #24)

4 (133%) completed in Q3 FY 2021
FY 2021 target is 3

IMPROVING LEGAL, REGULATORY, AND POLICY FRAMEWORKS TO SUPPORT PRIVATE-SECTOR INVESTMENT

In some East African countries, private-sector investment is hindered by either outdated or nonexistent legal and regulatory frameworks that will delay FC and COD. To move the frameworks forward, EAEP continued a suite of legal, regulatory, and policy support to foster an enabling environment for private-sector investment. In Ethiopia, the regulator, Ethiopian Energy Authority (EEA), suggested a task force of representatives from EEA, Ministry of Energy (MOE), Ministry of Finance (MOF) PPP unit, EEP, EEU, Ministry of Trade, and Ethiopian Investment Commission to be set up to review the generation license gap-analysis report prepared by EAEP. Once the review has been conducted, EAEP is hopeful that EEA and other stakeholders will prioritize the recommendations of the final report for implementation, in order to streamline the generation-licensing procedure and create a more business-friendly environment for IPPs. In Kenya, EAEP continued its support for the development and review of regulations to implement Kenya's Energy Act 2019, hosted by the Energy and Petroleum Regulatory Authority (EPRA). In Q4, EAEP will continue supporting the implementation of the Act by commenting on regulations and associated regulatory impact assessment reports when EPRA invites stakeholder and public comments. In Uganda, EAEP finalized the procurement process for a subcontractor to support the Electricity Regulatory Authority (ERA) in completing a benchmarking study and developing a cost-benchmarking tool. On June 29, a kickoff meeting was held with ERA, USAID/Uganda, EAEP, and EAEP subcontractor Mercados–Aries International (MAI). After the nine months implementation period ERA will have a full-cost study for transmission and distribution equipment and materials as a reference for pricing power projects, which will streamline regulatory approval.

EAEP Indicator 15. Policy reforms: Number of laws, policies, regulations, or standards to enhance energy sector governance formally proposed, adopted, or implemented as supported by EAEP assistance (PA #23)

8 completed in Q3 FY 2021
42 (200%) completed in FY 2021

FY 2021 target is 21

NECSOM power plant, Somalia. Photo credit: EAEP

OBJECTIVE 2: INCREASED GRID-BASED POWER CONNECTIONS

EAEP's Objective 2 team made progress on its goal of increasing connections in Ethiopia, Kenya, Zanzibar, and Uganda. The cooperation framework (CF) with Tanzania continued under negotiations in Q3, which unfortunately impacted the ability to support and count connections from Tanzania Electric Supply Company Ltd. (TANESCO). To mitigate, EAEP is expanding its scope to Rwanda, DRC, and Somalia, to identify new opportunities.

INCREASE NEW ON-GRID CUSTOMER CONNECTIONS AND PRODUCTIVE USERS CONNECTED TO THE GRID

EAEP continued to support utilities to develop and implement strategies to increase the number of on-grid connections for residential, commercial, and industrial customers. In Ethiopia, EEU trainers trained by EAEP last quarter started providing customer-service training to other EEU staff at different levels and regions. EEU-trained champions have cascaded the training to more than 1,440 staff in Addis Ababa and Oromia regions. Additionally, EAEP completed the translation of the workplace safety manual into Amharic, and EEU shared the Amharic manual with the utility's Environmental Health and Safety department. With final approvals from EEU, the manual will be used to provide safety training to senior and junior technicians working on the distribution network. Lastly, the meter test bench (MTB) arrived in Djibouti on June 26, and delivery is anticipated in August 2021. The MTB bench is critical for EEU's plan to continue to increase its quarterly connections. EAEP continued to support Kenya Power with the rollout of its business-process reengineering strategy. Progress reports were submitted to the EAEP team for support with any possible changes. Business-process reengineering may be affected after planned changes in Kenya Power's organogram scheduled for Q4. In Zanzibar, EAEP continued to support the Zanzibar Electricity Corporation (ZECO) with its connections program, through advanced geographic information system (GIS) training to 10 staff from ZECO, including engineers, technicians, surveyors,

and information technology (IT) representatives. EAEP subcontractor Esri Eastern Africa submitted the final advanced GIS training report, training performance-evaluation report, and GIS policy recommendations and road map for ZECO. Esri also provided evaluation licenses to trainees, to be used during the two-month site implementation support to ZECO in Q4. In Uganda, the Government of Uganda resolved to resume implementation of its electricity connections policy (ECP), which had been suspended due to funding challenges but only counted 1,780 connections this quarter. EAEP supported the Rural Electrification Agency (REA–Uganda) in coordinating the review and testing of connection materials to be used in an electrification project in southwestern Uganda, sponsored by the Kuwait Fund. The project is expected to deliver 1,600 new connections and distribute 1,100 ready boards (single-board wiring of bulbs and sockets counted as connections) to households that are unable to use conventional house wiring. To support productive use, EAEP launched the productive-use strategy with Kilembe Investments Ltd—a small service provider in Western Uganda—that will build capacity for the organization to identify, recruit, and connect larger power users.

EAEP Indicator 5. Electricity access: Number of new grid actual direct connections (PA #3)

363,532 completed in Q3 FY 2021
967,139 (79%) completed in FY 2021
FY 2021 target is 1,220,000

REDUCE THE TIME AND COST REQUIRED TO CONNECT A HOUSEHOLD OR BUSINESS TO THE POWER GRID

In Ethiopia, EAEP completed the first draft of the EEU and Universal Electricity Access Program (UEAP) distribution-system assessment. Up to now, several standards have been followed for different projects, especially at UEAP. This assessment will help EEU analyze how standards are practiced and develop a unified standard for the country's distribution system. The assessment also revealed shortcomings in the distribution network. Also, EAEP conducted procurement and contract-administration training for EEU in two rounds, at the training-of-trainers level. EAEP had identified one of the gaps for not attaining new connection targets at EEU as lack of on-time procurement of equipment and accessories for new connection requests.

In Kenya, EAEP supported the implementation of Kenya Power's distribution master plan phase I with Siemens and stakeholders. During the kickoff meeting, all parties agreed to start collecting data for Kenya Power's facilities database, with an implementation schedule to be submitted by Siemens. For phase II, the overall terms of reference (TOR) for the plan were developed and approved by Kenya Power, with EAEP support for procurement in the next quarter. Going forward, EAEP will build the capacity of Kenya Power engineers to use the software system to improve distribution-system planning for new customer connections.

Factory acceptance test meter test bench training for EEU, Ethiopia. Photo credit: EAEP

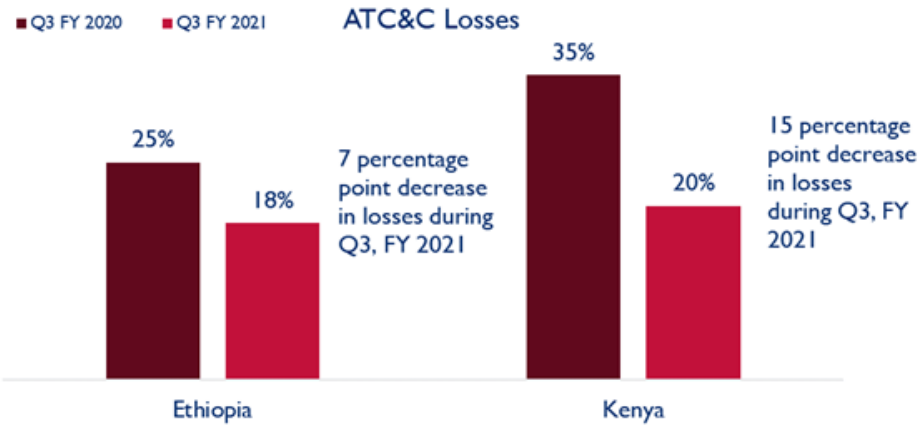
OBJECTIVE 3: STRENGTHENED UTILITIES AND OTHER POWER-SECTOR ENTITIES

During this quarter, the EAEP utility-turnaround team expanded work with EEU and Kenya Power, given the successes of the pilot areas. The utility-turnaround team continued to build momentum with Zanzibar, two utilities in Uganda, and scoping opportunities with small providers in Somalia and DRC.

REDUCING AGGREGATE TECHNICAL, COMMERCIAL, AND COLLECTIONS (ATC&C) LOSSES

In the EAEP supported regions (Nairobi region and additional sectors) in Kenya, ATC&C losses were reduced by 15 percentage points when compared to the previous year's quarter, during the onset of the COVID-19 pandemic (Q3 FY 2021 [20%] and Q3 FY 2020 [35%]). The EAEP utility-turnaround team extended its loss-reduction road map initiative to two additional sectors: Nairobi Industrial and Upper Hill. Significant improvements in revenue and operations started after only three months. In Ethiopia, ATC&C losses declined by 7 percentage points this quarter compared to the beginning of the previous fiscal year (Q1 FY 2020 [25%] and Q3 FY 2021 [18%]). The EAEP utility-turnaround team conducted remote reading of substation feeder meters across Addis Ababa Region and Finfinne District substations, to obtain monthly substation feeder-meter data. EAEP had been obtaining this data manually for months because the remote meter-reading platform was producing unreliable data due to problems with its configuration. Further, EAEP began supporting EEU to install remote meter-reading systems for industrial and large commercial customers. In Uganda, EAEP launched activity support for Kyegegwa Rural Electricity Cooperative Society (KRECS)—a small service provider—to reduce losses and increase revenue. EAEP finalized the diagnostic assessment and determined support areas in energy accounting, segregation of losses, network mapping, revenue-protection functions, document reviews, and training-needs assessment. KRECS support will start in Q4 and will be documented for potential application to other small service providers in Uganda, given similar utility challenges.

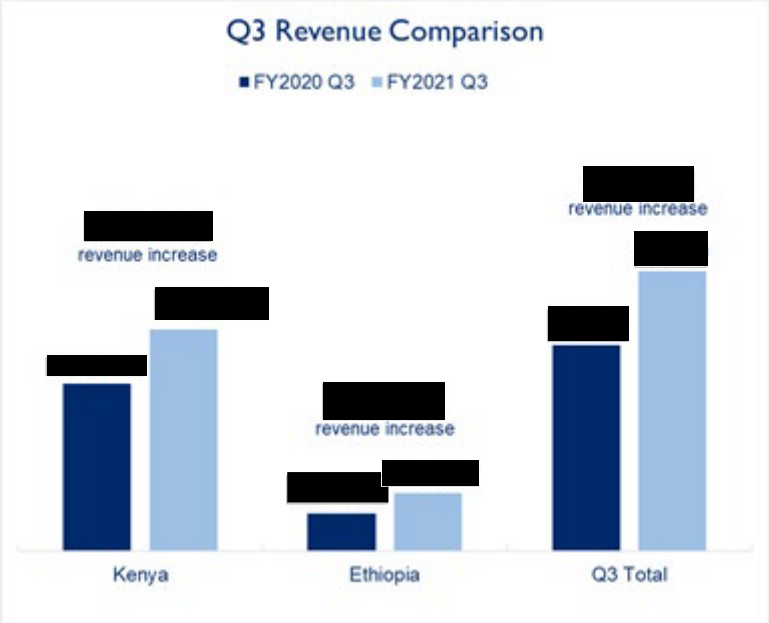
EAEP Indicator 8. ATC&C losses reduced as a result of EAEP support, measured in percentage points



INCREASING UTILITY COST RECOVERY (REVENUE)

In Q3, total increase in revenue was [redacted] when compared to the previous year's quarter, with [redacted] in Ethiopia and [redacted] in Kenya. In Kenya, EAEP provided structured data sets to pilot sectors, on a daily basis, by extracting and updating performance data for each sector and zone daily and addressing issues with low-performing zones, revenue collectors, and itineraries in these areas. In Ethiopia, EAEP and EEU built on the successful implementation of the optimized commercial cycle in pilot areas, with a rollout to all service centers in Addis Ababa Region and Finfinne District. EEU management signed off on an EAEP-developed executive order, requesting that all service-center managers and staff apply the new approaches. Additionally, EAEP continued work with the EEU Energy Management Directorate to address the issue of customers that had not yet migrated from the old billing system. EEU accepted the EAEP template and started the data-migration process, which will help EEU reduce the number of unbilled customers and consequently reduce the utility's commercial losses and increase revenues.

EAEP Indicator 9. Revenue by utilities increased through EAEP support



SUPPORT FOR STRATEGY AND POLICIES

In Kenya, EAEP supported the Kenya Power task force on its loss-reduction steering committee (including general managers for commercial services and information and communication technology [ICT], legal services, human resources [HR], and strategy departments), as well as the loss-reduction task force (war room), with presentations and initiatives to prevent, detect, and recover energy losses. In Zanzibar, EAEP launched support activities with an internal-audit process and drafted an internal-audit manual, operating procedures, risk-assessment work plan, ICT working process, and reporting templates.

EAEP's utility turnaround team at the NECSOM's surveillance center, in Somalia. Photo credit EAEP

OBJECTIVE 4: INCREASED REGIONAL POWER TRADE

In East Africa, cross-border power trade is critical to driving down costs, improving efficiency, and increasing the reliability of electricity supply throughout the region. Yet the region faces numerous challenges, including perceived oversupply in multiple countries, politically sensitive borders for power trade, and interconnection noncompliance. EAEP achieved the following in Q3 FY 2021.

DEVELOPING AND ACCELERATING REGIONAL INTERCONNECTION PROJECTS

EAEP's Objective 4 team focused predominantly on supporting specific transactions this quarter, as shown in ***Table 1***.

Table 1. Status of EAEP-supported interconnection projects

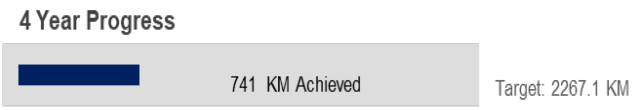
Transaction / interconnector	Status
Ethiopia–Kenya 200 MW power trade	Ethiopia's portion of the infrastructure was completed, while the Kenya side remained incomplete as of June 2021 because the static VAR [volt-ampere reactive] compensator (SVC) unit procurement had not yet started. Completion of final construction on the Kenya side was further delayed because of the work still under way on the final four transmission towers and because of the PPA Task Force mentioned in Objective 1. EAEP facilitated the sharing of the Interconnection Agreement between Kenya and Ethiopia. The Interconnection Agreement has since been incorporated into the PPA.
Ethiopia–Kenya–Tanzania (EKT) transmission line	EAEP's wheeling model was completed and submitted to the Eastern Africa Power Pool (EAPP) in Q3 for capacity building to take place in Q4.
Rwanda–Uganda Shango–Mbarara 220 kV line	This project, when successfully completed, will synchronize power networks among five countries (Burundi, DRC, Kenya, Rwanda, and Uganda) and lay the foundation for future power trade in the region. EAEP continued to lead weekly central coordination committee meetings for Shango–Mbarara interconnector commissioning. Attendees included EAPP, Energy Utility Corporation Limited (EUCL), Kenya Power, Nile Equatorial Lakes Subsidiary Action Program (NELSAP), Rwanda's EDCL, KETRACO, Uganda Electricity Transmission Company Ltd. (UETCL), and USAID Missions in Kenya, Rwanda, and Uganda. In May, the EAEP Objective 4 team performed physical inspections of both Mbarara and Shango and found the substations to be physically ready for interconnection. At the time of the inspection, the Shango line was not yet fully commissioned; however, plans were under way to finalize pre-commissioning tests. In June, Chief Executive Officer (CEO) meetings were held with the Central Coordination team to resolve the telecommunication issues on the commissioning of the interconnector. The Central Coordination team is the highest decision-making body, responsible for evaluating, approving, and signing off each phase of the project. With utility CEO involvement, it was revealed that Rwanda had procured boosters to continue testing Option 1. Option 1 entails the integration of ABB (Uganda) and ECI (Rwanda) tele-protection equipment on the Shango-Mbarara 220 kV line. This testing entails having ECI Telecommunication Ltd. equipment on the Rwanda side and ABB Telecomms equipment on the Uganda side. Further, the Rwandan CEO requested that the testing of Option 1 reach its conclusion before the

Transaction / interconnector	Status
	move to Option 2. Option 2 entails having ABB on the Uganda and Rwanda sides of interconnector. Responding to this request will entail delivering ABB tele-protection equipment relocated from Rubavu substations. Commissioning is anticipated in the next quarter.
DRC–Uganda 400 kV interconnector transaction (Nkenda–Beni–Butembo–Bunia line)	EAEP completed a seven-module transmission financing training series with the Nuru team. The sessions addressed different approaches to financing large-scale power projects and highlighted how project finance could be applied to the Nuru example. Nuru developers informed EAEP that they were put in touch with Energy Development in Africa, which wants Nuru to sign a memorandum of understanding (MOU) to co-develop the project. USAID/Uganda responded that Energy Development in Africa firm is a legitimate organization that is currently involved with the Kikagati Hydro Power Project.

BUILDING CAPACITY OF EAPP MEMBER UTILITIES TO ENGAGE IN LONG- AND SHORT-TERM POWER TRADE

In Q3, EAEP received a request from EAPP for capacity building and training of system operators on cross-border operation of power systems. The original scope of support for the operational-readiness bill of quantities for equipment was absorbed by the World Bank; therefore, EAEP pivoted support to other areas for operational readiness. This support will specifically focus on three areas: control area concepts and critical requirements; development of an EAPP control area and national operating procedures; and development of a certification program for EAPP system operators. Additionally, EAEP launched the Somalia cross-border trade road map activity based on the interest of other donors in the Horn of Africa Initiative (HAI). The EAEP Objective 4 team reviewed existing interconnection documents and held several meetings with local and regional interconnection entities to better understand the status of technical and operational readiness of Somalia and Somaliland with regards to regional power integration.

EAEP Indicator 13. Kilometers of power lines constructed or rehabilitated that have been energized, tested, and commissioned with EAEP support (PA #19)



308 km completed in Q3 FY 2021
741 km (44%) completed in FY 2021
FY 2021 target is 1,680

Olkaria–Lessos–Kisumu transmission line, Kenya. Photo credit: Nyaga Ireri

CROSS-CUTTING ACTIVITIES

Cross-cutting activities underpin EAEP's programming. These activities include institutional performance improvement, gender mainstreaming, community engagement, and environmental concerns. In Q3 FY 2021, the cross-cutting program advanced the following activities.

INSTITUTIONAL PERFORMANCE IMPROVEMENT

EAEP's institutional performance-improvement unit (IPIU) deploys USAID's human and institutional capacity development (HICD) approach with East African power entities. The IPIU continued to remain flexible and nimble in its support to capacity-building needs across the EAEP portfolio. This quarter, the IPIU presented a high-level progress report to Kenya's MOE on the HICD-derived cooperation matrix. The meeting was a lynchpin in obtaining guidance and alignment for the next phase of EAEP activities in FY 2021. The MOE Director of Renewables discussed possible future support requirements, including sharing learning experiences in the Kenyan energy sector on environmental and community-engagement best practices and the implementation of the Energy Act, 2019, particularly on the role of County governments in the energy sector. IPIU continued to support the entire capacity-building life cycle and supported 567 individuals in Q3 to obtain training in technical energy fields.

"Institutional Reforms and Operationalization of IPP Units" training by Vance Center; social media interaction. Photo credit: EAEP

EAEP Indicator 12. Training and capacity-building activities: Number of people trained in technical energy fields supported by EAEP (PA #18)

567 completed in Q3 FY 2021
1,631 (85%) completed in FY 2021
FY 2021 target is 1,921

GENDER EQUITY AND INTEGRATION

EAEP continued to promote gender equity in Q3 FY 2021 (see graphs below). To help young women secure practical technical experience in the energy sector, the Women in Rwandan Energy (WIRE) apprenticeship program placed 22 apprentices, for a total of 92 thus far. The initiative has seen an additional seven apprentices go on to receive full-time employment, bringing the program total to 12. Meanwhile, in Kenya, 15 interns engaged as the latest cohort, and Kenya Power joined the program along with Geothermal Development Company (GDC) and KETRACO. The team signed agreements with two entities in Somalia and five in Tanzania for the internship program, and prepared to launch the Tanzanian Women in Energy Development (TaWoED) network early in Q4. To further support apprentices and interns, EAEP continued its workforce-readiness training series in Rwanda and Tanzania, and WIRE further intensified negotiations with academic institutions in Rwanda to roll out the training to universities and technical colleges. WIRE-supported lecturers from these institutions will train fresh graduates and final-year students enrolled in engineering and energy-related fields. Lastly, EAEP supported the establishment of Puntland Women in Energy (PWiE) in Somalia, and initiated discussions with potential members for a Ugandan chapter of African Women in Energy and Power (AWEaP), a nonprofit company established to accelerate African women entrepreneurs' participation in the power and energy sector.

WIRE apprentices during a workforce-readiness skills training. Photo credit: EAEP WIRE

EAEP Indicator 19. Number of female interns/apprentices who receive EAEP gender and capacity-building support

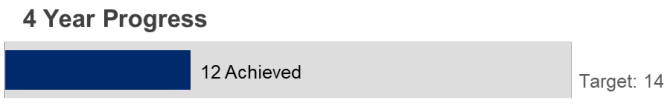
32 completed in Q3 FY 2021
89 (119%) completed in FY 2021
FY 2021 target is 75

COMMUNITY ENGAGEMENT AND ENVIRONMENT

The majority of EAEP work on community engagement and environment focused on Kenya; however, EAEP did start the regional guide to wildlife and energy interactions, which will support multiple countries and utilities. In Kenya, EAEP's environment specialist completed the ESMF for KETRACO, which will give the utility clear procedures and guidance to mitigate environmental challenges. In Q3, EAEP supported the environmental review of the 308 km Olkaria–Lessos–Kisumu high-voltage transmission line by traveling across the entire line with the KETRACO environment unit. EAEP's community-engagement specialist presented the findings of the KETRACO wayleaves (rights of way) study at the utility's annual meeting, detailing the survey process, findings around construction of a specific line on the surrounding community, and lessons learned from the experience. Additionally, EAEP scoped activities with Uganda's largest utility, Umeme Ltd., specific to community-engagement requests, and hopes to launch support activities in Q4.

KETRACO annual research conference; EAEP's Community engagement advisor presented a study on wayleaves. Photo credit: EAEP

EAEP Indicator 16. Number of private-sector companies, government entities, and utilities that establish and/or implement new or revised existing community-engagement plans, policies, or strategies with EAEP Power Africa assistance (PA #25)



1 completed in Q3 FY 2021
7 (100%) completed in FY 2021
FY 2021 target is 7

COUNTRY PROGRESS: ETHIOPIA

Ethiopia Top Achievements and Results in Q3 FY 2021

- Completed training on generation and transmission expansion planning before implementation of the revised plan next quarter
- EEA led advancement of a report analyzing the generation licensing gap, including stakeholder review and implementation strategy
- Train-the-trainers customer-service champions trained 1,440 EEU staff; EAEP delivered training last quarter (Q2)
- Meter test bench arrived in Djibouti en route to Addis Ababa; EAEP will support EEU in Q4 with installation and capacity building

The Objective 1 team continued its ongoing support for the Tulu Moye and Corbetti geothermal projects, coordinating with Government of Ethiopia (GOE)/EEP legal counsel Clifford Chance to advance project documents, including engagement letters and the crucial Geothermal Drilling Directive. The program aims to advance these important geothermal projects (50 MW apiece) to financial close, with Tulu Moye reaching FC in December 2021 and Corbetti in Q2 FY 2022. EAEP also continued its ongoing engagement with the Metehara solar project, coordinating between developer Enel Green Power (Enel) and EEP as project stakeholders navigated Ethiopia's national elections in June. Elsewhere, EAEP and WSP Global made considerable progress with virtual training on generation and transmission expansion planning for Ethiopian power entities; in Q3, 22 employees participated in the training, which supports the implementation of EEP's master plan. The Objective 1 team also helped to advance the Public–Private Partnership Directorate General's (PPPDG's) five-year strategic plan (based on previous HICD assessments of the Ethiopian power sector), continued work on a generation licensing gap-analysis report for EEA, supported the Vance Center for International Justice to provide training in PPPs to representatives from Ethiopian power entities, and continued implementing GIS cadastral system training for EEA and Ministry of Water, Irrigation, and Energy (MoWIE) staff.

In Ethiopia, the Objective 2 team pursued three main activities to improve the time and cost of the connections process. EAEP completed the first draft of the EEU and UEAP distribution-system assessment, outlining current practices regarding installation and identifying distribution-system standards applicable to EEU, and also analyzed the impact of EEU's newly implemented enterprise resource planning (ERP) system on new customer connections. Because EAEP had identified one of the gaps for not attaining targets as lack of on-time procurement of equipment and accessories for new connection requests, the program conducted procurement and contract-administration training for 16 EEU employees: nine men and seven women. Finally, EAEP supported the virtual factory acceptance test (FAT for EEU's new MTB and coordinated shipping of the bench from China to Ethiopia. On June 26, the MTB arrived in Djibouti and will be in Ethiopia in Q4. Despite travel challenges related to COVID-19, and the fact that the virtual MTB FAT was the first such experience for the supplier and EEU, all procedures were conducted successfully.

The Objective 3 utility-turnaround team continued its intensive work with EEU to turn it into a more resilient and profitable utility. After implementing the optimized commercial cycle in two EEU regions in previous quarters, EAEP began rolling out these proven improvements to additional EEU regions, working daily with EEU managers and field staff. EAEP also supported remote reading of substation meter feeders in the Addis Ababa and Finfinne regions, helped EEU install remote meters for industrial and large commercial customers, monitored the efficiency and functionality of EEU's new handheld meter-reading devices, and introduced a meter-sealing management process, all with the aim of reducing EEU energy losses and improving the utility's financial viability.

OBJECTIVE 1 PROGRESS ON WORK PLAN ACTIVITIES: ETHIOPIA

Work plan reference number, activity description, and minimum output (MO) code	Activity status
ET 1.1.1 Ongoing transaction support to Corbetti Geothermal and Tulu Moye power plants **Activity Managers:** [redacted] **Counterparts:** EEP; MoWIE **Deliverable:** EAEP Transaction Tracker **MO:** 1.1	**Summary of previous support:** On May 29, 2020, the Ethiopia House of Peoples' Representatives approved the Geothermal Proclamation Amendment for Corbetti and Tulu Moye, and on June 16, the Council of Ministers approved the project documents. EAEP began assisting Tulu Moye to fulfill and finalize the outstanding conditions precedent (CPs) to ensure effectiveness of the project documents. Tulu Moye will receive [redacted] in grant funds from the US International Development Finance Corporation (DFC) to support early-stage design of Phase 1 of the project, at 50 MW. Tulu Moye indicated that this grant is in addition to the support that DFC is already providing, as part of the lenders' group for project finance. The grant will allow Tulu Moye to commence detailed-design work for the power plant at a much earlier stage; Tulu Moye can therefore accelerate the project and delivery of the first 50 MW of electricity to the Ethiopian power grid. **Quarter 1:** The GOE/EEP's international legal advisors, Clifford Chance, reached out to the MOF and EEP representatives. Clifford Chance inquired about the status of the MOF's review of the updated legal opinion and recommendation for EEP and GOE to organize their signatories, the issuance of MOF and EEP in-house legal opinions (respectively), and any internal authorization processes required to ensure successful completion of the above steps. EAEP supported GOE/EEP representatives to expedite and complete the "effectiveness" of the project documents. For the Corbetti and Tulu Moye projects to achieve "effective date," they must complete the following steps: • MOF needs to complete the internal sign-off process on or before the effective date. As it stands, no internal sign-off is required from EEP, but if necessary, EEP will complete this step before the effective date. • The respective seller, EEP, and GOE (acting through MoWIE and MOF), as well as the respective shareholders as defined in the implementation agreement, will—on the effective date—issue the letter agreement with the revised protocol and implementation agreement amendment, as discussed. • Legal opinions from the MOF, EEP, and each seller must be issued for each project on the effective date. Clifford Chance will share the consolidated execution versions of the letter agreement for each project once MOF's in-house legal counsel obtains the required internal sign-offs. Thereafter, EEP and GOE signatories can execute the relevant documents. Tulu Moye's CEO asked for the assistance of EAEP's senior energy sector advisor in checking whether MOF and EEP representatives received the final drafts of the letter agreement, and whether MOF and/or EEP will require assistance in finalizing the documents. EAEP reached out to the EEP and MOF representatives to offer assistance in reviewing the documents. Additionally, EAEP discussed with Tulu Moye's CEO the signing-ceremony logistics, should GOE/EEP decide to

Work plan reference number, activity description, and minimum output (MO) code	Activity status
	showcase the "effectiveness" milestone. EAEP provided technical input for this transaction and will continue to follow up on developments to reach the effective date. **Quarter 2:** EEP and the MOE signed Corbetti's "effectiveness" letter on January 15. The remaining activities for Corbetti to reach effectiveness were for the legal directorates at EEP and the MOF to provide their legal opinions, which was accomplished at the end of the quarter. EAEP's senior energy sector advisor helped expedite the effectiveness letter, and will continue to follow subsequent stages. EAEP, the USAID/Ethiopia Mission energy specialist, and the program manager then held a conference call with the MoWIE special advisor to the Minister to discuss the Corbetti and Tulu Moye projects. MoWIE will expedite Clifford Chance's mandate extension and lead engagement on outstanding issues to help the Tulu Moye project developer secure financing with its lender group. EAEP made a presentation on the remaining activities required to reach financial close, as well as issues that should be discussed and finalized by the different GOE and EEP entities. EAEP classified the issues based on critical bankability and bankability requiring drafting amendments, and provided technical guidance. Additionally, the African Legal Support Facility (ALSF) is working on Clifford Chance's mandate-extension letter. EAEP will continue to follow up with ALSF on Clifford Chance's mandate extension and offer any necessary support to these projects. **Quarter 3:** On April 28, with assistance from EAEP, the ALSF finalized the execution of the Clifford Chance (GOE/EEP international legal counsel) grant and mandate extension to support GOE/EEP in Corbetti and Tulu Moye projects discussions. EAEP's tracking of the status of the engagement letters with GOE (MOF and MOE) institutions was instrumental in the signing of the documents, so as to bring Clifford Chance on board to assist GOE/EEP in discussions with lenders. EAEP shared a copy of the New York Convention Proclamation Negarit Gazette with Clifford Chance, to review whether this document addressed the amendment agreements to the interconnection agreement (IA) and PPA, allowing for application of the New York Convention to each of the documents. On May 12, EAEP sent a copy of a revised Geothermal Drilling Directive from EEA to Clifford Chance for its review, to determine whether the revised directive could have technical or commercial impacts on drilling activities for the projects. On June 25, EAEP coordinated a working session between the MOF and Clifford Chance to go over the list of lenders' issues under the mandate of the MOF. The MOF reviewed and provided input on issues that required a combined response from MOF and EEP. Some of the issues raised by lenders involved offshore account structures, application of the New York Convention, MOF's mandate in granting changes in law and tax, and the need for a Direct Agreement. The same working session is currently planned to take place with EEP the week of July 5. Once that session is completed, the aggregated responses from

Work plan reference number, activity description, and minimum output (MO) code	Activity status
	MOF and EEP will be submitted to the lenders' legal team in early Q4. EAEP will continue to follow up on the status of these transactions through financial close and beyond.
ET 1.1.2 Continued technical assistance to Metehara Solar Power Plant and Ethiopia Solar Program: two transactions **Activity Manager:** [redacted] **Counterparts:** EEP, Ministry of Finance and Economic Cooperation **Deliverable:** EAEP Transaction Tracker **MO:** 1.1	**Summary of previous support:** EAEP was informed by EEP's CEO that EEP responded to Enel Green Power's proposal, saying that the tariff acceptable to EEP would be like that of ACWA Power ($0.0256/kWh), with no escalation. EEP said it might consider a slightly higher tariff if the cost of development for Metehara is justifiably higher than that of ACWA Power's projects. The program also held discussions with EEP and the International Finance Corporation (IFC) on Rounds 1 and 2 of the Scaling Solar projects. EAEP formally wrote to EEP proposing support for the Round 2 Scaling Solar projects, which will involve drafting the generation connection agreement (or modifying existing connection agreements from other solar projects). **Quarter 1:** EAEP's senior energy sector advisor reached out to Enel's project director to obtain a status update on discussions with EEP. Enel had been consulting EEP on how Enel could move forward with the tariff discussion. Enel began working to reduce its tariff, in order to make it competitive with ACWA Power's tariff of less than $0.03/kWh. Enel senior management said it would decide on the tariff at the beginning of 2021 and then approach EEP with a proposal. **Quarter 2:** EAEP's senior energy sector advisor reached out to Metehara Solar to discuss Enel's decision on EEP's tariff-adjustment request. Enel senior management considered all options regarding the tariff-reduction request and communicated to EEP in 2020 the price of $0.03976/kWh, which at the time was a 30% reduction from the original tariff. Metehara indicated growing concern from Enel's lenders regarding the macroeconomic conditions and political situation in Ethiopia, and informed Enel that it would reassess these issues and concerns in the second quarter of 2021 before making any decisions. As of the end of the quarter, EAEP had received no decision from Metehara. **Quarter 3:** On April 23, EAEP was informed by Enel Green Power's Metehara project director that the management team planned to reach out to EEP sometime in July or August, once the Ethiopian national elections are finalized. The national elections were initially scheduled for June 5 (for regions) and June 12 (for Addis Ababa and Dire Dawa administration cities). However, the government decided to hold one election for both regions and administrative cities, and postponed the date to June 21. As of this reporting period, the Ethiopia national election was successfully completed, with the incumbent party winning 410 out of 436 seats. Another ballot will be held for the other 111 constituencies by the end of 2021. Enel's Metehara project director stated that Enel management held a round of calls with different stakeholders; based on the feedback received, everyone was waiting for the election to be over before engaging with the government. Enel also indicated that it was not currently focusing on the Round 2 solar tender, and the feedback it received from the marketplace was to wait out the election outcome and reassess its investment strategy in Ethiopia once the new government received a mandate.

Work plan reference number, activity description, and minimum output (MO) code	Activity status
ET 1.2.1 Support for updated EEP master plan and system integration study **Activity Manager:** [redacted] **Counterparts:** EEP, EEU, MoWIE, EEA **Deliverable:** Updated master plan for EEP **MO:** 1.3	**Summary of previous support:** EAEP kicked off its EEP master plan study at the end of May 2020, with the appointment of the subcontractor and a briefing with USAID/Ethiopia. EEP established an internal working group dedicated to the study, and reached out to key stakeholders to join the technical working group, including MoWIE, EEA, EEU, and the National Grid Control Center. EAEP worked with GOE/EEP and consulting firm WSP Global to make sure all required data were delivered in order to produce phase 1 deliverables, the inception report, and the load-forecast report, by the deadline agreed under the contract. Although the program encountered a few setbacks due to COVID-19 restrictions and EEP's request for direct control over WSP's activities, EAEP was able to accommodate EEP by agreeing to co-manage the project. A nondisclosure agreement between WSP and EEP was signed on August 3, 2020, and an MOU among EEP, WSP, and RTI International then entered the final stages of review. On August 22, WSP shared the draft inception report with GOE/EEP and EAEP; the final draft was set to be shared with EEP's CEO and the State Minister of Energy. **Quarter 1:** EAEP and members of the Ethiopia electricity master plan project technical working group held weekly meetings. Attendees included EAEP, MoWIE, EEP, EEU, and WSP. EAEP's senior energy sector advisor shared the revised Ethiopia electricity master plan project MOU with both EEP and WSP for review. WSP also conducted a conference to discuss the draft load-forecasting report previously shared with the technical working group. The discussions covered the need for demand forecasting for power system planning, historical demand analysis, review of previous forecasts, key underlying parameters, approaches, and results. WSP undertook to share the Excel modeling tool it developed in-house with GOE/EEP, and planned to conduct hands-on training once the COVID-19 travel ban was lifted. Additionally, EAEP, through WSP, facilitated a capacity-building exercise on generation expansion planning for 14 participants from the National Grid Control Center, EEA, MoWIE, EEP, and EEU. The National Grid Control Center asked EAEP for a separate session with WSP to discuss and share near-term planning challenges, as well as operating procedures, for a clear picture of what real-time operations would look like. EEP will require generation-planning software and dongles for the next-generation expansion planning training series. WSP entered into discussions with the software vendor to see if it could give EEP temporary access to the software, with the hope that EEP would buy licenses in the next few months. This training would be open to all GOE/EEP institutions, including MoWIE, EEA, and EEU. **Quarter 2:** EAEP and members of the Ethiopia electricity master plan project technical working group continued to meet weekly. WSP completed the demand-forecast activity and sent the final report to EEU and EAEP, completing phase 1 of the project. Phase 2 will explore the generation and transmission expansion planning aspect of the planning activity. Additionally,

Work plan reference number, activity description, and minimum output (MO) code	Activity status
	WSP conducted the seventh and eighth EEP trainings on the new stochastic dual dynamic programming (SDDP) tool. The sessions involved having EEP operations and planning team members access SDDP software to create system files. **Quarter 3:** On June 18, at the request of EEP management, WSP shared the pre-draft of the Generation Expansion Planning report to expedite the review and approval process, so that EEP management can use the document for budgetary purposes for FY 2014 (the new Ethiopian FY 2014 calendar starts next September 2021). The original deliverable date of June 30 for the Generation Expansion Planning report had to be moved due to issues identified in the SDDP software. WSP noticed that total generated energy exceeded demand during modeling; this error was identified in the latest version of the SDDP software, which was causing the model to artificially create additional demand to avoid paying spill penalties. The software developer (PSR Inc.) provided an update which it said would fix the issue. EAEP and WSP made considerable progress with the virtual training on generation and transmission expansion planning. Over 20 generation and transmission planning and operations employees participated in the training during Q3. Several discussion and interactive sessions were conducted with planning and operations departments to refine generation and transmission system data and model information. All the courses were recorded, and training materials were shared with EEP planning and operations team members.
ET 1.3.1 – 2021 Capacity development for PPPs	**Cross-listed with REG 1.1.1 Support for capacity development for PPPs** **Quarter 3:** Employees of the Ethiopian PPP unit attended EAEP's regional PPP training. In Ethiopia, this activity contributed to 14 employees (100%) from the PPP unit completing training sessions in technical energy fields supported by EAEP. More information can be found under REG 1.1.1.
ET 1.4.1 b HICD for Ethiopia's energy sector **Activity Managers:** [redacted] **Counterparts:** EEP, EEU	**Summary of previous support:** EAEP hosted an HICD workshop for the PPPDG in February 2020, at which staff reviewed and edited the organizational capacity assessment tool. After the workshop, EAEP prepared the baseline PPPDG assessment for review with participants and other stakeholders. EAEP finalized the assessment with stakeholders by the end of FY 2020, and afterward worked with stakeholders to develop a PPPDG strategy. **Quarter 1:** This activity was put on hold under the bridging work plan. **Quarter 2:** Follow-up meetings with PPPDG for feedback and capacity development support resulted in an agreement to conduct annual Institutional Performance Capacity Area (IPCA) assessments to track progress for the support and initiatives by PPPDG. EAEP agreed on assessment tools with PPPDG and deployed these to HICD participants. Completion and analysis of this activity were expected in April 2021.

Work plan reference number, activity description, and minimum output (MO) code	Activity status
Deliverable: HICD report for PPPDG **MO:** 1.5	**Quarter 3:** EAEP prepared and submitted annual IPCAs to the original HICD participants. Further, the PPPDG submitted its final five-year strategic plan and road map draft for EAEP review and comment by the African Development Bank (AfDB). EAEP reviewed and analyzed the IPCA and provided its input on the final five-year strategic plan and road map draft. The program is planning to hold an in-person HICD validation workshop and discussion with PPPDG decision makers, to implement the five-year strategic plan and road map in Q4.
ET 1.3.3 Legal and regulatory framework gap analysis and recommendations for streamlining licensing/permitting process for IPPs **Activity Managers:** [redacted] **Counterpart:** EEA **Deliverable:** Summary of legal and regulatory gap analysis and recommendations **MO:** 1.4, 1.6	**Summary of previous support:** EAEP agreed to conduct a legal and regulatory gap analysis and to recommend streamlined licensing procedures to the EEA. EAEP's technical advisor reviewed the energy proclamation and amendment and the energy regulations and conferred with EEA's generation-licensing director and legal team. The advisor drafted a generation-licensing review report and a guide for interviews with key stakeholders, and shared these with EEA for review and input. The program expected the final report on the generation-licensing gap analysis to be finalized by the third week of October 2020, to be shared with EEA and other GOE stakeholders for comment. **Quarter 1:** EAEP held discussions with EEA's generation-licensing director to solicit feedback on the EAEP-drafted report on the results of the generation-licensing gap analysis. EEA promised to review the report and give EAEP feedback, at which point EAEP would solicit feedback from other stakeholders to consolidate a final draft report. If EEA were to implement the recommendations in the report, it would help bridge the gaps in licensing procedures for renewable energy projects and ultimately attract private-sector investors. **Quarter 2:** EAEP's senior transaction advisor held a follow-up meeting with EEA to discuss the EAEP-drafted generation-licensing gap-analysis report. EEA asked EAEP to produce a more comprehensive report, including a detailed matrix laying out the step-by-step process for obtaining generation, distribution, and transmission licenses. Once the report was complete, EEA would review the benchmark comparison in the generation-licensing gap-analysis report. Additionally, EEA proposed setting up a task force comprising representatives from EEA, EEP, EEU, the MOE, the Ministry of Finance PPP unit, the Ministry of Trade, and the Ethiopian Investment Commission. The task force would (1) ensure that gaps identified in the generation-licensing gap-analysis report were accurate and (2) obtain buy-in to implement report recommendations. EAEP planned to discuss this matter internally and get back to EEA on the way forward. **Quarter 3:** Based on feedback from EEA and discussions held in Q3, and pending budget approval, in Q4, EAEP will incorporate comments from the generation-licensing gap-analysis report and prepare a detailed matrix that lays out the step-by-step process for obtaining a license (including generation, distribution, and transmission licenses). Per EEA's suggestion, a task force of representatives from EEA, MOE, MOF PPP unit, EEP, EEU, Ministry of Trade, and Ethiopian Investment

Work plan reference number, activity description, and minimum output (MO) code	Activity status
	Commission will be set up to ensure that the gaps identified are indeed accurate, and to obtain buy-in to implement the recommendations of the final report. Moreover, in Q4, subject to budget approval, EAEP will prepare a TOR (in collaboration with EEA) and engage a local consultant to prepare the matrix.
ET 1.3.4 Operationalization of EEP IPP unit and legal and finance training **Activity Manager:** [redacted] **Counterpart:** EEP **Deliverables:** IPP working group updates **MO:** 1.5	**Summary of previous support:** EAEP worked with the Vance Center for International Justice and EAEP's energy markets and finance specialist to provide virtual training for EEP's IPP unit. The first training was planned to cover (1) structuring of hydro and wind projects under an IPP model, (2) challenges and case studies on reaching financial close, and (3) PPP structuring of legal agreements and concession contracts. EAEP developed a list of Ethiopian candidates, which it planned to formally send to EEP. As of the end of September 2020, EAEP was drafting formal invitation letters to the concerned institutions ahead of the trainings, which were planned to launch between October and December. **Quarter 1:** EAEP, in collaboration with the Vance Center, facilitated a joint training for Ethiopia, Kenya, and Nigeria. The training session, conducted by Baker McKenzie (New York and London offices), Mehrteab Leul & Associates (Ethiopia), TripleOKLaw (Kenya), and George Etomi & Partners (Nigeria), attracted 82 participants, including 14 panelists. These trainings helped build EEP's IPP unit and Kenya's capacity for PPPs in both generation and transmission. EAEP undertook to continue to coordinate with the Vance Center for subsequent trainings in 2021. **Quarter 2:** EAEP continued its legal fellows training sessions with the Vance Center for International Justice, aimed at the institutional strengthening of Kenyan, Nigerian, and Ethiopian IPP units. The Vance Center scheduled its fifth training in the series for April 27. This session will cover PPP controls, corruption, conflicts, and arbitration, as well as PPP project management, structuring, and implementation. These trainings will build the capacity of various countries and EEP for PPPs in generation and transmission, and address *force majeure* and other COVID-19 impacts on PPPs/IPPs. **Quarter 3:** EAEP, in collaboration with the Vance Center, continued to provide training sessions aimed at the institutional strengthening of Kenyan, Nigeria, Somalian, and Ethiopian IPP units. Several trainings were provided during the quarter, covering: • PPP controls, corruption, conflicts, and arbitration • PPP project management, structuring, and implementation • How to structure renewable energy projects under the IPP model; understanding energy sector agreements • Sovereign debt restructuring and finance

Work plan reference number, activity description, and minimum output (MO) code	Activity status
ET 1.3.5 (cross-listed with Objective 2) GIS integration of EEA cadaster documents **Activity Manager:** [redacted] **Counterpart:** EEA **Deliverables:** Brief on EEA cadaster documents with recommendations **MO:** 1.3, 2.1	**Summary of previous support:** EAEP continued to support EEA with GIS integration of its cadaster data, the system for land ownership and location that is critical for existing and future energy infrastructure decisions. EEA formally asked EAEP for GIS training, including cadaster technology bid evaluation, advanced GIS for cadaster map preparation, cadaster database development, and web cadaster development. EEA selected 11 staff for these trainings, the purpose of which was to help automate EEA's geothermal licensing process. In FY 2021, this activity was planned to move to Objective 1, as it supports long-term planning for geothermal resources. **Quarter 1:** EAEP conducted a three-day in-person cadaster technology and bid-evaluation training for EEA staff on November 10–12. The first two days of the training focused on technological aspects of the cadaster system, while the third day covered principles of bid evaluation. These trainings equipped EEA staff with the requisite knowledge of cadaster technology during bid evaluation. Additionally, the training strengthened EEA's capacity to develop data-driven policies and regulations for the energy sector and helped automate EEA's geothermal licensing process. **Quarter 2:** EAEP conducted the third GIS cadastral system-development training for EEA staff in Bishoftu, Ethiopia. Representatives from MoWIE also attended the training, which focused on cadaster database development using GIS, based on PostgreSQL, PostGIS, and QGIS software. **Quarter 3:** EAEP built on its training from Q2 and provided additional GIS cadastral system-development training for EEA staff in Bishoftu, Ethiopia. The training was also attended by representatives from MoWIE. The focus was on cadaster database development using GIS, based on PostgreSQL, PostGIS, and QGIS software.
Assessment of current ESIA processes and plans for improvement	There were no new requests for ESIA reviews in Ethiopia for FY 2020.

OBJECTIVE 2 PROGRESS ON WORK PLAN ACTIVITIES: ETHIOPIA

Work plan reference number, activity description, and minimum output code	Activity status
ET 2.1.1 Support to EEU's Distribution System **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverables:** Report on EEU distribution and universal electric access program; EEU distribution-system training needs assessment and training plan **MO:** 2.1, 2.2, 2.3	**Summary of previous support:** The EAEP Objective 2 team met with EEU and the UEAP to establish a framework for cooperation. EAEP developed and submitted a draft capacity-building plan, including training in customer-service management, procurement and contract management, distribution-system safety, and GIS. The program then advanced the analysis of EEU distribution-system adherence to international technical standards for new connections and conducted a webinar for EEU staff involved in distribution systems and universal electricity access programs on strategies for new connections. **Quarter 1:** EAEP shared with EEU the TOR for EEU's distribution-system assessment and universal expansion access plan. EAEP continued waiting for EEU and UEAP to share their distribution standards. EAEP also worked on the EEU distribution-system assessment in support of EEU plans to achieve one million new connections. The program planned to perform a technical analysis of EEU and UEAP's existing distribution-system practices for new customer connections; the results of this assessment will help EEU identify gaps and plan interventions for improving its distribution system. **Quarter 2:** EAEP finalized a quantitative analysis of the EEU ERP system assessment from 368 service centers. EAEP will present the findings to EEU leadership via a dashboard that includes average days and costs required to connect domestic, commercial, and industrial customers. Additionally, the dashboard shows overall average costs and days required for new connections by region, based on ERP-generated data. EAEP also compared the ERP system-assessment results with the previous EAEP paper-based time and cost baseline study, to demonstrate the impact of ERP system implementation on time and cost required for new connections, according to each tariff class. The purpose of this study was to gauge the impact of ERP system forms and tools on new on-grid connections, and ultimately to contribute to a reduction of time and cost for new electricity connections. **Quarter 3:** EAEP completed the first draft of the EEU and UEAP distribution-system assessment. The report outlines the current practices of EEU distribution system regarding installation, and identifies distribution-system standards applicable to EEU. Several standards have been followed for different projects, especially at UEAP. This assessment will help EEU analyze how standards are practiced and develop a unified standard for the country's distribution system. The assessment also reveals shortcomings in the distribution network. Some of the recommendations of the report can be implemented in the short term, while others will take longer. EAEP shared the draft report with the Ethiopia USAID mission for its feedback. EAEP also shared the final EEU ERP system-assessment report with the utility. This assessment was conducted to identify the impact of EEU's newly implemented ERP system on new customer connections, and includes recommendations based on qualitative and quantitative analysis findings pertaining to 50,000 new EEU customers who were connected from April to

Work plan reference number, activity description, and minimum output code	Activity status
	September 2020. The assessment includes findings on the required time and cost of new connection, training gaps, best practices related to connection-reporting procedures, and existing system infrastructure.
ET 2.1.2 Support to EEU's UEAP **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverables:** Procurement plan development, single-wire earth return technology application strategy, capacity-building reports **MO:** 2.1, 2.2, 2.3, 2.5	**Summary of previous support:** This activity is new under the FY 2021 work plan. **Quarter 1:** EAEP drafted a workplace electrical safety training manual and shared with stakeholders for feedback and revision. **Quarter 2:** EAEP finished developing a workplace electrical safety training manual for EEU junior distribution technicians and gave the manual to EEU's Environmental Health and Safety department. EAEP received feedback on the manual; one suggestion was to translate the manual into Amharic so it can be easily used by most EEU workers. Another suggestion, which EAEP began work on, was to incorporate power transmission and distribution safety standards and enforcement mechanisms, such as wearing personal protective equipment and maintaining safety standards in day-to-day work. The team, meanwhile, began planning for three trainings in Q3 – procurement support, project management, and contract management. **Quarter 3:** EAEP completed the translation of the workplace safety manual into Amharic, and EEU shared the Amharic manual with the utility's Environmental Health and Safety department. EEU's legal department reviewed the manual and provided comments. The manual will be used during safety training for senior and junior technicians working on the distribution network. EAEP conducted procurement and contract-administration training for EEU in two rounds, at the training-of-trainers level. The training was offered to 16 trainees (9 men and 7 women) from the EEU head office and Addis Ababa and Oromia regional utilities. Training for other EEU regional utilities was postponed due to the election in Ethiopia. EAEP had identified one of the gaps for not attaining new connection targets at EEU as lack of on-time procurement of equipment and accessories for new connection requests.
ET 2.2. 1 EEU new customer support **Activity Manager:** [redacted] **Counterpart:** EEU	**Summary of previous support:** The Objective 2 team, in collaboration with the Addis Ababa City Electric Utility, conducted a data-gathering exercise to obtain preliminary reference data on EEU's time and cost for connecting new customers. Following an interruption due to COVID-19, the EAEP project manager for the study conducted refresher training for data-capture technicians who were initially trained before the lockdown. Additionally, EAEP delivered a refresher presentation on the study to EEU's distribution Deputy CEO and distribution team. The EAEP team started data collection in EEU's Hawassa, Afar Semera, Afar Logia, Dire Dawa, and Harari service centers, and used the data collected to calculate baseline values for the utility's time and cost of new connections for residential, commercial, and industrial customers.

Work plan reference number, activity description, and minimum output code	Activity status
Deliverables: Connection and time baseline; recommendations for improving customer connections; provision of meter test bench for EEU **MO:** 2.3, 2.5	EEU also approved the technical specifications for the meter test bench to be purchased by EAEP. The MTB would help EEU increase its connections, specifically the number of metered installations, by testing and calibrating new and existing meters. EAEP finalized the procurement at the end of September 2020. The program supported EEU with change-management training for its executives and senior managers, and customer-service management training for the customer-service department, as part of capacity-building support to the utility. EAEP and EEU agreed upon the structure of the trainings, which were set to run for two weeks in September. EAEP prepared a request for proposals (RFP) to be sent out to potential consultants for the training, which helped EEU senior managers develop a strategy in light of senior staff reorganizations and COVID-19. **Quarter 1:** EAEP met with the USAID/Ethiopia Mission to discuss EEU's request for an additional analysis on the time and cost for making new connections, based on its newly implemented ERP system. Both parties agreed that EAEP would use in-house expertise to conduct the study. EAEP developed a concept note for EEU's ERP system assessment, which would use a qualitative methodology. EEU approved the concept and gave the go-ahead for the activity to begin. This additional study was to produce critical details based on EEU's newly implemented ERP system, which would in turn help EEU reduce new connection time and costs. EEU expressed its urgent need for the meter test bench. EEU's instrumentation and meter laboratory had two old test bench machines; one failed, and the other was not working well. Because of the equipment problems and COVID-19, although EEU had planned 238,000 meter tests in 2020, it managed to conduct only 63,000. EEU conveyed the significant impact the MTB would have on its annual grid-connection plan, to achieve one million connections per year. EEU approved the technical specifications for the MTB; this bench will help EEU increase its connections, and the number of metered installations, by allowing it to test and calibrate new and existing meters. The vendor required typical steps for the procurement; EAEP began working to address these requirements as quickly as possible and to finalize procurement of the test bench. EAEP consultant Ethiopian Aviation Academy concluded its two-week customer-service management training of trainers for 100 EEU staff. The EAEP training aimed to convert 100 EEU staff into customer-service champions, by leading them to understand the linkage between service excellence and the EEU strategic plan. EEU management expressed its satisfaction with the overall training, and said it would like to implement the new skills in its over 500 service centers, which will require a culture shift. Also, EAEP, EEU, and Ethiopian Management Institute (EMI) agreed to hold EEU strategic change-management training, which was offered by EMI December 18–25. EAEP facilitated meetings between EMI and various EEU departments to enable EMI to prepare a tailored training manual for EEU. The strategic change-management training would equip senior

Work plan reference number, activity description, and minimum output code	Activity status
	managers with change-management skills in light of EEU restructuring, the *System Analyse und programmentwicklung* (SAP; system analysis and program development) system (part of ERP system implementation), and requirements for business continuity in a post-COVID-19 Ethiopia. **Quarter 2:** EAEP started the virtual factory acceptance test for the MTB in Bishoftu, Ethiopia, with nine EEU technical representatives and the Chinese supplier. In-person attendees included the heads of the quality control and assurance, energy and fuel management, central meter management, and material engineering departments, as well as meter lab engineers. The FAT will assure EEU and the supplier that the new MTB complies with all contractual specifications. The test procedure follows a checklist prepared in advance by the supplier and accepted by EEU. EAEP facilitated the test procedure to address any functional issues before the equipment arrived at EEU's installation site. EAEP previously obtained EEU meter samples needed for the MTB, to ensure testing compatibility and accuracy. This sample set would support the procurement process and ensure the MTB's functionality to replace old EEU machines that were still in use. The MTB remained critical for EEU's plan to achieve one million new connections per year. **Quarter 3**: The MTB arrived at the port of Djibouti on June 26 as scheduled. Transportation by sea commenced on June 3, and EAEP expects its arrival in Addis Ababa in Q4. EAEP issued to the local freight forwarding agent all the necessary documentation for customs clearance. During the quarter, EAEP finalized the virtual FAT for the MTB and shipping from China to Ethiopia. EEU engineers, the EAEP procurement team, the supplier (Synchro Power), and the manufacturer (Hanpu) signed the FAT documents. Despite challenges related to COVID-19, and the fact that the virtual MTB FAT was the first such experience for the supplier and EEU, all procedures were conducted successfully. The FAT included physical measurements, testing, and validation of results. EAEP cooperated with Synchro Power, Massida Solutions, and EEU to clear the MTB from the Port of Djibouti. EAEP also visited EEU's instrumentation, meter-testing, and calibration laboratory in Addis Ababa to assess the situation of the lab. EEU had contracted out energy meter testing and calibration to local companies to overcome the challenges of its testing laboratory and to meet the utility's target of connecting one million meters by the end of the year. EAEP found that the laboratory was testing only a 1% sample of outsourced energy meters—estimated to be between 1,000 and 2,000 meters per day. The customer-service management training video developed by the EEU communications team was translated into English by a local translation service provider. The video is about the customer-service management training, and EAEP's contribution to customer-service improvement activities was mentioned. Previously, the video had been broadcasted on EEU's major local

Work plan reference number, activity description, and minimum output code	Activity status
	media outlet, and a training success story video had also aired on the local FM radio station. The EEU trainers trained by EAEP started providing customer-service training to other EEU staff at different levels and regions. EEU-trained champions cascaded the training to more than 1,440 staff (530 women and 960 men) in Addis Ababa and Oromia regions.
ET 2.2.2 Gap assessment of GIS and related activities in EEU **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverables:** Connection and time baseline; recommendations for improving customer connections; provision of meter test bench for EEU **MO:** 2.3, 2.5	**Summary of previous support:** NRECA International was supporting EEU with GIS-related activities, which included developing a geospatial planning framework and a GIS capacity-building program. This support was anticipated to be completed in 2021. In coordination with NRECA International, EAEP undertook to conduct a gap assessment on GIS and related activities in parallel with NRECA International's ongoing activity. The assessment would include capacity building for determined gaps in GIS, database administration, and security within the utility, including regional and district offices. Additionally, EAEP would build mapping capabilities within EEU for COVID-19-related facility (hospitals, health care, critical care) locations to minimize disruptions to these sites. EAEP and EEU also would develop a support dashboard with critical information necessary for decision-making purposes. This activity would allow EEU to improve strategic connection services and respond quickly to changes. **Quarter 1:** This activity was on hold under the bridging work plan. **Quarter 2:** This activity largely remained on hold. Development of dashboards for mapping COVID-19 related facilities got under way for Q3. **Quarter 3**: EAEP prepared a concept note to create a COVID-19 dashboard to enable EEU to respond quickly to power outages at COVID-19-related facilities (hospitals, quarantine centers, testing laboratories, and vaccine-storage facilities). EAEP developed a mock dashboard showing the medium-voltage distribution network, location of health facilities, and a mobile app for reporting power outages at health facilities. This same dashboard was demonstrated to utility representatives from Kenya, Tanzania, and Uganda.

OBJECTIVE 3 PROGRESS ON WORK PLAN ACTIVITIES: ETHIOPIA

Work plan reference number, Activity description, and minimum output code	Activity status
ET 3.1.1 Energy-loss reduction **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverable:** Report on establishment of energy-accounting process **MO:** 3.1, 3.2, 3.3	**Summary of previous support:** EAEP's utility-turnaround team focused on the energy-accounting process in EEU's Addis Ababa and Finfinne regions, in order to account for energy losses. EAEP began working with EEU to ensure that all incoming and outgoing feeders were metered. EAEP also helped EEU energy-audit employees manually read feeder meters every month and collected billing data to compare billed energy against energy delivery to the region and district. EAEP made recommendations to EEU on PPAs related to boundary metering points between transmission and distribution networks, and the program presented to EEU management practices implemented by other utilities, as well as various documents and schemes showing metering-point installations to measure energy between transmission and distribution. **Quarter 1:** The EAEP utility-turnaround team, in collaboration with EEU Addis Ababa region managers, established a working group composed of representatives from different departments in North Addis Ababa District, in order to roll out optimized commercial-cycle activities and maximize revenues. The EAEP team and the working group met to discuss ways forward on this task, involving identifying the challenges facing EEU service-center employees and possible remedial measures. Additionally, EAEP discussed with EEU's Addis Ababa regional managers the targets for EEU teams, to increase accountability in the efficient rollout of the optimized commercial cycle across Addis Ababa districts and service centers. **Quarter 2:** The EAEP utility-turnaround team carried out manual meter readings across Addis Ababa Region and Finfinne District substations, to obtain monthly substation feeder-meter data. EAEP had been obtaining these data manually for months because the remote meter-reading platform was presenting unreliable data due to problems with its configuration. Once the data are consolidated, EAEP will work with EEU to prepare the monthly energy-accounting report and establish the level of commercial losses, which EEU is eager to ascertain following the signing of the PPA between EEU and EEP. These energy-accounting reports will help EEU reduce energy losses and improve performance. **Quarter 3:** Remote reading of substation feeder meters across Addis Ababa Region and Finfinnee District continued, and monthly energy-accounting reports were produced and submitted to EEU. The EAEP team compared these reports against monthly billing and collection reports, so as to account for ATC&C losses. Further, EAEP began helping EEU install remote meters for industrial and large commercial customers. EEU had requested EAEP's help in identifying these customers and prioritizing the areas where meters will be installed.
ET 3.1.2	**Summary of previous support:** This activity is new under the FY 2021 work plan. **Quarter 2:** To increase meter-reading accuracy and efficiency, EEU decided to procure handheld meter-reading devices in 2019. Power Africa, through the Power Africa Transactions and Reforms Program (PATRP), supported EEU management in

Work plan reference number, Activity description, and minimum output code	Activity status
Introduction of handheld meter-reading devices **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverable:** Training reports **MO:** 3.1, 3.2, 3.3	drafting technical specifications and provided input for the procurement. As EEU procured the devices, EAEP continued its support to EEU by identifying shortcomings in the customer meter-reading process. For example, EAEP determined that some customers' meters were not being read due to incorrect global positioning system (GPS) coordinates inserted during the first reading. Consequently, customers were not billed, impacting the utility's performance. EAEP reported the matter to EEU and recommended enabling the GPS coordinate feature in the device, so that meter readers would be able to reinsert correct coordinates for relevant customers' meters. **Quarter 3:** EAEP continued to monitor the efficiency and functionality of handheld meter-reading devices. The use of these devices increased the accountability of meter readers, and also improved meter-reading accuracy. Identified gaps were addressed, and EAEP began conducting follow-up.
ET 3.1.3 Review of meter-sealing management processes **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverable:** Meter-sealing management instructions; training reports **MO:** 3.1, 3.2, 3.3	**Summary of previous support:** This activity is new under the FY 2021 work plan. **Quarter 2:** EAEP reviewed the meter-sealing management process and supported EEU in preparing technical specifications. Further, EAEP drafted a meter-sealing instruction document for EEU to use once the meter seals were procured by and delivered to the utility. The procurement process was ongoing as the quarter ended; EAEP planned to continue to follow up and support EEU. **Quarter 3:** The meter-sealing management process was introduced to and accepted by EEU. The utility was still in the process of procuring seals, which is necessary for the implementation of the process. EAEP will continue to follow up and support EEU once the seals are procured and delivered.
ET 3.1.4	**Summary of previous support:** This activity is new under the FY 2021 work plan.

Work plan reference number, Activity description, and minimum output code	Activity status
Updating of customer data in the ERP system **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverable:** Clean customer data **MO:** 3.1, 3.2, 3.3	**Quarter 2:** EAEP met with the head of the EEU Energy Management Directorate to discuss customers who had not migrated from the old billing system to the new ERP billing system. EAEP proposed several options to resolve the issue, including EEU engaging its ICT staff to identify, from the old system backup, the exact number of customers not migrated to the ERP, and then initiating their migration. Another EAEP-proposed solution was to identify unbilled customers in the field and to register and bill them in the ERP system. EAEP prepared and shared with EEU a template to facilitate the process, which would help EEU reduce the number of unbilled customers and consequently reduce the utility's commercial losses and increase revenues. **Quarter 3:** EEU accepted and implemented the template provided by EAEP. Data migration was completed by the end of the quarter, thus concluding this activity.
ET 3.2.1 Rollout of changes to EEU commercial cycle and improvement of utility operations **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverable:** Report on commercial-cycle improvement procedures; training reports **MO:** 3.1, 3.2, 3.3	**Summary of previous support:** EEU management reviewed and analyzed the EAEP-proposed commercial cycle (intended to merge four billing subcycles into one) and agreed to pilot it in a selected area. EAEP started piloting the project in Service Center 3 of North Addis Ababa District, shortening the commercial cycle from 20 meter-reading days to 12 and reducing the number of meter readers, thus increasing efficiency. EAEP's utility-turnaround team helped EEU's customer-service department update customer records, and at the end of August 2020, the team carried out manual readings of substation/feeder meters in Addis Ababa and Finfinne for energy-accounting purposes. EAEP submitted findings and recommendations to EEU managers pertaining to unregistered customers consuming electricity, billing irregularities and errors, customer meter issues, and damaged meters. At the request of EEU management, EAEP drafted a procedure on customer enumeration for staff at distribution transformers and feeders. **Quarter 1:** EAEP met with EEU's Deputy CEO for the customer-service directorate to discuss coordinating activities to implement the optimized commercial-cycle rollout in Addis Ababa region districts. EAEP asked EEU management to designate a point of contact to work with EAEP in North Addis Ababa District. Because EEU managers and staff would have to be engaged in the process, they would benefit from EAEP's expertise and on-the-job training sessions, which would increase the utility's ability to roll out the optimized commercial-cycle process across the country. Additionally, EAEP presented to EEU management a detailed work plan for the utility's consideration and planning. EAEP highlighted the work piloted in Service Center 3, North Addis Ababa District, with the addition of over 1,000 customers to the billing system, compared to the period before the start of the pilot project. EEU billed an additional approximately 2 million kWh, which can be attributed to EAEP's support in resolving billing-exception cases. EEU assigned three inspection employees across every service center to inspect activities related to commercial loss reduction, revenue increases, and identification of potential electricity theft. The inspection

Work plan reference number, Activity description, and minimum output code	Activity status
	teams were responsible for examining every residential and small commercial customer-metering point (both prepaid and postpaid). **Quarter 2:** EAEP's utility-turnaround team continued its optimized commercial-cycle rollout (12-day meter-reading cycle) activities. EEU and EAEP worked on daily customer meter-reading targets as proposed by EAEP. EAEP prepared notification lists of defaulted customers, which meter readers used to notify customers of their outstanding debt and the need to clear the payments to avoid disconnection. This activity would help service-center managers monitor daily activities performed and targets fulfilled by each employee. Additionally, the EAEP team met with EEU's head of the Energy Management Directorate to discuss ongoing commercial operations activities, with a special focus on revenue protection. The meeting also focused on advanced metering infrastructure activities for commercial and industrial customers, an activity recommended by EAEP. The optimized commercial cycle would help EEU standardize and improve overall commercial operations at its service centers, thus increasing the utility's efficiency. This process would also help EEU focus its efforts on future investment and expansion of its customer-connection networks. **Quarter 3:** After the successful implementation of the optimized commercial cycle in pilot areas, EEU management asked EAEP to expand the approach to all service centers in Addis Ababa Region and Finfinne District. EAEP held various meetings in different districts to arrange the rollout. EEU management signed off on an EAEP-developed executive order, requesting that all service-center managers and staff apply the new approaches. The Objective 3 team worked daily with EEU management and staff to arrange and prepare the ground for rollout, given that top EEU managers wanted to begin implementation as soon as possible.
Archived Activity Individual performance evaluation **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverable:** Report on individual performance-	**Summary of previous support:** After analyzing EEU's employee performance-evaluation policy, EAEP worked to integrate missing key performance indicators (KPIs) applicable specifically to district and service-center employees responsible for revenue increases and commercial loss reduction. The idea was to set SMART (specific, measurable, achievable, realistic, and time-bound) goals that would improve employee discipline and utility performance. The program prepared a presentation on performance evaluation and presented it to EEU managers and relevant employees. In the last quarter of FY 2020, EEU's management team decided to put on hold expansion of the commercial-cycle approach to other districts—due to COVID-19 and evacuation of the EAEP team—and the utility consequently postponed implementation of the performance-evaluation policy. **Quarter 1:** EEU management endorsed the idea of establishing a performance-evaluation process, and began incorporating EAEP-developed policy into its internal regulations and procedures. EEU managers stated that they wished to begin

Work plan reference number, Activity description, and minimum output code	Activity status
improvement procedures **MO:** 3.1, 3.2, 3.3	implementing the performance-evaluation process once the optimized commercial cycle, already piloted in Service Center 3 (North Addis Ababa District), had been rolled out to other service centers and districts. At the request of EEU management, EAEP agreed to support EEU in setting targets and reward/reprimand criteria for individual EEU employees. **Quarter 3:** This activity remained on hold, pending the rollout of the optimized commercial cycle in Addis Ababa Region and Finfinne District.
ET 3.1.5 Implementation of proposed revenue-protection procedures **Activity Manager:** [redacted] **Counterpart:** EEU **Deliverables:** On-the-job training reports for EEU staff **MO:** 3.1, 3.2, 3.3	**Summary of previous support:** EAEP identified several cases of large customers consuming EEU-generated electricity even though they were not registered in the utility's billing system. The program developed a revenue-protection package, including job descriptions, to cover the organizational structure, responsibilities, and functions of a proposed EEU revenue-protection department (RPD). In Q3 FY 2020, the Objective 3 team finalized job descriptions for RPD positions and submitted them to EEU managers for review, then supported EEU managers in identifying revenue-protection activities that the utility could implement using funds allocated by the World Bank. EAEP highlighted priority areas to improve revenue-protection processes, including metering infrastructure at distribution transformers, portable meter-testing equipment to enable customer meter testing on the spot, capacity building, and other efforts. EAEP proposed a structural organization model to EEU for the RPD. The program worked with the EEU HR department to avoid overlapping tasks and responsibilities for staff. EAEP also proposed establishing an IT audit within the internal-audit team. EAEP continued to work on changes in the organizational structure of the service center, drafting job descriptions for the data analyst and billing officer positions. **Quarter 1:** EEU's relevant departments reviewed the revenue-protection package, which included job descriptions, and EAEP provided additional explanations and support in streamlining the process. However, EEU management did not officially approve the package, so implementation and capacity-building activities were delayed. The COVID-19 pandemic and the outbreak of war in northern Ethiopia had a significant impact on this activity, hampering decision making and scheduling of training sessions. Ultimately, the overall proposed structural organization model for the RPD was not approved by EEU during the quarter. Notwithstanding, EEU did approve assigning inspection teams to service centers, where they would be responsible for inspecting and monitoring the work of meter readers. The teams would ensure quality and accuracy of customer meter readings, verify billing anomalies, assess the quality of disconnections of nonpaying customers, and report on their findings. EAEP began supporting service-center managers in organizing and assigning the work for these teams, as this was a new responsibility for service managers. The support also was to include on-the-job training for inspection teams.

Work plan reference number, Activity description, and minimum output code	Activity status
	Quarter 2: As of March 31, EEU had not yet approved the proposed structural organization model for the RPD. Most of the positions for assigned inspection teams in service centers were filled. EEU management agreed to roll out the EAEP-proposed optimized commercial cycle in other service centers and districts, and the inspection teams began carrying out tasks in the field. This effort increased the efficiency of meter readers in reading/billing and collections. **Quarter 3:** The proposed structural model was still not officially approved as of the end of Q3. However, EEU did make partial changes in the organizational structure of service centers. These changes included placing accountability for the accuracy of meter reading with the meter-reading supervisor, who closely works with inspection teams in identifying meter-reading irregularities and potential meter tampering by customers.

COUNTRY PROGRESS: KENYA

Kenya Top Achievements and Results in Q3 FY 2021

- 15 percentage point reduction in ATC&C losses when compared to the onset of COVID-19 in the previous year
- [redacted] increase in revenue when compared to a similar period the previous year
- PPA Task Force support with EAEP staff
- Commissioning of the 308 km Olkaria–Lessos–Kisumu line
- Secured MOE's continued buy-in for HICD support across Kenya's energy sector
- Activity kick-off on Kenya Power master plan coordination with Siemens

In Q3, EAEP Objective 1 team members supported the PPA task force launched by President Kenyatta on March 29 for a six-month review of all PPAs before they reach FC. Additionally, EAEP continued to provide support and input for operationalizing Kenya's ambitious Energy Act 2019, participating in sensitization meetings with county governments, providing comments on draft regulations from regulator EPRA, helping to draft regulatory impact statements, and drafting the various chapters of the task force's final report on the status of implementation of the Act. Working specifically with EPRA, EAEP produced a scope of work (SOW) for its support for the Kenyan grid code, which mainly will involve training EPRA staff and members of the Grid Code Review Committee (GCRC). EAEP's community-engagement specialist completed work with KETRACO on its ESMF, which included an application audit of the 308 km Olkaria-Kisumu-Lessons line, which was commissioned shortly thereafter. KETRACO requested EAEP audit this line to reflect on the environmental and social compliance of the line before commissioning. Additionally, EAEP continued engaging with KETRACO to establish its resettlement action policy for future lines. KenGen participated in PPP trainings offered by the Vance Center, and further explored business strategies in a post-COVID-19 power sector. Finally, at a higher level, EAEP's Chief of Party and USAID's Kenya energy program management specialist met with the Director, Renewable Energy, of MOE to provide an update on ongoing activities and discuss any new priorities from the Ministry.

EAEP continued its support for the implementation of Kenya Power's master plan, which would enable the utility to better synchronize its activities and strategically address grid-connection issues using advanced software tools and GIS. The Objective 2 team held a kickoff meeting with Siemens, where it was agreed that PSS®SINCAL should be updated to the latest version, as well as the ESRI shape – PSS® SINCAL interface, and that maintenance and service contracts should be valid for three years. The team also continued to implement business-process reengineering and connection quality control for the utility, to address Kenya Power's high lost-opportunity costs [redacted] from July 2019 to June 2020). This lost-opportunity cost was analyzed at the request of the New Connectivity Department, using customer incidence and LPU data. EAEP compared 12-month billing data and calculated the lost opportunity of supply hours to LPU by KPLC.

The Objective 3 team continued its intensive support for Kenya Power's business and field operations. The utility-turnaround team extended its loss-reduction road map initiative to two additional sectors, Nairobi Industrial Area and Upper Hill; EAEP's three-month engagement in these two sectors produced significant improvements in revenue and operations (for example, the trend of zero bills decreased by 13% compared with baseline data, and billing in Kenyan shillings [KSh] compared with baseline data improved by an average of 8%, or [redacted]). The team also continued to support selected pilot sectors with loss-reduction road map activities and planning and implementation of daily operations. EAEP assisted the loss-reduction steering committee (including general managers for commercial services and the ICT, legal services, human resources, and strategy departments) and the loss-reduction task force with presentations and initiatives to prevent, detect, and recover energy losses. Finally, the Objective 3 team convinced Kenya Power management that without proper energy accounting, it will be difficult to identify electricity leaks and concentrate resources and logistics in the right places. Following the program's

previous support for energy accounting in eight Kenya Power regions, work continued to install meters at the county level, while EAEP stressed the need for metering and energy accounting in Kenya Power's 20 highest-consuming sectors, so as to maintain the momentum of loss-reduction and operations improvements.

OBJECTIVE 1 PROGRESS ON WORK PLAN ACTIVITIES: KENYA

Work plan reference number, activity description, and minimum output code	Activity status
KE 1.1.1 Transaction Advisory Support for IPPs and KenGen projects **Activity Managers:** [redacted] **Deliverables:** PATT updates; EAEP Transaction Tracker **MO:** 1.1	See Annex C for updates on transactions anticipated to reach FC in FY 2021.
KE 1.2.1 Transaction support to KETRACO for transmission PPPs **Activity Managers:** [redacted]	**Summary of previous support:** EAEP transaction advisors finalized an inception plan covering commercial, financial, legal, and technical transaction support and capacity building for KETRACO. The initial phase of support, which got under way in Q3 FY 2020, focused on preparing KETRACO in the areas of risk assessments, contractual implications, and financial analyses. EAEP reviewed the Africa50 Infrastructure Fund's high-level assessment of the Africa PPP project, in which Africa50 proposed an alternative contracting structure, including several contractual arrangements that differed from what was initially envisaged. Africa50 proposed that KETRACO be a minority shareholder in the special-purpose vehicle holding the project investments, which was rejected by KETRACO because this approach did not align with the PPP legislation. **Quarter 1:** EAEP continued to counsel KETRACO's PPP transmission project, through commercial advice and legal, financial, and training support. EAEP completed the review of its subcontractor NRF's KETRACO PPP risk matrix and shared the matrix with KETRACO. KETRACO gained an understanding of these risks in a contractual environment, which will be useful as it continues to

Work plan reference number, activity description, and minimum output code	Activity status
[redacted] **Counterpart:** KETRACO **Deliverables:** Training reports, PPP financial model, report on document reviews of feasibility studies developed for KETRACO **MO:** 1.2, 3.6	develop its PPP project with Africa50. Additionally, EAEP completed the review of financial advisory subcontractor Fieldstone's updated report on the KETRACO–Africa50 risk matrix and prepared an advisory summary for KETRACO on other developments of a financial nature for KETRACO's PPP project. **Quarter 2:** EAEP met with KETRACO to discuss progress on the EAEP-supported PPP development with Africa50. Key highlights from the discussions included: • Africa50 and KETRACO will soon revive PPP discussions, following the resolution of some aspects of PPP arrangements. • Kenya's PPP unit delayed funding for transaction advisors for a separate World Bank-supported PPP deal, to be procured by international competitive bidding. • KETRACO was involved in consultations on the development of Kenya's PPP Bill (2021). • The Ethiopia–Kenya interconnection transmission line was anticipated to be completed in March 2021, given that only the foundations and structures of four towers had yet to be finished. However, procurement and construction of the required SVC unit had not yet started. • EAEP anticipated that SVC procurement and construction would require several months, pushing back full commissioning of the interconnection into 2022. There was a possibility that trading at a lower capacity might happen sooner. Throughout the quarter, EAEP and its subcontractors Fieldstone and NRF continued to support KETRACO with legal, financial, and commercial advice, as well as training, for the Africa50 PPP project. Fieldstone offered KETRACO its last training session on the PPP financial model, on the risk analysis component of the value for money. **Quarter 3:** After completion of the initial phase of transaction support and related trainings (conducted by NRF and Fieldstone), EAEP engaged with Dr. Eng. John Mativo to discuss potential future support. KETRACO stated that it did want further support to progress its PPP project, and would send EAEP a request soon. Meanwhile, EAEP connected Africa50 to the DG of the PPP Unit, which will take a more active role in steering the transaction moving forward. There has been subsequent engagement with Africa50 and Ketraco, with Africa50 developing a workplan for the transaction to be shared with Ketraco and the PPP Unit.
KE 1.3.1 Support the implementation of	**Summary of previous support:** EAEP initiated its support for the Task Force on Implementation of the Energy Act 2019 with the participation of an EAEP representative. The program advised on the implications of the Act for the major Kenyan power entities, including Kenya Power, KETRACO, KenGen, GDC, Rural Electrification and Renewable Energy Corporation (REREC), and EPRA. EAEP also helped shepherd various pieces of Act-related legislation through the appropriate levels of government.

Work plan reference number, activity description, and minimum output code	Activity status
Kenya's Energy Act 2019 **Activity Manager:** [redacted] **Counterparts:** MOE, Kenya Power, KenGen, EPRA **Deliverables:** Working group reports **MO:** 1.4, 1.6, 1.3, 1.5	**Quarter 1:** EAEP, through its consultant Now Advocates LLP, concluded its training program for Kenyan power entities on Kenyan laws regarding community engagement and environment. The objective of the training was to empower these entities to improve their organizational performance. EAEP's senior energy advisor extracted and presented to the participants the sections of the Energy Act 2019 with mandates vested in specific entities for coordination of the entire energy sector, and specified aspects of capacity building, research, and training. The training guided utilities in developing national policies on community engagement, land access, revenue allocation, and compensation for energy infrastructure projects. EAEP also received copies of the annual report of the Task Force on Implementation of the Energy Act 2019 for the year ended June 30, 2020. EAEP circulated the report to USAID and other development partners. Meanwhile, the Task Force selected MOE staff and the seven energy entities began drafting several new regulations during an in-person workshop. EAEP's senior advisor and member of the Task Force reviewed comments on the draft Integrated National Energy Plan (INEP) Framework and four additional energy regulations recently drafted by the Task Force, with the support of power entities' technical staff. Finally, EAEP's senior advisor participated in the EPRA stakeholders' consultation workshop on the Draft Energy (Solar Photovoltaic Systems) Regulations 2020, which took place on December 11. Attendees from the private sector made various adverse comments about the rationale and appropriateness of the proposed penalties, professional indemnity insurance coverage, and annual fees for licensed contractors and certified workers. EPRA promised to consider the comments when finalizing the regulations. **Quarter 2:** The Task Force sent 14 regulations to EPRA for further action, bringing the total number of regulations sent to EPRA to 29. The 14 regulations included 11 drafted from scratch by the Task Force and technical experts from MOE and energy entities. The Task Force identified two more regulations that might need drafting before the end of the Task Force's tenure on June 30, 2021. EAEP continued to offer valuable technical input to the Task Force. **Quarter 3:** EAEP's senior advisor continued supporting the Task Force as a co-opted member representing energy sector development partners. In Q3, EAEP supported the task force by: • Linking the Senior Advisor of the German Agency for International Cooperation (GIZ) with the chair and vice-chair of the task force, so the task force could engage GIZ about financial support. • Participating virtually in sensitization meetings with county governments, May 17–21. These meetings were opened by the Cabinet Secretary for Energy and addressed by the Governor of Nakuru County and the CEOs of some power entities, among others. The main agenda items included:

Work plan reference number, activity description, and minimum output code	Activity status
	– Brief on the task force mandate – Energy Act 2019 overview – Energy Act 2019 – county government – Overview of INEP framework – Mainstreaming of cross-cutting issues in energy plans and INEP – Outlines of INEP and energy plans for counties – Outline of energy plans for national service providers – Draft energy (INEP) regulations – Draft energy (consolidated energy fund) regulations – Draft energy (rural electrification program levy) regulations – Council of Governors consultative meeting – Presentation of meeting resolutions • Providing comments on EPRA's Draft Energy (Electricity Reliability; Quality of Supply and Quality of Service) Regulations, 2021; and Draft (Electricity Supply) Regulations, 2021, despite the quick turnaround time required by EPRA. EAEP identified a few minor errors and recommended some changes to EPRA. USAID submitted EAEP's comments to EPRA on May 17. • Participating virtually in a retreat in Naivasha, May 31–June 4; and drafting regulatory impact statements for Integrated National Energy Plan Regulations, Energy Fund Regulations, and Rural Electrification Program Regulations. • Drafting the various chapters of the Task Force's final report on the status of implementation of the Energy Act, 2019, and reviewing and editing the consolidated draft of the report. In Q4, EAEP will continue supporting the implementation of the Act by commenting on regulations and associated regulatory impact assessment reports when EPRA invites stakeholder and public comments.
KE 1.3.2	**Summary of previous support:** EAEP consulted with EPRA to determine the best way forward on-grid-code support. EPRA began working with the Green Mini-Grids facility on the mini-grids framework, including the issue of what should happen when

Work plan reference number, activity description, and minimum output code	Activity status
Support Kenya's implementation of the grid code **Activity Managers:** [redacted] **Counterparts:** MOE, EPRA **Deliverable:** Regulation updated for grid code implementation **MO:** 1.6	the main grid reached the mini-grids. EAEP promised to exclude any work on mini-grids from the SOW for the program's subcontractor, Enertech. EAEP also undertook to train 10 EPRA staff and to address skills gaps still present in the institution, despite previous Power Africa support under the grid-management support program. Activity implementation was put on hold due to budget constraints, however, and the activity was not included in the bridging work plan. **Quarter 1:** EAEP's senior advisor reviewed the latest draft of the TOR for the Kenya Ancillary Services study, updated by the United States Trade and Development Agency's (USTDA's) internal consultant. This document captured all recommendations from EAEP and the USAID/Kenya and East Africa Mission for the first phase of the study, except for excluding some tasks under the second phase that had been agreed upon between USTDA and EPRA. The tasks excluded were ancillary services market rules and guidelines, and ancillary services market investment strategies. EAEP also noted that the requirement for individual engineers and engineering firms to register with the Engineers Board of Kenya, as well as a list of the required qualifications of the consultant, had been omitted from the TOR. EAEP suggested that USTDA could incorporate these requirements into a separate document. **Quarter 2:** This activity did not progress in Q2, pending finalization of the budget and work plan. **Quarter 3:** EAEP and EPRA reviewed the SOW of the support that had been proposed to be provided by Enertech, in light of the work that the Task Force on the Implementation of the Energy Act 2019 had carried out on the Energy (Electricity Supply) Regulations 2021, of which the grid code is a part. The scope of support will now mainly involve training EPRA staff and members of the GCRC on the grid code. EPRA decided that GCRC members would be nominated under a gazetted grid code, which delayed commencement of training. EPRA also wants the timing of training of EPRA staff be close to that of GCRC members' training. The trainings are now likely to be conducted in late Q4 FY 2021 or in Q1 FY 2022.
KE 1.3.3 Development of frameworks for ancillary services and battery storage **Activity Managers:** [redacted]	**Summary of previous support:** On May 14, 2020, EAEP submitted comments to USAID on the draft TOR for EPRA's ancillary services study. EPRA intended to undertake a comprehensive study of ancillary services for the power sector in the next financial year, subject to availability of adequate resources. In Q4 FY 2020, EAEP supplied KETRACO with a draft SOW on a reactive power and voltage-support study. In addition, Energy Storage Africa (ESA) submitted a detailed commercial and technical proposal to MOE and Kenya Power for a 480 MWh battery-storage installation at the Suswa substation, and EAEP and ESA discussed how EAEP could contribute to ESA's proposed utility-scale battery-storage project. **Quarter 1:** EAEP's senior advisor discussed with Gridworks Development Partners (GWDP) its consideration of Kenya as a market for GWDP battery energy storage and ancillary services, distribution lines and substations, and solar photovoltaics (PV)

Work plan reference number, activity description, and minimum output code	Activity status
[redacted] **Counterparts:** Kenya Power, EPRA, KETRACO **Deliverables:** Guidance/services to EPRA for ancillary services policies and standards study; assessment of fast-acting reactive power and voltage-control equipment for KETRACO **MO:** 1.1, 1.5, 1.4	for commercial and industrial (C&I) customers, customers of Kenya Power, and mini-grids. EAEP gave GWDP details regarding the situation of the Kenyan power sector and enabling environment under the Energy Act 2019. EAEP also held a meeting with a team from African Infrastructure Investment Managers to discuss the enabling environment for the installation of solar PV with battery energy storage by Kenya Power's C&I customers. EAEP informed the team of provisions in the Energy Act 2019 for generation for self-consumption, under the net-metering policy. African Infrastructure Investment Managers is considering Kenya as a possible market for investing in the C&I solar PV business. Current surplus power capacity, which is poised to progressively increase in the next few years, and the 20% tariff increase Kenya Power applied for with EPRA, if granted, would lead to more C&I and some domestic customers installing their own solar PV, which would aggravate Kenya Power's already dire financial situation. The EAEP advisor held calls with Kenya Power's manager of generation and transmission planning and chief engineer for generation planning, regarding their views on the proposal by ESA to install 480 MWh of battery energy storage at Suswa substation. Kenya Power informed EAEP that it considered battery energy storage good for the utility's grid, but it did not believe Suswa would be the right location. In Kenya Power's view, more than 480 MWh is required, but in different places in the country, such as South Nyanza in western Kenya, where at peak times there is inadequate transmission capacity; or at substations along the coast. Kenya Power noted its belief that it would be difficult, and not in the national interest, to justify single sourcing (direct procurement) of battery energy storage. As the quarter ended, Kenya Power was awaiting guidance from the MOE on next steps. **Quarter 2:** EAEP's senior advisor held an update meeting with MOE's Renewable Energy Secretary. The MOE had begun preparing a tender on battery energy storage, with assistance from GIZ. Kenya already had 385 MW of variable (intermittent) renewable energy (wind and solar PV) capacity and another 220 MW under construction, and expected to commission these MW in 2021. Battery energy storage will be important to the country, as it could increase effective generation capacity by storing energy that would otherwise be constrained at off-peak times and make it available for dispatch at peak times. **Quarter 3:** There was no progress on this activity during Q3, as the MOE continued awaiting feedback from GIZ on support for development of a TOR for the battery-storage procurement. This step could happen during July's Development Partners Working Group meeting. During this quarter, the LCPDP 2021-2030 was released by the MOE and the document's generation capacity expansion plan includes the incorporation of significant quantities of battery storage. This is a key signal that the ministry is explicitly saying it is needed and should be prioritized, in conjunction with increased wind and solar.

Work plan reference number, activity description, and minimum output code	Activity status
KE 1.4.1 Capacity Development Support for PPPs	**Cross-listed with REG 1.1.1 Support for capacity development for PPPs** **Quarter 3:** Kenyan energy sector employees attended EAEP's regional PPP training. In Kenya, this activity contributed to 18 (12 from the PPP unit) completed training sessions in technical energy fields supported by EAEP. More information can be found under REG 1.1.1.
KE 1.4.2 Building of KenGen's and other counterparts capacity to develop IPPs/PPPs **Activity Managers:** [redacted] **Counterpart:** KenGen, KETRACO, KenGen, Kenya Power, EPRA, GDC **Deliverables:** PPP policies for management improvement **MO:** 1.1, 1.5, 3.6	**Summary of previous support:** EAEP legal advisor NRF delivered an introductory PPP legal training module to KenGen on June 16, 2020. NRF took participants through introductions, training-plan structure, content, and timing. This EAEP-supported PPP legal training aimed to build KenGen's capacity to understand the risk allocations underpinning a successful PPP project, as well as the implications of these risks for KenGen and other stakeholders, including the Kenyan government. As a result of this training, KenGen learned to link risk allocation to contractual structures and agreements. The training began in the third quarter of FY 2020 and continued through the fourth quarter, with the goal of helping KenGen address specific legal issues regarding the Olkaria VI PPP project. **Quarter 1:** The first session of the legal fellows training by Power Africa under the Vance Center took place, as scheduled, on November 9 for Kenyan trainees. The session, titled "Challenges and case studies on reaching financial close in energy project development and financing," was conducted by Sullivan & Cromwell of the USA and Bowmans Kenya. There were 45 participants, including trainees, EAEP staff, and resource persons. The post-course self-assessment survey was planned for Q2. The second training session, titled "Overview of project finance, including types of financing with specific requests made to cover bond securitizations," was conducted on December 10 jointly for trainees in Ethiopia, Kenya, and Nigeria by Baker McKenzie (New York and London offices), Mehrteab Leul & Associates (Ethiopia), TripleOKLaw (Kenya), and George Etomi & Partners (Nigeria). **Quarter 2**: EAEP continued its legal fellows training sessions with the Vance Center, aimed at the institutional strengthening of Kenyan, Nigerian, and Ethiopian IPP units. The Vance Center scheduled its fifth training in the series for April 27, 2021. This session covered PPP controls, corruption, conflicts, and arbitration, as well as PPP project management, structuring, and implementation. These trainings built the capacity of various countries and EEP for PPPs in generation and transmission, and addressed *force majeure* and other COVID-19 impacts on PPPs/IPPs. **Quarter 3:** The Vance Center conducted its fifth joint training session, for Ethiopia, Nigeria, and Kenya. The session on April 27 covered identifying good PPP projects, identifying and mitigating corruption risks, understanding law-enforcement trends, and implementing best practices. The session on April 30 covered highlights of the PPP Bill, anti-corruption legislation, an assessment of Kenya's PPP success, and factors for sustainable development. Two joint sessions were conducted June 15 and June 17 on the

Work plan reference number, activity description, and minimum output code	Activity status
	topics "How to structure renewable energy projects under the IPP model" and "Understanding energy sector agreements." These trainings built the capacity of the respective countries to understand PPP and IPP projects in generation and transmission. Additionally, 19 KenGen staff who successfully participated in NRF training from previous quarters were given certificates of participation in Q3.
Archived Activity KenGen organizational health assessment (OHA) **Activity Manager:** [redacted] **Counterpart:** KenGen **Deliverable:** Completed OHA **MO:** 1.5	**Summary of previous support:** EAEP completed the final OHA report for KenGen and presented the findings virtually to the managing director and the executive committee on March 23, 2020. The KenGen Executive Committee developed an implementation plan to institute reforms, with its revamped Horizon II strategy, for key areas identified via the OHA as gaps. Areas identified as priorities included succession planning, training, performance-improvement tracking, and cascading of the Horizon II strategy to employees. The KenGen board asked EAEP to facilitate a meeting to present the assessment report, at which point the board would take charge of specific priorities and initiatives. **Quarter 1:** See IPIU section in cross-cutting table.
KE 1.4.3 Streamlining procedures for competitive tendering **Activity Managers:** [redacted]	**Summary of previous support:** This activity is new under the FY 2021 work plan. **Quarter 2:** This activity did not commence in Q2, due to lack of response from the Government of Kenya (GOK) and MOE. **Quarter 3:** In early 2019, MOE requested input from the National Treasury about the draft Collaboration Agreement between MOE and the Development Bank of Southern Africa. The agreement had previously been shared with the Attorney General's Office, and the Attorney General's input was incorporated. The National Treasury finally sent a response to MOE in April, focused on the legal language of the agreement rather than the substance. The Director General of the PPP Unit, however, did express his support for the overall engagement with the Development Bank of Southern Africa and its objectives—e.g., introducing a new model for the competitive procurement of new generation capacity. However, given the establishment of the PPA Task Force in late March, the principals at MOE felt it would be prudent to await the recommendations of the Task Force (expected in September 2021) before progressing further with National Treasury.

Work plan reference number, activity description, and minimum output code	Activity status
Counterpart: EPRA **Deliverable:** Training report **MO:** 1.5	
KE – IPIU (1.4.4) institutional reforms **Activity Manager:** [redacted] **Counterparts:** Kenya Power, KenGen, KETRACO, EPRA **Deliverable:** Power Africa–MOE cooperation matrix for Kenya energy sector **MO:** 1.4, 1.6	**Summary of previous support:** EAEP conducted validation meetings on HICD assessments with Kenya Power, KenGen, KETRACO, EPRA, GDC, and REREC, leading to a final validation workshop in November 2019. The program then concluded a cooperation matrix with the MOE and agreed on priority areas for support for the six power entities. Dr. Eng. Joseph Njoroge, Principal Secretary of the MOE, approved the Power Africa–MOE cooperation matrix and shared it with all sector CEOs for implementation. **Quarter 1:** See IPIU section in cross-cutting table. **Quarter 2:** See IPIU section in cross-cutting table. **Quarter 3:** See IPIU section in cross-cutting table.
KE IPIU – 1.4.5 KenGen post-COVID-19 business resumption and resilience project	**Summary of previous support:** EAEP's institutional performance-improvement team presented the draft KenGen COVID-19 business-resumption report to the KenGen Executive Committee. The committee validated the report and made technical suggestions, including continuously developing benchmark cases and solidifying the budgetary requirements for the COVID-19 implementation road map. The next steps designated for EAEP were to work with KenGen to develop a budget and to conduct final quality checks for the draft report. It was envisioned that once completed, the COVID-19 business-resumption strategy could be adapted for other utilities and stakeholders in Kenya and throughout the region.

Work plan reference number, activity description, and minimum output code	Activity status
Activity Managers: [redacted] **Counterpart:** KenGen **Deliverables:** Business-resumption and resilience strategy; marked-up version and comments on actual strategy **MO:** 1.5	**Quarter 1:** See IPIU section in cross-cutting table. **Quarter 2:** See IPIU section in cross-cutting table. **Quarter 3:** See IPIU section in cross-cutting table.
KE 1.5.1 KETRACO support on resettlement action policy improvements **Activity Manager:** [redacted] **Counterpart:** KETRACO **Deliverable:** Resettlement action policy improvement	**Summary of previous support:** EAEP started conversations on the technical support needed for updating KETRACO's Resettlement Action Policy Framework that would support standard processes for RAPs and other community-engagement activities. KETRACO was to develop the framework in FY 2021 at the conclusion of the wayleaves study; EAEP completed the KETRACO wayleaves study and submitted the research document to KETRACO for comments. **Quarter 1:** See CE section in cross-cutting table. **Quarter 2:** See CE section in cross-cutting table. **Quarter 3:** See CE section in cross-cutting table.

Work plan reference number, activity description, and minimum output code	Activity status
MO: 1.7	
KE 1.5.2 Support for rollout of KenGen community-engagement policies and mechanisms **Activity Manager:** [redacted] **Counterpart:** KenGen **Deliverables:** National community-engagement policy; training reports **MO:** 1.7	**Summary of previous support:** EAEP advertised the consultancy for the grievance and complaints-handling mechanism (GCHM) activity supporting KenGen's larger community-engagement portfolio, and selected Ecomove Services. **Quarter 1:** See CE section in cross-cutting table. **Quarter 2:** See CE section in cross-cutting table. **Quarter 3:** See CE section in cross-cutting table.
KE 1.5.3 ESMF for KETRACO **Activity Manager:** [redacted] **Counterpart:** KETRACO	**Summary of previous support:** EAEP continued its work with KETRACO to advance its ESMF, after a kickoff meeting with KETRACO's team of environmental management and socioeconomics experts. Together, KETRACO and EAEP developed a robust stakeholder profile integrating all KETRACO stakeholder groups, including development partners, the regulator, and implementing partners, among others. KETRACO and EAEP also began developing a 360-degree desk analysis on the policy and legal environment in which the ESMF will be deployed and implemented. **Quarter 1:** See ENV section in cross-cutting table. **Quarter 2:** See ENV section in cross-cutting table. **Quarter 3:** See ENV section in cross-cutting table.

Work plan reference number, activity description, and minimum output code	Activity status
Deliverable: Environmental and social management framework **MO:** 1.7	
Archived Activity *(may be picked up again at a later date)* Kenya National Energy Efficiency and Conservation Strategy (KNEECS) review **Activity Managers:** [redacted] **Counterpart:** MOE **Deliverables:** Document with comments; marked-up version and	**Summary of previous support:** EAEP participated in the virtual official launch of KNEECS by the Principal Secretary for Energy, Dr. Eng. Joseph Njoroge. The launch, attended by 200 participants, was moderated by the World Bank, which hailed this important milestone for Kenya, coming soon after the launch of the Ministry's gender policy, which Power Africa helped to launch in February 2019 (the first in Africa). Power Africa made extensive comments on the draft KNEECS, which were incorporated into the final document. **Quarter 1:** No new activity on this assignment during the quarter. **Quarter 2:** No new activity on this assignment during the quarter. **Quarter 3:** No new activity on this assignment during this quarter. The Strategy is currently under implementation by EPRA.

Work plan reference number, activity description, and minimum output code	Activity status
comments on actual strategy **MO:** 1.3	

OBJECTIVE 2 PROGRESS ON WORK PLAN ACTIVITIES: KENYA

Work plan reference number, activity description, and minimum output code	Activity status
KE 2.1 Assistance with the implementation of Kenya Power's distribution master plan – Phase 1 **Activity Managers:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Interface and training report **MO:** 2.1	**Summary of previous support:** Kenya Power began updating its distribution master plan, which previously had covered 2012–2017. EAEP and Kenya Power agreed to support the process for updating the plan, focusing first on designing the SOW for the assignment with Kenya Power. With an updated master plan, Kenya Power would be better able to synchronize its activities and strategically address grid-connection issues using advanced software tools and GIS. By September 2020, EAEP had received the sign-off from Kenya Power on Phase 1 of the study, and had begun to design the SOW for Phase 2. **Quarter 1:** The Phase 1 SOW (facilities database and PSS®SINCAL integration) was released for bid, while the Phase 2 SOW was finalized by EAEP and signed off by Kenya Power. **Quarter 2:** The Phase 1 bids were received and negotiated, and the subcontract was finalized. During this period, the EAEP technical team began working with Kenya Power to lay the groundwork for the activity. This work was intended to help Kenya Power interface its industry-standard distribution-planning software, PSS®SINCAL, to its GIS-based Oracle facilities database. This connection would facilitate the import of electrical network data directly into the distribution-planning software, reduce the time and human capital required to carry out the exercise manually, and increase the accuracy of network models and planning studies. This activity also would facilitate a faster review of the existing distribution master plan, which will increase the scope of KPLC's coverage and address the current and forecast demand in the next five years. Additionally, EAEP planned to build Kenya Power engineers' capacity to use the software system to improve distribution-system planning for new customer connections. The Oracle GIS-based facilities database that KenGen maintains contained about 95% of the updated physical data for the power network. **Quarter 3:** EAEP held a kickoff meeting with Siemens on June 22, where it was agreed that PSS®SINCAL would be updated to the latest version, as well as the ESRI shape – PSS®SINCAL interface. It was also agreed that maintenance and service contracts should be valid for three years. The basic training received in 2015 should be strengthened to include distribution network short-circuit and protection analysis. The parties also agreed to start collecting data for Kenya Power's facilities database, with an implementation schedule to be submitted by Siemens.

Work plan reference number, activity description, and minimum output code	Activity status
	The TOR for the Kenya Distribution Master Plan was approved by Kenya Power management, and the RFP was in the process of being finalized and released to potential bidders as the quarter ended. The RFP for the Distribution Master Plan activity will be released in Quarter 4.
KE 2.2 Business-process reengineering and connection quality control **Activity manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Progress updates **MO:** 2.1	**Summary of previous support:** EAEP began supporting Kenya Power's New Connection Quality-Control Committee on baseline reports, business objectives, and development of measurable performance indicators. The program provided feedback and comments on prime customer consumption and segregation of sales from new customers by different tariff categories and customer profiles. The committee's work was expected both to improve the process of making new connections and to support higher consumption of new connections. See Objective 3 for details on business-process reengineering. **Quarter 1:** The EAEP utility-turnaround team met with Kenya Power's new connection/connectivity committee to develop and implement a road map for new connection processes. EAEP supported Kenya Power in data integrity, new connections integrity, data migration of pending job orders, strengthening of current processes, capacity development in data analysis, investment needs, customer load, power interruptions (especially to premium customers), and illegal connections. EAEP supplied Kenya Power with documented processes to support its new connection/connectivity processes and quality-control units. **Quarter 2:** EAEP's utility-turnaround team analyzed data for large power user (LPU) incidents per customer from July 2019 through June 2020. According to the results, Kenya Power's estimated lost-opportunity cost amounted to [redacted], due to feeder-energy interruptions. EAEP performed calculations based on data provided by Kenya Power's new connectivity quality-control team, and compared those results with inCMS (customer database software) LPU billing data for each customer for each month, as well as average interruption hours per month. EAEP planned to present these findings to Kenya Power for further discussion and action. **Quarter 3:** The business-strategy department of Kenya Power began monitoring the implementation of business-process reengineering, ensuring that business processes would be linked to commercial operations. Progress reports were submitted to the EAEP team, for support as needed. Kenya Power plans to make changes to their organogram in Q4, which may group business functions and responsibilities in ways that may require changes to the commercial processes, internal controls and flow charts. EAEP is on stand-by to support if this comes to fruition.

OBJECTIVE 3 PROGRESS ON WORK PLAN ACTIVITIES: KENYA

Work plan reference number, activity description, and minimum output code	Activity status
KE 3.1.1A Effective management and governance improvements—management effectiveness **Activity Manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Standard operating procedures for commercial functions **MO:** 3.1, 3.2, 3.3	**Summary of previous support:** EAEP continued working with Kenya Power to determine the utility's needs. Kenya Power established a transformation office, which EAEP offered to support in place of the project management unit. Discussions continued through the end of Q4 FY 2020. EAEP also developed various executive orders and processes, as well as KPIs and criteria for training of midlevel managers. The utility-turnaround team submitted to Kenya Power a draft commercial loss-reduction road map focusing on high impact and quick wins to drive the utility's loss-reduction efforts and increase revenue collection. **Quarter 1:** Kenya Power management transformed the field-enforcement teams into meter inspection and installation teams, located in the zones. The main task of these teams would be to replace faulty meters in their respective zones, with less emphasis given to meter inspection. The EAEP team stressed the importance of independent revenue-protection teams and field enforcement to control Kenya Power's energy losses. The issue was addressed at a team meeting with the managing director, who requested more details from the general manager for customer services. EAEP also continued to support Kenya Power on planning activities to improve billing, by identifying zero and estimated bills and improving meter-reading coverage and accuracy. **Quarter 2**: EAEP and USAID met with Kenya Power's board to discuss support for the utility, as well as the entire Kenyan energy sector. EAEP briefed the board on overall EAEP support to Kenya Power, specifically in the following areas: • Strategic plan • Culture change • Business-process reengineering • Diagnostic and transformation planning • Risk assessment and post-COVID-19 business-continuity plan • Loss-reduction road map and proof of concept in the Roysambu pilot sector • Ongoing work with ICT strategy

Work plan reference number, activity description, and minimum output code	Activity status
	Additionally, EAEP's utility-turnaround team presented to the Kenya Power board performance results from Roysambu pilot-sector activities, as well as initiatives undertaken, recommendations for consideration, and proposed initiatives for quick wins on loss reduction and increased revenue collection. Kenya Power's board stated its appreciation for EAEP's work, and asked EAEP to roll out its activities to other Kenya Power sectors, especially Nairobi Industrial and Upper Hill. EAEP prepared and submitted to the Kenya Power board a loss-reduction road map, a transformation plan, and a list of key performance-improvement activities for review. The EAEP team also worked on technical meter specifications to forward to the board. EAEP then participated in the official inauguration of the Kenya Power task force on loss reduction, consisting of a steering committee and an operational team, which would deal with loss reduction and performance improvement at the utility. EAEP agreed to help the task force roll out to other sectors the EAEP Roysambu pilot-sector loss-reduction road map, tools, and approach, which led to significant operational improvements and to reduced losses. EAEP's approach in the Roysambu sector was intended act as proof of concept for other sectors. EAEP began rolling out activities in the Nairobi Industrial and Upper Hill sectors. The program planned to continue to help the task force implement the proposed initiatives for loss reduction and increased revenue collection. Finally, EAEP presented to the Kenya Power task force on loss reduction a diagnostic report, turnaround plan, and loss-reduction road map. The report highlighted the main findings, including gaps, activities, and solutions that would support loss reduction. EAEP presented in-depth data analyses of the Roysambu pilot sector as a working-concept approach that had already been tested. **Quarter 3:** The EAEP utility-turnaround team extended its loss-reduction road map initiative to two additional sectors: Nairobi Industrial and Upper Hill. The program's three-month engagement in these two sectors produced significant improvements in revenue and operations (for example, the trend of zero bills decreased by 13% compared with baseline data, and billing in KSh compared with baseline data improved by an average of 8%, or [redacted]. After meeting with Kenya Power's general manager for commercial services, EAEP conducted a detailed loss study for all utility sectors. Of Kenya Power's 145 sectors, 20 sectors, which account for 60% of the utility's business, were selected to roll out the methodology used by EAEP in the pilot sectors.
KE 3.1.1B	**Summary of previous support:** EAEP provided on-the-job coaching to Kenya Power staff in energy balancing and accounting; visits to substations; proper network alignment; and data collection from feeder meters. The Objective 3

Work plan reference number, activity description, and minimum output code	Activity status
Effective management and governance improvements – Talent management, incentives, and staff capacity **Activity Manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Employee performance incentive mechanism, staff training reports **MO:** 3.1, 3.2, 3.3	team trained over 100 individuals on disconnection, revenue collection, field-enforcement revenue protection, and data analytics, accompanying trainees in the field on a daily basis. The team demonstrated to Kenya Power field teams how to analyze, plan, and enforce disconnections of nonpaying customers. **Quarter 1:** EAEP continued to support Kenya Power's field-enforcement unit by developing standard operating procedures, job descriptions, and reporting forms and templates, and the Objective 3 team organized and conducted trainings for 40 staff. The team also provided training on energy balance, calculation of ATC&C losses, and other techniques of combining data for monthly reporting. Kenya Power established a second field-enforcement team in charge of inspecting LPUs, and an analytical team to support daily field-enforcement planning and monitoring of operations. EAEP began working in one region; Kenya Power was to observe and decide whether to expand the initiative to other regions. **Quarter 2:** EAEP continued on-the-job capacity building of commercial-function employees in data analytics, work planning, implementation, and performance evaluation. EAEP embedded advisors worked on a daily basis with Kenya Power employees in three Nairobi region sectors, and provided tools to regional management to use in other Nairobi sectors as well. **Quarter 3:** EAEP continued its support in selected pilot sectors for loss-reduction road map activities and planning and implementation of daily operations. At the same time, the utility-turnaround team supported the loss-reduction steering committee (including general managers for commercial services and the ICT, legal services, HR, and strategy departments) and the loss-reduction task force (war room) with presentations and initiatives to prevent, detect, and recover energy losses.
KE 3.1.1C Effective management and governance improvements – Strategic plan **Activity Manager:** [redacted]	**Summary of previous support:** This is a new activity under the FY 2021 work plan. **Quarter 1:** Kenya Power appointed a new general manager for strategy, who planned to review the utility's corporate strategy to accommodate new ideas and views. EAEP held discussions with the general manager about a "transformation office" (rather than a project management office), which he agreed to consider under the new strategy review. **Quarter 2:** EAEP held a virtual meeting with the new Kenya Power strategy general manager, providing a brief of progress in recent years for strategy, strategic planning, and implementation, as well as ongoing activities at different levels and different initiatives (including 2018–2023 strategic-plan implementation and EAEP turnaround support for

Work plan reference number, activity description, and minimum output code	Activity status
Counterpart: Kenya Power **Deliverables:** Progress updates on the strategic plan **MO:** 3.1, 3.2, 3.3	loss reduction). The general manager indicated that Kenya Power would need further support from EAEP for its current strategic plan and transformation office. EAEP's support was expected to improve Kenya Power's adaptability, given the changing financial and operational situation stemming from COVID-19. **Quarter 3:** Changes of management and COVID-19 resulted in the need to review Kenya Power's Strategic Plan 2018–2023, so as to align this document with existing management requirements and support the post-COVID-19 environment. EAEP completed the draft of the strategic-plan assessment and presented it to Kenya Power management and the Board of Directors. The document was being reviewed by Kenya Power as the quarter ended, and is anticipated to be completed and finalized in Q4.
KE 3.1.2 A Internal controls improvements – Reporting, KPIs, and project management office (PMO) **Activity Manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Operational KPIs, standard operating procedures for information sharing, PMO setup **MO:** 2.1, 2.2, 3.1, 3.2, 3.3	**Summary of previous support:** With EAEP support, Kenya Power's energy-accounting and energy-balance initiatives expanded from four to eight regions. Each region has defined energy-received and energy-balance data. This data collection and analysis exercise was reflected in the monthly business analysis reports, which showed data for eight regions. Kenya Power also began extracting monthly energy-balance data for each feeder. EAEP supported the effort to align distribution transformers and customers with feeders in the Roysambu sector, and drafted an executive directive to establish KPIs for field-enforcement activities, disconnections, and collections in newly established sectors and zones. **Quarter 1:** The KPIs for disconnections and collections were implemented in the Roysambu pilot sector by the EAEP Objective 3 team and significantly improved commercial performance. EAEP drafted a presentation for Kenya Power management demonstrating progress and the importance of rolling out KPIs to other sectors and regions. **Quarter 2:** EAEP continued supporting Kenya Power to develop data analyses, particularly for the Roysambu, Upper Hill, and Nairobi Industrial sectors. EAEP also worked with Kenya Power employees to build capacity and to share knowledge regarding reports development. The Objective 3 team provided almost-daily support in developing data sets. **Quarter 3:** EAEP worked with Kenya Power's ICT department to automate templates pertaining to commercial operations, so as to enable improved control of daily planning and implementation. The methodology used in Kenya Power's pilot sectors—Roysambu, Upper Hill, and Industrial—served as proof of concept for improvements in internal controls, and also to monitor implementation of daily, weekly, and monthly KPIs and targets at different operational levels.

Work plan reference number, activity description, and minimum output code	Activity status
KE 3.1.2 B Internal controls improvements – ICT and customer data structure **Activity Manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Operational KPIs, standard operating procedures for information sharing, PMO setup **MO:** 2.1, 2.2, 3.1, 3.2, 3.3	**Summary of previous support:** At Kenya Power's request, the Objective 3 team met with the managing director and CEO and the ICT general manager to discuss supporting the ICT department on its road map and the development of an ICT strategy. The team prepared recommendations regarding current systems and applications, given that several different standard systems and software solutions were available for purchase but could not be optimally interlinked. EAEP continued to work with the consultants hired to support the development of the Kenya Power ICT strategy and road map for system integration. Additionally, EAEP supported the new connection quality-control committee with proposed baseline reports, business objectives, and measurable parameters, to be developed by the ICT team to mainstream periodic reports for each business unit. **Quarter 1:** EAEP's utility-turnaround team continued its support for Kenya Power's ICT department. The department appointed staff, from all relevant divisions, for interviews on business processes as primary users of ICT. The stated main priorities of the department included increasing revenue and enhancing revenue collection, reducing losses, improving operational efficiency and customer service, and improving business intelligence and analytics. **Quarter 2:** EAEP continued its series of workshops with Kenya Power's ICT general manager and other managers to discuss the utility's ICT priorities, which would help it to develop an ICT strategy. These workshops aimed to gather information and feedback from various users, which Kenya Power would use to define cost-effective ICT solutions, thus helping the utility achieve greater efficiency and improve its finances. The ICT general manager authorized the team to proceed with intensive workshops for the following priority initiatives: • Increase revenue collection • Reduce losses • Improve operational efficiency • Improve customer service • Improve business intelligence and analytics. The target audience for these workshops included general managers and higher-level managers responsible for the above-listed areas. EAEP's utility-turnaround team also submitted an assessment to Kenya Power conveying initial findings, including gaps and recommendations, on overall Kenya Power ICT infrastructure. The assessment focused on the utility's applications, infrastructure, and ICT processes and governance. This activity was important for guiding

Work plan reference number, activity description, and minimum output code	Activity status
	Kenya Power's management in decision making, especially to capture critical data on low-performing regions/sectors and zones, to improve efficiency and increase revenue. **Quarter 3:** EAEP submitted the ICT strategy to the Kenya Power Board of Directors, which reviewed and approved the document. The draft business intelligence (BI) assessment and strategy was also submitted to the utility for review, feedback, and comments. This document assesses the current state of BI and data analytics at Kenya Power and defines the strategy, key initiatives, and implementation road map. A phased implementation approach will ensure that Kenya Power's ICT hardware and software serve as a solid foundation for a fully-fledged enterprise data warehouse and BI and data-analytics platform.
KE 3.1.2 C Internal controls improvements – Customer data structure **Activity Manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Operational KPIs, standard operating procedures for information sharing, PMO setup **MO:** 2.1, 2.2, 3.1, 3.2, 3.3	**Summary of previous support:** EAEP prepared a detailed list of customer data by commercial offices or zones, and sent this list to Kenya Power for necessary steps and actions. The utility-turnaround team supported Kenya Power's regions with a newly configured customer-service database, which will allow for debt data-structured analysis. The EAEP team extracted the latest data from the system and structured information by respective zones to support cash-collection activities. Additionally, EAEP identified and addressed gaps in the currently configured customer database, and advised Kenya Power to assign and deploy specific teams/employees to each zone, to verify data integrity. **Quarter 1:** EAEP provided detailed lists of customers for each itinerary, cascaded for each zone, including the number of customers with no response. The Objective 3 team focused on: • Roysambu sector disconnection reports – a daily report to monitor and follow teams in the field for activities and disconnections actioned (Kenya Power did not have any official reports on field activities) • Disconnection planning forms – daily, weekly, and monthly forms for each zone and sector (the pilot sector had no disconnection-cycle planning) • Lists of itineraries, including number of customers with no response. On a daily basis, EAEP monitored itinerary performance and progress by extracting system data manually, arranging it according to each itinerary and respective zone, and analyzing the data (Kenya Power had no such tool to monitor progress and performance)

Work plan reference number, activity description, and minimum output code	Activity status
	• Lists of customers owing more than [redacted] to be treated as a priority for each zone—i.e., pole disconnections (the Roysambu pilot sector did not have an assigned pole team for hard disconnections) Finally, the EAEP team visited field teams, including low-performing teams, and supported disconnections of problematic customers (customers resisting disconnections or reconnecting illegally). **Quarter 2:** EAEP continued supporting Kenya Power in data analyses, particularly for the Roysambu, Upper Hill, and Nairobi Industrial sectors. EAEP also worked with Kenya Power employees to build capacity and share knowledge regarding writing reports. EAEP provided almost-daily support in developing data sets. **Quarter 3:** EAEP provided structured data sets to pilot sectors, on a daily basis, by extracting and updating performance data for each sector and zone daily and addressing issues with low-performing zones, revenue collectors, and itineraries in these areas. Additionally, the EAEP team extracted daily meter-reading data and addressed billing anomalies in the respective sectors, by segregating and cascading for each zone and meter reader the number of zero bills, negative bills, and extreme bills; pivoting these bills for respective itineraries; and addressing them accordingly.
KE 3.1.3 A Operational improvements – Field-enforcement unit **Activity Manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Operational KPIs, standard operating procedures	**Summary of previous support:** EAEP continued to support Kenya Power's field-enforcement unit by developing standard operating procedures (SOPs), job descriptions, and reporting forms and templates, and the Objective 3 team organized and conducted trainings for 40 Kenya Power staff. The team also provided training on energy balance, calculation of ATC&C losses, and other techniques of combining data for monthly reporting. Kenya Power established a second field-enforcement team in charge of inspecting LPUs, and an analytical team to support daily field-enforcement planning and monitoring of operations. EAEP began working in one region, and Kenya Power was to observe and decide whether to expand the initiative to other regions. **Quarter 1:** EAEP's utility-turnaround team updated final performance figures for the first month (October) of EAEP engagement as shadow management in the Roysambu pilot sector. Based on final October collection data, there was an improvement in cash collection, billing, response rate, and zero bills for the pilot sector. The team continued its support for Roysambu pilot-sector activities, meeting with Roysambu managers to present a detailed analysis of performance, as well as EAEP's revenue-collection targets for December 2020, for the managers to share with each zone. EAEP's utility-turnaround team also supported the Roysambu pilot sector by maintaining a daily presence in the field and focusing on the following areas:

Work plan reference number, activity description, and minimum output code	Activity status
MO: 2.1, 2.2, 3.1, 3.2, 3.3	• Identifying low-performing zones and suggesting staff changes • Identifying, through detailed analysis, itinerary-response rates and overall performance • Monitoring daily sector or zone performance and alerting Kenya Power management to necessary actions • Supporting low-performing zones and teams in the field by assisting with cash-driven activities (e.g., disconnecting nonpaying customers, preparing and monitoring implementation of disconnection orders, and managing relationships with the community and customers). EAEP intensified its field activities in the Roysambu pilot sector, supporting and meeting with revenue collectors and training them on disconnections guidelines and revenue collection. The Objective 3 team emphasized the following activities: • Disconnecting defaulting customers • Generating disconnection orders by each zone and itinerary • Monitoring employees' failure to perform job orders (e.g., disconnections) • Monitoring and providing daily updates on progress. **Quarter 2:** EAEP's utility-turnaround team finalized data analytics and sector assessments for Kenya Power's Nairobi Industrial and Upper Hill sectors. EAEP used the data analyses as a baseline to commence field activities in these two sectors. The EAEP team also met with the Nairobi region's manager and county managers to plan the commencement of activities in the Nairobi Industrial and Upper Hill sectors. EAEP will work with Kenya Power to roll out the EAEP loss-reduction road map, tools, and approaches used in the Roysambu pilot sector to the Nairobi Industrial and Upper Hill sectors, which will lead to significant improvements in operations and will reduce losses. EAEP's March data analyses for Nairobi Industrial and Upper Hill indicated improvements that can be attributed to EAEP's engagement and ongoing support in these sectors. In Upper Hill, the customer response rate improved by 6 percentage points, from the baseline 50% to 56%. March revenue collection improved by [redacted]. For Nairobi Industrial, revenue collection improved by [redacted]. Also, billed energy improved by 10%, compared with baseline data of 60 million kWh, to 66 million kWh for both sectors, including LPUs. The customer response rate improved by 3 percentage points to 47%, compared to the baseline rate of 44%.

Work plan reference number, activity description, and minimum output code	Activity status
	Quarter 3: EAEP established tools to monitor daily operations and other field activities, so as to improve the effectiveness and efficiency of Kenya Power's commercial and technical operations. Kenya Power began reviewing its company organogram, which includes the revenue-protection and field-enforcement teams established with EAEP's support.
KE 3.1.3 B Operational improvements – Commercial and technical operations **Activity Manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Progress reports on commercial and marketing strategy for Kenya Power, benchmarking study, diversification strategy **MO:** 2.1, 2.2, 3.1, 3.2, 3.3	**Summary of previous support:** The utility-turnaround team supported further analysis of Kenya Power's commercial strategy, including potential diversification; this initiative kicked off with Kenya Power managers. EAEP collected and analyzed data, and subsequently developed and submitted commercial diagnostics. The team then prepared two documents—one on diagnostic initiatives and one on the commercial diagnostics business case—that the program planned to discuss with Kenya Power in a workshop format. **Quarter 1:** EAEP finalized the commercial strategy and presented four deliverables to Kenya Power: commercial strategy diagnostic, business case, initiatives, and recommendations. Additionally, EAEP supported Kenya Power's then-new connection/connectivity department in analyzing raw data and comparing it with billing-system data, to accurately estimate lost billing from LPUs. The EAEP utility-turnaround team met with Kenya Power's connection/connectivity processes team and quality-control committee to discuss a road map for new connection processes. EAEP supported Kenya Power in data integrity, new connections integrity, data migration of pending job orders, strengthening of current processes, capacity development in data analysis, investment needs, customer load, power interruptions (especially to premium customers), and illegal connections. EAEP provided Kenya Power with documentation to support its new connection/connectivity processes and quality-control units. These activities were designed to help Kenya Power improve its overall performance and efficiency. **Quarter 2:** EAEP had nothing to report in Q2 for this activity. **Quarter 3:** EAEP worked in two Kenya Power pilot sectors (Upper Hill and Nairobi Industrial) to align feeders and customers, so as to better measure energy and billing data and properly account for electricity use by large power users. This initiative was still in progress as the quarter ended.
KE 3.1.3 C Operational improvements –	**Summary of previous support:** EAEP helped the Kenya Power loss-reduction department develop a feeder-based business energy balance and built the capacity of the utility's data analysts in energy balancing and data processing. The Objective 3 team also completed in-depth feeder-loss analysis, showing that 75 feeders in Nairobi generated 8% of

Work plan reference number, activity description, and minimum output code	Activity status
Feeder-based grid and boundary metering **Activity Manager:** [redacted] **Counterpart:** Kenya Power **Deliverables:** Progress reports on on-grid and boundary metering **MO:** 2.1, 2.2, 3.1, 3.2, 3.3	Kenya Power's total losses, and prepared recommendations to reduce those losses. The team then met with Kenya Power's energy-loss management, network management, field enforcement, and regional security management departments in Nairobi County to discuss development of a loss-reduction road map for FY 2021. EAEP selected the Hardy Feeder as the pilot for this loss-reduction initiative, with the objective of eliminating commercial losses on the feeder. The Objective 3 team visited the Roysambu sector and identified eight feeders supplying six zones, none of them shared with other sectors. The team selected two feeders—Central Glass and Kahawa Ex Ruaraka—with critical energy-accounting issues, and initiated field visits and activities to determine loss levels. The team identified critical issues in need of corrective feedback measures and actions, for a return to normalcy during the next cycle. **Quarter 1:** The EAEP team toured the Kahawa Ex Ruaraka feeder to physically verify how many distribution transformers were connected to the feeder. These activities led to identification of mismatches of system data and field/ground data. EAEP identified 98 Tx's (distribution transformers) connected to the Kahawa Ex Ruaraka feeder, whereas the facilities database indicated that 115 transformers were aligned to the feeder. The Objective 3 team forwarded its findings to the respective departments in charge of feeder alignment for corrective measures. Given that network alignment is a cause of incorrect energy accounting and incorrect loss calculation, EAEP worked with Kenya Power to improve network alignment. **Quarter 2:** EAEP presented to the loss-reduction task force its opinion on the road map for establishing energy accounting at the county and sector levels. Kenya Power's customer-service general manager confirmed that the proposed road map would be implementable, and the decision was made to proceed with activities. Unfortunately, Kenya Power was reluctant to pursue implementation, but EAEP continued to work on the activity and finalize the agreed points. **Quarter 3:** EAEP convinced Kenya Power management that without proper energy accounting, it will be difficult to identify electricity leaks and concentrate resources and logistics in the right places. Following the program's previous support for energy accounting in eight Kenya Power regions, work continued to install meters at the county level. Until this metering is completed, EAEP stressed the need for metering and energy accounting in Kenya Power's 20 highest-consuming sectors, to continue with loss-reduction and operations improvements.

COUNTRY PROGRESS: RWANDA

EAEP continued its progress in Rwanda in Q3. The Objective 1 team continued to follow up all supported transactions and participated in energy sector activities, such as development partner meetings and technical working groups. EAEP subcontractor SP delivered final ESIA/RAP/ESMP reports, including capacity building, for the Gisagara–Huye–Rukarara and Kirehe–Rwainkwavu lines. EAEP then responded to a request from the managing director of EDCL to expand SP's scope of work to include a review of tender documents for the upcoming Bugesera Airport/Industrial Park transmission line. Throughout the quarter, CCS continued its weekly capacity-building sessions for select REG and MININFRA staff, as part of the Rwanda resource assessment, and representatives from Rwandan power entities participated in EAEP's regional PPP training. EAEP and USAID/Rwanda reached out several times to the Electricity Access Rollout Program (EARP), offering support for household connections; however, as of the end of the quarter, EARP had yet to respond to EAEP's offers of support. Finally, EAEP continued supporting the WIRE Activity in Rwanda; details can be found in this report's gender section.

Rwanda Top Achievements and Results in Q3 FY 2021

- Final inputs for 2 priority transmission lines submitted
- Resource assessment advancing for REG and MININFRA
- Continued support to Rwanda Utilities Regulatory Authority (RURA) for tariff setting; delayed due to COVID-19 lockdown precautions

East African Power hydro power station. Photo credit: Jordan Snowzell

OBJECTIVE 1 PROGRESS ON WORK PLAN ACTIVITIES: RWANDA

Work plan reference number, activity description, and minimum output code	Activity status
RW 1.1 Support for independent power producers and REG **Activity Manager:** [redacted] **Counterpart:** IPPs **Deliverable:** Updates on PATT, QTAT for potential transaction support **MO:** 1.1	**Summary of previous support:** EAEP continued to offer support to Rwandan IPPs by closely communicating with developers and responding to their needs. All EAEP-supported transactions that had yet to reach financial close required either a new PPA or a PPA amendment. The Government of Rwanda (GOR) assessed generation costs and renegotiated tariffs with a number of developers with non-executed PPAs. Contingent on budget, EAEP offered to submit activity-approval requests for financial analysis work to be conducted—specifically, analyzing project bankability with varied tariffs and conditions. Additionally, EAEP wrote letters of support for projects, to be shared with investors and development partners, offering to provide an objective view on the energy sector and how the project would fit into the country's energy strategy. This activity is connected to RW 1.2 below, "accelerating national transmission projects." **Quarter 1:** EAEP continued to monitor all supported transactions and stayed abreast of energy sector activities. All EAEP transactions at the time were in PPA negotiations with the GOR; as noted above, a valid PPA would be needed before the projects could advance toward financial close. East African Power, developing a 4.2 MW hydropower project supported by EAEP, remained in tariff negotiations with the Rwandan government, which would have to conclude before its PPA could be signed. To facilitate the negotiations, EAEP began creating an objective financial model for the project that would include a sensitivity analysis with various tariffs. This project was expected to reach FC in 2021. **Quarter 2:** EAEP provided a completed financial model to East African Power, the developer of the 4.2 MW Bihongora Hydropower project. The EAEP-created model was expected to be useful to the developer in both negotiating tariffs and meeting lender requirements. The developer continued negotiating a tariff and PPA with the GOR and now expects to reach FC in early 2022. **Quarter 3:** EAEP continued to follow up all supported transactions and participated in energy sector activities, such as development partner meetings and technical working groups. The transactions currently being supported need their PPAs to be amended before they can reach FC. During Q3, EAEP and USAID/Rwanda reached out several times to EARP, offering support for household connections. The parties held a meeting at which EARP outlined its challenges and EAEP listed possible areas of support. However, after numerous attempts at follow up, EARP still did not respond to EAEP's offers of support.
RW 1.2 Accelerating national transmission projects –	**Summary of previous support:** SP began conducting feasibility studies on two transmission lines in Rwanda. The feasibility studies were needed before funding of the lines could be approved; the lines were earmarked to be funded by the AfDB. SP submitted to EDCL and EAEP a draft ESIA and ESMP for review. EAEP's managers approved the draft prefeasibility studies

Work plan reference number, activity description, and minimum output code	Activity status
Feasibility studies for selected 110 kV lines **Activity Manager:** [redacted] **Counterpart:** EDCL **Deliverables:** Feasibility study, ESMP, RAP, and tender documents for two high-voltage transmission lines **MO:** 1.2	conducted on the two transmission lines. Subsequently, EDCL and EAEP approved SP's latest deliverables—the prefeasibility study and the progress report—and EAEP held a planning meeting with SP and REG to discuss the capacity-building element of the feasibility study work. **Quarter 1:** SP and its local partner began conducting geotechnical investigations along line routes and substations. This activity also involved building EDCL's capacity to conduct ESIAs, produce ESMPs and RAP studies, and develop bidding documents for other national transmission lines in the pipeline. **Quarter 2:** SP submitted to EDCL and EAEP its latest deliverable, a draft detailed-design report, and subsequently trained seven REG and EDCL staff members. The week-long virtual training focused on design of transmission systems, as well as power-flow simulations using real examples. This component is important for building EDCL's in-house capacity to complete future design and power-flow simulation work. **Quarter 3:** SP completed the deliverables—final and full ESIA/RAP/ESMP reports, including capacity building—for the Gisagara–Huye–Rukarara and Kirehe–Rwainkwavu lines. EAEP responded to a request from the managing director of EDCL to expand SP's initial scope of work to include a review of tender documents prepared by EDCL for the upcoming Bugesera Airport/Industrial Park transmission line. Under the expanded scope, SP completed the Initial review of tender documents with written comments/modifications for the Bugesera line.
RW 1.3.1 Resource assessment and planning improvement for future generation for REG **Activity Manager:** [redacted] **Counterpart:** REG and MININFRA **Deliverables:** Resource assessment	**Summary of previous support:** EAEP made progress in securing REG approval to update the least-cost power-development plan (LCPDP). CCS conducted a survey for the REG resource study, to determine a baseline for capacity among selected staff from REG and MININFRA. CCS then submitted its Phase 1 report, a summary of each generation resource, including data, studies, and tools reviewed, which is part of the Rwanda Resource Study for Electricity Generation Sources. CCS also led a capacity-building session with members of REG and MININFRA on long-range energy alternatives planning (LEAP) software. **Quarter 1:** CCS continued its weekly capacity-building sessions for REG and MININFRA staff. The Q1 session focused exclusively on calculating energy demand and understanding accurate demand forecasts, both of which would be essential for the CCS Rwanda resource assessment. The assessment and capacity building for REG and MININFRA were intended to lead to improved resource management and strategic planning in Rwanda. **Quarter 2:** CCS conducted a capacity-building session regarding generation and energy supply data, to be incorporated into the LEAP software used in the resource assessment. CCS subsequently submitted to REG and EAEP its Rwanda resource assessment Phase 2 report. The report built on the Phase 1 gap analysis of studies, tools, and data sets for Rwanda generation resources. Additionally, the report included a recommended technical approach for updating the Rwanda energy resource

Work plan reference number, activity description, and minimum output code	Activity status
studies and training reports **MO:** 1.3	assessment for priority resources and technology applications (Phase 3). CCS also conducted weekly capacity-building sessions with selected REG and MININFRA staff. **Quarter 3:** CCS continued its weekly capacity-building sessions for select REG and MININFRA staff, as part of the Rwanda resource assessment. Included in the sessions were webinars focused on LEAP and GIS.
RW 1.4.1 Improve capacity of REG to negotiate, produce, and manage power generation and transmission projects **Activity Manager:** [redacted] **Counterpart:** REG and RURA **Deliverable:** IPP/PPP team strengthening (series of trainings) **MO:** 1.5	**Summary of previous support:** EAEP's evaluation committee and REG's IPP team selected IP3 to implement the PPP team-strengthening capacity-building activity, to take place over 12 months. EAEP worked with the Ethiopian, Kenyan, Rwandan, Somali, Tanzanian, and Ugandan USAID Missions to select participants for the trainings. The PPP team-strengthening virtual trainings were to consist of a series of intermediate- to advanced-level training modules related to PPPs in the energy sector. **Quarter 1:** EAEP launched its regional PPP training in Q1 with participants from the DRC, Djibouti, Ethiopia, Kenya, Rwanda, Somalia, Tanzania, and Uganda. IP3 was contracted to implement the 10-month intensive training program, focused on the financial and legal intricacies of PPPs. The first section covered PPP strategies, methods, and project structuring. The goal of the training was to increase capacity across the region for improved management of PPPs. **Quarter 2:** This activity is now cross-listed with **REG 1.1.1 Support for capacity development of PPPs.** **Quarter 3:** See RW 1.1.
RW 1.5.1 Improvements to RURA's energy and enforcement capabilities **Activity Manager:** [redacted]	**Summary of previous support:** After a competitive procurement process, EAEP and RURA selected MAI to conduct the tariff methodology, cost-of-service study, and capacity-building activity. The EAEP-supported study and capacity building will help Rwanda move toward cost-reflective tariffs. With new generation coming online, tariffs must be sufficient to cover IPP payments and utility overhead costs, while also considering affordability and realistic demand figures. In Q4 FY 2020, MAI, EUCL, and RURA met to address critical issues related to tariff methodology. **Quarter 1:** EAEP's energy specialist met with MAI, RURA, REG, and MININFRA. Participants discussed MAI's recently submitted updated draft tariff methodology, so as to answer any outstanding questions before MAI finalized the report. MAI proceeded with its updated tariff methodology and cost-of-service study for RURA. The EAEP-supported study, with a

Work plan reference number, activity description, and minimum output code	Activity status
Counterpart: RURA **Deliverables:** Tariff methodology and cost-of-service study, capacity-building reports **MO:** 1.6, 3.5	capacity-building element, was designed to help Rwanda move toward cost-reflective tariffs and to increase RURA's capacity to conduct frequent tariff reviews and revisions in-house. **Quarter 2:** MAI met with RURA and EUCL to discuss MAI's submission of its draft cost-of-service study. EUCL planned to share with MAI updated cost information to include in the report. Tariff revisions were to include subsidy adjustments, which would be critical given the impact of COVID-19 on the Rwandan economy. **Quarter 3:** MAI was still awaiting an updated business plan from EUCL to finalize the cost-of-service study; RURA was following up with EUCL to obtain the information. The week-long, in-person capacity-building session scheduled for the week of June 28 was canceled due to an increase in COVID-19 cases (the GOR restricted in-person meetings in Kigali from July 1 forward). The training will be rescheduled to either in person, when the situation improves, or a virtual format.

COUNTRY PROGRESS: SOMALIA AND SOMALILAND

Somalia Activity Highlights Q3 FY 2021

- EAEP supported the placement of 6 female interns at 2 energy companies in Somalia
- 7 participants from National Energy Corporation of Somalia (NECSOM), Puntland MEMWR, and Waamo Energy Service Company (WESCO) completed the EAEP supported Project-Finance Training with Vance Center

In Q3, EAEP continued its intensive work in Somalia and Somaliland. The Objective 1 team held a three-day, in-person stakeholder-engagement forum in Garowe, attended by five ESPs from south-central Somalia and local government officials in Garowe. The primary objective of the forum was to understand more comprehensively the key issues regarding generation and distribution in the power sector, to ensure that EAEP's support aligns with the key issues and program targets. Challenges identified include a lack of generation-development planning, limited capacity for distribution operations and maintenance, and a lack of proper regulatory frameworks. During this forum, EAEP held a meeting with the Puntland Ministry of Energy, Minerals, and Water Resources (MEMWR) and Puntland Electricity Development Agency (PEDA); MEMWR requested support for drafting an energy bill for the Somalian energy sector, and separately, several Somalian ESPs expressed interest in interconnecting their distribution networks.

EAEP team visiting NECSOM power plant for diagnostics. Photo credit: EAEP

The Objective 3 team engaged in seven days of diagnostic analysis with NECSOM, an ESP based in Garowe, reviewing documentation, interviewing key department heads and employees, visiting sites, observing field operations, and analyzing data. Based on the diagnostic assessment, EAEP anticipates working directly with NECSOM by designing loss-reduction activities, drafting SOPs and regulations, and training employees in the implementation phase. Meanwhile, the Objective 4 team assessed Somalia's readiness for cross-border trade, reviewing existing interconnection documentation and holding several meetings with local and regional interconnection entities. Finally, at the beginning of June, EAEP facilitated a Somalia Donor Coordination meeting, at which the World Bank made a presentation on its proposed Somali Electricity Sector Recovery Project (SESRP), a five-year, multiphase project with a total budget of [redacted].

OBJECTIVES 1–4 PROGRESS ON WORK PLAN ACTIVITIES: SOMALIA

Work plan reference number, activity description, and minimum output code	Activity status
SM 1.1.1 Advancing power-generation projects **Activity Manager:** [redacted] **Counterparts:** ESPs **Deliverables:** Progress updates, PATT and QTAT updates **MO:** 1.1	**Summary of previous support:** Somalia activities kicked off in Q2 with the hire of the EAEP Somalia/Somaliland energy advisor. **Quarter 2:** EAEP's utility advisor kicked off engagements with ESPs and government agencies in Puntland State of Somalia. The advisor planned to identify electricity service providers in Grauwe interested in advisory services from EAEP on generation projects as well as capacity building. EAEP considered logistical arrangements for conducting the training. Additionally, EAEP held a meeting with NECSOM, Grauwe's largest electricity service provider. In 2019, NECSOM successfully developed and commissioned a 3 MW solar and wind hybrid system. NECSOM was planning to expand its hybrid system by an additional 2 MW. NECSOM requested EAEP's advisory support on engineering, procurement, and construction (EPC) in expanding the project. EAEP also met with Rhodes Global, a US-based company interested in investing in the Somalia energy sector. The meeting focused on investor expectations, information that could unlock private-sector investment in the Somalia energy sector, and potential Power Africa support. This meeting was a follow-up to a previous engagement with other development partners and Power Africa in December 2020, during the Federal Government of Somalia briefing on the "Invest in Somalia Energy" platform. Rhodes Global was undertaking a feasibility study to develop 200 MW of power generation in Somaliland with a local partner/utility company. The company requested EAEP's help with an initial checklist for its feasibility study. EAEP's utility advisor for Somalia was slated to travel to Hargeisa later in March to meet with Rhodes's local representative for further discussions. Although the Rhodes Global project was the early stages, it was expected to target a significant need in Somalia, where power supplies are constrained and extremely expensive. Power Africa support for Rhodes Global or similar projects could help increase the power supply and significantly reduce the cost of power in Somalia. EAEP also attended a meeting for Somalia donor coordination, where various thematic presentations were made. The meeting aimed at reducing overlap, creating alignment, encouraging collaboration, and realizing the efficiency and effectiveness of various donor activities. The United Kingdom's (UK's) Foreign, Commonwealth & Development Office (FCDO, formerly DFID [2]) presented lessons from Energy Security and Resource Efficiency in Somaliland

[2] For more about FCDO, see USAID's "Power Africa Development Partners" web page, https://www.usaid.gov/powerafrica/developmentpartners.

Work plan reference number, activity description, and minimum output code	Activity status
	(ESRES). Launched in 2015, ESRES developed nine hybrid mini-grids for ESPs in Somaliland and supported the Ministry of Energy and Minerals (MoEM) to build a policy and regulatory framework for the sector. FCDO indicated ESRES's main achievements as providing access to electricity to 83,710 customers and reducing diesel consumption by 3.4 million liters per year, by generating and deploying renewable energy. Through ESRES, FCDO had learned that more investment in renewable energy generation in Somaliland would not necessarily reduce electricity tariffs, because generation costs were not the only factor leading to high prices; aggregated distribution losses were also responsible. The cost of connection in Somaliland was as high as [redacted], a significant constraint to on-grid electrification. This cost was so high because customers had to buy their meters, which accounted for more than 50% of the connection cost. These lessons learned will inform EAEP's performance-improvement activities targeting Somali ESPs, to enhance their technical and operational efficiency. **Quarter 3:** Building on the Q2 stakeholder mobilization, EAEP held a three-day, in-person Stakeholder-Engagement Forum in Garowe, Somalia, June 13–15. Five ESPs from south-central Somalia and local government officials in Garowe attended. The primary objective of the forum was to understand better the key issues around generation and distribution in the power sector, so as to ensure that EAEP's support would align with key issues and program targets. Additionally, the forum was an opportunity for EAEP's regional subject-matter experts to interact directly with Somali stakeholders and to visit power facilities. They identified sector priorities and familiarized themselves with Somali's privately owned and operated energy systems so that they would be better able to support EAEP's local energy specialist in designing and implementing support activities. As part of this assessment, EAEP conducted a baseline survey on generation, distribution, capacity development, and legislation to accurately capture the overall current status of the sector. Results of the survey will be concluded and analyzed in July. Among the challenges identified included the lack of generation-development planning, limited capacity on distribution operations and maintenance, and the lack of a proper regulatory framework in the sector. As next steps, EAEP began designing support activities to tackle the generation planning, technical capacity development, and legislation issues. Some of these support activities—particularly the technical capacity development—are expected to be implemented in the third and fourth quarters of 2021, but the planning of other activities will start in 2021 while implementation is extended to 2022. In the meantime, EAEP is planning to hold similar stakeholder-engagement forum in Somaliland later in FY 2021 to identify key issues and sector priorities.

Work plan reference number, activity description, and minimum output code	Activity status
	As part of promoting private sector investment in Somalia's energy sector, EAEP engaged several international investors. Among those investors were Rhodes Global, Gigawatt Global, and Mitsubishi. Gigawatt Global and Mitsubishi are Power Africa partners and Rhodes Global is a US-based company that focuses on investments in agriculture, livestock, and energy in emerging markets. The Mitsubishi engagement started mid-May and reached a high level by the end of the quarter, but Rhodes Global and Gigawatt Global remained in the initial discussion phase with local partners. Rhodes Global aims to develop up to 200 MW in Somaliland; Gigawatt Global wants to develop an aggregate of 20 MW in Somaliland and Somalia with local ESPs in Mogadishu and Burao. Because Gigawatt Global's project size is relatively small and is within the current Somalia generation project sizes, the discussions progressed faster, and Gigawatt Global was able to sign an MOU with its local partner in Mogadishu. In addition to facilitating meetings and fast-tracking progress between these international investors and local partners, the EAEP regional team and local energy specialist will prepare an initial checklist for a prefeasibility study when the parties make their MOUs and project scopes available to EAEP.
SM 1.1.2 Support for capacity development of PPPs **Activity Managers:** [redacted] **Counterparts:** IPPs **Deliverables:** Training reports **MO:** 1.4	**Cross-listed with REG 1.1.1 Support for capacity development of PPPs** **Quarter 3:** In April and June, six stakeholders from the Somalia energy sector completed trainings on various subjects together with their counterparts from other East African countries. The trainings were delivered by the Vance Center. Covered topics included PPP project structuring and implementation, renewable energy projects under the IPP model, and energy sector agreements. The participants were policymakers and managers from ESPs. EAEP recognized that the absence of proper regulations and lack of technical capacity were preventing private investment and hindering sector development. As a result, decision makers were invited to these trainings from both private and public entities so that they could grasp the skills to form PPPs and unlock private investment in the energy sector.

Work plan reference number, activity description, and minimum output code	Activity status
NEW: Puntland State PPP support **Activity Managers:** [redacted] **Counterparts:** ESPs **Deliverables:** Training reports **MO:** 1.4	**New addition** **Quarter 3:** During the Stakeholder Assessment Forum in June, EAEP met with Puntland MEMWR and PEDA. Puntland is a Federal Member State of Somalia. MEMWR and PEDA presented their vision to turn Ente Nazionale Energia Electrica (ENEE), an ESP based in Bossaso, into a PPP. MEMWR and PEDA requested support on the structuring and implementation of PPPs. Although some MEMWR and PEDA staff had attended EAEP's PPP training delivered by the Vance Center, the training did not cover Somalia's specific context. EAEP is considering providing in-house workshops on PPP to MEMWR and PEDA. Some Somali counterparts who attended EAEP's regional PPP capacity development could work with EAEP's advisors to design PPP training tools to incorporate more local context.
NEW: Legislation Support for Puntland State **Activity Managers:** [redacted] **Counterpart:** MEMWR **Deliverables:** Draft energy regulatory bill **MO:** 1.4	**New addition** **Quarter 3:** Puntland's MEMWR requested support to draft an energy regulatory bill. The absence of a proper regulatory framework was a major challenge also identified during EAEP's stakeholder-engagement forum in June. EAEP is considering working with local and international regulatory and legal experts to draft an energy bill for Puntland State. However, EAEP aims to first clarify how Puntland's energy bill would align with the federal government's regulations, and whether there would be any political repercussions. Somalia has a federal parliamentary system of government with six Federal Member States—as noted above, Puntland is one of them. However, Puntland State is unique because it was formed in 1998 before the federal system was established in Somalia in 2012. Therefore, it has a high level of sovereignty and runs its internal affairs autonomously. EAEP began working with MEMWR, USAID/Somalia, and the federal government's Ministry of Energy to determine the appropriateness of Puntland's energy bill within the federal system.
NEW: Standardized technical	**New addition** **Quarter 3:** Several ESPs expressed an interest in interconnections with their distribution networks. However, ESPs do not have standardized national planning or operations codes, both of which are important for ESP

Work plan reference number, activity description, and minimum output code	Activity status
distribution grid code **Activity Manager:** [redacted] **Counterparts:** ESPs **Deliverables:** Stakeholder consultation readouts, potential grid code **MO:** 1.3	interconnections and cross-border power trade. ESPs' distribution systems must have acceptable grid code standards to make seamless interconnections with neighboring countries and the EAPP. This area may overlap with the World Bank's upcoming SESRP. Thus, EAEP began considering working with the World Bank and a local ESP on a pilot basis to develop operations and planning codes that could easily be adopted at a national level.
SM 2.1.1 Support for private distribution companies **Activity Managers:** [redacted] **Counterparts:** Private distribution companies **Deliverables:** Diagnostic reports	**Summary of previous support:** Somalia activities kicked off in Q2 FY 2021 with the hire of the EAEP Somalia/Somaliland energy advisor. **Quarter 2:** EAEP and USAID/Somalia representatives attended a meeting at which WESCO presented a concept note for a hydroelectric power project. WESCO aims to develop the project along the Jubba River, which runs 25 km to the north of Kismayo. The purpose of WESCO's presentation was to seek grant funding from USAID and Power Africa, to finance a preliminary project study. EAEP also continued its engagement with ESPs in Somalia. SomPower and NECSOM, the two ESPs based in Hargeisa and Garowe, respectively, signed nondisclosure agreements with EAEP and proceeded to complete EAEP data-request forms (WESCO had already completed this form). EAEP began reviewing whether sufficient data existed for a WESCO diagnostic assessment, to identify gaps in the company's management and operations as well as to recommend possible remedial actions. **Quarter 3:** In Q2, EAEP engaged five ESPs and shared diagnostic assessment data-request forms. The purpose was to learn more about technical and operational gaps that could inform new ESP performance enhancement tools to strength the capacity and operations of ESPs. However, because the data shared were not sufficient for in-depth

Work plan reference number, activity description, and minimum output code	Activity status
and transformation plans **MO:** 3.1	scrutiny, the EAEP Objective 3 Lead and EAEP local energy specialist undertook seven days of diagnostic analysis (June 16–22) with NECSOM, the ESP based in Garowe. They reviewed documentation, interviewed key department heads and employees, visited sites, observed field operations, reviewed data for analysis, etc. The EAEP team met with the Chief Technical Officer as well as the HR, IT, Finance, Customer Service, Billing, and Meter-Reading departments. The team also conducted site visits and observed meter-reading activity. The analyses remained under way at the end of the quarter, and detailed findings and recommendations will be provided later along with a diagnostic report. Some general observations were feasible, however. For example, NECSOM did not have a proper reporting system in place. Similarly, internal controls were not functioning, and performance management was not being practiced. Moreover, meters were found inside customer premises, which causes bill collection delays and power theft. Based on the final findings of the diagnostic assessment, EAEP anticipates working directly with NECSOM to design loss-reduction activities, draft SOPs, draft regulations, and train employees in the implementation phase. Given Somalia's security challenges, these activities most likely will be delivered through a combination of in-person activities from EAEP's local energy specialist and virtual sessions from the EAEP regional Objective 3 team.
SM 3 Somalia road map for cross-border trade **Activity Managers:** [redacted] **Counterparts:** MOE, private-sector utilities **Deliverables:**	**Cross-listed with REG 2.1.3**

Work plan reference number, activity description, and minimum output code	Activity status
Progress report and road map **MO:** 4.2	
SM 4 PACO – Somalia development partner coordination **Activity Manager:** [redacted] **Deliverables:** Progress updates	**Summary of previous support:** EAEP engaged in secretariat function for Somalia development partner working group. **Quarter 2:** EAEP attended a meeting for Somalia donor coordination, at which various thematic presentations were made. The meeting aimed at reducing overlap, creating alignment, encouraging collaboration, and realizing the efficiency and effectiveness of various donor activities. FCDO presented lessons from ESRES. Launched in 2015, ESRES developed nine hybrid mini-grids for ESPs in Somaliland and supported the MoEM to build a policy and regulatory framework for the sector. FCDO indicated ESRES's main achievements as providing access to electricity to 83,710 customers and reducing diesel consumption by 3.4 million liters per year, by generating and deploying renewable energy. Through ESRES, FCDO learned that more investment in renewable energy generation in Somaliland would not necessarily reduce electricity tariffs, because generation costs were not the only factor leading to high prices; aggregated distribution losses also were responsible. The cost of connection in Somaliland was as high as [redacted], a significant constraint to on-grid electrification. This cost was so high because customers had to buy their meters, which accounted for more than 50% of the connection cost. These lessons learned were expected to inform EAEP's performance-improvement activities targeting Somali ESPs, to enhance their technical and operational efficiency. **Quarter 3:** On June 3, EAEP facilitated a Somalia donor coordination meeting at which the World Bank made a presentation on its proposed SESRS. It would be a five-year, multiphase project, with a total budget of [redacted]. The project would increase access to affordable and clean electricity by focusing on four main areas: (1) reconstructing sub-transmission and distribution networks in Mogadishu and Hargeisa, (2) hybridizing mini-grids in urban centers, (3) electrifying public institutions through stand-alone solar systems, and (4) developing institutional capacity for energy entities. The project would be implemented through Project Implementing Units embedded in the Ministries of Energy, with oversight from a high-level steering group and energy sector working groups. If the project is approved by the World Bank, EAEP will work through the Project Implementing Units in Hargeisa and Mogadishu

Work plan reference number, activity description, and minimum output code	Activity status
	to ensure alignment between SESRP and EAEP, especially in areas of potential overlap, such as interconnection capacity development, assessments for grid code standardization, and regulatory support. During recent meetings, Somalia development partners brainstormed the possibility of occasionally inviting high-level government officials from various ministries to the coordination meetings. The primary objective would be to help development partners learn firsthand from decision makers about sector priorities and development plans. At the same time, it would also provide a platform for policymakers to affect and inform the design and implementation frameworks of development projects. Additionally, EAEP attended a meeting to transfer the development partners' Chair position from FCDO to the Swedish Embassy in Somalia. Power Africa supports drafting TORs for Chair rotations as well as determining who will take over the Secretariat position after EAEP closes.

COUNTRY PROGRESS: TANZANIA

Tanzania Top Achievements and Results in Q3 FY 2021
• CF negotiations between MOE and Ministry of Finance advanced • Advanced GIS training for ZECO staff concluded • Internal-audit process with ZECO kicked-off

Pending the signing of the CF that will allow EAEP to resume activities on the Tanzanian mainland, the EAEP Objective 1 team will continue to support Tanzania's 350 MW renewable energy project activity and the Kinyerezi I Expansion project (regarding the latter, the High Court delivered a ruling on June 16 in favor of the Public Procurement Appeal Agency order that TANESCO readvertise the tender). There were no other activities on the mainland in Q3.

In Q3, as in the previous quarter, EAEP focused its attention on the island of Zanzibar. Following Q2 training by the Objective 1 team on competitive procurement and battery storage, ZECO requested an in-depth training on the same topics, supplemented by case studies from other countries. Simultaneously, EAEP supported negotiations between NextGen and Zanzibar to develop a 40 MW solar project, with two sites at 20 MW each.

Zanzibar Electricity Corporation employees verify two low-voltage lines connected to a distribution transformer in Makadara. Photo credit: EAEP

The Objective 2 team continued its intensive work in Zanzibar with ZECO, the island's electrical utility. The team provided advanced GIS training to 10 ZECO staff, including engineers, technicians, surveyors, and IT representatives, and performed annual maintenance of the two existing perpetual ArcGIS Desktop licenses at the utility. EAEP also supported ZECO's capacity for procurement, contract management, and project management, training 20 employees via the online Coursera platform on subjects including risk governance and resolution of conflict. The team conducted an electrical network simulation workshop, using DIgSILENT power system software, to equip ZECO staff with skills in advanced modeling and long-term and cost-effective distribution-network planning, so as to accommodate new and existing on-grid customer-based connections. Finally, as of the end of Q3, EAEP began planning support for ZECO on setting tariffs, drafting the TOR for the procurement of a trainer in Q4.

The Objective 3 team was also active in Zanzibar. EAEP began strengthening ZECO's internal-audit process with an initial diagnostic, and subsequently drafted an internal-audit manual, operating procedures, risk-assessment work plan, ICT working process, and reporting templates. The team also began mapping of individual customers and customer alignment, and conducted a skills-assessment exercise with ZECO employees.

OBJECTIVE 1 PROGRESS ON WORK PLAN ACTIVITIES: TANZANIA

Work plan reference number, activity description, and minimum output code	Activity status
TZ 1.1.1 A Transaction advisory support – Mainland **Activity Manager:** [redacted] **Counterparts:** TANESCO, Energy and Water Utilities Regulatory Authority (EWURA), Attorney General's Chambers (AGC), Public Procurement Appeals Authority (PPAA) **Deliverables:** Progress updates **MO:** 1.1	**Summary of previous support:** TANESCO completed its technical review of the bids for solar and wind-generation projects; however, the cost review stalled due to tariff negotiations. Bidders appealed to the PPAA on the technical evaluation results for this procurement. In response, TANESCO suspended the procurement process for wind-generation projects until the matter was resolved. Later, the TANESCO evaluation team concluded its solar project bids and submitted a report to the tender board for review and a way forward, but the bid remained stalled under Procurement Act 2011. EAEP supported General Electric (GE) and TANESCO to coordinate next steps for the Kinyerezi I Expansion. EAEP's Tanzania advisor traveled to Dodoma in June 2020 and confirmed that GE needed to conduct a follow-up meeting with TANESCO related to the Bill of Quantities of equipment to advance the sole-source EPC contract. After a month of negotiations, TANESCO issued a letter to GE suspending the negotiation process. TANESCO stated that it would look for alternatives for the Kinyerezi I Expansion, and then decided to restart the bidding process through open tendering, to invite new bidders. **Quarter 1:** TANESCO forwarded to the MOE a request for "No Objection" to proceed with negotiations with the bid winner for both solar and wind-generation projects. The project bid validities had expired, and TANESCO had yet to respond to bidders' concerns on this issue. EAEP continued closely following developments. TANESCO and CSI Energy Group/Dozan/MTU concluded negotiations and held a clarification meeting for the Kinyerezi I Expansion. The tender cool-off period, established to accommodate any objections from other bidders, expired on November 26. The TANESCO tender board was ready to award the expansion to CSI Joint Venture at the end of FY 2020. GE did not win the second tender. **Quarter 2:** The TANESCO tender board put on hold bids for the Kinyerezi I Expansion tender. This action occurred after one of the bidders filed a case in High Court against TANESCO, the Attorney General, and the PPAA. The PPAA acknowledged a complaint from another bidder and ordered TANESCO to readvertise the tender. On February 22, the High Court agreed to hear the case. which was set to commence imminently. The High Court was to issue its final decision within 42 days of February 22. As noted, EAEP continued tracking the Kinyerezi I Expansion tender, and supported GE, which TANESCO had given another opportunity to participate in the bid. EAEP attended and participated in a roundtable meeting on the CF and EAEP Tanzania energy project document with the Ministry of Energy, TANESCO, AGC, EWURA, the Rural Energy Agency (REA–Tanzania), and Tanzania Petroleum Development Corporation (TPDC). The team also met with the AGC to refine and finalize the SOW for a training on competitive procurements, legal contracts, and project finance.

Work plan reference number, activity description, and minimum output code	Activity status
	The NextGen Solawazi 5 MW solar project forwarded its commercial operation date to between 14 and 21 days from March 3. This was because of the delayed arrival of NextGen's engineer, who will supervise the commissioning process. NextGen, a US company, is developing a 5 MW solar project in Kigoma (isolated grid). **Quarter 3:** EAEP will commence support for the 350 MW renewable energy project activity once a "No Objection" is issued by the MOE to continue negotiations with the bid winners for both solar and wind-generation projects, and once the CF has been signed. EAEP will continue to track the Kinyerezi I Expansion project, given that the High Court delivered its ruling on June 16 in favor of the PPAA order that TANESCO readvertise the tender. The NextGen Solawazi 5 MW solar project in Kigoma (isolated grid) was commissioned on March 6.
TZ 1.1.1 B Accelerate financial close for priority generation projects: Zanzibar solar + battery storage (50 MW) **Activity Manager:** [redacted] **Counterpart:** ZECO **Deliverables:** Progress updates **MO:** 1.1	**Summary of previous support:** At the request of ZECO and the Zanzibar Utilities Regulatory Authority (ZURA), EAEP undertook to provide Zanzibar counterparts with training on competitive procurement, project finance, legal agreements, and battery storage. This training was designed to expand these institutions' understanding and capacity to implement the planned competitive procurement of 50 MW of solar photovoltaics with battery storage. On October 9, 2020, EAEP shared a high-level concept note with USAID/Tanzania on the proposed training. A meeting was scheduled for October 16 with the Tanzania Mission and ZECO to finalize the concept note and approach to the training. **Quarter 1:** EAEP postponed its training on competitive procurement to January 2021, at the request of USAID/Tanzania, after key counterparts reported availability conflicts. EAEP learned that several counterparts had been attending to time-sensitive requests associated with the post-election government transition in the US. **Quarter 2:** EAEP completed a specialized "competitive procurement and battery storage" training for energy entities in Zanzibar. Attendees included 18 participants from Ministry of Energy (Zanzibar), Ministry of Finance and Planning (Zanzibar), ZURA, and ZECO. The training aimed to expand the capacity of Tanzanian energy institutions to engage in competitive and transparent procurement, thus maximizing access to least-cost energy services. Topics included project-finance considerations, sample contracts for renewable energy projects, dispute resolution, and valuing of energy-storage services. EAEP hosted this training as a collaboration with IFC for potential support to solar + battery developments in Zanzibar. EAEP continued to follow up with ZECO on next steps to advance solar development. Simultaneously, NextGen entered negotiations with Zanzibar to develop a 40 MW solar project, with two sites at 20 MW each. **Quarter 3:** After EAEP's Q2 training on competitive procurement and battery storage, participants requested an in-depth training on the same topic, supplemented by case studies from other countries. EAEP received this training request from

Work plan reference number, activity description, and minimum output code	Activity status
	ZECO, with which it was engaging as the quarter ended to finalize the curriculum. Simultaneously, negotiations continued between NextGen and ZECO to develop a 40 MW solar project, with two sites at 20 MW each.
TZ 1.2 Grid-development plan to accelerate transmission projects **Activity Managers:** [redacted] **Counterpart:** TANESCO **Deliverables:** Progress updates and km of national lines **MO:** 1.2, 4.3, 1.3	**Summary of previous support:** In February 2020, EAEP confirmed with TANESCO the priority national projects that needed support, and outlined opportunities (capacity building, studies, etc.) in its work plan update. EAEP undertook to engage TANESCO, given that the work plan was approved as of April 2020, and followed up on priority transmission lines for development. Power System Simulator for Engineering (PSS®E) dongles—two for EAPP staff and three for TANESCO—and licenses were under procurement, and simulation studies were planned to start in January 2021. EAEP developed an SOW for grid-development planning and simulation modeling, with associated capacity building, and anticipated delivering training remotely until normal operations could resume. The program confirmed TANESCO support for the grid-development planning and simulation modeling, with associated capacity building, in June 2020. Procurement of PSS®E licenses for EAEP staff and five accompanying USB dongles was in progress as FY 2020 ended. **Quarter 1:** Procurement of PSS®E licenses and five USB dongles (two for EAEP staff and three for TANESCO) was completed. The simulation studies were planned to start in January 2021. Temporary (online) licenses were made available by Siemens on December 4, 2020, with an expiration date of December 31, 2020. The USB dongles were expected to be delivered to the regional office in Kenya in early January 2021, and from there would be transferred to the Dar es Salaam office. With the CF unsigned, EAEP was not yet able to send the licenses for PSS®E to TANESCO. **Quarter 2:** EAEP continued waiting to start this activity upon the completion of the CF, which was still on hold during Q2. **Quarter 3:** EAEP continued waiting to start this activity upon the completion of the CF, which advanced but was still not signed during Q3.
TZ 1.2.2 Improved planning for natural gas advancement **Activity Manager:** [redacted] **Counterpart:** TPDC	**Summary of previous support:** TPDC shared with EAEP the proposed capacity-building areas for which it required support. TPDC prioritized upstream projects (exploration and development) to increase gas-production capacity and security of supply, and to accommodate upcoming mega-projects that would require large volumes of natural gas as feedstock. The company sought capacity-building support relating to planning for upstream development, in line with cost-optimization techniques and development and management of cross-border petroleum pipelines. EAEP was reviewing the TPDC request as FY 2020 ended. **Quarter 1:** EAEP finalized the SOW documents to support the requested TPDC activities and identified a consultant to support the work, which was planned to commence upon completion and signing of the CF.

Work plan reference number, activity description, and minimum output code	Activity status
Deliverables: Training reports **MO:** 1.3	**Quarter 2:** EAEP continued waiting to start this activity upon the completion and signing of the CF, which was still on hold during Q2. **Quarter 3:** EAEP continued waiting to commence this activity upon signature of the CF.
TZ 1.3.1 Support for AGC's capacity to understand energy projects **Activity Manager:** [redacted] **Counterpart:** AGC **Deliverables:** Training reports **MO:** 1.3	**Quarter 2:** EAEP will start this activity upon the completion and signing of the CF, which was still on hold during Q2. **Quarter 3:** EAEP continued waiting to commence this activity upon signature of the CF.
TZ 1.4.1 Support capacity development for PPPs in Tanzania **Activity Manager:** [redacted] **Counterparts:** TANESCO, AGC, EWURA **Deliverables:** Capacity-building reports	**Cross-listed with REG 1.1.1 Support for capacity development for PPPs** **Quarter 3:** Tanzanian energy sector employees attended the regional PPP training. In Tanzania; this activity contributed to 12 completed training sessions in technical energy fields supported by EAEP. More information can be found under REG 1.1.1.

Work plan reference number, activity description, and minimum output code	Activity status
MO: 1.1, 1.5, 3.6	

OBJECTIVE 2 PROGRESS ON WORK PLAN ACTIVITIES: TANZANIA

Work plan reference number, activity description, and minimum output code	Activity status
TZ 2.1.1 Improved use of geospatial data for analysis and planning **Activity Manager:** [redacted] **Counterparts:** TANESCO, REA–Tanzania, ZECO, Ministry of Water and Energy (Zanzibar), MOE **Deliverables:** Progress updates **MO:** 2.1, 2.2, 2.3	**Summary of previous support:** EAEP met with staff from TANESCO, REA–Tanzania, and the ZECO distribution-system planning department to discuss plans for the program's institutional-strengthening agenda. Attendees discussed the areas to complement existing strategies of reaching connection targets, with capacity building in geospatial technology skills, procurement, and project and contract management. Another training focus was strategies for reducing the cost of connections and time required to connect the grid. **Quarter 1:** EAEP's GIS specialists conducted a two-day GIS training for senior managers from the Ministry of Water and Energy and ZECO in Zanzibar and REA–Tanzania in Morogoro, Tanzania. An international GIS software supplier made a short virtual presentation. The training introduced basic information on managing GIS technology capabilities, for better decision making among senior managers regarding establishing a comprehensive national GIS database for electrification planning. **Quarter 2:** EAEP agreed to provide advanced GIS training to 10 staff from ZECO, including engineers, technicians, surveyors, and IT representatives. EAEP will be supported by training provider Esri Eastern Africa. Esri conducted a rapid GIS training needs assessment of ZECO before the advanced GIS training, enrolling 10 advanced GIS training participants to take the online GIS foundation course prior to the advanced course. The advanced GIS training will teach ZECO staff in detail about the design, deployment, and operation of GIS systems. EAEP will start GIS activities with TANESCO and REA–Tanzania upon the completion and signing of the CF, which was still on hold during Q2. **Quarter 3:** EAEP provided advanced GIS training to 10 staff from ZECO, including engineers, technicians, surveyors, and IT representatives. EAEP subcontractor Esri Eastern Africa submitted the final advanced GIS training report, training performance-evaluation report, and GIS policy recommendations and road map for ZECO. Esri also provided evaluation licenses to trainees, to be used during the two-month-long site implementation support to ZECO in Q4. Finally, EAEP performed annual maintenance of the two existing perpetual ArcGIS Desktop licenses at ZECO.
TZ 2.1.2 Support for greater capacity in procurement and contract management	**Summary of previous support:** Activities commenced in FY 2021. **Quarter 1:** EAEP concluded a five-day training in procurement and contract administration for ZECO. ZECO expressed interest in expanding the training to include procurement governance structures, such as a tender board. Additionally, the utility suggested incorporating PPP subject areas, such as negotiation skills, into the training. This exercise was intended to reduce procurement and contract-management skills gaps at ZECO. It also would enable ZECO to control the quality and efficiency of ongoing distribution-network and customer-connection projects, thus helping the utility meet its annual

Work plan reference number, activity description, and minimum output code	Activity status
and project management **Activity Manager:** [redacted] **Counterparts:** TANESCO, REA–Tanzania, ZECO **Deliverables:** Proposed processes for procurement and contracts, capacity-building reports **MO:** 2.1., 2.2., 2.3	connection targets. EAEP expected to start similar activities with TANESCO and REA–Tanzania upon the completion of the CF, which was still on hold during Q1. **Quarter 2:** EAEP enrolled 20 ZECO staff to undertake an online project management course through the Coursera online platform. The training is critical for field project engineers and technicians to be able to install medium- and low-voltage distribution lines and to manage ongoing customer-connections projects. The training will end in September 2021. EAEP planned to start similar activities with TANESCO and REA–Tanzania upon the completion and signing of the CF, which remained on hold during Q2. **Quarter 3:** Of the 20 enrolled trainees who took the online project management course through the Coursera platform, 6 trainees completed a total of 21 courses in subjects including Major Engineering Project Performance, Negotiation Skills: Negotiate and Resolve Conflict, Storytelling and Influencing: Communicate with Impact, Risk Governance: Engage the Board, Financing and Initiating Major Engineering Projects, and Major Engineering Projects: Governance, Risk and Scope.
TZ 2.2.1 Data collection to support strategies for reducing time and cost of connections **Activity Manager:** [redacted] **Counterpart:** ZECO, TANESCO **Deliverables:** Time and cost of new connections study + recommendations, training reports	**Summary of previous support:** Activities commenced in FY 2021. **Quarter 1:** EAEP continued planning for a cost and time baseline for Tanzania and Zanzibar. TANESCO would give EAEP data sets for five regions in the Dar es Salaam and Coast zones for use in working out a baseline. The baselines were to help EAEP measure the impact of its support to the utilities and, for TANESCO and ZECO, the baselines would produce details on the utilities' actual time and cost for new connections. **Quarter 2:** EAEP planned to support ZECO with training on DIgSILENT software for distribution planning. EAEP explained the compatibility of DIgSILENT software with other software used across the utility, to reassure ZECO on that point. The workshop would train ZECO's engineers in how to do load-flow studies using power system software, for optimizing both the planning for distribution and reticulation networking and the time and costs of connections. EAEP prepared a TOR for procuring the DIgSILENT software and two desktop computers for Pemba and Unguja. ZECO reviewed—with no comment—the proposed TOR. USAID/Tanzania approved procurement of the software and the two computers. EAEP released an RFP for procuring two DIgSILENT perpetual licenses and five lease licenses for training purposes. EAEP planned to start similar activities with TANESCO upon the completion and signing of the CF, which remained on hold during Q2.

Work plan reference number, activity description, and minimum output code	Activity status
MO: 2.1, 2.2., 2.3	**Quarter 3:** EAEP conducted an electrical network simulation workshop using DIgSILENT power system software, with 13 participants: 10 from ZECO, two from TANESCO, and one from the Ministry of Energy in Zanzibar. The training equipped participants with skills in advanced modeling and long-term and cost-effective distribution-network planning, so as to accommodate new and existing on-grid customer-based connections. For training purposes, EAEP provided three-month leases for seven DIgSILENT licenses and two desktop computers. EAEP will support trainees by conducting follow-up sessions after one and three months.
TZ 2.2.2 ZECO connections strategy for digital customer registration **Activity Manager:** [redacted] **Counterpart:** ZECO **Deliverables:** Capacity-building reports **MO:** 2.1, 2.2., 2.3	**Summary of previous support:** Activities with ZECO started in Q1 and Q2. **Quarter 1:** EAEP planned to support ZECO by offering a training on tariff setting. The training would enable ZECO's staff to determine a tariff methodology, prepare a tariff model, and analyze model results. The skills gained would facilitate frequent tariff reviews for a tariff that covers the full costs of ZECO's operations. The internal SOW was under development as the quarter ended. **Quarter 2:** EAEP anticipated supporting ZECO in modernizing its network by expanding the use of digital technology. This quarter, EAEP began organizing a workshop on how to design and conduct a pilot project on customer digitization processes. An internal SOW for designing a customer digitization process was being drafted as the quarter ended. The Objective 3 lead prepared a report on the prepayment vending systems used in ZECO, and the Objective 2 team began plotting how to design the digitization process based on the reported systems available in ZECO. **Quarter 3:** EAEP planned to support ZECO with training on setting tariffs. The training will be offered by an accredited trainer; EAEP drafted the TOR for procuring the trainer.

OBJECTIVE 3 PROGRESS ON WORK PLAN ACTIVITIES: TANZANIA

Work plan reference number and activity description	Activity status
TZ 3.1 On-the-ground utility-turnaround support for TANESCO **Activity Manager:** [redacted] **Counterpart:** TANESCO **Deliverable:** Diagnostic report, once approved by TANESCO **MO:** 3.1, 3.3	**Summary of previous support:** In December 2019, EAEP interviewed 33 employees from multiple TANESCO departments and conducted site visits and inspections. The team spent significant time on substations, primary and secondary lines, customer-connection points, warehouses, meter labs, commercial operations and revenue protection for LPUs, GIS, automatic meter-reading applications, billing databases for prepaid and postpaid customers, and other documents and reports. EAEP shared the diagnostic results with TANESCO in June 2020. The Objective 3 team arrived in Dar es Salaam in September and presented to regional TANESCO employees its findings and observations for validation. This activity started in Q4 FY 2020 with the planned embedding of staff in TANESCO's Dar es Salaam region. EAEP prepared a presentation for the TANESCO manager, and the Objective 3 team started planning its relocation to Tanzania. At the end of FY 2020, the Objective 3 lead and the utility-turnaround advisor who had conducted the diagnostic assessment went to Tanzania to brief TANESCO and the managing director on the planned work and secure buy-in. The Objective 3 lead also began planning relocation to Tanzania to oversee this workstream launch. **Quarter 1:** TANESCO management validated EAEP's findings and approved the transformation-support approach. EAEP identified advisors to be embedded in TANESCO for hands-on support. The EAEP Objective 3 team lead planned to relocate Tanzania for smooth startup activities with TANESCO. EAEP continued awaiting the signing of the CF to start operations. **Quarter 2:** This activity remained on hold due to the delays in completing and signing the CF. **Quarter 3:** This activity remained on hold due to the delays in completing and signing the CF.
TZ 3.2 On-the-ground utility-turnaround support for ZECO **Activity Manager:** [redacted] **Counterpart:** ZECO **Deliverables:** Progress updates	**Summary of previous support:** Activities with ZECO started in Q1 and Q2. **Quarter 1:** EAEP began discussions with ZECO on utility-turnaround support, given delays on mainland activities. **Quarter 2:** EAEP continued planning its support for ZECO's operations assessment. EAEP met with ZECO's general manager to agree on the implementation road map. Additionally, the utility-turnaround team continued supporting ZECO's internal-audit department in drafting an internal-audit manual, including SOPs and support for IT annual planning, considering that the unit was only recently established and will need support in its risk-assessment methodology. EAEP conducted a joint field visit with ZECO's internal-audit team to check customer-metering points and to review the process. These activities were expected to lead to strengthened internal audits for ZECO, ultimately reducing losses and improving operational efficiency.

Work plan reference number and activity description	Activity status
	Quarter 3: EAEP began strengthening ZECO's internal-audit process with an initial diagnostic, and drafted an internal-audit manual, operating procedures, risk-assessment work plan, ICT working process, and reporting templates. The team also began mapping of individual customers and customer alignment, in three phases: • Phase 1: Identify the main problems and design a plan and SOPs for ZECO management • Phase 2: Assign responsibility to implement the process to 10 local employees • Phase 3: Map 20 distribution transforms on the UTM Geo Map platform Finally, EAEP conducted a skills-assessment exercise with ZECO employees.

COUNTRY PROGRESS: UGANDA

Uganda Top Achievements and Results in Q3 FY 2021

- Launched support to Kilembe Investments Ltd. (KIL) on productive use of energy, to connect more commercial and industrial customers in Western Uganda
- Completed KRECS diagnostic for loss reduction and support for increasing revenue
- Commenced GIS support for REA–Uganda to support ECP rollout

EAEP finalized the procurement process for a subcontractor to support ERA in completing a benchmarking study and developing a cost-benchmarking tool. A kickoff meeting with ERA, USAID Uganda, EAEP, and MAI was held on June 29, and this activity is expected to be completed in nine months. Also under Objective 1, after the Uganda Cabinet's decision to rationalize different agencies and ministries in the government, USAID/Uganda asked EAEP to develop a High-Level Response Strategies Matrix that would aid the government and the committee charged with the rebundling process to anticipate possible issues, risks, and shortfalls, and effectively mitigate them. EAEP, working with USAID/Uganda and other donors, developed the TOR for the activity and received approval from the Uganda World Bank representative to the energy working group. EAEP will deliver the matrix and activity report in Q4.

EAEP team inspecting the Mbarara sub-station under Shango-Mbarara interconnection commissioning activity. Photo credit EAEP

Under Objective 2, EAEP supported REA–Uganda in preparing a draft prefeasibility report for the proposed Electricity Access Scale-Up Project (EASP), which is expected to fund up to one million new electricity connections within five years. The Objective 2 team also began planning GIS assistance to the utility; supported REA–Uganda in coordinating the review and testing of connection materials to be used in an electrification project in southwestern Uganda; and helped develop a strategy to guide all marketing and promotional activity for the ECP. Finally, EAEP finalized the procurement process for a consultant to provide PUE support to Kilembe Investments Limited. KIL has over 18,000 connections, of which 99% are domestic consumers; only 0.7% of connections are commercial, and only 0.3% are industrial.

The Objective 3 team also commenced activities in Uganda in this quarter. In Q2, the EAEP utility-turnaround team had traveled to Uganda to assess KRECS, an energy cooperative responsible for power-service distribution in 13 districts of Uganda in the Central Service Territory. The team conducted field visits and collected data for the initial diagnostic assessment of KRECS operations. In Q3, the Objective 3 team developed a diagnostic report for KRECS and presented the findings and proposed approach to KRECS management, focusing on energy accounting, segregation of technical and nontechnical losses, network indexing and customer mapping, document review and amendment, revenue protection, and capacity building.

OBJECTIVES 1–4 PROGRESS ON WORK PLAN ACTIVITIES: UGANDA

Work plan reference number, activity description, and minimum output code	Activity status
UG 1.1.1 Support for integrated resource plan **Activity Manager:** [redacted] **Counterpart:** MOE **Deliverables:** Progress reports **MO:** 1.4	**Summary of previous support:** Not applicable (N/A). **Quarter 1:** This activity remained on hold under the bridging work plan. **Quarter 2:** This activity did not start in Q2; it was expected to commence in Q3 FY 2021. **Quarter 3:** This activity remained on hold due to the sector-rationalization process that kicked off in May 2021.
UG 1.2.1 Support for capacity development for PPPs **Activity Manager:** [redacted] **Counterparts:** Ugandan Energy Generation Company Ltd. (UEGCL), ERA **Deliverables:** Training reports **MO:** 1.5	**Cross-listed with REG 1.1.1 Support for capacity development for PPPs** **Quarter 3:** Ugandan energy sector employees attended the regional PPP training. In Uganda, this activity contributed to 18 completed training sessions in technical energy fields supported by EAEP. More information can be found under REG 1.1.1.

Work plan reference number, activity description, and minimum output code	Activity status
UG 1.2.2 Regulatory benchmarking study **Activity Manager:** [redacted] **Counterparts:** ERA, UETCL, Ugandan Energy Generation Company Ltd. (UEDCL) **Deliverables:** Progress reports **MO:** 1.5, 1.6, 4.7	**Summary of previous support:** N/A **Quarter 1:** EAEP confirmed the TOR with ERA and moved toward the procurement phase. EAEP anticipated awarding the consultancy in Q2. **Quarter 2:** EAEP's senior technical advisor submitted to ERA the evaluation proposals for a standard cost-benchmark study for transmission and distribution grids. Establishing the cost benchmark would enable ERA to constitute a cost-reflective tariff and develop a live tool for costing transmission and distribution projects. The selected bidder would be expected to prepare a presentation for ERA before finalization of the subcontract. **Quarter 3:** EAEP finalized the procurement process for a subcontractor to support ERA in completing a benchmarking study and developing a cost-benchmarking tool. A contract was signed between RTI International and MAI (the winning bidder) in June 2021. On June 29, a kickoff meeting was held with ERA, USAID Uganda, EAEP, and MAI. This activity is expected to be completed in nine months.

Work plan reference number, activity description, and minimum output code	Activity status
NEW: High-Level Response Strategies Matrix **Activity Manager:** [redacted] **Counterparts:** Ministry of Energy and Mineral Development, Other donor partners **Deliverables:** Report, matrix **MO:** 1.5, 1.6	**New Activity** **Quarter 3:** After the Uganda Cabinet's decision to rationalize different agencies and ministries in the government, which calls for the rebundling of the energy sector in Uganda, USAID/Uganda asked EAEP to develop a High-Level Response Strategies Matrix that would aid the government and the committee charged with the rebundling process to anticipate possible issues, risks, and shortfalls and effectively mitigate them. EAEP, working with USAID/Uganda and other donors, developed the TOR for the activity and received approval from the Uganda World Bank representative to the energy working group. EAEP will deliver the matrix and activity report in Q4.
NEW: Umeme Ltd. Community Engagement Support **Activity Manager:** [redacted] **Counterpart:** Umeme Ltd. **Deliverables:** To be determined **MO:** 1.7	**New Activity** **Quarter 3:** EAEP communicated with Umeme Ltd. regarding potential project support related to community engagement improvements. This was an area highlighted by Umeme Ltd. for support, and EAEP's community engagement advisor presented options in Q3 and proposed recommended activities. EAEP prepared an SOW for Umeme Ltd., which was reviewing the document as the quarter ended.

Work plan reference number, activity description, and minimum output code	Activity status
UG 2.1.2 REA–Uganda rural electrification strategy **Activity Manager:** [redacted] **Counterpart:** REA–Uganda **Deliverables:** Progress reports **MO:** 2.1, 2.3	**Summary of previous support:** N/A. **Quarter 1:** This activity was on hold under the bridging work plan. **Quarter 2:** This activity did not start in Q2; it was expected to commence in Q3 FY 2021. **Quarter 3:** REA–Uganda needs an updated Rural Electrification Strategy and Plan (RESP) to cover the timeline 2022–2025, due to the Government of Uganda by December 2021. In order to deliver the updated RESP III, REA–Uganda requires a consultancy to review the performance of RESP II, integrate learnings from this performance review into a new RESP III, and align the RESP III with the Third National Development Plan (NDP III) (2020/21 – 2024/2025) goals and recommended structure. REA–Uganda requested EAEP's support for procuring a consultant to perform these tasks, and shared a draft TOR. On June 17, EAEP met with REA–Uganda to consolidate planning for the support of REA–Uganda's expectations and timelines. The senior transmission and distribution advisor for Uganda prepared an activity-approval form, which was approved by EAEP management. However, the USAID/Uganda Power Africa lead asked that EAEP hold off on this activity until REA–Uganda and the Ministry of Energy and Mineral Development can confirm who the point of contact will be and who will be the responsible body for the RESP III.
UG 2.1.2 A Advising of REA–Uganda on-grid connections Connections database support to REA–Uganda **Activity Manager:** [redacted] **Counterparts:** REA–Uganda, Umeme Ltd., UEDCL	**Summary of previous support:** N/A. **Quarter 1:** EAEP's database-management specialist cleaned and uploaded data for 1,182 new connections in September 2020 to the ECP database. In addition, EAEP prepared and validated ready-board connections from Umeme Ltd. (14,971) and UEDCL (1,773). EAEP also prepared a data-extraction request for connections made under the ECP between November 2018 and June 2020, for the REA–Uganda internal-audit department. EAEP prepared a technical-justification report for REA–Uganda to proceed with the procurement of a firm to carry out a connections data cleaning activity. This activity was expected to fill geolocation gaps for over 1.6 million connections data records submitted by service providers (electricity utilities). EAEP's database-management specialist submitted to REA–Uganda a data-extraction report for CP connections made from November 2018 to October 2020. REA–Uganda planned to use this information in reviewing the Karamoja integrated development plan, strategy, and framework for addressing development gaps in the Karamoja subregion of northeastern Uganda. One of the stated objectives of the Karamoja integrated development plan was to increase access to clean energy. EAEP's database-management specialist conducted a desktop geospatial data validation of over 100,000 connections submitted by Umeme Ltd.. The exercise aimed to ascertain whether all the connections submitted by the utility companies fulfilled the

Work plan reference number, activity description, and minimum output code	Activity status
Deliverables: Progress reports **MO:** 2.1, 2.3	minimum spatial data-quality requirements under the ECP. The resulting report supported the implementation efforts under the ECP to accurately capture connections data for reliable reporting and planning. EAEP's database-management specialist completed training in management and administration of the Electronic Database and Information Management System (EDIMS) under the Clean Development Mechanism project, coordinated by REA–Uganda's connections department. EDIMS is a GIS web-based system, developed under the World Bank Carbon Initiative for Development trust fund, to analyze power consumption and carbon-capture credits for electricity connections attributed to REA–Uganda and the ECP. The specialist began supporting REA–Uganda's connections department in managing and administering the system after the software developer, RMSI, handed it over to REA–Uganda at the end of December 2020. EAEP took part in the evaluation of expressions of interest for an independent verification agent (IVA) consultancy for electricity connections. REA–Uganda was seeking an IVA to verify 62,480 connections. The ECP requires an IVA to carry out desk-based and physical verification of working connections for eligible customers, and proper documentation by service providers. REA–Uganda then makes payments to service providers for verified and cleared connections, which in turn enables providers to procure materials and deliver more electricity connections. **Quarter 2:** EAEP continued planning the special study on the time and cost of new customer connections in Uganda. EAEP's database-management specialist extracted sampling data for connections made from 2016 through March 2021. The objective of the study was to establish baseline values for the time and cost required for new customer connections. EAEP's senior technical advisor submitted to ERA evaluation proposals for a standard cost-benchmark study for transmission and distribution grids. Establishing the cost benchmark would enable ERA to constitute a cost-reflective tariff and develop a live tool for costing transmission and distribution projects. USAID/Uganda, EAEP, and Actis representatives held an introductory call regarding infrastructure funding opportunities and the investment landscape in Uganda for on-grid projects. In particular, USAID/Uganda emphasized oversupply generation challenges in the country, with evacuation relief needed before future IPPs can advance. The Mission's recommendation was to examine projects less than 20 MW, which do not fall under the government's normal IPP approval process and therefore tend to advance faster. **Quarter 3:** EAEP supported REA–Uganda in preparing a draft prefeasibility report for the proposed EASP. The database-management specialist provided data on connections by subcounty, facilitating projection of connections under EASP. EASP is expected to provide funding for up to 1 million new electricity connections within five years.

Work plan reference number, activity description, and minimum output code	Activity status
	The EAEP Uganda team, along with the GIS specialist, initiated a plan to build GIS capacity for utilities in Uganda. The team engaged with utilities to identify skills gaps and also engaged with NRECA Uganda to find out whether it had provided similar support, in order to fine-tune the TOR for the activity and avoid duplication. The proposed activity will target GIS leads at utilities, who will in turn train their field GIS staff. Additional training will be provided to senior managers to ensure high-level buy-in on the use of GIS systems for reporting and planning. EAEP also supported REA–Uganda in addressing data queries identified during the ECP connection data audit, carried out by REA–Uganda's internal-audit team. This exercise ensured that ECP connections data gathered from various utilities complied with management standards and guidelines for connections data, as outlined in the ECP implementation manual. EAEP's database-management specialist continued to enhance the electricity-connection web portal, to incorporate system users' change requests to the portal reports and dashboards. This task is intended to cater to changing user-reporting needs under REA–Uganda's connections department, and also will aid in reporting to government, donors, and other stakeholders.
UG 2.1.2 B Advising of REA–Uganda on-grid connections Technical advisory support to REA–Uganda **Activity Manager:** [redacted] **Counterparts:** REA–Uganda, Umeme Ltd., UEDCL **Deliverables:** Progress reports **MO:** 2.1, 2.3	**Summary of previous support:** N/A **Quarter 1:** EAEP helped REA–Uganda review technical specifications for single-phase, prepaid energy meters for a rural electrification project funded by the Kuwait Fund for Arab Economic Development. REA–Uganda contracted Rocktrust Contractors Uganda Ltd. to extend the power grid to parts of Bushenyi, Kasese, Mitooma, and Rukungiri Districts in southwestern Uganda. EAEP helped REA–Uganda review a sample single-phase meter and its associated documentation. The meter is intended for use under the "Bridging the Demand-Supply Gap Through Accelerated Rural Electrification" program for which a concessional loan was extended to Uganda by the Export-Import Bank of China. This program is expected to provide up to 170,000 households and businesses with free electricity connections, under the ECP. EAEP advised REA–Uganda on upgrading its Standard Transfer Specification software for all meters across the country and adjusting technical specifications for incoming meters. REA–Uganda had received a notification from the Standard Transfer Specification Association to upgrade all prepaid meters in Uganda, as the current edition of the software will become obsolete in 2024. EAEP supported REA–Uganda to prepare specifications for single-phase and three-phase meters to be procured as part of the "Bridging the Demand-Supply Gap Through Accelerated Rural Electrification" program.

Work plan reference number, activity description, and minimum output code	Activity status
	EAEP helped the REA–Uganda connections department carry out online FATs on connection materials to be procured with AfDB funding. EAEP concluded the online FATs, allowing procurement and shipping of the materials and paving the way for REA–Uganda to obtain materials for 87,500 connections that will benefit Ugandan households. The materials, including 12,500 ready boards, were to start arriving in Uganda in February 2021. EAEP supported the onboarding of two utility companies as service providers under the ECP. The two companies, Hydromax Limited and Kisiizi Hospital Power Limited, expressed interest in providing electricity connections in Buseruka (western Uganda) and Kisiizi (southwestern Uganda), where they respectively operate. EAEP reviewed documents presented by the companies and prepared a memorandum and board paper recommending their onboarding. These companies distribute electricity in remote areas that are not covered by other utilities. Their onboarding as service providers under the ECP would contribute to government efforts to increase access to electricity across Uganda. **Quarter 2:** EAEP's communication and knowledge-management specialist participated in a meeting between REA–Uganda's connections department and Umeme Ltd., to discuss the distribution of ready boards. REA–Uganda sought to gain insight into Umeme Ltd.'s previous ready-board distribution experience, including challenges and lessons learned. This consultation will inform future distribution plans and promotional strategies for ready-board projects. REA–Uganda began procuring over 50,000 additional ready boards for distribution to low-income households under the ECP. EAEP planned a GIS training for electricity utilities in Uganda. EAEP's GIS specialist was slated to deliver the training, aimed at building the capacity of various utilities in using GIS technologies to improve the quality of spatial data collection for decision making and project planning. EAEP began preparing a consolidated report on the three-phase meter samples provided for testing by the materials supplier for the 550 subcounties electrification project. The report, which included consolidated comments from Umeme Ltd. and UEDCL, was sent to the supplier for a response. EAEP's senior technical advisor participated in a meeting with REA–Uganda's acting CEO and project team to discuss the project's progress and the last-mile connection component. The project expected to deliver materials for up to 4,254 three-phase connections, and single-phase meter procurement progressed after the materials supplier received REA–Uganda clearance to begin manufacturing for factory acceptance tests and field testing. The Government of Uganda resolved to resume implementation of its ECP, which had been suspended due to funding challenges. The Cabinet agreed to provide free electricity connections under the ECP starting on March 8, after materials for the 87,500 connections were procured under the Uganda Rural Electricity Access Project funded by AfDB. This round of

Work plan reference number, activity description, and minimum output code	Activity status
	connections would be limited to direct-connection customers only—that is, customers that did not require an additional pole to connect to the electrical network. EAEP's senior technical advisor helped the REA–Uganda connections department evaluate financial proposals for an IVA for 68,000 electricity connections under the ECP. The REA–Uganda connections department submitted the evaluation report to the agency's contracts committee for review and approval. Contracting a verification agent is crucial under the ECP, because REA–Uganda can reimburse utilities only for verified connections. EAEP's database-management specialist worked on enhancing REA–Uganda's electricity-connection portal, to improve the user experience with dashboards and reports. This enhancement catered to the different reporting needs of REA–Uganda's connections department, thereby enhancing agency operations. **Quarter 3:** EAEP supported REA–Uganda in coordinating the review and testing of connection materials to be used in an electrification project in southwestern Uganda, sponsored by the Kuwait Fund. The senior technical advisor coordinated the testing of sample meters and ready boards for the project by the three participating utilities, and will collect reviews from utilities into a consolidated report that will be sent to the materials supplier for action. The project is expected to deliver 1,600 new connections and distribute 1,100 ready boards to households that are unable to use conventional house wiring. EAEP's communication and knowledge-management specialist supported REA–Uganda in developing a strategy to guide all marketing and promotional activity for the ECP. The specialist guided a marketing firm in preparing the strategy. This strategy will guide marketing activities for free connections under the ECP, including promotion of productive use of electricity, ready-board distribution, and promotion of low-interest credit solutions for house wiring and three-phase connections.

Work plan reference number, activity description, and minimum output code	Activity status
UG 2.1.3 Productive energy use **Activity Manager:** [redacted] **Counterpart:** KIL **Deliverables:** Progress reports **MO:** 2.1, 2.3	**Summary of previous support:** N/A. **Quarter 1:** This activity was identified for potential support at the end of Q1 FY 2021. **Quarter 2:** USAID/Uganda, EAEP, and the CEO of KIL held an introductory meeting to outline advisory support, with the aim of strategically attracting productive users to the utility. At the time, KIL had over 18,000 connections, of which 99% were domestic consumers; only 1% of connections were commercial, and only 0.3% were industrial. This growth trajectory meant that KIL would fail to recover its actual connection costs, because the average monthly domestic consumption of electricity was only 25 kWh, while the average across Africa is 50 kWh per month across all sectors. EAEP and KIL agreed to develop an advisory support scope to attract more PUE consumers, which would improve KIL's financial sustainability. EAEP finalized the TOR with KIL for PUE support. The program agreed on the timeline for delivery in Q3. EAEP supported REA–Uganda in evaluating proposals for a consultancy to promote PUE in Uganda. The selected consultant would be expected to produce a promotion strategy, thereby supporting REA–Uganda in its efforts to achieve the second objective of the ECP: to increase demand for electricity on the grid by 500 MW by 2027. This accomplishment would also feed into ECP's first objective, to increase electricity connections to an average of 300,000 per year. The first stage involved a literature review of similar work done by other entities, including the Power Africa Uganda Electricity Supply Accelerator (PAUESA). **Quarter 3:** The procurement process for a consultant to provide PUE support to KIL, as per the TOR, was finalized. A contract between RTI and Clean Energy Enthusiasts will be signed in the first week of July, at which point the consultant will be able to start work on the activity.
UG 3.1.1 UEDCL utility-turnaround support **Activity Manager:** [redacted] **Counterpart:** UEDCL	**Summary of previous support:** N/A. **Quarter 1:** This activity was on hold under the bridging work plan. **Quarter 2:** This activity did not start. **Quarter 3:** UEDCL has not yet expressed interest in pursuing this activity. EAEP will consider not pursuing this activity in the FY 2022 work plan.

Work plan reference number, activity description, and minimum output code	Activity status
Deliverable: Diagnostic assessment and transformation plan **MO:** 3.1, 3.3	
UG 3.1.2 KRECS utility-turnaround support **Activity Manager:** [redacted] **Counterpart:** KRECS **Deliverables:** Diagnostic assessment and transformation plan **MO:** 3.1, 3.3	**Summary of previous support:** N/A. **Quarter 1:** This activity did not start during the quarter. **Quarter 2:** EAEP advisors traveled to Uganda to assess KRECS, an energy cooperative responsible for power-service distribution in 13 districts of Uganda in the Central Service Territory. EAEP's utility-turnaround team conducted field visits and collected data for the initial diagnostic assessment of KRECS operations. Additionally, EAEP held a meeting with KRECS management to discuss initial findings and obtain consent on the proposed approach. The diagnostic assessment and transformation plan were being finalized as the quarter ended. The resulting report was expected to address key findings, problems, and areas for improvement. A transformation plan would be part of the report, with concrete recommendations and actions. **Quarter 3: E**AEP developed a diagnostic report for KRECS and presented the findings and proposed approach to KRECS management. Support was proposed in the following areas: • **Energy accounting.** EAEP can help utilities establish energy-accounting systems for all voltage levels, including medium-voltage feeders and low-voltage feeders/distribution transformers. The program can lend its support defining and setting processes, activities, workflow, responsibilities, and reporting for energy accounting, as well as drafting or amending accompanying regulations, procedures, reporting templates, and job descriptions. • **Segregation of technical and nontechnical losses.** EAEP can support utilities in gathering network information; modeling and simulating networks; and drafting processes, workflow, and responsibilities for estimating network technical losses. Further, the program can help identify areas with higher loss levels and create loss-reduction plans, including investment plans, cost–benefit analyses for technical loss reduction, and detailed action plans to tackle nontechnical losses. • **Network indexing and customer mapping.** EAEP can help utilities with network indexing and customer mapping so as to account for energy, identify network overloads, and home in on areas with higher energy losses. The program

Work plan reference number, activity description, and minimum output code	Activity status
	can identify the requirements and steps for network indexing and draft the documentation needed to support the process. Further, it can set processes and draft regulations, procedures, and workflows for customer mapping to the network. • **Document review and amendment.** EAEP can help utilities review internal regulations and procedures, and align them with functions to ensure compliance and harmony with work processes. The program can review and amend job descriptions to ensure that they cover all operational activities and avoid overlap of responsibilities. Further, EAEP can introduce energy-based KPIs and targets for all positions, and establish an individual performance-evaluation scheme against these KPIs. • **Establish revenue protection.** Revenue-protection functions are crucial to utility functionality, loss reduction, and increased revenue. EAEP can help utilities establish such functions, by drafting policies and creating an organizational structure, scope of work, SOPs, job descriptions, and responsibilities and reporting lines. • **Capacity building.** EAEP can conduct a training needs assessment and provide various trainings as necessary. Training areas include but are not limited to energy accounting, loss identification and localization, loss segregation, loss reduction and electricity theft identification, operation management, network indexing, customer mapping, and revenue protection. EAEP received the green light from USAID to start activities in Uganda. The EAEP Objective 3 team is preparing the necessary documents, and will begin activities as soon as COVID-19 lockdowns are lifted in Uganda.
NEW: Umeme Ltd. Utility turnaround **Activity Manager:** [redacted] **Counterpart:** Umeme Ltd. **Deliverables:** Diagnostic assessment	**New Activity** **Quarter 3:** EAEP communicated with Umeme Ltd. that the project can support the following: • Enhance commercial loss-reduction efforts through development of an anti-theft strategy, in consultation with the sector regulator. The strategy will include a reward system for responsible staff, based on reduced commercial-loss trajectory. • Carry out consumer mapping of three of the worst-performing feeders, insofar as this informs Umeme Ltd.'s strategy. EAEP prepared an SOW for Umeme Ltd., which was reviewing the document as the quarter ended.

Work plan reference number, activity description, and minimum output code	Activity status
and transformation plan **MO:** 3.1, 3.3	

REGIONAL – OBJECTIVE 1

REG 1.1.1 SUPPORT FOR CAPACITY DEVELOPMENT OF PPPs

From November 2020 to September 2021, EAEP is conducting an intensive PPP training program for regional stakeholders. IP3 is implementing this training program, focusing on the financial and legal intricacies of PPPs. Course attendees include selected participants working with PPPs in Djibouti, DRC, Ethiopia, Kenya, Rwanda, Somalia, Tanzania, and Uganda. The goal of the training is to increase capacity across the region for improved management of PPPs. Participants are eligible to receive course credits from IP3 toward an internationally recognized PPP specialist certification.

Courses in Q3 focused on finance and included:

- Essentials of Financing Public–Private Partnerships
- Financial Analysis Techniques for PPPs
- Project Risk Analysis for PPP Investors
- Project Contracts and Financing Agreements
- Financial Statements and Project-Finance Models
- Designing a PPP Project-Finance Model.

The training is scheduled to conclude in Q4 with graduation on September 12, 2021, for all participants.

REGIONAL POWER TRADE

Regional Power Trade: Top Achievements and Results, Q3 FY 2021

- Completed wheeling model for EKT
- Arranged project-finance training for private developer, Nuru, for PPP transmission between DRC and Uganda
- Developed capacity-building plan for operational readiness with EAPP

In Q3 FY 2021, EAEP's Objective 4 team progressed its goal of increasing power trade among the program's core countries. EAEP received a request from EAPP for capacity building and training of system operators on cross-border operation of power systems; this support (delivery to start in Q4) will specifically focus on three areas: control area concepts and critical requirements; development of an EAPP control area and national operating procedures; and development of an EAPP system operator certification program. Additionally, EAPP requested support from EAEP on finalizing the draft EAPP bilateral trade agreement, a standard form agreement that EAPP trading entities will use for short-term transactions with other signatories, based on a set of common terms and conditions approved by EAPP and applicable to all transactions; this activity will also commence in Q4.

Also at the regional level, EAEP held a kickoff meeting with subcontractor Enertech to plan interconnection training for high-level energy sector officials from Djibouti, Eritrea, Ethiopia, Somalia, and Somaliland. The interconnection training will familiarize participants with the critical principles of operating in an interconnected power pool and elements of cross-border energy trade, the aim being to encourage more significant regional power generation, interconnectivity, and trade. For the Shango–Mbarara interconnector between Rwanda and Uganda, the Objective 4 team performed physical inspections of both the Mbarara (May 20) and Shango (May 27) substations, which were found to be physically ready for interconnection. For the Nuru interconnector between DRC and Uganda, EAEP's senior energy advisor completed a seven-module transmission-financing training series, over four days, with the Nuru team. Partly as a result of this support, on June 28, 2021, Nuru signed a 30-year exclusive power-distribution concession for Bunia, the capital city of Ituri Province in DRC. Finally, EAEP completed the wheeling model for the EKT transaction, which will be submitted to USAID to review and passed along to EAPP in Q4.

At the country-specific level, to better understand the status of technical and operational readiness of Somalia and Somaliland for regional power integration, the Objective 4 team reviewed existing interconnection documents and held several meetings with local and regional interconnection entities. In Uganda, EAEP engaged subcontractor MAI to oversee a benchmarking study for ERA; a kickoff meeting was held on June 28, attended by ERA, USAID/Uganda, EAEP, and MAI.

REGIONAL POWER TRADE: PROGRESS ON WORK PLAN ACTIVITIES

Work plan reference number, activity description, and minimum output code	Activity status
REG 2.1.1 Grid-development plan to accelerate transmission projects – Tanzania **Activity Manager:** [redacted] **Counterparts:** EAPP; country-level power entities **Deliverables:** PSS®E dongles and training reports **MO:** 4.1, 4.2, 4.3	**Cross-listed with TZ 1.2 Grid-development plan to accelerate transmission projects**
REG 2.1.2 Operational-readiness support for selected EAPP countries **Activity Manager:** [redacted] **Counterparts:** EAPP; country-level power entities **Deliverables:** Operational-readiness assessments **MO:** 4.1, 4.2, 4.3	**Summary of previous support:** This activity is new under the FY 2021 work plan. **Quarter 1:** In Tanzania, EAEP delivered the Interconnected future training over two sessions targeting the high-level officials for one day and technical staff for three days from the Tanzanian power sector. A total of 28 participants from Government (Ministry of Energy, Ministry of Finance and Planning, The Attorney General Chambers), Regulators (Energy and Water Utilities Regulatory Authority, Public Procurement Regulatory Authority and Zanzibar Utilities Regulatory Authority) and the utilities (Tanzania Electric Supply Company Limited and Zanzibar Electricity Corporation), attended the training. The Permanent Secretary of the Ministry of Energy officially opened the proceedings resulting in great participation from the energy sector. The training provided insight into the key principles and elements of operating in an interconnected power pool and undertaking cross-border energy trading. For the high-level officials, a strategic session was delivered to gain an understanding of what a power pool is, its advantages and disadvantages, its benefits and risks, and typical governance, and structures. The session deliberated on the roles of all stakeholders – within Tanzania and the SAPP and EAPP power pools that Tanzania will operate in. While the technical team focused on the technical and commercial operations in-depth. **Quarter 2:** EAEP attended an HAI workshop organized by the EAPP and the World Bank. Attendees included 62 participants from EAPP, the EAPP independent regulatory board, the Horn of Africa (HoA) secretariat, the World

Work plan reference number, activity description, and minimum output code	Activity status
	Bank, the African Union, the Common Market for Eastern and Southern Africa, the Intergovernmental Authority on Development, the East African Community, the Energy Regulators Association of East Africa, HoA countries' energy ministry officials, and the donor community, including USAID. The HAI aims to provide a solid basis for HoA countries to make concrete progress on regional integration, while complementing national efforts in all countries. EAPP's secretary general presented the power pool's objectives, organizational structure, membership progress, expansion, and outreach. EAPP's independent regulatory board also presented its 10-year strategic plan and three-year action plan. Additionally, HoA countries that were not yet EAPP members indicated an interest in joining the HAI. The World Bank and EAPP agreed to develop the HAI, to help countries sustain a strong on-the-ground presence, with regular meetings and workshops to push forward the regional cooperation agenda. EAPP plays a critical role in regional integration, including leading the establishment of the commercial and operational framework necessary to enhance regional power trade. EAEP also continued discussions with the EAPP organizing committee regarding the operational-readiness mitigation plan for EAPP member countries. The activities discussed include defining the final SOW with EAPP, which would cover country-specific consultants, country prioritization by EAPP and EAEP, and associated schedules. The organizing committee planned to invite EAPP operations committee members to further develop the SOW to include capital-equipment specifications. The organizing committee members also made additional training requests to EAEP, to develop operational procedures and control area fundamentals and criteria. **Quarter 3:** EAEP received a request from EAPP for capacity building and training of system operators on cross-border operation of power systems. This support will specifically focus on three areas: control area concepts and critical requirements; development of an EAPP control area and national operating procedures; and development of a certification program for EAPP system operators. The area of operational readiness was assigned to Tractebel. EAEP's short-term action plan on the aforementioned request involves two trainings on control areas and certification programs for system operators in 11 countries (comprising 14 utilities).
REG 2.1.3 Somalia road map for cross-border trade **Activity Manager:** [redacted]	**Summary of previous support:** This activity is new under the FY 2021 work plan. **Quarter 2:** EAEP's utility advisor met with the Somalia World Bank team and initiated discussions on the HAI. EAEP's engagement with the World Bank is critical for the program's work in Somalia, which includes providing a cross-border power trade road map to Somali utilities. EAEP was at an early stage in the process, learning more about this initiative, and expected to provide further details going forward. EAEP's senior advisor attended a development partners meeting, convened by the World Bank, for the presentation of its proposed HoA Regional Integration for Sustainable Energy Supply (RISES) program. The World Bank had

Work plan reference number, activity description, and minimum output code	Activity status
Counterparts: MOE, private-sector utilities **Deliverables:** Progress report and road map **MO:** 4.2	allocated the program [redacted] to cover Djibouti, Ethiopia, Eritrea, Kenya, and Somalia. HoA RISES is scheduled to run from May 2021 to December 2026, and has four thematic areas: developing regional infrastructure networks (transport, energy, and digital); integrating trade and economics; building resilience; and strengthening human capital. For the first thematic area, energy, the World Bank identified the following studies/investments as priorities: • Feasibility study for Somalia–Ethiopia interconnection • Feasibility study for Eritrea–Ethiopia interconnection • Somalia transmission backbone • Investment for Ethiopia–Djibouti second interconnector • Technical assistance to enable regional power trade • Feasibility study for Kenya–Somalia interconnection • Feasibility study for second Ethiopia–Kenya interconnection **Quarter 3:** To better understand the status of technical and operational readiness of Somalia and Somaliland with regard to regional power integration, the EAEP Objective 4 team reviewed existing interconnection documents and held several meetings with local and regional interconnection entities. In February 2017, USAID's GEEL program had facilitated a trip for Somaliland's MoEM to Addis Ababa, to meet with Ethiopian counterparts about a high-level cross-border interconnection between Somaliland and Ethiopia. As a follow-up to this effort, EAEP met with MoEM on June 17, 2021, to discuss the interconnection with Ethiopia and any current MoEM plans for regional power trade. Due to the absence of sub-transmission interconnecting city mini-grids in Somaliland, and a lack of technical and logistical readiness, these discussions remained at a high level. Nevertheless, MoEM emphasized that power supply from Ethiopia would reduce extremely expensive electricity tariffs and enhance power reliability in Somaliland. To identify the nature of support available to Somalia and Somalia from regional entities promoting economic and infrastructure integration, EAEP held meetings with the HAI and the World Bank in May. HAI is considering a regional cross-border interconnection feasibility study that may support an interconnection technical assessment for Somalia. The World Bank's recently proposed SESRP aims to develop sub-transmission and interconnect mini-grids in major cities like Mogadishu and Hargeisa. If it is approved, SESRP will serve as a fundamental stepping-stone for Somalia and Somaliland regional power interconnection. Given the political sensitivities between Somaliland and Somalia, EAEP will develop two separate cross-border power-trade road maps for these two regions. This approach acknowledges the fact that Somaliland's MoEM has

Work plan reference number, activity description, and minimum output code	Activity status
	already started regional interconnection engagements, and has a higher readiness to participate in the development of the road map. Somaliland's interconnection road map will focus on interconnections between Somaliland and Ethiopia, while the Somalia interconnection road map will focus on possible interconnections between Somalia and Kenya.
REG 2.2.1 Support for standardized legal and regulatory framework **Activity Manager:** [redacted] **Counterparts:** EAPP member countries **Deliverable:** Legal and regulatory framework **MO:** 4.7	**Summary of previous support:** This activity is new under the FY 2021 work plan after Q1. In 2017, the EAPP steering committee authorized the development of protocols for short-term bilateral trade. EAPP formed the Bilateral Working Group, which is now called the Market Working Group, consisting of representatives of EAPP member utilities. Previously, Power Africa had assisted EAPP in developing a standard bilateral trade agreement form as well as a report on options for EAPP transmission access and pricing policy for short-term bilateral trade. **Quarter 2:** This activity did not advance in Q2. **Quarter 3:** In Q3, EAPP requested support from EAEP on finalizing the draft EAPP bilateral trade agreement. This is a standard form agreement that EAPP trading entities will use for short-term transactions with other signatories, based on a set of common terms and conditions approved by EAPP and applicable to all transactions executed under the agreement. The areas of support that EAPP has requested are: • Draft final EAPP bilateral trading agreement for review by ministries, regulators, and utilities, before resubmitting to the steering committee for approval • Develop a procedure for application by a party to the EAPP bilateral trade agreement, and send for review by ministries, regulators, and utilities, before submitting to the steering committee for approval EAEP will use NRF to provide legal assistance in developing and finalizing a template agreement for the bilateral trade of electrical energy among the 11 members of EAPP, through the following subtasks: • Review the EAPP-proposed draft bilateral trade agreement for the bilateral cross-border trade of electrical energy (bilateral PPA), and annotate per evaluation • Engage with members of EAPP as a collective (together with regulators and national utilities), to discuss and settle the legal terms of the proposed bilateral PPA This activity is expected to commence in Q4.
REG 2.2.2	**Summary of previous support:** Assistance with PPA and TSA documents was requested during a stakeholder consultation between EAEP and UETCL in March 2020.

Work plan reference number, activity description, and minimum output code	Activity status
Review of Ugandan interconnector PPA and transmission service agreement templates **Activity Manager:** [redacted] **Counterparts:** UETCL, EAPP **Deliverables:** PPAs and other templates **MO:** 4.7	**Quarter 1:** This activity was on hold under the bridging work plan. **Quarter 2:** EAEP entered into discussions with potential partners to conduct the review of the IA, PPAs and transmission service agreements. **Quarter 3:** UETCL indicated that it will complete this activity with the help of EAPP, rather than EAEP.
NEW: Training in interconnector basics for the Horn of Africa **Activity Manager:** [redacted] **Counterparts:** EAPP; country-level power entities **Deliverables:** Training curricula and report **MO:** 4.1, 4.2, 4.3	**New Activity** **Quarter 3:** EAEP held a kickoff meeting with subcontractor Enertech to plan interconnection training for high-level energy sector officials. The interconnection training will target Djibouti, Eritrea, Ethiopia, Somalia, and Somaliland. EAEP sent the draft curriculum to the participating entities for review. The interconnection training will familiarize participants with the critical principles of operating in an interconnected power pool and elements of cross-border energy trade. Ultimately, this increased capacity will encourage more significant regional power generation, interconnectivity, and trade. The training will be similar to that conducted for Tanzanian stakeholders in December 2020.
REG 4.2 Regulatory Benchmarking Study, Uganda **Activity Managers:** [redacted]	**Summary of previous support:** In FY 2020, EAEP attended a meeting with USAID/Uganda and ERA to discuss a cost-benchmark study. ERA requested the study to give it the ability to appraise investment plans and project packaging for both transmission and distribution grids, and to arrive at optimal costs. **Quarter 1:** See UG 1.2.2, regulatory benchmarking study. **Quarter 2:** See UG 1.2.2, regulatory benchmarking study.

Work plan reference number, activity description, and minimum output code	Activity status
Counterparts: ERA, UETCL, UEDCL **Deliverable:** Benchmark study **MO:** 1.5, 1.6, 4.7	**Quarter 3:** See UG 1.2.2, regulatory benchmarking study.
REG 2.3.1 Support for the Rwanda (Shango)–Uganda (Mbarara) interconnector commissioning **Activity Manager:** [redacted] **Counterparts:** EAPP, NELSAP, power-sector entities at the country level **Deliverables:** Progress update on commissioning of the Shango–Mbarara line, synchronization workshop reports, post-commissioning guide **MO:** 4.1, 4.2, 4.3, 4.5	**Summary of previous support:** EAEP participated in the Shango–Mbarara interconnector commissioning planning meeting with EAPP and NELSAP. The planning committee discussed next steps, including the road map, invitation letter to utility CEOs/managing directors, and concept letter incorporating details that emerged during the kickoff meeting with EAEP subcontractor Enertech. EAEP coordinated planning sessions with EAPP and NELSAP, including utilities and other relevant stakeholders. Later, EAEP shared the commissioning road map and provided an update on the work of Enertech. In FY 2021, the program planned to continue to coordinate planning sessions for commissioning. **Quarter 1:** EAEP and EAPP jointly held a CEOs' inception meeting for the Shango–Mbarara interconnector commissioning, involving EAPP, NELSAP, UETCL, REG, USAID, and Enertech. EAPP affirmed its commitment to ensuring that the interconnection would be successfully commissioned, and REG and UETCL confirmed that the 220 kV transmission line and substations were nearing readiness for commissioning and energization. All participants agreed to make their experts available for commissioning and subsequent preparations. Additionally, EAEP engaged various stakeholders, including power entities, in a briefing meeting on the critical commissioning date, originally set for November 25, 2020, discussing necessary documents, studies, design diagrams, and modifications. Through this work, commissioning members obtained virtual access to diagrams of the transmission line and the Shango and Mbarara substations, in order to make recommendations. The commissioning team provided weekly reports, including progress, challenges, diagrams and procedures that needed updating, inspection reports, and defects captured. A central coordinating committee meeting for the commissioning of the Shango–Mbarara interconnection was slated for January 2021, so that committee members could provide updates on progress, challenges, and support required for the project, as well as detailed plans to meet the synchronization/commissioning date of February 3. The committee anticipated that by mid-January, most of the information required from both utilities would have been submitted. **Quarter 2:** In January, EAEP participated in Shango–Mbarara meetings focusing on progress updates, challenges, required support, and detailed plans to meet the new synchronization or commissioning dates. Stakeholders observed that the previous February 3 synchronization date might not be achievable due to the unsatisfactory

Work plan reference number, activity description, and minimum output code	Activity status
	quantity, quality, and timeliness of the submission by the utilities of the information required for commissioning of the interconnector, due to the elections in Uganda and interrupted communications. The second meeting covered challenges around communication and protection equipment. According to the working groups, protection equipment compatibility and interoperability were pertinent issues; the working groups in respective utilities and EAEP subcontractor Enertech began investigating various options to overcome this challenge. It was thought that the worst-case scenario might result in a delay of six months from the previous February 3 commissioning date. The committee asked Enertech to identify the additional equipment needed, time associated with equipment procurement, impact on performance against EAPP interconnector codes, and risks. In February, EAEP led the fifth central coordination committee meeting for the Shango–Mbarara interconnector commissioning. The meeting focused on Enertech's recommendations on challenges around communication and protection equipment. The stakeholders agreed to form a special team, led by EUCL/EDCL, dedicated to resolving communication and tele-protection issues. EAEP committed to monitoring progress and resolving any arising challenges. Other working group members agreed to focus on processes and to develop commissioning procedures for equipment not directly impacted by communication issues, with EAEP assistance. In March, EAEP participated in a meeting to discuss the status and way forward for the Shango–Mbarara interconnector commissioning. Attendees included NELSAP, UETCL, EUCL, EDCL, Enertech, ABB Telecomms, and ECI Telecommunication Limited. The focus was on feedback regarding communication-link design, readiness for interconnection, and procurement of IPG Photonics boosters. EAPP wrote to UETCL management urging the expedited procurement of boosters. EAPP committed to reaching out in Q3 to EDCL, EUCL, and REG management requesting conditional approval for the redeployment of ABB Telecomms communications equipment from the Kigomo substation to the Shango substation, stressing the need to expedite procurement of boosters for the communications equipment required for commissioning. EAEP would monitor progress and help resolve any challenges. **Quarter 3:** In May, the EAEP Objective 4 team performed physical inspections of both Mbarara (May 20) and Shango (May 27). The substations were found to be physically ready for interconnection. At the time of the inspection, the Shango line was not yet fully commissioned; however, plans were under way to finalize pre-commissioning tests. In June, CEO meetings were held with the Central Coordination team to resolve the telecommunication issues on the commissioning of the interconnector, beginning with a meeting with the Rwandan CEO, followed by a meeting with the Ugandan CEO a few days later. Rwanda, it was revealed, had procured boosters to continue testing Option

Work plan reference number, activity description, and minimum output code	Activity status
	1. This testing entails having ECI Telecommunication Ltd. telecommunication equipment on the Rwanda side and ABB Telecomms equipment in Uganda. Further, the Rwandan CEO requested the completion of the testing of Option 1 to its conclusion before moving to Option 2. This will entail delivering ABB Telecomms tele-protection equipment relocated from Rubavu substations.
REG 2.4.1 Priority interconnector support between DRC and Uganda **Activity Manager:** [redacted] **Counterparts:** EAPP, Nuru Energy **Deliverables:** Review of MOU, QTAT, progress updates **MO:** 4.1, 4.5	**Summary of previous support:** EAEP began supporting the US company Nuru Energy, which is developing a PPP for the 320 km DRC–Uganda 400 kV interconnector transaction (the Nkenda–Beni–Butembo–Bunia line). At the end of FY 2020, EAEP legal subcontractor NRF was reviewing the MOU between Nuru and the DRC. NRF prepared a red-flag report on the MOU for Nuru's consideration, for negotiating and executing concessions with DRC. The MOU integrated all four segments of the project: importing, transporting, distributing, and selling electricity from Uganda. **Quarter 1:** Bimonthly discussions with Nuru, USAID, and the Objective 4 team to advance the Uganda–DRC transaction were ongoing. EAEP completed its review of the MOU between Nuru and Société Nationale d'Électricité (SNEL—DRC'S national electricity company), and the QTAT was under review by the USAID regional team. The final feasibility study and ESIA report review were awaiting translation by Nuru from French into English. EAEP began designing PPP training for all parties involved in the Nuru project and held preliminary discussions with NRF. On the DRC side, Nuru, the regulator, and MOE opened talks to define specific areas of capacity building needed to advance the Uganda–DRC transaction. A request-for-support letter from the MOE, the regulator, and Nuru was submitted to Power Africa. **Quarter 2:** In January, Nuru's CEO submitted the project's final ESIA report to EAEP for review. Additionally, Nuru signed a nondisclosure agreement with Samhwa Power Development (Samhwa). Samhwa agreed to review the project Gannt charts as third-party validation for the high-voltage construction phase and sequencing for the DRC line section, before sharing the charts with Power Africa. Nuru also held discussions with Gridworks Development, the UK-based company constructing the high-voltage line in Uganda. Nuru was exploring the potential for Gridworks to be a financing/equity partner. The parties confirmed that if Uganda was interested in having Nuru as the project developer, Nuru and Samhwa were open to broadening their scope. Nuru also was open to the possibility of other US partners collaborating on this interconnector transaction. In February, EAEP held its biweekly progress meeting with the CEO of Nuru on the Uganda–DRC 400 kV interconnector transaction. Participants discussed the lack of an active MOU between the DRC Ministry of Energy and any entity involved in the transaction. The previous MOU lapsed at the end of January 2021, which was identified as a risk for the project. In March, EAEP and Nuru developers discussed the scope for transmission-finance training.

Work plan reference number, activity description, and minimum output code	Activity status
	SNEL and the DRC Ministry of Energy selected Nuru as the private-sector partner to develop the 320 km (Nkanda–Bunia) 400 kVA transmission line from Uganda to Eastern DRC. EAEP agreed to provide project-finance training for this exciting and ambitious project for East Africa. **Quarter 3:** In May and June, EAEP's senior energy advisor completed a seven-module transmission financing training series, over four days, with the Nuru team. The sessions addressed different approaches to financing large-scale power projects and highlighted how project finance could be applied to the Nuru example. Focus areas included: • Sovereign guarantees and other forms of government support, and their alternatives • Risk allocation and the use of a risk matrix in developing a cross-border project • Roles and responsibilities of different stakeholders in transmission development, and how these apply specifically to the Nuru project • Structuring and financing large-scale power projects, required project documents, and key terms • Introductory demonstration of project financial models and key financial ratios • Presentation of a range of international and regional projects comparable to the Nuru project, and lessons that could be applied EAEP's senior energy advisor was asked to provide transaction support to Nuru, and participated in weekly meetings with executives and stakeholders from Nuru and Energy Development in Africa. A recent highlight was confirmation that Nuru had signed a 30-year exclusive power-distribution concession for Ituri Province in DRC. Nuru developers informed EAEP that they were put in touch with Energy Development in Africa, which wants Nuru to sign an MOU to co-develop the project. Nuru asked EAEP to perform due diligence on this company. USAID/Uganda responded that Energy Development in Africa firm is a legitimate organization that is currently involved with the Kikagati Hydro Power Project.
REG 2.4.2 EKT transaction **Activity Manager:** [redacted] **Counterpart:** EAPP	**Summary of previous support:** Ethiopia–Kenya power trade is critical for ensuring an outlet for surplus power and boosting regional trade. In this light, in FY 2020, EAEP facilitated the first-ever meeting of EEP, Kenya Power, and KETRACO to discuss the steps needed to advance energy trade between Ethiopia and Kenya. In Q4 FY 2020, EEP, KETRACO, and Kenya Power met virtually to advance the Tripartite Transmission Interconnector Agreement. Kenya Power and KETRACO shared the first draft of the agreement; EEP reviewed the draft at the end of September.

Work plan reference number, activity description, and minimum output code	Activity status
Deliverables: Transmission service agreements, accession agreements, IAs, PPAs finalized for specific deals—focused on EKT **MO:** 4.5, 4.1	**Quarter 1:** In January 2020, at an EAPP/World Bank meeting, stakeholders had requested that Power Africa conduct a cost–benefit analysis and unpack, improve, and simplify the KETRACO wheeling model such that EAPP member countries could use the revised model for similar transactions in the future. In Q1 FY 2021, this activity had to be put on hold due to unforeseen results, which suggested that the original wheeling model had mathematical errors. It was determined that these errors would have to be rectified before the model could be presented to EAPP and KETRACO. Also in Q1, after discussion with EAPP, the cost–benefit analysis activity was stopped and redeveloped as an economic benefits review. Capital expenditures and other costs associated with the EKT transaction were removed. Shortly afterward, EAEP and USAID decided to discontinue the cost–benefit analysis activity. **Quarter 2:** EEP and KETRACO continued to close the gap on power-trade issues between Ethiopia and Kenya, through PPAs and IAs. EAEP held an update meeting with EEP's strategic management and business-development team, for updates on EEP's response to Kenya on PPA and IA issues. The agreements were delayed due to COVID-19 and some staff adjustments, but eventually were cleared by EEP. Additionally, EEP expressed its desire for active engagement from the Kenyan side to effectively finalize all infrastructure and contractual issues, so that real trading could commence. EEP confirmed its full commitment to regional power trade and pointed to its significant resources invested in the Ethiopia–Kenya line, with 2,000 MW capacity. EEP also requested EAEP's support to Tanzania for PPA discussions with EEP. EAEP continued to develop the wheeling model for the EKT transaction, which would act as a transaction tool for the whole EKT transaction. Both the analysis and the model would be critical for advancing EKT toward the necessary agreements, and would be pilots for EAPP support of future interconnectors. **Quarter 3:** The wheeling model was completed and will be submitted to USAID for forwarding to EAPP. The PPA activity was delayed due to the PPA task force review in Kenya.

OTHER COUNTRY PROGRESS

BURUNDI

In Q3, EAEP support to Burundi focused on private energy producers and the development partner working group, given that TIP restrictions prevented EAEP from working directly with the government during Q3, although the restrictions were lifted at the very end of the quarter. Instead, EAEP engaged exclusively with the private sector. Activity highlights are as follows:

Songa Energy–Virunga Power hydropower projects (Ruvyi 1.65 MW and Mulé 9 MW hydropower projects): During Q3, EAEP held several meetings with DFC (Power Africa US Government [USG] partner) [3] and Songa Energy–Virunga Power, the developers of the Ruvyi and Mulé hydropower projects. The developer had entered into early conversations with DFC regarding potential financing of these projects. As per DFC's request, EAEP engaged NRF to translate project contract documents from French into English and to conduct a final legal review of the documents. Financial close is expected in mid-2022.

Support to IPPs: EAEP continued offering support to IPPs such as Kirasa Energy. Kirasa's 16 MW hydropower project is expected to reach FC by the end of 2021, as the developer finalizes its debt negotiations with lenders.

Mpanda hydropower project: EAEP submitted a QTAT for Hydroneo's 10.2 MW Mpanda hydropower project. USAID/Burundi approved the QTAT, and EAEP consulted with the developer to identify potential areas of support. EAEP offered technical assistance by reviewing the developer's feasibility studies, ESIA, RAP and bankability analysis, and offered potential legal assistance. Support will commence in Q4 with the goal of advancing the project toward FC, expected in mid/late 2022.

Burundi development partners meeting: On May 12, EAEP's senior energy specialist attended the development partners meeting hosted by the Delegation of the European Union to Burundi. The meeting was attended by KfW, AfDB, [4] the World Bank, the European Union, and Enabel. The meeting focused on domestic energy sector updates, regional infrastructure, and project status. EAEP offered insights into private sector successes and challenges that can be addressed by other development partners' capacity-building efforts.

DEMOCRATIC REPUBLIC OF CONGO

EAEP is expanding its profile in the DRC and seeks to unlock the enormous potential of the country's energy sector. The program is supporting private-sector developers with generation and distribution projects. EAEP has enrolled two members of the regulatory agency in regional PPP training, and is establishing relationships with other development partners in the country.

Identifying potential off-takers and LPUs for future interconnectors: EAEP attended the DRC Mining Week (June 14 – 15, 2021), the purpose of which was to identify potential off-takers and other LPUs in the Katanga region, to inform initial planning for the Sumbawanga – Katanga interconnector, which is in its' concept phase.

[3] See more about DFC at USAID's "Power Africa Interagency Partners" web page, https://www.usaid.gov/powerafrica/usgovernmentagencies.
[4] See more about AfDB at USAID's "Power Africa Development Partners" web page, https://www.usaid.gov/powerafrica/developmentpartners#AfDB.

Support for Greenshare 100 MW solar energy project: EAEP continued to advocate for this 100 MW solar power project. In Q3, EAEP participated in a meeting with Globeleq, which is considering becoming an equity investor in the project. An activity-approval form for a solar grid integration study was approved; the study is in the design phase and will move to procurement in Q4.

Support for Virunga Energies: EAEP held several meetings with Virunga to identify potential areas of support. Virunga currently has three operational hydropower projects with a total installed capacity of ~17 MW. The company is also developing a new 26 MW project. In addition to power generation, Virunga is distributing power both directly to consumers and through a private distribution company. The additional power generation and distribution would be a tremendous asset to the underserved region of North Kivu. EAEP drafted a cooperation framework agreement (CFA) outlining potential areas of support, which was being reviewed by Virunga as the quarter ended.

Talihya Nord hydropower project: After several conversations with Energie du Nord Kivu, EAEP completed a QTAT for the Talihya Nord 9.5 MW hydropower project. ENK has been producing and distributing ~3 MW of power to the cities of Beni and Butembo in North Kivu. USAID/DRC approved the QTAT. This project will provide generation and distribution to an underserved population in North Kivu; EAEP began working with the developer to identify the best areas for EAEP support.

Cross-listed with REG 1.1.1 Support for capacity development for PPPs, Q3:

DRC energy sector employees attended the regional PPP training; in DRC, this activity contributed to eight people trained in technical energy fields supported by EAEP. More information can be found under REG 1.1.1.

Support to DRC–Uganda interconnector: In May and June 2021, EAEP's senior energy advisor completed a seven-module transmission-finance training series with the Nuru team. These sessions addressed different approaches to financing large-scale power projects, and highlighted how Nuru could apply project financing. Focus areas included:

- Sovereign guarantees and other forms of government support and their alternatives
- Risk allocation and the use of a risk matrix in the development of a cross-border project
- Roles and responsibilities of different stakeholders in transmission development, and how these would apply specifically to the Nuru project
- Structuring and financing of large-scale power projects, and the required project documents and key terms
- Introductory demonstration of project financial models and key financial ratios
- Presentation of a range of international and regional projects comparable to the Nuru transmission and distribution project, and lessons that could be applied to Nuru

The Nuru project (led by an American citizen) is one of the most exciting privately developed power projects in East Africa. It will include a PPA with Uganda for 150 MW, and associated energy over a privately developed interconnection would therefore be of the order of 1 TWh per year. In

addition, Nuru expects that the project will directly lead to up to 455,000 new connections in DRC. Nuru has signed a 30-year exclusive power-distribution concession for Ituri Province in DRC. EAEP's regional trade lead continued supporting Nuru, noting the significance of the Uganda–DRC 400 kV interconnector transaction for regional power trade.

DJIBOUTI

Cross-listed with REG 1.1.1 Support for capacity development for PPPs, Q3: Djibouti energy sector employees attended the regional PPP training; in Djibouti, this activity contributed to six completed training sessions in technical energy fields supported by EAEP. More information can be found under REG 1.1.1.

Camco clean energy: EAEP held a meeting with Camco Energy, manager of the UK-government-funded Renewable Energy Performance Platform (REPP), to discuss how best to collaborate on projects in Djibouti. The parties will share information and continue to identify projects on which to collaborate. Additionally, EAEP discussed with CREC Energy (US company) the REPP facility and the program's recent engagement with Climate Fund Managers. CREC Energy is interested in engaging with Climate Fund Managers, which in turn has expressed interest in understanding more about CREC's project. EAEP will facilitate discussions between the parties.

Solar PV and hydronics development in Djibouti: EAEP's transaction advisor held a meeting with World Water and Solar Technologies (WWST), a US company, to discuss its combined solar PV and hydronics development in Djibouti and how EAEP can provide support. The proposed capacity of the solar PV plant is 20 MW (grid-connected). WWST had submitted an MOU to the Ministry of Energy and Natural Resources, but as of the end of June had yet to receive a response. WWST sought EAEP's advice on how to proceed. EAEP will consult with USAID/Djibouti and advise WWST on proposed next steps.

CREC energy waste-to-power project: EAEP held discussions with CREC Energy about its proposed waste-to-power project in Djibouti. CREC Energy's CEO expects to sign the project PPA imminently. CREC would like EAEP to consider support for attracting other development partner funding, given that InfraCo Africa, fully owned by the Private Infrastructure Development Group,[5] will no longer be involved in this project. USAID/Djibouti supports CREC's project, and EAEP believes that this project, if CREC is successful, can be successfully replicated. EAEP will provide referrals and in-house analysis, and will recommend CREC Energy for formal Power Africa support if a suitable development funding partner can be secured.

[5] For more about the Private Infrastructure Development Group, see USAID's "Power Africa Private Sector Partners" web page, https://www.usaid.gov/powerafrica/privatesector#PIDG.

CROSS-CUTTING ACTIVITIES

This section outlines EAEP's impact on gender mainstreaming, institutional strengthening, Power Africa coordination, communications, community engagement, and environment.

HUMAN AND INSTITUTIONAL PERFORMANCE IMPROVEMENT

The IPIU supports the delivery of EAEP's HICD approach, strengthens organizational leadership and governance, and enables better energy sector investment through stakeholder coordination and alignment. The IPIU team further ensures that all EAEP trainings include pre- and post-training assessments, and have the support and tools needed to develop materials and agendas geared toward the achievement of specific learning objectives. All events and training activities are listed in Annex H. The following descriptions highlight new activities and achievements from Q3 FY 2021. Additional activities are included in the Cross-Cutting Activities table and in the subsection on PACO coordination.

HICD Case Study: EAEP's IPIU presented a case study on HICD during a USAID deep-dive learning session. The session highlighted the mismatch between funds invested in human and institutional capacity development and the performance of some of the institutions receiving these funds. EAEP shared its HICD methodological framework implementation in Kenya and Ethiopia and offered insights into how the framework helped utilities identify weak areas that were strongly impacting their strategic objectives.

Sector Coordination in Kenya: EAEP's Chief of Party and USAID's Kenya energy program management specialist met with the Director, Renewable Energy, of MOE. The session focused on Power Africa's role in the Kenyan energy sector, and highlighted EAEP's activities since the inception of the program. Topics included an overview of all Power Africa activities, HICD process implementation with industry players, loss-reduction activities with Kenya Power, and the updated MOE cooperation matrix. Additionally, the Director talked about possible future support requirements, including sharing learning experiences in the Kenyan energy sector on environmental and community-engagement best practices and the implementation of the Energy Act 2019.

Online Training Expansion: EAEP continued to support online virtual training options for utility staff in Kenya, and began expanding this opportunity to utility staff in Zanzibar. Courses include business resumption, business analytics, and organizational change, among others. EAEP chose the Coursera model because of its virtual capabilities during COVID-19 office closures, flexibility for participants to complete courses at their own pace, and the quality of the courses being offered. The overall goal is to continually support organizational-strengthening activities. To keep excitement and momentum for online virtual trainings, the program instituted biweekly check-ins and scheduled an end-of-session conference for all participants who completed the course.

ENVIRONMENT

See Annex I: Environmental Management Plan Quarterly Update.

EAEP's environmental specialist reviewed ESIAs for the Uganda–DRC and Rwanda transmission lines. Additionally, the team continued technical support to KETRACO in developing its ESMF. EAEP's environment advisor and KETRACO officials completed a transect (sample survey) of the Olkaria–Lessos–Kisumu transmission line. The eight-day field mission identified the environmental and social challenges faced by KETRACO, and offered a unique opportunity to interact with diverse stakeholders impacted by the utility.

COMMUNITY ENGAGEMENT

This quarter, the community-engagement team completed the draft GCHM for KenGen, and prepared to present it to the KenGen Executive Committee. The team also began to develop TORs for engagements to support REREC and GDC in their community-engagement strategies. Finally, KETRACO gave EAEP feedback on the Kenya wayleaves study; EAEP will send an updated study for presentation to KETRACO's annual conference, to be held on July 2, 2021. EAEP's community-engagement specialist also reviewed ESIAs for the Uganda–DRC and Rwanda transmission lines.

GENDER EQUITY AND INTEGRATION

Expansion into Uganda and gender gaps audit: EAEP added Uganda to its list of countries to support in gender equity and integration. EAEP finalized data collection for the Uganda gender study and developed a draft report that provided insights into how EAEP can promote and, where possible, support gender inclusivity in the Ugandan energy sector. EAEP collected data from ERA, UEGCL, REA–Uganda, UEDCL, Bundibugyo Electric Cooperative Society, Kalangala Infrastructure Services, KRECS, KIL, and Umeme Ltd.

[redacted], *a Power Africa-supported apprentice at REG's Jabana 2 plant. Photo credit: WIRE*

Gender Networks: EAEP continued to support networks of women in energy across four countries. Rwanda's network, POWERHer, grew its membership to 100 and initiated a mentorship initiative in collaboration with the Ethiopian Women in Energy Network (EWiEn). Tanzania's network, TaWoED, had its members take part in workforce-readiness training, while EAEP supported the establishment of a fourth network of women in Somalia, PWiE.

Supporting young women in Energy Sector Careers: EAEP expanded the all-women internship program to Somalia and Tanzania in the past few months. During this period, EAEP has placed 21 new apprentices in Rwanda, 4 in Tanzania, and 6 in Somalia. Additionally, the program has seen seven women apprentices hired as permanent employees, raising the total number of women having secured permanent jobs with Power Africa support to 12. These interns will also receive workforce-readiness training as part of EAEP support to equip them with career-enhancing soft skills.

In this quarter, 168 women completed the workforce-readiness training program alongside existing members of POWERHer and TaWoED. WIRE further intensified negotiations with academic institutions in Rwanda to roll out the training to universities and technical colleges. In Rwanda, EAEP is scaling the workforce-readiness training in universities and technical colleges to sustain the initiative and improve women's employment prospects in the male-dominated energy sector. To date, EAEP's workforce-readiness training has reached 227 women from Kenya, Rwanda, and Tanzania.

PACO COORDINATION

The EAEP team continued to foster and facilitate coordination across Power Africa implementing partners and development partners. Additionally, EAEP completed the architecture and data mapping for the updated donor matrix tool. The donor information is now consolidated into one Excel sheet, which populates a Power BI dashboard that is web-accessible. EAEP will finalize the visualizations and present the draft web format to PACO in Q4.

Conferences and meetings of note this quarter are described in ***Table 2.***

Table 2. EAEP meetings and conferences, Q3 FY 2021

Event / Partner	Details
EAPP donor roundtable	On April 28, EAEP participated in a donor roundtable meeting organized by EAPP and the World Bank. Attendees included EAPP, EAPP Independent Regulatory Board, World Bank, AfDB (Power Africa Development Partner), European Investment Bank, Agence Française de Développement (AFD – Power Africa Development Partner), Swedish International Development Cooperation Agency (Power Africa Development Partner), Norwegian Agency for Development Cooperation – Power Africa Development Partner), USAID, Intergovernmental Authority on Development, COMESA, and Energy Regulators Association of East Africa. EAPP and EAPP and its Independent Regulatory Board presented their 10-year strategic plan, three-year action plan, and related tasks. The various stakeholders committed to their engagement.
DRC mining conference	EAEP attended a two-day virtual DRC mining conference on June 14–15, focusing on development in the DRC mining industry. The newly appointed DRC mining minister and the President's chief of staff shared the government's vision for the sector and the country. The meeting also focused on sustainability and formalizing the work of small-scale miners, specifically for the cobalt sector. Attendees discussed the *"enterprise general du cobalt"* and "fair cobalt alliance" projects that aim to place DRC at the center of the global electric-vehicle supply chain. EAEP will update the concept note for the Sumbawanga–Katanga interconnector, in light of the anticipated future power demand in DRC resulting from increased mining activities.
Deep-dive sessions with African Trade Insurance Agency (ATI – Power Africa Development Partner) [6]	EAEP participated in deep-dive sessions exploring opportunities to fast-track investment in Africa's renewable energy markets and increase field-based collaboration between ATI and Power Africa. The sessions included an overview of EAEP's activities and a presentation on opportunities for risk and liquidity insurance in East Africa power transactions. EAEP used the Nuru project to highlight where existing and innovative insurance products might be appreciated, and ATI showed interest in at least some of these opportunities. EAEP and ATI will continue discussions over the coming weeks to potentially involve ATI in more East African transactions. Seven of EAEP's focus countries are also ATI member countries and could benefit from ATI insurance products—in particular, those focused on the power industry.

[6] For more about ATI, see USAID's "Power Africa Private Sector Partners" web page, https://www.usaid.gov/powerafrica/developmentpartners#ATI.

Event / Partner	Details
AfDB (Power Africa Development Partner) Sustainable Energy Fund for Africa (SEFA) Session	EAEP's senior energy advisor participated in a joint Power Africa–SEFA session focused on SEFA's special fund, which focuses on green baseload power projects. EAEP inquired whether SEFA would consider supporting a promising baseload green project such as CREC Energy's waste-to-energy project in Djibouti. SEFA indicated that while they would consider it, they had found this type of power project difficult to develop. EAEP also offered SEFA information about the planned baseload generation expansion by private power distributors in Somalia, inquiring whether they could make their green baseload power solutions an option for Somalia. SEFA indicated that their representatives responsible for Somalia were based in Nairobi and would need to visit Somalia to assess potential involvement. EAEP and SEFA have the potential to catalyze power projects under development through cooperative interventions. EAEP will organize a follow-up meeting.

MONITORING, EVALUATION, AND LEARNING (MEL)

The EAEP MEL team—comprising the MEL manager, two MEL specialists based in Kenya, and a MEL assistant based in Rwanda—is supported by Khulisa, a subcontractor with deep MEL experience. In April 2021, the project's fourth virtual pause-and-reflect session was held to review Q2 data and to reflect on successes, challenges, and programmatic redirections. The next pause-and-reflect, to review Q3 data, will take place in August 2021. The sessions focus on reviewing the most up-to-date performance data.

During this quarter, the MEL team continued compiling lessons learned and adaptations in advance of the quarterly pause-and-reflect sessions. The areas shown in ***Table 3*** were identified by the Objective and cross-cutting teams.

Table 3. Programmatic learning from the quarter

Project objective and country	Lesson or adaptation
Objectives 1, 2 Rwanda, Tanzania, Regional	**Addressing impacts of COVID-19 on training:** The COVID-19 pandemic continued to have unpredictable impacts on several planned in-person training activities. For example, a planned RURA training had to be called off when the Government of Rwanda prohibited in-person meetings as a result of increased daily numbers of COVID-19 infections. EAEP has had to make contingency plans for virtual delivery of training where in-person sessions were not possible.
Objective 1 Somalia	**Political sensitivity:** With the continued political sensitivity between Somalia and Somaliland, EAEP, upon advice from USAID/Somalia has had to engage Somalia and Somaliland separately. As an initial step, EAEP prepared program documents specific to Somaliland that are currently under review by the Somaliland Ministry of Energy and Minerals.

Project objective and country	Lesson or adaptation
Gender Rwanda, Tanzania	**Changing mindsets about women in energy:** The EAEP/WIRE apprenticeship program is changing mindsets and increasing employers' trust in women's performance for technical energy jobs. For example, East African Power was the first company to join the apprenticeship program. Despite the company's ability to place more apprentices, the company accepted just one. However, at the end of three months, they ended up employing the apprentice and sought out three more new apprentices.
Gender Rwanda, Tanzania	**Self-reliance of women's energy networks:** While engaging and supporting various women energy networks, EAEP/WIRE has found low capacity in governance among the women networks' leaders. EAEP/WIRE is therefore planning capacity-building activities to encourage self-reliance, enhance the organizations' governance practices, and increase their ability to manage and implement action plans.
Objective 4 Regional	**Innovative support:** EAEP has recognized that the Nuru interconnector transaction is unique. To help the transaction continue to progress, EAEP began working with all the involved stakeholders to come up with innovative structuring and support to move the transaction to completion.

COMMUNICATIONS

During this quarter, the communications team supported seven social media posts (a selection of posts is included below from Twitter).


Power Africa @PowerAfricaUS · May 17
It's #WorldInternetDay!
In #Uganda, we are building the capacity of #utilities to employ #onlineGIS technologies to improve the quality of spatial data collection for decision-making and project planning.
#geographicinformationsystems #energyaccess #energyprojects
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Power Africa @PowerAfricaUS · May 25
We're celebrating the #LakeTurkana wind project (@LTWPOfficial) - the largest #windfarm in #Africa - providing 310 MW to #Kenya's national grid. This project has increased the country's #powergeneration capacity through reliable, low-cost #cleanpower.
#AfricaDay
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Power Africa @PowerAfricaUS · May 25
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USAID Rwanda @USAIDRwanda · Jun 1

#Women are innovators, leaders, and #changemakers across all spheres of society. @USAIDRwanda supports women's equal access to opportunities within education, business, governance, health, and in the #energysector @PowerAfricaUS #RwOT

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Power Africa @PowerAfricaUS · Jun 8

Congratulations @EthiopiaTmgo on the milestone kick-off drilling of the third geothermal well at #TuluMoye!

Power Africa continues to support #geothermal projects in #Ethiopia

> **EthiopiaTMGO** @EthiopiaTmgo · Jun 7
>
> Happening now: Ready to kickoff the third geothermal well while the a team from #MoF #EEA & EEP is attending the ceremony
> #Ethiopia #KenGen #Geothermal #renewableenergy #USAID #Kenya #PowerAfrica #Seleshi_b_a #meridiam #EU #USA

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Power Africa Retweeted

Orrick @Orrick · Jun 30

Together with @VanceCenter, @AelexPartners, LAT Legal Services, and @OCOAdvocates, we co-hosted a set of @PowerAfricaUS training workshops on how to structure and negotiate #renewableenergy projects in #Africa. Watch recordings of the sessions:

Orrick Hosts Second Series of Power Africa Professi...
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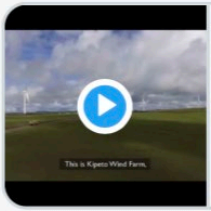
USAID Kenya @USAIDKenya · Jun 30

This is the U.S.-supported energy project in Kenya that @SecBlinken referred to as "enabling sustainability goals without writing off communities." We couldn't put it any better! @PowerAfricaUS @DFCgov #USAIDat60 youtu.be/8m0ArcNL39Y



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CROSS-CUTTING PROGRESS ON WORK PLAN ACTIVITIES

Work plan reference number, activity description, and minimum output code	Activity status
IPIU 1.1 Kenya organizational strengthening coordination matrix, action plan development, and working group facilitation **Activity Manager:** [redacted] **Counterparts:** All utilities, regulators, and other key stakeholders in core countries **Deliverables:** HICD reports and scores for Kenya, Ethiopia, and Rwanda **MO:** 1.3, 1.4, 1.5, 1.6, 1.7	**Summary of previous support:** This is a newly defined activity under the FY 2021 work plan. **Quarter 1:** The IPIU held high-level validation sessions with EPRA, KETRACO, Kenya Power, and KenGen executive committees to review the IPCA scores. The first round of scores came from a participatory assessment in FY 2019; they were updated through a repeat assessment in late FY 2020. During Q1 FY 2021, KenGen requested that EAEP participate in its upcoming strategy synthesis and review meeting, to share insights on how to improve the utility's strategy execution process. **Quarter 2:** Kenya Power change-management champions began spearheading implementation of the EAEP-supported culture survey recommendations. Additionally, the champions were expected to lead implementation of a change-management program to address the gaps identified through USAID's HICD process. The change-management program would involve improving revenue collection, reducing losses, and enhancing the overall performance of Kenya Power. **Quarter 3:** EAEP's Chief of Party and USAID's Kenya energy program management specialist met with the Permanent Secretary, Renewable Energy, of MOE. The session focused on Power Africa's role in the Kenyan energy sector, and highlighted EAEP's activities since the inception of the program. Topics included an overview of all Power Africa activities, HICD process implementation with industry players, loss-reduction activities with Kenya Power, and the updated MOE cooperation matrix. Additionally, the Permanent Secretary talked about potential future support requirements, including sharing learning experiences in the Kenyan energy sector on environmental and community-engagement best practices and the rollout of the National Energy Plan. Future collaborative activities between EAEP and MOE will include donor coordination, involvement of county governments, and collection of data to support Kenya's efforts to meet its energy-access goals. EAEP and MOE will continue to collaborate and will hold quarterly progress update meetings with the larger MOE team. In Q4, EAEP plans to bring together partners to go over the status of the cooperation matrix, which will aid in the continued realignment of various initiatives. In addition, EAEP will seek opportunities to form a sector technical working group of teams engaged for HICD. This working group will continually engage with EAEP and other development partners.
ET 1.4.1 b HICD for Ethiopia's energy sector	**Summary of previous support:** EAEP hosted an HICD workshop for the PPPDG in February 2020, at which staff reviewed and edited the organizational capacity assessment tool. After the workshop, EAEP prepared the baseline PPPDG assessment for review with participants and other stakeholders. EAEP finalized the assessment with stakeholders by the end of FY 2020, and afterward worked with stakeholders to develop a PPPDG strategy.

Work plan reference number, activity description, and minimum output code	Activity status
Activity Managers: [redacted] **Counterparts:** EEP, EEU **Deliverable:** HICD report for PPPDG **MO:** 1.5	**Quarter 1:** This activity was put on hold under the bridging work plan. **Quarter 2:** Follow-up meetings with PPPDG for feedback and capacity development support resulted in an agreement to conduct annual IPCAs to track progress for the support and initiatives by PPPDG. EAEP agreed on assessment tools with PPPDG and deployed these to HICD participants. Completion and analysis of this activity were expected in April 2021. **Quarter 3: The** PPPDG IPCA was undertaken, and as the quarter ended, the results were undergoing analysis for presentation to the PPPDG in Q4. The validation workshop planned for Q4 also will assist the unit to complete the five-year strategic plan, already in progress with EAEP inputs.
IPIU 1.2 Ethiopia PPPDG capacity-building coordination framework and strategic plan **Activity Manager:** [redacted] **Counterpart:** PPPDG **Deliverables:** Progress reports, strategic framework **MO:** 1.3, 1.4, 1.5,	**Summary of previous support:** See **ET 1.4.1 b HICD for Ethiopia's energy sector.** **Quarter 1:** The PPPDG requested EAEP's support for its PPP onboarding workshop, in November 2020. Workshop attendees included PPPDG's new state minister, board of directors, director general, and other directorate stakeholders. Additionally, PPPDG finalized its review of EAEP's draft baseline HICD capacity assessment. **Quarter 2:** Follow-up meetings with PPPDG for feedback and capacity development support resulted in an agreement to conduct annual IPCA assessments to track progress related to the support and PPPDG's initiatives. EAEP agreed on assessment tools with PPPDG and deployed these to HICD participants. Completion and analysis of this activity was expected in April 2021. **Quarter 3: The** IPIU reviewed the draft PPPDG strategic plan to align it to the findings of the HICD capacity assessment. The next step will be to support the PPPDG unit through a session where the new plan will be validated and an execution road map crafted into the five-year strategic plan, which should result in robust PPP project implementation. These steps are planned for Q4.
IPIU 2.1	**Summary of previous support:** This is a newly defined activity under the FY 2021 work plan. **Quarter 1:**

Work plan reference number, activity description, and minimum output code	Activity status
Training and coaching for organizational development efforts **Activity Manager:** [redacted] **Counterpart:** PPPDG **Deliverables:** Progress reports, strategic framework **MO:** 1.3, 1.4, 1.5	• **Ethiopia** – Change management and customer-service management: The IPIU team provided significant support in carrying out various trainings in Ethiopia. These included (1) PPP team strengthening for East African countries; (2) GIS for cadastral system-development training for EEA; (3) EEP operationalization of IPP unit training; and (4) Vance Center training on regulatory frameworks. • **Kenya** – Training and coaching of power entities for organizational development: EAEP launched technical and leadership training for 65 participants from four selected power entities. The three-month training aimed to build these entities' in-house skills in business analytics for executives, business and financial modeling, leadership development for engineers, and management of major engineering projects. • **Djibouti** – PPP strengthening: EAEP's IPIU director led a one-on-one session with the sole Djiboutian participant in the IP3 PPP training. The knowledge-transfer session aimed at equipping the participant with the proper tools and knowledge to share with colleagues. EAEP will conduct additional follow-up sessions to ensure that training provided is cascaded and supports actual performance improvement. **Quarter 2:** • **Kenya** – EAEP continued training and coaching power entities for organizational development. EAEP launched technical and leadership training for participants from four selected power entities. The three-month training aimed to build these entities' in-house skills in advanced business analytics, leadership development for engineers, business analytics for executives, business-continuity planning and management, and engineering large-infrastructure project management. Additionally, the program supported the Kenya Power Prosci© change-management training. • **Ethiopia** – EAEP subcontractor Ethiopian Airline Academy continued to support the rollout of customer-service management training by coaching customer-service champions. The IPIU team also participated in the review of the PPPDG strategic plan. • **Zanzibar**– The IPIU supported the rollout of Coursera training for project management for selected ZECO staff members. **Quarter 3:** EAEP continued training and coaching power entities for organization development using virtual learning. In this quarter, the unit engaged with participants from other countries and found growth in the demand for and knowledge of the offerings under the portal. The strategy is to grow the enrollment through alignment to specific objectives and country needs. Graduation for Kenyan utility staff is planned in Q4, with scale-ups to other targeted countries and utilities.

Work plan reference number, activity description, and minimum output code	Activity status
KE – IPIU (1.4.4) institutional reforms **Activity Manager:** [redacted] **Counterparts:** Kenya Power, KenGen, KETRACO, EPRA **Deliverable:** Power Africa–MOE cooperation matrix for Kenya energy sector **MO:** 1.4, 1.6	**Summary of previous support:** EAEP conducted validation meetings on HICD assessments with Kenya Power, KenGen, KETRACO, EPRA, GDC, and REREC, leading to a final validation workshop in November 2019. The program then concluded a cooperation matrix with the MOE and agreed on priority areas for support for the six power entities. Dr. Eng. Joseph Njoroge, Principal Secretary of the MOE, approved the Power Africa–MOE cooperation matrix and shared it with all sector CEOs for implementation. **Quarter 1:** EAEP's IPIU held a bimonthly check-in with participants regarding training on approaches to organizational development. EAEP, through the Coursera online platform, supported four priority areas: business analytics for executives, business and financial modeling, leadership development for engineers, and managing major engineering projects. EAEP also supported communities of learning for cross-pollination of ideas between entities. During the check-ins, EPRA requested inclusion of another analyst, because the advanced strategy and valuation course would be especially useful to EPRA in improving in-house skills for demand and load forecasting as well as implementation of the grid code. The online training metrics as of December 31 indicated 61 enrolled participants. The three-month EAEP training aimed to build power entities' in-house skills to support the implementation of specific activities, projects, policies, and strategic frameworks that would lead to solvent and resilient power entities. **Quarter 2:** EAEP's IPIU team held its quarterly town hall for Coursera learners from Kenyan power entities. EAEP updated the attendees on new courses, and offered a peek into the system's back end, where organizations can set up critical skill sets to develop over time. In this quarter, EAEP obtained 35 course completions, with 22 from Kenya Power, five from KenGen, four from KETRACO, and four from EPRA. EAEP planned to host a virtual graduation ceremony in Q3 for participants who completed the specializations. EAEP chose the Coursera model because of its virtual capabilities during COVID-19 office closures, its flexibility for participants to complete courses at their own pace, and the quality of the courses being offered. **Quarter 3:** EAEP presented a high-level progress report to the MOE on the HICD-derived cooperation matrix. The meeting was a lynchpin in getting guidance and alignment for the next phase of EAEP activities in FY 2021. High-level consultations were done by EAEP's Chief of Party and USAID's Kenya energy program management specialist, who met with the Permanent Secretary, Renewable Energy, MOE. The session focused on Power Africa's role in the Kenyan energy sector, and highlighted EAEP's activities since the inception of the program. Topics included an overview of all Power Africa activities, HICD process implementation with industry players, loss-reduction activities with Kenya Power, and the updated MOE cooperation matrix. Additionally, the Permanent Secretary talked about potential future support requirements, including sharing learning experiences in the Kenyan energy sector on environmental and community-engagement best practices and the rollout of the

Work plan reference number, activity description, and minimum output code	Activity status
	National Energy Plan. Future collaborative activities between EAEP and MOE will include donor coordination, involvement of county governments, and collection of data to support Kenya's efforts to meet its energy-access goals. EAEP and MOE will continue to collaborate and will hold quarterly progress update meetings with the larger MOE team.
KE IPIU – 1.4.5 KenGen post-COVID-19 business resumption and resilience project **Activity Managers:** [redacted] **Counterpart:** KenGen **Deliverables:** Business-resumption and resilience strategy; marked-up version and comments on actual strategy **MO:** 1.5	**Summary of previous support:** EAEP's institutional performance-improvement team presented the draft KenGen COVID-19 business-resumption report to the KenGen Executive Committee. The committee validated the report and made technical suggestions, including continuously developing benchmark cases and solidifying the budgetary requirements for the COVID-19 implementation road map. The next steps designated for EAEP were to work with KenGen to develop a budget and to conduct final quality checks for the draft report. It was envisioned that once completed, the COVID-19 business-resumption strategy could be adapted for other utilities and stakeholders in Kenya and throughout the region. **Quarter 1:** Power Africa EAEP presented the final report, with an implementation road map, to the KenGen Executive Committee. The team appreciated the support from EAEP and wrote a letter of appreciation indicating a commitment to implement the key recommendations that EAEP provided. **Quarter 2:** Based on this work, the team began developing a best-practice process for supporting a power entity to develop an effective COVID-19/pandemic business resilience plan and protocols. This process was expected to be shared with stakeholders in Q3. **Quarter 3:** EAEP continued to explore the appetite for COVID-19 support within the utilities through a suite of offerings that targeted organizational resilience. Based on lessons from KenGen's COVID-19 Business Resumption and Resilience Project, EAEP crafted effective tools and processes for developing similar protocols and offering advisory support to other power entities.
Archived Activity KenGen organizational health assessment **Activity Manager:** [redacted] **Counterpart:** KenGen	**Summary of previous support:** EAEP completed the final OHA report for KenGen and presented the findings virtually to the managing director and the Executive Committee on March 23, 2020. The KenGen Executive Committee developed an implementation plan to institute reforms, with its revamped Horizon II strategy, for key areas identified as gaps through the OHA. Areas identified as priorities included succession planning, training, performance-improvement tracking, and cascading of the Horizon II strategy to employees. The KenGen board asked EAEP to facilitate a meeting to present the assessment report, at which point the board would take charge of specific priorities and initiatives. **Quarter 1:** EAEP met with KenGen's board to present the utility's OHA findings. The KenGen board committed to implementing specific areas of the report, including succession planning and training follow-up, to ensure improved

Work plan reference number, activity description, and minimum output code	Activity status
Deliverable: Completed OHA **MO:** 1.5	performance. The KenGen board requested that the utility's management team provide quarterly implementation reports to the board. **Quarter 2:** This activity was archived for completion. **Quarter 3:** KenGen requested additional support for this previously archived activity. KenGen had proposed EAEP involvement in a forum to provide input to their current strategy, to check whether it was still aligned with their vision. This was proposed to be an in-house session with a neutral third party (EAEP). This activity is likely to take place in Q4 FY 2021.
PACO 2 Development partner matrix **Activity Managers:** [redacted] **Counterpart:** None; internal **Deliverable:** Development partner (donor) matrix	**Summary of previous support:** EAEP continued maintaining a development partner (donor) matrix document in cooperation with other stakeholders, and refinements were ongoing. The matrix catalogued and described known donor-funded energy projects in operation (or recently closed) in East Africa and included 10+ charts detailing investment profiles for each country, organized by donor, and seven metrics detailing major donors per market segment (including generation, transmission and distribution, household access, private-sector participation, and planning/regulatory support) plus total donor support per country on an aggregate and per-capita basis. **Quarter 1:** Updates to the donor matrix were under way for dissemination in Q2 FY 2021. **Quarter 2:** EAEP began redesigning the donor matrix to make it easier to maintain and use. **Quarter 3:** EAEP completed the upgrade of the donor matrix to the new Power BI-hosted Donor Dashboard, which allows users to select donors, institutions, utilities, etc., to identify development partner activity across the 10 EAEP countries. The Donor Dashboard will be disseminated in Q4, after the appropriate GIS license is obtained for online publishing. Additionally, EAEP converted and updated data to an Excel file that estimates over $14 billion in development partner support (grants, financing, etc.) in the on- and off-grid energy sector in the region.
NEW: Somalia targeted HICD **Activity Manager:** [redacted] **Counterparts:** Somalia ESPs, MOE	**New Activity** **Quarter 3:** The simplified HICD tool was deployed during the Somalia energy sector stakeholders' workshop, and results will be compiled in the fourth quarter. The next step will be to conduct a validation workshop with ESPs and other stakeholders.

Work plan reference number, activity description, and minimum output code	Activity status
Deliverables: HICD assessment, Progress reports	
ENV 1 Environmental assessments and reporting of transactions and activities with potential impacts **Activity Manager:** [redacted] **Counterparts:** All utilities, regulators, and other key stakeholders in core countries **Deliverables:** Environmental Management and Mitigation Plan (EMMP); Power Africa Environmental and Social Review Methodology (PESRM) **MO:** 1.7	**Summary of previous support:** EAEP finalized the EMMP for USAID approval; however, USAID required an updated Initial Environmental Examination for Power Africa compliance, which would have to be conducted by the PACO before submission and approval of EAEP's EMMP to USAID's environment bureau. Therefore, EAEP remained on standby pending a go-ahead from the Task Order Contracting Officer's Representative (TOCOR) to adjust the EMMP. EAEP continued to identify critical transactions for PESRM checklist updates and compliance; however, many activities were in "tracking mode" and not able to recover the necessary documents for PESRM updates. EAEP environment advisors reviewed the following for ad hoc support to the Objective teams: • Uganda–DRC interconnector ESIA for Nuru project • Concept notes for a geothermal industrial parks conference with Oserian Lakes • All activity-approval memoranda for internal scoping • Procurement documents for specific activities with potential impact on the environment, e.g., dam-rehabilitation studies in Ethiopia **Quarter 1:** EAEP conducted environmental reviews (PESRM) for transactions in Djibouti (CREC Energy), Kenya (Tindiyo–Virunga Power), and Tanzania (national system strengthening). **Quarter 2:** EAEP reviewed the ESIAs for the Nuru Energy Uganda–DRC line (including additional analysis from Endangered Wildlife Trust [EWT]) and two Rwandan transmission lines. **Quarter 3:** EAEP attended to the following requests: • Final technical review and clearance of the ESIA for the transport, distribution, and marketing of electrical energy in the northeast of the DRC from Bwera in Uganda • Technical review of the ESIA and ESMP for high-voltage transmission lines for Rwanda's EDCL
ENV 1.2	**Cross-listed with KE 1.5.3 ESMF for KETRACO**

Work plan reference number, activity description, and minimum output code	Activity status
KETRACO ESMF **Activity Manager:** [redacted] **Counterpart:** KETRACO **Deliverable:** One utility environmental-management process **MO:** 1.7	**Summary of previous support:** The EAEP environment advisory team drafted an SOW for KETRACO as the pilot utility for process-development support. Internal reviews concluded in late June 2020, and the scope was planned to be introduced to and negotiated with KETRACO in July. EAEP began stakeholder analysis with KETRACO in early August and continued to develop the environmental management system with counterparts. **Quarter 1:** EAEP started work with KETRACO on the ESMF and expected to complete framework development by Q2 FY 2021. The scope required additional time to directly support the construction of the 308 km Olkaria–Lessos–Kisumu high-voltage transmission line, in addition to the 220 kV bay extensions integration at Lessos substation, the extension of the 132 kV Kisumu substation at Mamboleo, and the establishment of a 220/132/33 kV substation at Kibos. **Quarter 2:** EAEP supported the development of KETRACO ESMF and completed data gathering and inputs for the first draft. The program updated the draft and associated tool for KETRACO input, anticipated in April 2021. The purpose was to allow for MEL counting in Q3 of adoption of standards. The standards would directly apply to environmental support for the Olkaria–Lessos–Kisumu line (308 km), and were reviewed by EAEP's environment advisor with KETRACO in February 2021. **Quarter 3:** EAEP finalized and submitted the ESMF to KETRACO. As an additional deliverable, EAEP planned to conduct a three-day training in Q4 for 20 staff in KETRACO's Sustainability Division on the use and application of the ESMF. As part of ESMF development, EAEP conducted an environmental audit of the Olkaria–Lessos–Kisumu line (308 km) that has since become a reference document for KETRACO, project financiers, and regulatory agencies during the project operations phase. The program anticipates continued support to KETRACO on both environment and community-engagement activities into FY 2022, with the aim of claiming more kilometers of transmission line(s). Similar work will be replicated in other EAEP countries.
ENV 2 Business case for mainstreaming environmental practices **Activity Manager:** [redacted] **Counterparts:** All utilities, regulators,	**Summary of previous support:** EAEP sponsored EWT to present on wildlife mitigation at a linear-infrastructure conference in Nairobi. EWT met with all Kenyan energy stakeholders to determine existing wildlife-mitigation measures and develop recommendations for a business case for wildlife processes. EWT prepared a written report of recommendations and shared it with host-country counterparts and USAID. Concerns highlighted in the report related to capacity building, training needs, general awareness across organizations, preferred structural designs, and the absence of guidelines for best practices around wildlife interactions with electrical infrastructure. **Quarter 1:** The bridging work plan determined that EWT would start work in Kenya, Ethiopia, or both, once budget clarity was attained. EWT was engaged by Ethiopia counterparts EEU and EEP for support; therefore, EAEP anticipated EWT working only in Ethiopia in a reduced-budget scenario.

Work plan reference number, activity description, and minimum output code	Activity status
and other key stakeholders in core countries **Deliverable:** Environmental business case **MO:** 1.7	**Quarter 2:** The task order was approved for EWT to undertake an East Africa regional handbook for wildlife mitigation and improvements. **Quarter 3:** EAEP received the draft wildlife guide from EWT for comment; the edited version will be sent back to EWT in Q4.
NEW: Climate-change support **Activity Manager:** [redacted] **Counterparts:** All utilities, regulators, and other key stakeholders in core countries **Deliverable:** Climate-change study on regional, large hydros, PATT reporting (Clean Energy Emission Reduction tool, CLEER)	**New Activity** **Quarter 3:** EAEP reviewed all PATT transactions using the USAID CLEER tool, which measures the emissions of specific transactions that the program is supporting as a step toward tracking EAEP's potential total emissions and (by extension) identifying appropriate offset measures**.** Additionally, EAEP coordinated draft briefs on Ethiopia and Kenya for review by the USAID Eastern Africa mission review; these drafts will be delivered in Q4. Lastly, EAEP finalized a TOR for a seasonal internship to assess the impacts of climate change on regional hydrology associated with large hydro projects anticipated in the coming 10 years (Grand Renaissance Dam, Stiegler's Gorge, Inga, etc.). The internship will focus on hydrology scenarios that could inform resource diversity in the region.
CE 1–2 Technical assistance to country-specific	**Summary of previous support:** EAEP signed letters of engagement with the leaders of REREC, KenGen, GDC, and KETRACO that proposed levels of support for community engagement. EAEP advanced community-engagement activities, predominantly in Kenya, while supporting ad hoc reviews and recommendations for transmission ESIAs and QTATs. EAEP did

Work plan reference number, activity description, and minimum output code	Activity status
activities and support to Objective 1 **Activity Manager:** [redacted] **Counterparts:** Power entities in three countries **Deliverables:** Progress updates and policy updates **MO:** 1.7	not work in Ethiopia on community engagement, despite early scoping with EEP and EEU, given hiring challenges for a local advisor. **Quarter 1:** • **Kenya** – EAEP conducted a virtual **training / capacity development on Kenya's laws, acts and policies related to the energy sector.** EAEP trained 44 participants from KenGen, KETRACO, Kenya Power, the Nuclear Power and Energy Agency, GDC, EPRA, REREC, Energy and Petroleum Tribunal, Ministry of Energy's gender department, Kenya Pipeline Company, community representatives, County Assemblies Forum, Council of Governors, and Task Force on Implementation of the Energy Act 2019. The training was conducted over six days on the implementation of the Energy Act 2019. The activity was completed, and a report and action plan were submitted for review in December 2021 for recommendations to stakeholders. – EAEP supported KenGen in **developing an overall GCHM** for energy projects and completed and submitted the deliverables: inception report, stakeholder consultation plan, post stakeholder consultation report and the final GCHM policy and procedure. It was expected that once the GCHM was completed, it would improve KenGen's ability to implement effective community-engagement policies and support improved public relations by establishing positive ways to address such issues. – EAEP held conversations with REREC on the **development of its community-engagement strategy.** EAEP and REREC developed a draft TOR to provide general guidance to REREC for planning and conducting its community-engagement activities over the next five years (2020–2025). This activity was put on hold until budget clarity evolved for either in-house support from EAEP or engagement of a consultant. – EAEP continued conversations with KETRACO on the **review and update of the Resettlement Policy Framework.** The revised framework will prevent or minimize involuntary displacement of persons, whenever possible, during transmission development. The activity moved into the wider stakeholder consultation phase. EAEP planned to support in-house development of the framework in future quarters. The ultimate goal was to have a resettlement action policy that could move KETRACO forward for the next 10 years. • **Ethiopia** – EAEP successfully recruited a **community-engagement specialist** to support the Ethiopia portfolio; however, due to budget constraints, this individual did not start work.

Work plan reference number, activity description, and minimum output code	Activity status
	Quarter 2: • EAEP completed the draft GCHM for KenGen and planned to make a presentation to the KenGen Executive Committee, which unfortunately postponed the presentation multiple times. EAEP anticipated that the presentation would take place only when the Executive Committee was ready. A training program for KenGen staff to enhance adoption of the GCHM policy was added as a component in the rollout strategy. This effort would allow for MEL attribution in Q3. • EAEP received feedback from KETRACO top managers and the research committee leaders for integration into the revised wayleaves study. EAEP agreed to incorporate this feedback and create an updated study in April 2021, which would be presented during KETRACO's annual conference in June 2021. This effort would allow for MEL attribution in Q3. • EAEP started developing a TOR and SOW with REREC and GDC to determine possible support areas in community engagement. During the HICD exercises, both institutions identified community engagement as an area for support. Due to the reduced FY 2021 budget, EAEP was not able to support additional financial resources, but instead worked with the existing community-engagement advisor to support the development of community-engagement policies. **Quarter 3:** • **KenGen:** The rollout of the GCHM through capacity building of staff did not commence. EAEP held an initial meeting with KenGen to discuss the development of a national policy on community engagement, which will help to address shortcomings in the Benefit Sharing Bill (2018), Equalization Bill, and Energy Act 2019. Land access, royalty allocation, issues of compensation, and benefit sharing must be harmonized to reduce conflict with the Revenue Allocation Authority in the power sector. The national policy will aim to include a standard land-access model to reduce conflicts with communities. This activity will move to the 2021–2022 work plan. • **KETRACO:** EAEP revised the wayleaves paper and performed in-depth inferential data analysis. The paper was accepted for presentation at the second KETRACO annual conference to be held on July 2. • **REREC:** The TOR for the development of the community-engagement strategy was completed and remained awaiting approval by the REREC executive committee. EAEP's community engagement advisor submitted an activity approval form (internal RTI process) with MW and connections targets for proposed assistance. Under the new dispensation,

Work plan reference number, activity description, and minimum output code	Activity status
	REREC has an expanded mandate of spearheading Kenya's drive to renewable energy, in addition to implementing rural electrification projects (including rural electrification mini-grids) in 25 counties. • **GDC:** The TOR for the development of the community-engagement strategy was completed and approved by the GDC Executive Committee. EAEP will support this activity through a consultant in FY 2022.
Gender A Gender gaps analysis **Activity Manager:** [redacted] **Counterparts:** Power entities in four countries **Deliverable:** Completed gender gaps analysis	**Summary of previous support:** EAEP submitted the draft gender gap-analysis document and began making revisions based on USAID feedback. EAEP resubmitted the revised report, which was accepted in early FY 2020. **Quarter 1:** EAEP established that no gender analysis had been undertaken by PAUESA, the program being taken over in Uganda. This meant that there was no baseline for gender indices in relation to EAEP activities in Uganda, which would be needed to define EAEP gender indicators. EAEP therefore planned to undertake a gender analysis of PAUESA partners, largely on-grid private companies, as well as Umeme Ltd., the national power entity. **Quarter 2:** EAEP began collecting data virtually and developed data-collection tools and questionnaires, which were posted on the online platform Survey Monkey and filled in by participants. EAEP collected data from ERA, UEGCL, REA–Uganda, UEDCL, Bundibugyo Electric Cooperative Society, Kalangala Infrastructure Services, KRECS, KIL, and Umeme Ltd. **Quarter 3:** EAEP finalized data collection for the Uganda gender study and developed a draft report, with support from subcontractor Khulisa. The findings of this study will provide insights into how EAEP can promote and, where possible, support gender inclusivity in the Ugandan energy sector. The findings will also help the Ugandan power sector improve women's participation in power generation, transmission, and distribution.
Gender I Supporting women in national energy networks **Activity Managers:** [redacted] **Counterparts:** EWiEn, TaWoED	**Summary of previous support:** EAEP supported the official launch of EWiEn on October 15, 2019. In Tanzania, a network of women in energy careers was registered as a local nongovernmental organization and set to launch in May 2020. The EAEP gender team supported the launch of this network with the establishment of an online presence (including a website and a LinkedIn profile) and anticipated an in-person meeting once the network was approved and COVID-19 restrictions were lifted. In Rwanda, EAEP organized the registration of POWERHer for founding members, set up elections, collected signatures, drafted the statute and preliminary action plan, and submitted the paperwork for registration. **Quarter 1**: • **Tanzania TaWoED:** TaWoED marked an important milestone in enhancing incorporation of women with disabilities into the Tanzania energy sector. EAEP helped TaWoED organize and deliver a training to women with disabilities on energy entrepreneurship. The training served as a pilot for disability inclusion in the network and within the Tanzania

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network in Tanzania, POWERHer network in Rwanda **Deliverables:** Lists of members for both networks; nondisclosure agreement for EWiEn launch materials for the Tanzania network	energy sector. The training also aimed to empower and inspire vulnerable and disadvantaged women in the energy sector, as well as to gather information on how best to refine commitments of actions and pledges from key stakeholders on inclusion. The training reached 10 young women. The project will be a collaboration hosted by TaWoED along with REA–Tanzania, Employable Africa, AG Energies Tanzania, and FUWAVITA (Tanzania association for the deaf). • **Rwanda POWERHer:** EAEP supported the POWERHer network in Rwanda to register as an entity and form a membership base of 104 women. This step will allow the network to receive funds directly, as opposed to relying on support from development institutions. Upon its establishment in October 2020, EAEP supported the POWERHer network elect committee members to undertake the registration process with the Rwanda Governance Board. As a result, POWERHer obtained a collaboration letter from the mayor of Nyarugenge District in December 2020. EAEP helped the network establish three social media platforms (Twitter, WhatsApp group, and LinkedIn) and started publishing blogs and articles about members who had built their skills or obtained leadership positions in the energy sector. The WhatsApp group allowed members to share job opportunities and communications regarding energy seminars and resources. EAEP planned to provide capacity building and technical support to newly elected or appointed members of the POWERHer network as well as assisting with communication and sustainability strategies. **Quarter 2:** • In March, the WIRE Initiative supported POWERHer and TaWoE to host an International Women's Day webinar. The webinar helped to raise the voices of women and other key stakeholders in the Rwandan and Tanzanian energy sectors. Participants shared experiences on harnessing the power of women's networks to enhance their participation in the energy sector, and also discussed strategies to synergize energy sector stakeholder efforts to rebuild post-COVID-19, with women and girls at the center. Energy sector stakeholders committed to doubling their efforts toward achieving gender equity, including intensifying outreach and networking activities in communities and within women-in-energy networks. • **Rwanda POWERHer:** EAEP's WIRE initiative began planning a capacity-strengthening workshop for elected committee members of POWERHer. The workshop aimed to strengthen the committee's capacity to lead the nongovernmental organization, implement the 12-month action plan, and work toward a self-sustaining network after support by the US White House's Women's Global Development and Prosperity Initiative (W-GDP) ends. WIRE also helped the POWERHer network develop a six-month implementation plan and internal regulations. EAEP assisted the

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	network in developing a website to enhance its communication with other donors and stakeholders. WIRE celebrated the official registration of the POWERHer network as a certified nongovernmental organization authorized to operate in Rwanda. The Rwanda Governance Board signed the POWERHer registration certificate on February 22. EAEP's WIRE initiative planned to continue to support POWERHer toward becoming an independent network. • **Ethiopia Women in Energy Network:** EAEP supported EWiEn to hold a regional launch and learning events in two regions of Ethiopia: the Southern Nations, Nationalities, and Peoples' Region and Sidama. The event comprised two sessions. The first session, which had 50 participants, consisted of presentations, group/panel discussions; and networking forums. The second involved a visit to Hawassa Vocational Training Center. Twenty women and girls visited a physical site that installs and assembles solar energy technology at the training center. The visit was guided by a practitioner woman in the solar energy field, and aimed to showcase women professionals in the regions. The participants were able to hear and learn firsthand from women in the energy sector. **Quarter 3:** • **Regional:** EAEP started discussions about partnering with Women in African Power (WiAP) to offer network-sustainability training to EWiEn, TaWoED, and POWERHer. The training will follow the sustainability road map methodology, which includes narrative information and worksheets that enable the networks to examine their current and future financial needs, various revenue sources, and capacity. WiAP and EAEP will implement this activity virtually. • **POWERHer:** In Q3, EAEP supported POWERHer to develop internal rules and regulations. This paved the way for the planned admission of over 103 new members during the network's general assembly, scheduled to take place in July 2021. EAEP supported POWERHer to effectively use three social media platforms (Twitter, WhatsApp, and LinkedIn) and develop a network website that will launch soon. EAEP also enhanced POWERHer members' soft skills through the WIRE-supported series of trainings, including women-empowered employee training, workforce-readiness skills training, and gender foundation training. EAEP also finalized preparations for tour visits to four universities and technical schools. The tour visits were planned to kick off in the third week of June, but were postponed due to growing COVID-19 caseloads and restrictions. EAEP supported POWERHer committee members to dialogue with EWiEn network members from Ethiopia; Wentors (Women Mentors), an organization that provides an online platform geared toward assisting young women in the technology fields; and Global Women's Network, to share experiences that would enable POWERHer to launch its mentorship program. EAEP and POWERHer are planning to launch an online mentorship platform for members of the network in Q4 FY 2021.

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	• **TaWoED:** EAEP trained 26 members of TaWoED on workforce readiness. This training offered members an opportunity to learn ways of enhancing their careers in the energy sector. For women already in the sector, lack of soft skills, which are necessary for career advancement, continues to be a challenge. In addition, EAEP supported the official launch of TaWoED in Dar es Salaam, including government officials, private and public sector companies, and professionals in the energy sector. • **Somalia network of women in energy:** EAEP supported the establishment of PWiE. The key founders of PWiE paid the network registration fees, and EAEP supported the network's communications and marketing, articles of association, and the request letter to support the registration process. PWiE is the fourth national network of women in energy supported by EAEP. • **Ugandan Women in Energy and Power:** EAEP initiated discussions with professional women in the Ugandan energy sector on the establishment of a national network of women in energy. Deliberations resulted in a proposal to form Uganda Women in Energy and Power, which will be the Ugandan chapter of AWEaP, a nonprofit company established to accelerate African women entrepreneurs' participation in the power and energy sector.
Gender 2.1 and 2.2 Implementing gender-mainstreaming best practices (gender-equity training series, coaching, policy support) **Activity Managers:** [redacted] **Counterparts:** Power entities	**Summary of previous support:** EAEP continued its virtual gender-equity training series in Rwanda and Kenya. The training kicked off in Kenya on April 23, 2020, with 25 participants from four parastatal power entities and the MOE. In Rwanda, virtual sessions began on May 13, with 28 participants from 13 public and private power entities. The aims of the gender-equity training were to equip participants with skills and knowledge to apply and influence gender-inclusive policy development and HR practices in their organizations, and to deepen their understanding of various aspects of gender within their organizations. **Quarter 1:** EAEP developed a coaching map to help trained power entities put in place inclusive practices across the employee life cycle, with each company guided by its organizational priorities. The coaching is intended to support Kenya Power, KenGen, GDC, and KETRACO, and is specifically targeted at supporting these companies' gender-equity priorities, including complying with Kenya's gender policy. EAEP planned to provide special attention and support to entities interested in strengthening their talent outreach and recruitment/hiring practices and policies, in alignment with USAID's Engendering Utilities best-practices framework. In Rwanda, the WIRE specialist and gender advisor began supporting Off-Grid Box (which produces all-in-one solar and water systems) in developing its sexual harassment prevention policy. **Quarter 2:** EAEP continued coaching three Kenyan power entities to adopt inclusive practices across the employee life cycle. EAEP developed a coaching road map that would serve as the overall guide for the coaching process. In addition, RURA management approved development of a gender-mainstreaming strategy; EAEP's WIRE initiative supported RURA in developing

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Deliverables: Training materials for seven sessions, including design, content, and facilitation guide; list of participants; eight training modules, including design, content, and facilitation guide	the gender policy, including a TOR for RURA's gender-mainstreaming strategy and staff capacity building. This activity was expected to result in a gender policy that would guide the Rwandan energy sector, train 60 women and men on gender mainstreaming, and teach staff how to implement gender best practices in human resources. Finally, EAEP facilitated an MOE gender-policy dissemination workshop in the energy sector. Attendees included representatives of the Cabinet Secretary, USAID/Kenya, and on- and off-grid sector players. EAEP's senior gender advisor took participants through the USAID Engendering Utilities program's HR best-practices framework. The participating organizations developed action plans aligned to the MOE gender policy, and also established an energy sector gender-steering committee. **Quarter 3:** **Kenya:** EAEP enrolled a fourth company, KenGen, into its coaching support. The program built working alliances with KenGen and the other participating utilities, tracking progress made since the delivery of foundational gender training FY 2021, with a special focus on the status of European Union phase I and II HR practices. EAEP also supported the four entities to develop and implement the coaching road map, as well as KETRACO's gender policy and baseline draft report. Once the final gender strategy is approved, EAEP will organize a sensitization workshop to enhance awareness of the policy among staff. EAEP also supported the review of GDC's sexual and gender-based violence and gender policies, for the first time since their development in 2015, and shared its inputs with the power entity. The program also supported the establishment of the MOE gender-policy steering committee, which aims to support the implementation of MOE's gender policy. EAEP helped outline the responsibilities of members of the steering committee and assisted in setting the meeting schedule. **Rwanda:** In Q3, EAEP/WIRE initiated and completed the hiring of a local consultant (Ethos Consulting Group) to develop RURA's gender-mainstreaming strategy and train 60 RURA staff on policy implementation. In addition, the EAEP and WIRE team provided technical support for the development of Off-Grid Box's sexual harassment policy. EAEP is anticipating the development of two country-level policies, for Rwanda Polytechnics and one company in Tanzania, during FY 2022. The WIRE team reviewed the gender foundation training curricula and enrolled the second cohort of 37 participants in Rwanda. The third cohort of 31 participants was scheduled to begin training on July 16, 2021. EAEP/WIRE, in collaboration with the Johns Hopkins University initiative Self-Empowerment and Equity for Change (SEE Change), organized an empowered-employee training from May 18–June 25. The training reached 35 Rwandan women in the energy sector with leadership and professional skills, to better create and focus on their goals and learn how to overcome workplace challenges. WIRE also fast-tracked the launch of the Rwanda sexual harassment community of practice to enhance peer learning and experience sharing in the country. This

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	initiative targets partner institutions. A call for member registration was launched, and plans were made to launch this community of practice in August 2021. **Tanzania:** EAEP rolled out workforce-readiness training for TaWoED members. By the end of June 2021, 15 members had completed the training. To expedite implementation, EAEP secured the services of JstWork, a second service provider based in Kenya. **All:** EAEP also developed a questionnaire and commissioned the registration of online participants from Kenya, Rwanda, Somalia, Tanzania, and Uganda for gender training in Q4. At the end of Q3, 25 participants in Kenya and five in Uganda had registered for the virtual gender foundation training. Attendees at this training will include human resources staff, gender focal points, and EAEP interns.
Gender 3.1–3.3 Increasing numbers of women in entry-level positions and in internship or apprenticeship programs **Activity Managers:** [redacted] **Counterparts:** Power entities **Deliverables:** Lists of interns and reports from their companies that they have been fully engaged; numbers of	**Summary of previous support:** The WIRE initiative continued to make progress placing apprentices at energy companies and institutions. Three additional companies signed a master apprenticeship agreement, which allowed placement of 37 new apprentices; the initiative placed 10 apprentices in August 2020. In September, REG completed apprentice interviews, selecting 33 candidates for placement. WIRE launched its workforce-readiness training with the first cohort of 27 women apprentices. In Kenya, KETRACO selected five EAEP-sponsored interns to be placed in a range of operational and technical fields within the organization, to acquire hands-on work experience. KETRACO joined KenGen and Kenya Power, which launched their all-women internship programs in January and March 2020, respectively. **Quarter 1:** • **Kenya:** EAEP added GDC to the list of companies being supported with female interns engaged in technical departments. Five female interns selected by the GDC Human Resources Department and the EAEP gender team joined the company in November 2020 for an initial six months, attached to the following departments: Board Secretarial Services and Insurance; Corporate Communication and Marketing; Legal Services; Direct Use; and Geothermal Resource Assessment. As a result of EAEP support to young female professionals, one intern secured a contract elsewhere, as a maintenance technician at CamSat, Ltd. • **Rwanda:** In FY 2020, EAEP developed an apprenticeship program in Rwanda to expose graduates and energy employers to the benefits of a gender-diverse energy sector. EAEP secured buy-in of 11 partner organizations to take on apprentices. As a result, by the end of December 2020, 13 energy companies had signed a master apprenticeship agreement. In Q1 FY 2021, EAEP placed 44 new apprentices through the second wave of the program, which raised the total to 72 placements for on-the-job training. REG hosted 31 women apprentices, deploying them at its 30

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women completing apprenticeships	branches all over the country. EAEP and WIRE celebrated the recruitment of three women apprentices as permanent employees who started at East Africa Power. **Quarter 2:** • **Rwanda:** WIRE met with the Rwanda Development Board skills office department to discuss the WIRE internship program. The Board and apprentices shared experiences and updates. Consequently, EAEP decided to extend the WIRE rotational apprenticeship program training period from three to six months. Additionally, WIRE engaged 10 new and existing partners to submit their expressions of interest for the program. WIRE placed six new apprentices at Munyax Eco, a Rwandan/Belgian solar energy company; and Energie, Communication et Telecommunication Technologies Limited (Energicotel), an IPP in Rwanda. There were 18 total placements in the quarter. Finally, WIRE celebrated one apprentice's recruitment at Ampersand Rwanda Ltd., raising the number of hired apprentices to five since September 2020. • WIRE held a quarterly check-in meeting with placed apprentices, during which the newly hired apprentices shared their success stories. At the meeting, the apprentices noted the importance of continuing to network, and 34 women applied to become members of the POWERHer network, raising the membership to 103. Additionally, a private company (Great Lakes Energy) and Rwanda's RURA committed to taking on new apprenticeships. • **Tanzania:** WIRE supported the Women in Energy, Tanzania (WIET) network in rolling out its internship program in Tanzania. EAEP began negotiating with energy sector companies to kick-start the Tanzania apprenticeship program, and by the end of March 2021 had approached eight companies to join. The WIRE initiative developed an MOU for participating companies to sign. Two Tanzanian companies, Off-grid Electric and d.light, signed the MOU with EAEP. • **Kenya:** EAEP continued supporting five interns each at GDC and KETRACO. The team began discussions with Kenya Power on a new round of interns. • **Somalia:** EAEP held discussions with a few private-sector companies about hosting interns in Q3. **Quarter 3:** • **Rwanda:** EAEP secured buy-in from 21 partner organizations to enroll apprentices, with four new energy companies signing master apprenticeship agreements. EAEP placed 21 new apprentices in the third wave of the program, which raised overall placements to 91, 79.1% achievement vis-a-vis the planned total placement of 115 apprentices in Rwanda. To phase out the first round of apprenticeship at REG, the utility organized two-week technical training and field visit

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	by 31 apprentices. Further, EAEP/WIRE celebrated the recruitment of seven women apprentices as permanent employees, raising the total number of women securing permanent jobs to 12. WIRE launched its photo challenge, and 110 photos were shared by contestants, followed by the selection of the best pictures by juries. Winners will be announced and publicized in July 2021. Finally, the WIRE apprenticeship program launched its success story and video coverage. • **Tanzania**: EAEP engaged five new partners to secure their buy-in to the apprenticeship program. One company (ENGIE Energy Access Tanzania) signed an MOU to place 12 interns in Q4. Further, EAEP, through WIET, launched the apprenticeship program in Tanzania, supporting the placement of four interns at ZOLA Electric. The program anticipates that d.light and Africa Energy Services Group Ltd. will soon sign MOUs with EAEP to host interns in Tanzania. Overall, 100 female engineers and various alumni have been mobilized to benefit from this program. WIRE/WIET has a target to expose 35 women in Tanzania to energy technical work through the internship program. • **Somalia:** EAEP expanded its internship program to Somalia. Two Somalian companies, SolarGen and Solar Energy Consulting & Construction Co., signed master agreements to place three female interns apiece in engineering-related departments for six months. These interns will also receive workforce-readiness training as part of EAEP support to equip women with career-enhancement skills. • **Kenya:** In Q3, 15 interns were engaged at Kenya Power, KETRACO and GDC, with six belonging to a new cohort (five new interns at Kenya Power and one new intern at KETRACO). EAEP started exploring partnerships with private companies on the internship initiative, and opened discussions with Sunbuckets Ltd., a US- based company with branches in Kenya. • **Informational webinar:** To further expand the scope of its all-female internship initiative, EAEP began planning to solicit for more partnerships with energy companies via an informational workshop in Q4. This workshop will target both private and public companies from Kenya, Rwanda, Somalia, Tanzania, and Uganda. • **DRC:** The EAEP internship initiative may move into DRC in FY 2022. Discussions were ongoing as the quarter ended.
Gender 3.4 Rwanda technical training program – Nyabarongo Power	**Quarter 2:** WIRE continued to hold discussions with REG on a way forward for supporting the Nyabarongo technical training program. The Nyabarongo power plant, envisioned to be entirely female run, had fallen behind schedule. WIRE planned to either find a way to work with REG on a technical training program for female employees, or pivot to another activity that would enable the program to achieve similar outputs.

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Plant all-female technical training and RURA electrical installation certification **Activity Manager:** [redacted] **Counterpart:** REG **Deliverable:** Number of women trained in technical energy sector	**Quarter 3:** WIRE committed to support technical training in Rwanda for women working at REG. Construction got under way at what will be the world's first all-female-workforce power plant, outside Kigali; REG's goal is to identify, train, and empower women to staff all operational positions at the plant. In Q3, WIRE continued discussions with REG on measures to support the REG technical training program for women. EAEP designed the proposal and curricula for the technical training program and shared it with REG for its review. It is anticipated that in Q4, the parties will pivot to hiring the service provider and conducting the training. EAEP identified a training program on electrical installation for women electricians. In Q3, the program engaged RURA and the Institution of Engineers Rwanda to launch the training of interested young female electricians. EAEP held an information-sharing meeting for 76 female electrical installers, developed a questionnaire, registered 230 attendees, and began drafting the MOU. It is anticipated that this training will provide professional certification to 100 women. This certification is a prerequisite to employment as an electrical installer in Rwanda, according to new national electrification standards.
Gender 4 Workforce readiness for women in the sector **Activity Managers:** [redacted] **Counterparts:** Power entities **Deliverable:** Number of women participating in the Nyabarongo Power Plant all-female technical training and RURA electrical	**Quarter 1:** The WIRE team secured the services of Three Mountains, a local consultancy offering workforce-readiness training. The team launched training for the first cohort with over 30 participants. **Quarter 2:** In Rwanda, the WIRE team completed a three-week workforce-readiness skills training for 43 women apprentices. The training enhanced soft skills and women's potential to compete and enter the Rwandan energy workforce. The WIRE team also began discussions with academic institutions that might be able to scale up similar training for upcoming graduates. The gender team began the process of securing a new partner to expand workforce-readiness and career-enhancement trainings for interested women in Kenya, Somalia, Tanzania, and Uganda. **Quarter 3:** In Rwanda, WIRE conducted five cohorts (four virtual and one face-to-face) of workforce-readiness skills training. In all, 150 women completed the trainings, the majority of whom were POWERHer members. In Tanzania, EAEP, through WIET, trained 18 women. In both Rwanda and Tanzania, the training was delivered virtually and facilitated by Three Mountains and JstWork, based in Rwanda and Kenya, respectively. WIRE further intensified negotiations with academic institutions in Rwanda to roll out the training to universities and technical colleges. The next step will be to explore partnerships between WIRE and the identified academic institutions targeted to roll out this program, with seven ready to sign as the quarter ended. WIRE will support lecturers from these institutions to train fresh graduates and final-year students enrolled in engineering and energy-related fields. It is anticipated that the agreements will be signed in July–August 2021, with the training of trainers conducted in August 2021. This approach will ensure the sustainability of the initiative and improve women's employment

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installation certification program	prospects in the currently male-dominated energy sector. By the end of June 2021, EAEP's workforce-readiness training had reached 227 women from Kenya, Rwanda, and Tanzania. Workforce-readiness training for Somalia will be delivered both virtually and in person. The training will complement ongoing partnerships and collaborations with energy companies, whereby EAEP is helping female graduates from universities and technical colleges acquire on-the-job training through a six-month rotational internship program. EAEP plans to expand this training to other countries, including Uganda, in FY 2022; and to roll out refresher courses in Kenya targeting new interns and young professionals in the energy sector.
Gender – Archived Activity WiAP and Young African Leaders Initiative (YALI) **Activity Managers:** [redacted] **Counterparts:** WiAP, YALI	**Summary of previous support:** EAEP supported preparations for YALI/WiAP virtual-leadership training, by contributing to the energy and gender curriculum and facilitation. The program was set to last five weeks, with 55 or more trainees from eight East African countries. EAEP planned to contribute to technical energy training, and to develop and administer pre- and post-training assessments. The YALI cohort includes promising young women leaders, ages 20–35, in the East African energy sector. **Quarter 1:** EAEP concluded its support for the YALI and WiAP young women's leadership training. EAEP's transaction advisor facilitated training modules covering the future of the power sector in East Africa and the financing of power projects. The modules included presentations from other EAEP energy experts, EAEP subcontractors NRF and Fieldstone, the Power Africa Off-grid Program, and Deloitte Australia. The training equipped young women in the East African power sector with knowledge in specialist subject areas, as well as collaboration and communication skills. EAEP led a five-week series on technical energy and gender sessions for the YALI/WiAP virtual-leadership training; YALI and WiAP selected the 2020 cohort with the aim of advancing promising women leaders in the energy sector.
MEL 1 MEL reporting and standardized data collection templates and procedures and PATT updates **Activity Manager:** [redacted]	**Summary of previous support:** EAEP developed project reporting schedules and templates to ensure timely data collection and analysis and focused on revising PATT transactions with the Objective 1 team and USAID. This process included a database cleanup. The program obtained required data from all technical teams and collected updates on EAEP-supported transactions for entry into the PATT, continuing to update as required. The team also developed a new Microsoft Access database for internal transaction tracking and adopted Tableau software for data entry and visualization for Power Africa Information Systems data. **Quarter 1:** No new updates. **Quarter 2:** The MEL team continued to update information on a quarterly cycle per requirements. **Quarter 3:** The MEL team continued to update information on a quarterly cycle per requirements.

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Counterpart: None; internal **Deliverable:** MEL plan	
MEL 2 Learning agenda and implementation **Activity Manager:** [redacted] **Counterpart:** None; internal **Deliverable:** Baseline report	**Summary of previous support:** EAEP updated and incorporated its learning agenda into the most recent MEL plan, and continued to refine learning questions generated by the technical team to identify two to four questions to focus on for the remainder of FY 2021. One special study commenced on wayleaves in Kenya, and another (in the planning phase) undertook to survey utility customers about their connection experience. Both were developed as text-message-based or telephone surveys, due to COVID-19 distancing restrictions. The special study on energy consumption was launched in Kenya and Ethiopia in July 2020, with preliminary findings collated from Kenya. **Quarter 1:** The electricity consumption special study was completed and findings were shared internally with Objective 2 and 3 leads, for their use in implementation. **Quarter 2:** KETRACO requested additional analysis on the wayleaves study in Kenya, which EAEP engaged RTI statisticians to support. EAEP launched a strategic communications subteam to move forward specific items on the learning agenda. **Quarter 3:** EAEP carried out a gender assessment in Uganda. The aim of the assessment was to give Uganda's energy organizations the information and recommendations needed to achieve gender equality internally and across the sector. The main objectives were: (1) to establish a solid gender baseline—i.e., to determine whether internal policies, practices, and related support systems for gender mainstreaming are effective and reinforce each other, and whether they are being followed; (2) to monitor and assess relative progress made in gender mainstreaming; (3) to identify critical gaps and challenges; (4) to document good practices toward the achievement of gender equality; and (5) to promote learning at the individual and organizational levels on how to effectively implement gender mainstreaming in policies, programs, and structures.
MEL 3 Data-quality assessment **Activity Manager:** Khulisa	**Quarter 1:** This in-person activity was delayed due to COVID-19 mitigation measures. The team prepared for virtual mini-data-quality assessments in lieu of an in-person activity. **Quarter 2:** This activity was in the planning phase for Quarter 3. **Quarter 3:** This activity has been incorporated into the internal midterm evaluation, which will be undertaken in Q4.

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Counterpart: None; internal **Deliverable:** Internal data-quality assessment report	
MEL 4 Operational studies **Activity Manager:** [redacted] **Counterpart:** None; internal **Deliverable:** Special study report	**Summary of previous support:** The EAEP MEL team conducted a baseline assessment in Ethiopia to learn about connection costs and time under Objective 2. EAEP subcontractor Khulisa concluded data collection for the time and cost baseline study, compiled daily fieldwork reports on data collection, and sent them to EEU managers, in order to provide an overview of activities and challenges. The study established baseline values for the time and cost required for new customer connections. **Quarter 1:** The baseline study in Ethiopia was completed. Data were requested in Tanzania to conduct a similar study. Further, the team in Kenya began considering launching a time and cost study, and they requested the survey questionnaire. As the quarter ended, they were reviewing the applicability of the questionnaire for the work in Kenya. **Quarter 2:** The EAEP MEL team began working with the utility-turnaround team in Kenya and the embedded advisors in Uganda to identify the need and timeline for time and cost studies. **Quarter 3:** The EAEP MEL team obtained connections data from Kenya Power and analyzed the data to establish a baseline for the time and cost of connections in Kenya. Preliminary findings were shared with the Objective 3 team. Additionally, the MEL team analyzed Ugandan connections data to establish the baseline value for time to connect new customers. In the process, the MEL team determined that cost data were missing, and began planning a Ugandan data-collection exercise.
COM 1 Core communications materials **Activity Manager:** [redacted] **Counterpart:** None; internal	**Summary of previous support:** EAEP developed key materials to promote its work under the Power Africa brand. **Quarter 1:** • TaWoE network banners – 1 piece • EAEP backdrop banners – 3 pieces (2 for Ethiopia and 1 for Tanzania) • EAEP revised fact sheet – 200 pieces used in Ethiopia • EAEP pull-up banners – 2 pieces (Tanzania training) **Quarter 2:**

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Deliverables: Branding implementation plan and marking plan	• EAEP produced merchandise marked with the USAID Identity for EWiEn: Backdrop banner – 1, pull-up banner – 1, brochures – 100, safety helmet – 25 and conference bags – 50. • EAEP marked its offices in Kenya and Ethiopia (Rwanda signage was in progress at the end of March). **Quarter 3:** • TAWoED: Pull-up banner – 1 • EAEP Somalia – pull-up banner – 1, backdrop banner – 1, business cards – 300 • Office branding – Ethiopia (put on hold)
COM 2 Public messaging for Power Africa **Activity Manager:** [redacted] **Counterpart:** None; internal **Deliverables:** Social media messages and success stories	**Summary of previous support:** The EAEP communications team supported Power Africa's social media presence by developing Twitter, LinkedIn, Facebook, and Instagram posts. **Quarter 1:** The team developed 29 separate social media posts that were posted by Power Africa communications. **Quarter 2:** **Medium Blog** • Who Rules the (Energy) World? Highlighting Kenya's All-Female Internship Program, March 3, https://powerafrica.medium.com/who-rules-the-energy-world-highlighting-kenyas-all-female-internship-program-d195946174bd • "WIRED" for Success: Advancing Women in Rwanda's Energy Sector, February 11, https://powerafrica.medium.com/wired-for-success-advancing-women-in-rwandas-energy-sector-79695c7ca85c **LinkedIn** • POWERHer women's network launch • REG apprenticeship program video, https://www.linkedin.com/posts/power-africa_reg-rwanda-gender-mainstreaming-at-rwanda-activity-6777552585017585664-zUDh • International Women's Day, https://www.linkedin.com/posts/power-africa_internationalwomensday-energyinternships-activity-6773144911274360832-EY6R • International Day of Women and Girls in Science, https://www.linkedin.com/posts/power-africa_internationaldayofwomenandgirlsinscience-activity-6765565613952778240-Tgiv

Work plan reference number, activity description, and minimum output code	Activity status
	Facebook • March 4, https://www.facebook.com/PowerAfrica/posts/3729075153842705 • February 11, https://www.facebook.com/PowerAfrica/posts/3669311699819051 **Twitter** • March 17 (USAID Kenya), https://twitter.com/USAIDKenya/status/1372171726222680068?s=20 • March 16, https://twitter.com/PowerAfricaUS/status/1371788153825206274?s=20 • March 9, https://twitter.com/USAIDAfrica/status/1369090562532446213?s=20 • March 8 (POWERHer retweet), https://twitter.com/POWERHer1/status/1368930774150492166?s=20 • March 5, https://twitter.com/PowerAfricaUS/status/1367777056528957440?s=20 • March 4, https://twitter.com/PowerAfricaUS/status/1367384362153558020?s=20 • February 11, https://twitter.com/PowerAfricaUS/status/1359895167508090880?s=20 • February 11, https://twitter.com/PowerAfricaUS/status/1359819557842653185?s=20 • February 11, https://twitter.com/PowerAfricaUS/status/1359796844247871489?s=20 **Instagram** • March 4, https://www.instagram.com/p/CL_QuMgKUJN/?utm_source=ig_web_copy_link • February 11, https://www.instagram.com/p/CLJeLm7KBcU/?utm_source=ig_web_copy_link **Quarter 3: Twitter** • Orick Vance Center training, June 30, https://twitter.com/Orrick/status/1410260596789026820?s=20 • USAID Kenya Kipeto video, June 30, https://twitter.com/USAIDKenya/status/1410168146158362625?s=20 • Tulu Moye Geothermal Operations retweet, June 8, https://twitter.com/PowerAfricaUS/status/1402270809721389066?s=20 • WIRE mention, USAID/Rwanda, June 1, https://twitter.com/USAIDRwanda/status/1399796409684135938?s=20 • Lake Turkana Wind Project, May 25, https://twitter.com/PowerAfricaUS/status/1397130467825045506?s=20 • World Internet Day, May 17, https://twitter.com/PowerAfricaUS/status/1394220396795383810?s=20

Work plan reference number, activity description, and minimum output code	Activity status
	• KipetoWind Farm May 3, https://twitter.com/PowerAfricaUS/status/1389204373205659649?s=20
COM 3 East Africa Energy Café **Activity Managers:** [redacted] **Counterparts:** External stakeholders **Deliverables:** Progress updates	**Summary of previous support:** EAEP developed and launched a first virtual Energy Café in Kenya, to discuss PPAs; and a second on the impact of COVID-19 on the Kenyan energy sector. Initial brainstorming began for a regional Energy Café covering all EAEP countries. **Quarter 1:** EAEP held the second virtual Energy Café in Kenya on October 29, 2020, on the impact of COVID-19 on the Kenya energy sector. The event brought together a panel from EPRA, Kenya Power, KenGen, KETRACO, Lake Turkana Wind Project, Stanbic Bank, Standard Chartered Bank, and the Electricity Sector Association of Kenya. Panelists discussed how the unprecedented COVID-19 pandemic had affected the power sector in terms of demand, generation, financial resources, and revenue, and stretched relationships among the stakeholders in the PPA process. Other topics discussed included lockdown challenges, such as restrictions in transporting materials, equipment, and personnel; increased duties and taxes; declaration of a *force majeure* by Kenya Power; and the new learnings. The event was attended by over 60 representatives from utilities, government line ministries, the regulator, development partners, private-sector firms, developers, lenders, law firms, and engineering firms. The COVID-19 conversation was timely and gave the sector space to reflect on what had happened from March 2020, how organizations adjusted and were coping, lessons learned, and what the sector could do to prepare for such crises in the future. **Quarter 2:** EAEP started planning a regional Energy Café to connect EAEP's work and stakeholders in the region. The café was anticipated to take place in Q3 or Q4 of FY 2021. **Quarter 3:** EAEP continued planning a regional energy café to connect EAEP's work and stakeholders in the region. The café will take place in Q4.
COM 4 Strategic event support **Activity Managers:** [redacted] **Counterpart:** None; internal	**Summary of previous support:** In FY 2020, the EAEP communications team supported seven in-person events. Starting in Q2 FY 2020, most events pivoted to virtual formats, including the first Energy Café, biweekly internal brown-bag learning series, and virtual pause-and-reflect workshops. **Quarter 1:** The communications team supported EAEP trainings and other events. The team prepared invitation letters, produced merchandise marked with the USAID Identity (backdrop banners, EAEP fact sheets, training manuals, certificates, flyer designs), reviewed reports, and drafted social media posts for Power Africa platforms. **Events in Q1:**

Work plan reference number, activity description, and minimum output code	Activity status
Deliverables: Progress updates	• Shango (Rwanda)–Mbarara (Uganda) 220 kV interconnection line commissioning (October 13–14, 2020) • Capacity development on Kenyan laws and policies related to the energy sector (October 13–22) • WIRE apprentices and POWERHer team-building meeting (October 28) • Second virtual Energy Café, Kenya; The impact of COVID-19 on the Kenya energy sector (October 29) • Geothermal cadaster technology bid-evaluation training, Addis Ababa, Ethiopia (November 10–12) • WiAP/YALI training series (November 18–December 9) • EMTP training for EEP officials (November 27–December 15) • Training on the role of interconnectors in the development of the energy sector in Tanzania, in Morogoro, Tanzania, and on Zoom (November 30–December 4) • WIRE workforce-readiness training (November 30–December 3) • EEU customer-service management training (November 30–December 11) • WiAP/YALI graduation ceremony (December 17) **Events in Q2:** • Virtual learning activities for power entities in Kenya (January 4 and continuing beyond March 31, 2021) • EAEP pause-and-reflect workshop (January 25–26) • Shango–Mbarara combined workgroup workshop and the fourth central coordination meeting (January 27) • Zanzibar procurement and battery-storage training (February 1–3) • Second training for EEA on advanced GIS for cadaster database development (February 1–5) • Project management training for ZECO (February 3 and continuing beyond March 31) • POWERHer International Women's Day webinar (March 8) • Workforce-readiness skills training for POWERHer and WIRE apprentices (March 10–31) • Procurement and contract-management training for ZECO (March 15–19) • Kenya Power change-management training (March 23–25) • Third GIS cadastral database development training for EEA staff (March 28–April 1)

Work plan reference number, activity description, and minimum output code	Activity status
	Events in Q3: • PPP Strengthening for East African Countries: Financial analysis techniques for infrastructure projects online program – Essentials of financing PPP (March 22–April 2, 2021) – Financial analysis techniques for PPPs (April 5–16) – Project risk analysis for investors, lenders, and governments (April 19–30) – Transaction toolkit for PPP procurement (May 3–14) – Understanding financial statements and project-finance models (May 17–28) – Designing a project-finance model (May 31–June 11) • Advanced GIS training for ZECO (April 12–16) • Brown-bag learning series (April 20, May 4, May 18, June 8 and 22, July 6) • Pause-and-reflect session (April 26–27) • Training on tariff setting for ZECO (May 16–21) • Electric network simulation workshop for ZECO using DIgSILENT power system software (June 28–July 2)

PROGRAM MANAGEMENT UNIT

This section presents EAEP's program management as well as finance and administration activities. The PMU continued to oversee day-to-day financial management, HR management, administration, security, and logistical coordination for the program. The PMU also coordinated closely with the RTI home office to seamlessly support EAEP deliverables.

OPERATIONS

Offices: All EAEP staff continued to work from home, per RTI's COVID-19 parameters for reopening offices and in observation of country-specific COVID-19 directives. During Q3, the team continued to set up the Tanzania satellite office, to have a program presence ready when RTI COVID-19 parameters allow and when the CF is signed to allow mainland activities to proceed. Finance and operations team members requiring access to servers, printers, and other equipment were allowed to use the EAEP offices on an ad hoc basis. Small meetings also were allowed, depending on country regulations and RTI COVID-19 parameters. The EAEP team is currently preparing protocols and rotational office-use schedules for all offices for a phased return-to-office schedule. Return-to-office phasing will be rolled out depending upon local regulations and with RTI approval.

IT support during pandemic lockdown: EAEP continued to operate virtually using Microsoft Teams, Skype for Business, Zoom, and Google Meets. For document sharing and storage, the team accessed a central SharePoint site.

PROCUREMENT

The procurement team started the procurement processes whenever scopes of work were final and the senior management team granted activity approval. Priority subcontracts are listed in ***Table 4.***

Table 4. EAEP procurements in Q3 FY 2021

Topic	Details	Status
Quarter 3 procurements		
Kenya Power: Review of facilities database and PSS®SINCAL interface requirements	The consultant firm was selected, and the contract finalized	Executed
Consultant for standard cost-benchmarks study for transmission and distribution grids for the ERA in Uganda	Proposed consultant presented proposal to ERA and the evaluation finalized	Executed
Promotion of productive uses of electricity, KIL, Uganda	Deadline for bid submission was April 26, 2021	Executed
Consultant to develop the RURA gender-mainstreaming strategy and staff capacity building for its implementation	Proposed consultant approved by RURA	Executed
Standard cost-benchmarking study for transmission and distribution grids for ERA in Uganda	None	Executed
Kenya Power-Distribution Master Plan Phase 2	RFP and SOW development review	RFP and SOW development review

Topic	Details	Status
Development of GDC Community-Engagement Strategy	RFP distributed and reviewing bids	Bid evaluation ongoing
Guide to wildlife interactions with electric infrastructure and possible proactive and reactive mitigation measures for power projects in East Africa	Task order with Endangered Wildlife Trust completed	Executed
Legal support to Burundi Songa Energy–Virunga Power Hydropower Project	Task order with Norton Rose Fulbright under preparation	Executed
Energy transmission and transactions advisory services – East Africa	Modification to task order with SP under preparation	Executed

HUMAN RESOURCES

EAEP's HR specialist supported hiring for the positions listed in ***Table 5;*** see also the Q3 staffing plan in Annex F.

Table 5. EAEP recruitment and hiring in Q3 FY 2021

Country	Position	Status	Hire Date
Tanzania	Energy Specialist (Objectives 1 and 4)	Position put on hold	n/a
Tanzania	Administrative Assistant	Candidate started	May 3, 2021
Kenya	Environment Technical Advisor	Candidate started	May 3, 2021
Kenya	Senior IT Specialist	Candidate was hired	In Q4
Kenya	Temporary Capacity-Building Coordinator	Candidate was hired	June 3, 2021

CHALLENGES AND RISKS

COVID-19: In Q3 FY 2021, EAEP continued to operate under various COVID-19 restrictions, conducting virtual trainings and meetings when necessary and allowing staff to resume work in counterpart and project offices on a country-by-country basis. Despite vaccination progress in the region and Tanzania's new administration reporting on cases for the first time since May 2020, cases continued to rise, with new variants reaching the region and forcing continued lockdown measures. In Q3, Kenya, Rwanda, and Uganda imposed strict lockdown measures that shut down previously operating offices, impacting stakeholder engagement. EAEP continued its flexible implementation approach with stakeholders to promote virtual options, create travel arrangements for field work, and engage local organizations to carry out work done by international contractors.

Many of EAEP's field staff experienced poor health and loss of family members during this quarter, which required other staff to step in to support gaps during temporary leave. COVID-19 will be a continuous challenge for EAEP, likely through the life of the program; however, the team has developed skills to adapt to the new normal, and also to work with stakeholders to develop more areas in which to support resilience, mitigation, and adaptation for energy outcomes during the pandemic.

Activity startup in Tanzania: EAEP made progress in Q3 to advance the cooperation framework with mainland Tanzanian counterparts, with the document advancing to the Ministry of Energy and Ministry of Finance for final approval. Working with USAID/Tanzania and the TOCOR, EAEP continued to follow up with Tanzanian stakeholders to advance negotiations. In May, EAEP and USAID arrived at the decision that Tanzanian earmarked funds in the EAEP budget should be released to other activities in the program. Given the delays in Tanzanian results, EAEP expanded its program in Zanzibar and Uganda and began scoping activities for connections in Rwanda, DRC, and Somalia. Once the CF is signed, EAEP will be able to start activities quickly on the mainland; however, the program will need to confirm the work plan with Tanzanian stakeholders, given the shortage of remaining time and funds for activities.

EAEP sources of funds: Prior to March 2020, EAEP was holding funding for Tanzania, despite the delay in CF (referenced above). This put strains on EAEP's ability to pivot funding to achieve targets in other countries. In March 2020, the TOCOR provided guidance on sources of funds and stated that, given that EAEP is currently mid-program, strict adherence to sources of funds is not required, but instead the program should be flexible with resources to meet overall targets. This adjustment in Q3 led to improved implementation, with increased activities in DRC, Kenya, and Uganda. EAEP will continue to track the sources of funds for Power Africa's benefit, given the implications for Ethiopian activities during the "pause" for security issues, buy-in by the Somalia Mission, and continuing WIRE activities.

Financial close activities to meet 1,500 LOP target: In Q3, the Kenyan government set up its PPA task force, which delayed approximately 389 MW worth of projects supported by EAEP for another six months. The Kenya PPA review, the activity stop in Ethiopia, cooperation framework delays in Tanzania, and COVID-19 related impacts on financial close in other areas could delay EAEP's ability to reach the 1,500 MW LOP target. To mitigate this situation, EAEP analyzed delays to financial close across the entire PATT portfolio for the region. Each delay was categorized and explained, to identify trends across technologies, countries, and types of transactions, and to inform a broader strategy for securing MWs. EAEP will present the results to PACO in Q4.

Rebundling of Uganda's energy sector: In Q3, USAID/Uganda notified EAEP of the Cabinet decision to rebundle Uganda's energy sector, and also noted that a previously planned advocacy paper to support development partner actions was shifted to a risk-matrix activity. Although USAID and other donors do not condone the rebundling of the sector, EAEP has been asked to develop a risk matrix to outline responsibilities, implications, and implementation recommendations on behalf of the development partner community. EAEP continued to receive feedback from development partners and USAID to structure the activity and prepare a scope of work accordingly.

Activity continuity in Ethiopia: In Q3, EAEP continued to operate in Ethiopia during the USAID pause, acting on the USAID Contracting Officer's guidance about using "old funds" (funds obligated before August 2020). Stakeholders in Ethiopia remained unaware of USAID's pause; however, EAEP was asked to support follow-on and new activities that are under consideration. EAEP continued to request USAID guidance on if/when the pause will be lifted and whether USAID will support an exemption to continue activities with new funds, given positive results previously accomplished in Ethiopia. As of the end of Q3, however, EAEP had not received an exemption from USAID to use new funds, and therefore proceeded with a phased close-down of activities, while also assessing ways in which to extend "old" funds for as long as feasible. This anticipated end of EAEP efforts represents a significant challenge for anticipated connections and MW results in Ethiopia that EAEP and PATRP have supported.

Activity progress in Rwanda: In Q3, EAEP developed scopes of work for climate change and connections-related activities for Rwandan counterparts; however, as of the end of June, representatives from the utilities and connections program remained unresponsive. EAEP and USAID/Rwanda will continue to follow up, given the estimated 250,000 potential annual connections under the existing EARP program and the role of EAEP in resource planning for REG, for which a climate-change component could easily be introduced.

Activities in Uganda: The major Objective 2 goal for Uganda—increasing the number of connections—was impacted by the government's delay in adequately reimbursing Ugandan distribution utilities. This situation negatively affected EAEP's new connections, with less than 1,800 made in Q3, rather than the anticipated 75,000. The challenge of nonpayment to Umeme was partially resolved in Q3. The resumption of the ECP concerns connection materials procured by REA–Uganda under AfDB funding, and is not directly related to the partial payment to Umeme. ECP projections got back on track this quarter, but the five-month delay will impact EAEP's overall connections results in Uganda.

ANNEX A: PARTICIPANT TRAINING REPORT

Country	Training and capacity-building activity	Date (Q3, Apr–Jun 2021)	No. of men	No. of women	Total
Regional	PPP Regional Training – Essentials of Financing PPPs	Mar 22–31	13	5	**18**
Regional	PPP Regional Training – Financial Analysis Techniques for PPPs	Apr 5–14	14	5	**19**
Regional	PPP Regional Training – Project Risk Analysis for Investors, Lenders, and Governments	Apr 19–28	13	5	**18**
Regional	PPP Regional Training – Project Agreements and Contracts	May 3–12	14	6	**20**
Regional	PPP Regional Training – Understanding Financial Statements & Project-Finance Models Learning Outcomes	May 17–26	14	6	**20**
Regional	PPP Regional Training – Designing a Project-Finance Model	May 31–Jun 9	11	4	**15**
Ethiopia	Generation Expansion Planning – SDDP models	Feb 3–Mar 30	12	4	**16**
Ethiopia	GIS training	Mar 25–Apr 7	8	2	**10**
Ethiopia	Procurement and Contract Administration	May 31–Jun 11	9	7	**16**
Ethiopia	Project-Finance Training 1 with Vance Center	Apr 29	7	2	**9**
Ethiopia	Project-Finance Training 2 with Vance Center	Jun 15	5	3	**8**
Ethiopia	Generation Expansion Planning – optimal generation models	Feb 4–Mar 30	16	4	**20**
Ethiopia	Generation Expansion Planning – Simulation	Apr 13–Jun 1	16	4	**20**
Ethiopia	Transmission Expansion Planning – Theory	Jun 6–29	15	5	**20**
Ethiopia	Transmission Expansion Planning – PSS®E Models	Jun 6–29	17	6	**23**
Ethiopia	Transmission Expansion Planning – Simulation	Jun 6–29	17	6	**23**
Kenya	Coursera	Apr 19–May 31	5	4	**9**
Rwanda	Resource Assessment – Transformation and Demand (LEAP)	May 27	6	1	**7**

Country	Training and capacity-building activity	Date (Q3, Apr–Jun 2021)	No. of men	No. of women	Total
Rwanda	Resource Assessment – GIS Assessment	May 27	4	2	**6**
Rwanda	Workforce-Readiness Skills Training – Cohort 3	Apr 20–30	0	31	**31**
Rwanda	Gender Foundation Training	Jun 2–10	8	29	**37**
Rwanda	Workforce-Readiness Training – Cohort 4	May 1–29	0	26	**26**
Rwanda	Rotating Apprenticeship	Apr 1–Jun 30	0	22	**22**
Rwanda	Workforce-Readiness Training – Cohort 5	May 17–28	0	31	**31**
Rwanda	Workforce-Readiness Training – Cohort 6	May 31–Jun 11	0	35	**35**
Tanzania	Project Management – Coursera	Apr 19–Jun 21	10	7	**17**
Tanzania	Workforce Readiness Training	May 1–29	0	15	**15**
Tanzania	Advanced GIS Training	May 17–21	8	2	**10**
Tanzania	DIgSILENT Power System Software Training	Jun 28–Jul 2	9	4	**13**
Tanzania	Rotating Apprenticeship	Apr 1–Jun 30	0	4	**4**
Tanzania	Mapping Process and Energy Accounting	Jun 16–Jul 15	8	0	**8**
DRC	Nuru Project Financing Training	May 18–Jun 3	7	1	**8**
Somalia	Project-Finance Training with Vance Center	Apr 29	7	0	**7**
Somalia	Rotating Apprenticeship	May 15	0	6	**6**
	Totals		**273**	**294**	**567**

ANNEX B: SUMMARY OF PERFORMANCE MONITORING AND EVALUATION TABLES

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
EAEP 1a / PA #6	Generation capacity pending financial close	3,916.43 MW	Annual	Annual	Annual	N/A	Actual: 3,737.43 LOP target: 3,916.43	This "actual" figure is for the MW of the transactions that EAEP is supporting and those that EAEP is tracking which that have not yet reached FC.
EAEP 1b / PA #7	Transactions pending financial close	69	Annual	Annual	Annual	N/A	Actual to date: 66 LOP target: 69	This "actual" figure is for the transactions that EAEP is supporting and those that EAEP is tracking which that have not yet reached FC.
EAEP 2a / PA #8	Generation capacity reached financial close	359.95 MW	0 MW	0 MW	0 MW	0%	Actual: 179 LOP target: 1500	None of EAEP-supported transactions reached FC in Q3. See Annex C for details of the transactions.
EAEP 2b / PA #9	Transactions reached financial close	15	0 MW	0 MW	0 MW	0%	Actual: 3 LOP target: 33	None of the EAEP-supported transactions reached FC in Q3. See Annex C for details of the transactions.
EAEP 3a / PA #10	Generation capacity commissioned	513 MW	0 MW	0 MW	0 MW	0%	Actual:165 MW	None of the EAEP-supported

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
							LOP target: 1251.4 MW	transactions were commissioned in Q3. See Annex C for details of the transactions.
EAEP 3b / PA #11	Transactions commissioned	7	0	0	0	0%	Actual: 1 LOP target: 24	None of the EAEP-supported transactions were commissioned in Q3. See Annex C for details of the transactions.
EAEP 4 / PA #14	Number of competitive procurement processes for new generation capacity implemented with East Africa Energy Program assistance	3	0	3	1	133.3%	Actual: 14 LOP target: 21	EAEP carried out a regional PPP training that was attended by IPP unit members from Ethiopia, Kenya, and Rwanda. Only Ethiopia is reported since Kenya and Rwanda were reported in Q2.
EAEP 5 / PA #3	Number of new grid actual direct connections	1,220,000	263,672	339,935	363,532	79.3%	Actual: 2,007,427 LOP target: 4,000,000	Year 3 progress is 967,139 new connections. Q2 new connections are from: **1) Kenya (200,170)** Residential – 193,903 Productive users – 6,267 **2) Ethiopia (154,027)**

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
								Residential – 149,484 Productive users – 4,543 **3) Uganda (1,780)** Residential – 1,587 Productive users – 193 **4) Zanzibar (7,555)** Residential – 7,479 Productive users – 76 The Uganda numbers also include 518 (267 from Q1 and 251 from Q2) which were realized from Umeme Ltd. data cleanup.
EAEP 6	Average utility connection cost reduced as a result of EAEP support	5%	N/A	N/A	N/A	N/A	LOP target: 5%	This is an annual indicator and will reported at the end of September 2021.
EAEP 7	Percent change in the time required to connect to the grid as a result of EAEP support	3%	N/A	N/A	N/A	N/A	LOP target: 5%	This is an annual indicator and will reported at the end of September 2021.
EAEP 8	ATC&C losses reduced because of EAEP support	2%	Kenya Power (ATC&C) = 14 per-centage points	Kenya Power (ATC&C) = 12 per-centage points	Kenya Power (ATC&C) = 15 per-centage points	Kenya Power = N/A EEU = N/A	Kenya: actual: 4% LOP target: 5%	For Kenya Power, the Q3 values have been calculated by comparing ATC&C values in Q3 FY 2021 (20%) and ATC&C

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
			EEU (ATC&C) = +5 per-centage points (EEU had increased ATC&C losses of 5 percentage points)	EEU (ATC&C) = 7 per-centage points	EEU (ATC&C) = 7 percentage points		Ethiopia: actual: Baseline LOP target: 5%	values in Q3 FY 2020 (35%). Kenya Power reported a 15 percentage point reduction in ATC&C losses. For EEU, the Q3 values have been calculated by comparing ATC&C values in Q3 FY 2021 (18%) and ATC&C values in Q3 FY 2020 (25%). ATC&C losses in Ethiopia reduced by 7 percentage points. The % achieved will be calculated in September 2021.
EAEP 9a	Revenue by utilities increased through East Africa Energy Program support - Kenya	3%	Kenya = [redacted]	Kenya = [redacted]	Kenya = [redacted]	N/A	Actual: N/A LOP target: 12%	For Q3, the progress is a comparison of values reported in Q3 FY 2021 [redacted] and Q3 FY 2020 [redacted]. The % achieved will be calculated in September 2021.

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
EAEP 9b	Revenue by utilities increased through East Africa Energy Program support - Ethiopia	5%	Ethiopia = [redacted]	Ethiopia = [redacted]	Ethiopia = [redacted]	N/A	Actual: N/A LOP target: 12%	For Q3, the progress is a comparison of values reported in Q3 FY 2021 [redacted] and Q3 FY 2020 [redacted]. The % achieved will be calculated in September 2021.
EAEP 10	Number of additional TWh of cross-border power traded among East African countries through EAEP support	1.01 TWh	0	0	0	0%	Actual: 0 LOP target: 1.89	None of the EAEP-supported activities in Q3 led to additional TWh of cross-border power traded.
EAEP 11 / PA #12	New electricity capacity committed for regional trade through bilateral agreements	230 MW	0	0	0	0%	Actual: 0 LOP target: 281 MW	In Q3, none of the EAEP-supported bilateral agreements led to new electricity capacity committed for regional trade.
EAEP 12 / PA #18	Number of people trained in technical energy fields supported by EAEP	1,921	722 (men = 308; women = 414)	342 (men = 164; women = 178)	567 (men = 273; women = 294)	84.5%	Actual: 2,366 LOP target: 3,351	See Annex A above for details of Q3 training.
EAEP 13 / PA #19	Kilometers of power lines constructed or rehabilitated: The	1,680 km	0	433	308	44.1 %	Actual: 741 LOP target: 2,267.1 km	The Olkaria – Lessos – Kisumu high-voltage transmission line was

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
	sum of linear kilometers of new, reconstructed, rehabilitated, or upgraded transmission and distribution lines that have been energized, tested, and commissioned / installed with EAEP support							commissioned on June 17, 2021.
EAEP 14 / PA #20	Kilometers of transmission and distribution power lines reached financial close with EAEP support	93.1 km	0	0	0	0 %	Actual: 0 LOP target: 496.7 km	None of the EAEP supported transmission and distribution lines reached financial close in Q3.
EAEP 15 / PA #23	Policy reforms: Number of laws, policies, regulations, or standards to enhance energy sector governance formally proposed, adopted, or implemented as supported by EAEP assistance	21	12	22	8	200 %	Actual: 74 LOP target: 77	**Q3 policies include:** 1. Rwanda – EDCL ESIA and RAP) 2. Rwanda – RURA gender-mainstreaming strategy 3. Kenya – Community-Engagement Framework for GDC – terms of reference - adopted 4. Kenya – Community-

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
								Engagement Framework for REREC – terms of reference – proposed 5. Kenya – Gender-Based Violence Policy for GDC – Proposed 6. Kenya – Gender Policy for GDC 7. ZECO Internal Audit Standard Operating Procedures – Proposed 8. ZECO Customer Mapping and Indexing Process – Proposed
EAEP 16 / PA #25	Number of private-sector companies, government entities, and utilities that establish and/or implement new or revised existing community-engagement plans, policies, or strategies with EAEP Power Africa assistance	7	6	0	1	100%	Actual: 12 LOP target: 14	**In Q3, the numbers include:** 1. Rwanda – EDCL ESIA and RAP
EAEP 17 / PA #26	Number of host-government power-sector strategic	9	5	3	1	100%	Actual: 16 LOP target: 19	**In Q3, the numbers include:**

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
	planning documents adopted, implemented, or revised, with EAEP support							Kenya – KETRACO ESMF
EAEP 18	Increased women in the energy sector workforce within EAEP partner institutions through EAEP support	4%	N/A	N/A	N/A	N/A	Actual: 1% LOP target: 10%	This is an annual indicator that will be reported in September 2021.
EAEP 19	Number of female interns who receive EAEP gender and capacity building support	296	59	19	32	37.2 %	Actual: 143 LOP target: 200	In Q3, the numbers include: 1. Rwanda – WIRE supported 22 new apprentices 2. Tanzania – WIRE supported 4 new apprentices 3. Somalia – EAEP supported 6 new apprentices
EAEP 20	Increased membership of women in national energy networks through EAEP support	10%	Annual	Annual	Annual	N/A	Actual: 43% LOP target: 28%	This is an annual indicator that will be reported in September 2021.

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
Tracking indicators							**Cumulative actual (no LOP target)**	
EAEP A	Amount mobilized: Amount of investment mobilized for energy projects (PA #14)	N/A	$0	$0	$0	N/A	[redacted]	No EAEP-supported transactions reached FC in Q3.
EAEP B	Utilization of risk mitigation tools: Utilization of risk mitigation tools by developers of qualified transactions supported by Power Africa (PA #17)	N/A	0	0	0	N/A	2	No EAEP-supported transactions reached FC in Q3.
EAEP C	Number of US companies participating in Power Africa projects / transactions (PA #30)	N/A	0	0	0	0	0	No EAEP-supported transactions reached FC in Q3.
EAEP D	Number of US companies that participate in Power Africa outreach events (PA #32)	N/A	0	0	0	N/A	0	EAEP did hold any outreach events in Q3.
EAEP E	Percent change in System Average Interruption Duration Index	N/A	Kenya: SAIDI = 25.95 hours	Kenya: SAIDI = 9.74 hours	Kenya: SAIDI = 36.43 hours	N/A	N/A	

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
	(SAIDI) and Customer Average Interruption Duration Index (CAIDI)		CAIDI = 12.95 hours	CAIDI = 3.87 hours	CAIDI = 11 hours			
EAEP F	Increase in IPCA score	N/A	0	N/A	N/A	N/A	N/A	This is an annual indicator that will be reported in September 2021.
EAEP G	Number of institutions with improved capacity	N/A	40	9	26	N/A	N/A	EAEP only counts an entity once in a year, although we track all institutional capacity building efforts, including trainings. Measured by pre and post-training tests. **Q3 progress included:** 1. Ethiopia – Ministry of Energy 2. Rwanda – EUCL, Enviroserve, Geni Solution Group, Ignite Power, Hobuka Limited, Integrated Polytechnic Regional College in Kigali, Mobisol, San Tech Limited, Agro Co. Rwanda, Ameki Color, ARC Power,

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
								Equatorial Power, Fair Construction, Great Lakes Power, Mesh Power, Multipurpose Vision Limited, Power Legacy Limited, Straw Tec, Africa Energy Services Group 3. Tanzania – TaWoED, ZOLA Electric 4. DRC – Nuru Energy 5. Somalia – WESCO, Puntland Energy Development Agency, National Energy Corporation of Somalia
WIRE indicators								
EAEP H	Number of persons trained with USG assistance to advance outcomes consistent with gender equality or female empower-ment through their roles in public or private-sector institutions or	196	0	0	37	18.9%	Actual: 117 LOP target: 400	In Q3, WIRE carried out a gender foundation training in Rwanda that was attended by individuals employed in both private and public sector.

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
	organizations (GNDR-8)							
EAEP I	Number of university students participating in rotating apprenticeship programs with energy sector organizations	N/A	N/A	N/A	N/A	N/A	N/A	This indicator has been merged with EAEP indicator #19. The progress toward the targets is therefore reported under EAEP #19.
EAEP J	EG. 6-13: Percent of individuals with improved soft skills following participation in USG-assisted workforce development programs	350	96.5% (28 out of 29 trained)	96% (48 out of 50 trained)	100% (148 out of 148 trained)	64% (224 out of 350)	Actual: 224 (64%) LOP target: 600	In Q3, WIRE carried out workforce-readiness training for 148 women, of whom 148 reported improved soft skills.
EAEP K	EG.6-12: Percent of individuals with new employment following participation in USG-assisted workforce development programs	65	3	2	7	18.5%	Actual: 12 LOP target: 115	Q3 progress included: Rwanda – After the workforce-readiness training, 7 WIRE apprentices got permanent employment.
EAEP L	GNDR-1: Number of legal instruments drafted, proposed, or adopted with	2	0	0	1	50%	Actual: 1 LOP target: 3	In Q3, WIRE supported the implementation of the RURA gender-

Indicator Number	Indicator	Year 3 Target	Year 3 Q1 Actual	Year 3 Q2 Actual	Year 3 Q3 Actual	Year 3% Achieved	Cumulative Actuals / LOP Target	Notes
	USG assistance designed to promote gender equality or non-discrimination against women or girls at the national or subnational level							mainstreaming strategy.

ANNEX C: UPDATE ON TRANSACTIONS SCHEDULED TO REACH FINANCIAL CLOSE IN FY 2021 OR FY 2022

This annex provides an overview of the transactions EAEP targeted to close for FY 2021 or FY 2022.[7]

KENYA

Kenya Power's finances, which were already under pressure, have been worsened by the temporary decline in power demand resulting from the COVID-19 pandemic. In response to its financial predicament, the utility, with the support of EPRA and the Ministry of Energy, has sought to avoid or defer financial obligations arising primarily from new power-generation developments that have signed PPAs but have not yet started construction.

As a result of concerns about the power demand/supply balance and Kenya Power's weak financial position, power-generation developments have experienced greater delays in concluding necessary approvals and agreements to proceed. In addition, there have been explicit delays or deferrals of agreed-on or proposed CODs, for projects under construction or in advanced stages of development. One contractual remedy Kenya Power is employing is to limit the circumstances (usually for a period of time) under which they will pay for energy from non-dispatchable generation projects that are available (e.g., wind and solar) but not yet dispatched (deemed energy).

Although various types of generation developments, in multiple locations, have experienced significant differences in the financial and technical implications of the above issues, it appears that almost all generation developments have been affected to some extent or another. For EAEP-supported projects, the draft LCPDP "optimized" generation-development plan recommends that CODs be deferred for between zero and five years, and on average for about two years. If this arrangement is accepted or finalized, there will inevitably be delays to financial close, and some projects may be abandoned. EAEP has not adopted the LCPDP CODs as the expected outcome at this point, because the LCPDP has been superseded by the Task Force establishment (described below) and power project timings will thus be subject to its recommendations, consultations, and likely objections and negotiations.

In addition, on March 29, 2021, President Kenyatta appointed a Task Force for the Review of PPAs for a period of six months. The Task Force consists of 16 members drawn from GOK ministries, state-owned enterprises, and the private sector. The Task Force's TOR includes:

- Undertake a comprehensive review and analysis of the terms of all PPAs
- Probe the compliance of the PPAs and all associated agreements with government policies, legislation, and regulations
- Review the sustainability and viability of all independent power-generation projects that have been proposed, are under implementation, or are operating
- Review the allocation of risk between the IPPs and Kenya Power under the PPAs
- Review the take-or-pay approach applied under the PPA structure and recommend a viable pay-when-taken approach.

[7] Includes updates on some projects with likely FC dates which are now beyond FY 2022.

Significantly, a moratorium was placed on all PPAs not concluded as of March 29, 2021, and on the renewal of PPAs that would occur during the tenure of the Task Force. These two moratoria will have adverse implications for EAEP MW targets for transactions reaching FC in Kenya, in that they will further push back FC dates: 17 transactions totaling 561 MW, covering hydro, geothermal, solar, and wind technologies.

The updated estimated FC and COD dates for EAEP-supported generation projects are presented in the table below. During FY 2020 and FY 2021, the estimates for FC and COD were deferred by an average of 6–12 months, as the result of delays encountered. These delays were in some cases project specific, but in most cases were a result of deferrals due to disengagement, principally by Kenya Power.

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
Tindinyo Falls Resort	Hydro	2.4	Stage 3A – Project Structuring	Mar 31, 2021	Sep 30, 2021	EAEP continued assisting Virunga Power to progress four hydropower projects. This assistance consisted primarily of advice and direct intervention with key Kenyan stakeholders to address delays. The four projects are: • Tindinyo Falls Resort • Mutunguru Phase 1 • Mathioya • Middle Nzoia On July 14, 2021, EAEP senior energy advisors met with Virunga Power executives to discuss how they might proceed with their hydro project being developed under their Tindinyo Falls Resort Ltd. (TFRL) company. Virunga has been working on this project for several years and has a PPA with Kenya Power. In the past, TFRL has tried to have the MW capacity in the PPA increased
Mutunguru Phase 1	Hydro	7.8	Stage 3A – Project Structuring	Dec 31, 2021	Mar 31, 2022	

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						from 1.5 MW to 2.4 MW. However, due to delays they have encountered, including the current moratorium on PPAs (associated with the Presidential Task Force on PPAs), TFRL has restructured its project so that only the original 1.5 MW of the project's capacity could be allocated to a PPA with Kenya Power. The remaining 0.9 MW of Tindinyo's output would be allocated to separate PPAs with one or more tea companies that have expressed interest. To proceed on this basis, the PPA would need to be changed only to reflect a new COD, which EPRA has already granted TFRL, and a few miscellaneous provisions, all of which TFRL is willing to defer until after the moratorium has concluded. If TFRL does not begin project construction imminently, there is a risk they will miss

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						their new EPRA-granted COD. The implications of this situation are that TFRL is taking the risk that finalization of the PPA may be delayed (after the moratorium period). The company does not want Kenya Power to cancel their current PPA because the COD in that version of the PPA has expired. TFRL is, therefore, willing to begin construction without the PPA finalized and is requesting a no-objection response from Kenya Power. However, Kenya Power has referred this request to the Task Force. EAEP has suggested that the specific case of Tindinyo Falls be raised with alternate Board Director of Kenya Power, Engineer Isaac Kiva, because of his roles at Kenya Power and membership on the Presidential Task Force. EAEP also noted that the

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						related moratorium only applies to PPAs and does not stop generation projects from proceeding. On EAEP's recommendation, TFRL drafted a proposed clause for the response they want from Kenya Power. EAEP also wrote to Engineer Kiva asking for him to meet with Virunga to discuss their proposal. EAEP will continue to monitor and support Virunga as they attempt to progress their project. In addition, EAEP will assess how a framework could be developed to ensure that the pipeline of Kenya's generation projects is not stalled completely, because of the likely future severe power supply implications.
Mathioya	Hydro	7.5	Stage 3A – Project Structuring	Jun 30, 2021	Dec 31, 2021	FC is delayed because Virunga is still waiting for Kenya Power to engage in PPA discussions. This delay has continued due to the

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						Presidential Task Force work and related moratorium on PPAs. The delay has occurred despite the approval of feasibility studies by MOE in August 2019, and the COD for Mathioya (for June 2023) being provided by EPRA in September 2019.
Middle Nzoia	Hydro	6.5	Stage 3A – Project Structuring	Jun 30, 2021	Dec 31, 2021	FC is delayed because Virunga is still waiting for Kenya Power to engage in PPA discussions. This delay has continued due to the Presidential Task Force work and related moratorium on PPAs. The delay has occurred despite the approval of feasibility studies by MOE in August 2019, and the COD for Middle Nzoia (for January 2023) being provided by EPRA in September 2019.
Kesses I	Solar	40	Stage 3B – Financing	Feb 28, 2021	Sept 30, 2021	The Alten Kesses I solar project has been under development since 2014, and has benefited from Power Africa support both

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						historically and more recently, as EAEP helped the developer finalize the last required deeds and permits. Alten's Peter Sibondo advised EAEP on May 3 that the Certificate of Financial Close will be given after the security documents (debenture and charge) are perfected. Money to pay the stamp duty was sent and the perfection was expected to be done during that week. Construction work at site is progressing, with earth-moving already completed. Alten is negotiating with the EPC contractor a change in price for the solar panels that the contractor attributed to impacts of COVID-19, with Alten insisting on the contractor sticking to the original price. The first large payment to the contractor is due in June. EAEP had a call with Peter Sibondo of Alten (in the

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						week of June 21–25, 2021) and followed up on July 2 with Mr. Sibondo and Obbie Banda, underwriter for Africa Trade Insurance. EAEP was informed that the National Treasury had not yet sent its No Objection to ATI for it to provide a guarantee to Alten. The No Objection still therefore remains an unfulfilled CP to the project achieving FC. Mr. Sibondo also informed EAEP that Alten and Kenya Power visited the site on June 30, as previously scheduled, and agreed that Alten will establish its own substation at its site instead of connecting at another substation, some distance away, built to connect both Eldosol and Radiant projects to the national grid. Although this project may be delayed because of the Task Force and moratorium, EAEP

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						is hopeful that FC will occur before Sept 2021.
Rupingazi Mini Hydro Project	Hydro	6.8	Stage 3B – Financing	Jun 30, 2021	Sep 30, 2021	The Rupingazi Mini Hydro project made progress in early-stage construction before finalizing arrangements with its development partners. Subsequently, the project partners struggled to agree on fundamental steps in the development and composition of the Board of Directors of the special-purpose vehicle, Kleen Energy. EAEP understands that the developer will look for a new development partner, and due to current uncertainty, the program forecasts a delay in FC until Sept 2021. EAEP has been supporting IPPs in various ways, including providing information on the Kenya power sector to prospective financiers of IPP projects. EAEP held an update call with Eddie Mugo of Kleen Energy,

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						the developers of this project, on June 20 and was informed that the project was progressing well but that Kleen Energy was disappointed by the REPP for making demands that Kleen Energy considered unwarranted for a project of this size. REPP is providing mezzanine debt to the tune of $8 million, but only $800,000 has been used for project construction. Due to this slow pace of disbursement from the REPP facility, Kleen Energy has engaged Grant Thornton Kenya to help it in securing long-term finance from other sources, and also is talking with the US DFC. However, DFC has asked for an opinion on the proposed delay of the project's COD, in the updated LCPDP, from June 30, 2022, as per the PPA, to the "optimized" date of June 2023. Kleen Energy

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						requested that EAEP check with the Ministry of Energy which date should be followed, and provide DFC with the opinion it is seeking on the CODs. EAEP undertook to get clarification on the dates from the MOE. EAEP may also wish to consider sharing with DFC the opinion piece it prepared on LCPDPs in Kenya, once the piece is cleared by USAID. As requested by Mr. Mugo of Kleen Energy, EAEP held a call with the Secretary for Renewable Energy, Eng. Isaac Kiva, on July 2 to get clarification on the COD for the project that should be followed. Eng. Kiva said that Kleen Energy should negotiate the date with Kenya Power, but added that June 2023 would be better for the power system. EAEP informed Kleen Energy of this response and they were not

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						averse to the proposed delayed date.
Menengai-08 Sosian	Geothermal	35	Stage 3B – Financing	Jul 31, 2021	Dec 31, 2021	EAEP previously received word from GDC that the Sosian Menengai Geothermal Power project had reached FC, but this claim had not been verified at quarter's end. As of June 23, 2021, GDC's update indicated that the outstanding items for FC attainment include: • Signing of Deed of Adherence is pending • Attorney General's legal opinion is pending on the Deed Kenya Power delayed FC of the Sosian 35 MW project because of a failure to approve the new effective date of the PPA, associated with exposure to the risks of an early COD. The GDC Board has been lobbying the GOK for Kenya Power's compliance.

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						Additionally, the PPA Task Force assignment and moratorium on PPAs signing will have an impact on the FC date.
Menengai-09 Quantum Power East Africa Geothermal Ltd. (QPEA GT) Menengai-09 QPEA GT	Geothermal	35	Stage 3B – Financing	Jul 31, 2021	Dec 31, 2021	EAEP was not assisting as of June 30, 2021, but continued to track the progress of this project. As of June 2021, GDC's update included the following outstanding CPs for attainment of FC: • Signing of Deed of Adherence is pending • Attorney General's 'legal opinion is pending • Direct agreement has not yet been executed • Africa Development Fund–Partial Risk Guarantee (ADF-PRG) awaits signing of the Indemnity Agreement

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						The PPA Task Force moratorium will have an impact on the attainment of PPA CP and, consequently, the FC date.
Menengai-10 (OrPower 22)	Geothermal	35	Stage 3B – Financing	June 30, 2021	Dec 31, 2021	EAEP was not assisting as of June 30, 2021, but continued to track the progress of this project. Ormat sold its stake in the project to Vital Capital in 2019, and this change in shareholding structure is one reason for the slow progress toward FC. As of June, the update on the outstanding items is as below. • Execution of direct agreement • Generator construction security • Attainment of the PPA effective date • Negotiation on Government Letter of Support (ongoing)

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						• Signing of Deed of Adherence • Attorney General's legal opinion • ADF-PRG is awaiting signing of the Indemnity Agreement The PPA task force moratorium will have an impact on the PPA date and, consequently, the FC.
Ngong Wind Expansion	Wind	11	Stage 3B – Financing	Dec 31, 2021	Dec 31, 2021	Power Africa had previously supported KenGen's efforts to optimize and expand the Ngong Wind project. KenGen informed EAEP that the Board had directed that the management provide evidence that the existing plant is performing as designed before pursuing any further development of the field.
Chania Green Wind Project	Wind	50	Stage 3A – Project Structuring	Jun 30, 2021	Sep 30, 2021	EAEP is providing general transaction advisory assistance to Chania Green.

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						The Chania Green development appears to have been impacted by a combination of COVID-19 and Kenya Power-related delays. It was anticipated that the Deed of Adherence relating to government support would be signed in mid-2020, and it is now expected that Chania will benefit from the recent involvement of the experienced Elsewedy Energy team. However, EAEP currently anticipates that FC will only be achieved in September 2021. In order to achieve COD in May 2022, the shareholders have informed EAEP that they have decided on an all-equity deal to construct the project. EAEP's request for a further update was outstanding as of June 30, 2021.

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
Olkaria I Unit 1–3 Geothermal Power Plant Rehabilitation	Geothermal	5.7	Stage 3A – Project Structuring	Jun 30, 2020	Sep 30, 2021	EAEP gave general transaction support to KenGen but was not providing direct assistance as of June 30, 2021. This project constitutes the redevelopment of Olkaria I Units 1–3 after the power plant reached the end of its economic life. The redevelopment will raise the plant's capacity from 45 MW to 50.7 MW, representing an additional 5.7 MW. The valuation is complete and the award awaits resolution of the project's overall budget.
Isiolo Solar Farm	Solar	40	Stage 3A – Project Structuring	Jun 30, 2020	Sep 30, 2021	EAEP is providing general transaction advisory assistance to the Isiolo Solar project. This project involves the development of a 40 MW solar PV plant in Isiolo. A USTDA grant of $356,630 to Green Millennia Energy Limited partially funded the feasibility study, which was

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						completed. Isiolo signed a PPA with Kenya Power. The PPA was supposed to become effective on May 27, 2020, but the Government Letter of Support was stalled pending approval by the interministerial PPP Committee. The IPP had intended to commence construction by June 30, 2020, using equity. COD was set for the end of March 2021 but was delayed due to the generation-development issues bedeviling Kenya's power sector. EAEP's request for a further update was outstanding as of June 30, 2021.
Baharini Mpeketoni Wind Farm	Wind	90	Stage 3A – Project Structuring	Sep 30, 2021	Sep 30, 2021	EAEP is supporting the Baharini Mpeketoni Wind Farm. EAEP met with Elicio NV, which is now the developer for the wind project, located in the Baharini area of Mpeketoni,

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						some 20 km from the Lamu port. Elicio noted that their project has a particularly favorable wind profile due to its location on the coast near Lamu. The project has been in development for over 10 years, with the feasibility study approved in 2014 and its feed-in tariff steadily declining from 12 US cents/kWh to 7 US cents/kWh. Elicio also noted that their PPA was signed in January 2020, with a planned effective date of May 31, 2021, and a long-stop date of November 30, 2021. Conditions precedent to the PPA's effective date include the implementation of their agreed RAP and the Government Letter of Support. Kenya Power and EPRA previously approved the PPA. The full execution of the PPA will take place only after

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						approval by the PPP Committee of the National Treasury. Land is still an issue, and the PPA has consequently not yet become effective. Moreover, the project has not yet received Government Letters of Support and had previously experienced lengthy delays due to the difficulties of arranging meetings with government representatives and a reduced sense of urgency. These delays have, of course, been extended due to the Presidential PPA Task Force and associated moratorium on PPA finalization. Electrawinds sold its majority stake in this project to Elicio NV.
Nyakwere Hills Solar PV Power Project	Solar	40	Stage 2B – Project Development	Jun 30, 2021	Sept 30, 2021	EAEP team members met with CVE Africa on May 10, 2021, to discuss the IPP situation in Kenya and the Kenyan President's appointed

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						Task Force on PPAs. CVE Africa has invested in the Nyakwere Hills solar project. The project has been the beneficiary of a USTDA grant to fund technical assistance for Quaint Energy Kenya Ltd. ("Quaint") in order to support the development of a 40 MW solar photovoltaic power plant in Kenya. More recently, EPRA scheduled the project to be developed in phases of 10 MW each, which adversely affects the financial viability of the project, and the developer has been trying to get this decision rescinded. Additionally, this project has probably been delayed because of a combination of COVID-19, slow IPP framework processes, and Kenya Power's (aided and abetted by MOE and EPRA) general reluctance to commit to more PPA contracts because of their precarious

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						financial position and the narrative that Kenya will have excess supply. EAEP advised CVE Africa to make submissions to the Presidential PPA Task Force either individually, together with other IPPs, or both. It is likely CVE Africa will take this advice. EAEP subsequently provided CVE with the information required to make such a submission. EAEP considers it essential that IPPs are mobilized to make sure that the Kenyan power sector hears their issues and concerns.
Meru Wind Phase 1	Wind	100	Stage 3A – Project Structuring	Dec 31, 2021	Dec 31, 2021	EAEP was not assisting as of June 30, 2021. This 100 MW project is being developed by Windlab in Meru County. Windlab partnered with the Meru County government to develop a hybrid renewable energy project consisting of wind, solar, and battery

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						storage up to 166 MW under a PPP scheme. The initial phase will consist of 80 MW hybrid development of wind, solar, and battery storage. The project is ambitious in scope and scale. The complexity, combined with the delays affecting most solar and wind projects in Kenya, is expected to further delay progress toward FC.
Rumuruti Solar	Solar	40	Stage 3B – Financing	Dec 31, 2021	Dec 31, 2021	In Q3, EAEP asked KETRACO about progress on the undergrounding of the transmission connection line for the 40 MW Rumuruti solar project. KETRACO explained that, in response to complaints about local content in the proposed works, Kenya's Public Procurement Administrative Review Board had stayed KETRACO's process for procuring an entity to undertake the project works. Subsequently, Kenya's High

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						Court found that the Review Board had no authority in this matter and that KETRACO was effectively free to continue the procurement process for the connection work. The Rumuruti project will, however, be further postponed because of the delay in the procurement process and the requirement that the PPA cannot become effective (and FC cannot happen) until the transmission line is completed. EAEP's senior energy advisor subsequently met with Kenergy Renewables' Rumuruti Project Development Manager to discuss this 40 MW solar project. Kenergy confirmed that (as discussed with KETRACO), the work to underground the transmission connection feeder line could now

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						proceed. EAEP and Kenergy agreed to meet again when the Managing Director of Kenergy Renewables returns to Nairobi in August 2021. EAEP has supported the Rumuruti project, which is an important component of Kenya's future power supply, for some time and this project is well advanced, although the transmission line is required to make the PPA effective. Following the proposal in the LCPDP 2020–2040 to move this project's COD to 2028, the Governor of Laikipia County submitted a memorandum to the Task Force for review of PPAs with information on the advantages to the county economy of the project coming into service as per PPA date. The memorandum sent to the Task Force by the Electricity Sector Association of Kenya also commented on

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						the need to maintain the PPA COD. EAEP met with Rumuruti Solar on April 30, 2021, to discuss the status of their project and help evaluate their options after the release of the final draft of the LCPDP, shared in February 2021, that proposed the project's COD be moved back to 2028. It was agreed that EAEP would facilitate access to the Kenya Power Board Subcommittee on Strategy and Innovation so that the project sponsors would have an opportunity to present their case and demonstrate the technical and financial benefits the project would bring to the Kenyan grid.
Oserian	Geothermal	8	Stage 2A – Feasibility	Jun 30, 2021	Dec 31, 2021	The Oserian geothermal industrial park development (Oserian Two Lakes) includes the development of geothermal and solar generation projects with an estimated 8 MW potential.

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						The Oserian developer did not respond to previous requests for specifics about its funding proposals, nor to more recent general EAEP inquiries. Additionally, the Oserian Two Lakes CEO with whom EAEP had primarily been dealing left the company, and consequently it is difficult to be optimistic about Oserian reaching FC before the end of FY 2021. EAEP's request for a further update was outstanding as of June 30, 2021.
Makindu	Solar	30	Stage 3A – Project Structuring	Jun 30, 2020	Sept 30, 2021	EAEP was not providing direct assistance as of June 30, 2021. This effort involves the development of a 30 MW solar PV project in Makindu. A PPA was signed with Kenya Power, and the project began moving toward FC. However, the project was delayed pending the PPP committee's approval of the PPA. This

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						delay has continued due to the Presidential Task Force work and related moratorium on PPAs.
Olkaria VI	Geothermal	140	Stage 3A – Project Structuring	Jun 30, 2022	Jun 30, 2022	EAEP (through NRF) concluded capacity building and support on inputs to the RFP for this project in FY 2020. The issue before the Tribunal on de-listing of one of the bidders was resolved by the Tribunal decision to allow the bidder to be reinstated in the list of prequalified bidders. KenGen is in the process of formalizing this reinstatement and proceeding to issue the RFP. Meanwhile, KenGen has engaged EPRA to discuss the impact of the latest LCPDP timelines. In addition, Kenya Power's decision to suspend any further discussions on the PPA for this project will mostly likely result in a prolonged procurement process, as bidders seek clarity on the tariff in the

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						arrangement. The presidential Task Force's timeline and the moratorium on PPAs will definitely push FC beyond 2022.
Further projects with FC forecast in FY 2021						
Kopere	Solar	40	Stage 3A – Project Structuring	Jun 30, 2021	Sep 30, 2021	EAEP continued tracking the progress of this project but has no recent update. Voltalia is developing this project, for which it has a signed PPA with Kenya Power. This project is expected to be impacted by the delays affecting most solar and wind projects in Kenya. This delay has continued due to the Presidential Task Force work and related moratorium on PPAs.
Saigrene Energy Small Hydro Projects	Hydro	17	Stage 2B – Project Development	Jun 30, 2021	Sep 30, 2021	EAEP continued tracking the progress of this project but had no recent update in time for this report. This project involves a USTDA grant of [redacted]

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						to Saigrene Energy. The company Kenya Limited partially funded a feasibility study to support the development of five grid-connected, run-of-the-river hydropower plants in the Central Region of Kenya. US engineering and project-development firm Knight Piesold and Co. undertook the study. EAEP's request for a further update was outstanding as of June 30, 2021.
Xago Solar	Solar	40	Stage 3B – Financing	Jun 30, 2022	Jan 1, 2023	On July 23, 2020, EAEP's senior energy advisor met with Xago Africa, the developers of the Siaya Solar power project. The Siaya project has been supported by USG entities for many years, including the USTDA's support for an assessment study on battery energy storage. At the meeting, Xago staff voiced their

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						appreciation for Power Africa support provided to date. Xago confirmed that Power Africa partner Denholm Capital's Themis Energy had withdrawn from the project in mid-2020. In addition, Xago reported that they had completed the acquisition of land rights and consolidating land plots for the development of their project. Xago also confirmed that they were still planning to include a battery energy storage facility as part of their project (within the same bundled refit tariff). EAEP advised Xago that the Kenyan LCPDP 2021–2030 (released in May 2021) recommended that solar and wind power developments (in Kenya), without PPAs, be migrated from the refit program to a contestable procurement program. EAEP forwarded a copy of the LCPDP draft with this

KENYA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						recommendation, which should enable Xago to continue to progress their project under the refit program, subject to relaxation of the current moratorium. EAEP also confirmed that the program would support Xago's efforts to keep their project moving and advised Xago that EAEP will consult the Kenyan MOE on a mechanism to prioritize advanced IPP projects. Xago's project not only includes energy storage but also is strategically located in western Kenya, which would benefit from additional generation and network support.

ETHIOPIA

Corbetti and Tulu Moye geothermal projects (150 MW each): Expected FC has been delayed to Q4 FY 2021. In Q1 FY 2021, both Corbetti and Tulu Moye reached "effectiveness." Because of the COVID-19 pandemic, the projects previously encountered significant delays in finalizing the CPs to achieve effectiveness of the project documents (i.e., the PPAs and IAs). EAEP engaged with GOE/EEP, as well as the project developers, to satisfy the remaining three outstanding CPs from the initial list of 16. In Q3 FY 2021, EAEP assisted the GOE/EEP and Clifford Chance (GOE/EEP's international legal advisor) in preparing a response to the lender's list of "critical bankability issues" and "bankability issues requiring drafting amendments." EAEP was able to set up a working session between the MOF and Clifford Chance that resulted in finalizing the MOF response. EAEP proceeded to work with EEP to do the same. If all goes well, the aggregated responses from the MOF and EEP will be submitted to the lender's legal team in early Q4 FY 2021.

Metehara solar project (100 MW): Expected FC has been delayed until EEP and Enel Green Power (Enel – the project developer) agree on the tariff, which is anticipated to take place in Q4 2021. On April 24, 2020, Enel presented a revised proposal with a new tariff to EEP, which was not accepted by EEP management. EEP asked Enel to align its tariff to that of the Gad and Dicheto solar projects, which were awarded to Saudi-based ACWA Power. To that end, Enel discussed with its suppliers and contractors ways to reduce the tariff to a level close to EEP's petition, which proved too difficult to achieve. Enel's management team still planned to travel to Ethiopia to hold an in-person meeting with EEP managers to finalize the tariff issue as soon as COVID-19 travel restrictions were lifted. In November 2020, EAEP's senior energy sector advisor reached out to Enel's project director to obtain a status update on Enel's discussions with EEP. Enel consulted EEP on how Enel could move forward with the tariff discussion. Enel began working to reduce its tariff, to make it competitive with ACWA power's tariff of less than $0.03/kWh. Enel senior management decided to offer a $0.039/kWh tariff early in 2021 and then approach EEP management with a proposal, which EEP subsequently rejected.

In Q3, EAEP continued to communicate with Enel's management regarding the status of the project. Enel's management planned to reach out to the EEP in July 2021 (i.e., a few weeks after the Ethiopian national elections) regarding the tariff adjustment, which is the issue holding up the transaction from achieving commercial close. The national election took place on June 21, although some constituencies were not able to vote due to security and logistical issues. As a result, voting in those constituencies was postponed to September 2021. Once the results have been announced and the elected administration takes office, the next steps will be for the project sponsors to reach out to EEP's management and conclude negotiations on the tariff-reduction issue.

Ethiopia solar program, Round 1, Dicheto and Gad (125 MW each): Expected FC has been delayed until Q4 FY 2021. The PPAs and IAs were signed on December 19, 2019. However, certain CPs needed to be fulfilled for the project documents to become effective by June 2020, giving the project developers six months to satisfy the CPs from the date of signing. However, due to the COVID-19 pandemic, project developers were not able to meet that deadline. As a result, the effectiveness date was postponed. The Gad and Dicheto solar projects developer asked for more time to solicit financing, which the GOE/EEP extended by an additional six months, such that FC was expected to be reached in Q3 FY 2021. However, in mid-March, the GOE/EEP once again postponed the long stop date to October 2021 for the project sponsors to reach FC, subject to the resolution of foreign exchange availability, convertibility, and the transferability guarantee that project lenders requested. EAEP continued to follow the progress of these projects and to provide advice when and if required.

ETHIOPIA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
Tulu Moye – Phase I	Geothermal	50	Stage 3A – Project Structuring	Dec 31, 2021	Dec 31, 2021	EAEP shared the New York convention proclamation ratification document with Clifford Chance to review and determine one of the bankability requirements. EAEP assisted ALSF in having the Minister of Energy sign Clifford Chance's grant and mandate-extension letters. EAEP reviewed and shared the Geothermal Drilling Directive with Clifford Chance for its review of any technical and commercial impact it may have on the Tulu Moye PPA. EAEP arranged and participated in a working session between Clifford Chance and the MOF to go over the lender's issues list pertaining to the IA and PPA.
Corbetti - Phase I	Geothermal	50	Stage 3A – Project Structuring	Dec 31, 2021	Dec 31, 2021	EAEP shared the New York convention proclamation ratification document with Clifford Chance to review and determine one of the bankability requirements. EAEP assisted ALSF in having the Minister of Energy sign Clifford Chance's grant and mandate-extension letters. EAEP reviewed and shared the Geothermal Drilling Directive with

ETHIOPIA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						Clifford Chance for its review of any technical and commercial impact it may have on the Corbetti PPA. EAEP arranged and participated in a working session between Clifford Chance and the MOF to go over the lender's issues list pertaining to the IA and PPA.
Metehara	Solar	100	Stage 3A – Project Structuring	Sept 30, 2021	June 30, 2022	EAEP continued to communicate with the project developer for the Metehara solar project, Enel. Enel management plans to reach out to EEP's management team sometime in August/September 2021, after the Ethiopian national elections are finalized and political tensions subside. The main issue with this transaction is the tariffs, which Enel has offered at $0.039/kWh, and to which EEP management had not yet responded as of June 30.
Gad and Dichetto	Solar	250	Stage 3A – Project Structuring	June 30, 2021	Sept 30, 2021	EAEP continued tracking the progress of this project. Despite signing the power purchase agreement in December 2019, ACWA Power (the winning bidder) has yet to reach FC.

ETHIOPIA Project name	Technology	Project size (MW)	Project stage	Previously estimated financial close date (as of Dec 31, 2020)	New estimated financial close date (as of June 30, 2021)	Status as of June 30, 2021
						EAEP met with the PPP Directorate General to discuss foreign exchange availability and a convertibility guarantee. The foreign exchange availability and the convertibility guarantee are a hindrance for developers to reach financial close. The long stop date for the project sponsors to reach financial close is set for October 2021.

RWANDA

Amahoro Energy: Expected FC has been delayed on the Amahoro Energy Nyundo project until mid-2022. Once again, the shareholder structure was modified for this project. As of May 2021, DC Frontier exited the consortium and the project exclusively belonged to Amahoro Energy (the original shareholder). This project needs to renegotiate its PPA and tariff, as it defaulted on the previous versions by not adhering to the milestone deadlines such as completing construction and reaching commercial operations.. EAEP's senior energy specialist first started supporting this transaction under PATRP, and continued to do so under EAEP. The developer received USTDA funding for feasibility studies. During this quarter, EAEP followed up with the developer on project progress.

Bihongora: In April 2021, the developer agreed with REG on a tariff ($0.09/kWh). The tariff is lower than originally expected. During Q2 FY 2021, EAEP provided a project financial model to the developer that included a sensitivity analysis. Through the model and analysis, conversations with the developer led to reducing costs, resulting in a lower tariff. The developer entered into PPA negotiations with REG and the GOR; the project is expected to reach financial close in mid-2022.

Kirimbi I and II: During April 2021, the developer was told by the GOR that this project had been put on hold. Before being put on hold, the developer was in pre-PPA negotiations with the GOR; a new PPA would be needed in order to continue. Rwanda is currently facing an oversupply issue and is looking to delay projects without valid PPAs. East African Power, the developer for this project, is also developing Bihongora hydropower project; they have decided to focus first on Bihongora before trying to push for Kirimbi's advancement.

BURUNDI

Songa Energy (Ruvyi and Mulé): EAEP subcontractor NRF agreed to complete a legal review and provide translated (French to English) versions of all project contract documents for Songa Energy–Virunga Power's Ruyvi and Mulé hydropower projects. The work is expected to be completed by Q4 FY 2021 and will be shared with potential project investors and lenders. The Ruyvi and Mulé projects are expected to reach financial close mid-2022. These EAEP-supported projects will add 10.65 MW of power to the grid, which is significant given the limited available generation capacity in Burundi.

Kirasa Energy: The developer has held advanced conversations with lenders for debt. They have secured equity and are working with the National Land Committee as they begin the expropriation phase and start construction on access roads. The PPA was signed in late 2019 and financial close is expected by the end of 2021. During this quarter, EAEP continued to work with the developer.

Hydroneo: USAID/Burundi approved the EAEP-completed QTAT for Hydroneo's 10.2 MW hydropower project. Hydroneo has a signed PPA with the national utility, Régie de Production et de Distribution de l'Eau et de l'Electricité (REGIDESO), and as of June 30 was awaiting final approval from the President's office. The project is expected to reach financial close mid-2022. EAEP worked with the developer to identify areas of EAEP support to the project.

DEMOCRATIC REPUBLIC OF THE CONGO

Greenshare Solar: The developer has secured debt with the IFC and entered into conversations with the DFC to complement the IFC's debt. The developer also has held advanced conversations with Globeleq; Globeleq is considering becoming an equity investor in the 100 MW EAEP-supported

solar energy project. EAEP has advocated for the project to both Globeleq and the DFC. EAEP is supporting the project by funding a solar energy grid integration study; as of Q3, the study was in the design phase before moving through procurement. The Greenshare project, with a signed PPA, is expected to reach financial close in mid-2022.

Talihya Nord hydropower project: After several conversations with ENK, EAEP completed a QTAT for the Talihya Nord 9.5 MW hydropower project. ENK produces and distributes ~3 MW of power to the cities of Beni and Butembo in North Kivu. During Q3 FY 2021, USAID/DRC approved the QTAT. The project will provide generation and distribution to an underserved population of North Kivu. EAEP worked with the developer to identify the best areas of EAEP support to the project.

Virunga Energies Hydropower Projects: During Q3 FY 2021, EAEP held several meetings with Virunga Energies to identify potential areas of EAEP support to its projects. Virunga Energies has three operational hydropower projects with a total installed capacity of ~17 MW. The company is also developing a new 26 MW project. In addition to power generation, Virunga Energies is distributing power both directly to consumers and through a private distribution company. The additional power generation and distribution would be a tremendous asset to the underserved region of North Kivu. EAEP drafted a cooperation framework agreement (CFA) outlining potential areas of support; Virunga Energies was reviewing the CFA as the quarter ended.

TANZANIA

Renewable energy competitive procurement (350 MW): TANESCO's evaluation team concluded the evaluation of bids for construction of 350 MW (wind and solar) on an IPP basis. TANESCO forwarded to the MOE a request for "No Objection" to proceed with negotiations with the bid winner for both solar and wind-generation projects. The project bid validities expired, however, and TANESCO wrote to the bidders to extend their bid validities to June 2021. EAEP continued closely following developments, but support will be limited to legal and project-finance training of the relevant institutions, as required and after the CF is signed.

Kinyerezi I Expansion (185 MW): TANESCO and CSI Energy Group/Dozan/MTU concluded negotiations and a clarification meeting for the Kinyerezi I Expansion. The tender cool-off period was intended to allow time for any objections from other bidders, because as TANESCO's tender board was ready to award the expansion to CSI Joint Venture at the end of FY 2020, one of the bidders appealed to the PPAA. The PPAA acknowledged a complaint and ordered TANESCO to readvertise the tender. CSI retaliated by filing a case with the High Court against TANESCO, the Attorney General, and the PPAA. TANESCO's tender board put on hold bids for the Kinyerezi I Expansion until ruling was delivered by the court. On June 16, 2021, the High Court judges delivered a ruling in favor of PPAA's order that "TANESCO is to readvertise the tender." EAEP will continue tracking the Kinyerezi I Expansion tender and support GE, which will be given another opportunity to participate in the bid.

Zanzibar solar + battery storage (50 MW): At the request of ZECO and ZURA, EAEP completed a specialized "competitive procurement and battery storage" training for energy entities in Zanzibar. Attendees included 18 participants from Ministry of Energy (Zanzibar), Ministry of Finance and Planning (Zanzibar), ZURA, and ZECO. The training aimed to expand the capacity of Tanzanian energy institutions to engage in competitive and transparent procurement, thus maximizing access to least-cost energy services. Topics included project-finance considerations, sample contracts for renewable energy projects, dispute resolution, and valuing of energy-storage

services. Participants requested in-depth training on the same topics, supplemented by case studies from other countries. EAEP received the request from ZECO for training on "In-depth competitive procurement and battery energy storage, plus case studies" aimed at expanding the capacity of Tanzanian energy institutions to engage in competitive and transparent procurement, and thus maximizing access to least-cost energy services. EAEP and ZECO began preparing the curriculum; the training likely will take place in mid-July 2021. EAEP plans to host this training in collaboration with IFC for potential support to solar + battery developments in Zanzibar.

ANNEX D: SUCCESS STORIES AND OTHER COMMUNICATIONS PRODUCTS FROM Q3 FY 2021

Institutional Performance Strengthening Model to Transform the Kenyan Energy Sector

Human and institutional capacity development (HICD) assessment workshop, Mombasa, Kenya, September 2019. Photo credit: EAEP

Kenya's power sector faces several ongoing challenges, including sustaining reforms and offering top-notch electricity services to consumers. To support the sector, Power Africa launched virtual training, mentorship, and coaching in priority subject areas, aimed at improving organizational performance.

Power Africa convened the first sector-wide institutional performance strengthening workshop in September 2019. The workshop served as a platform for Power Africa to introduce the institutional

performance strengthening model to the sector and assess the capacity gaps of each entity. Additionally, the workshop led to developing institutional capacity performance assessment (IPCA) plans and a cooperation matrix between the Kenyan Ministry of Energy and USAID, aimed at helping the power entities continually build their capacity to meet their mandates.

During the assessment, the power entities identified the following critical capacity shortcomings:

- Plotting organizational strategy
- Planning for long-term generation, transmission, and investment for optimized power supply
- Negotiating, procuring, and managing power generation and transmission projects

Other areas included:

- Designing sector regulations
- Attracting private-sector funding
- Managing and developing staff performance
- Promoting organizational learning and performance improvement.

Power Africa adapted a virtual learning approach for Kenyan power entities due to the unprecedented COVID-19 pandemic. Power Africa's East Africa Energy Program used the Coursera platform, which gave the participants flexibility to complete courses at their own pace. Power Africa launched the virtual learning program in October 2020, allocating 65 slots for the power entities: Kenya Power – 25 slots, Kenya Electricity Generating Company (KenGen) – 20, Energy and Petroleum Regulatory Authority (EPRA) – 10, and Kenya Electricity Transmission Company (KETRACO) – 10. The virtual learning program also included mentoring, coaching, and regular check-ins with the participants throughout the training program.

Power Africa and the participating power entities selected courses to address strategy execution using business modeling, leadership development, knowledge management and organizational success, business-continuity planning, and engineering project management.

"I am a Certified Public Accountant working as a senior pricing analyst. I embarked on the course (Advanced Valuation and Strategy, Mergers & Acquisitions Private Equity and Venture Capital) to refresh my mind on various valuation models. I have benefited from the course and enjoyed the simplicity with which the course was presented." [redacted] **EPRA**

Between October 2020 and July 2021, 37 of the 65 trainees completed 102 courses on topics such as advanced business analytics, leadership development for engineers, business analytics for executives, business-continuity planning and management, and engineering extensive infrastructure project management. Power Africa began organizing a virtual graduation ceremony and thematic clinics for the learners, to recognize and celebrate their progress. The events will also serve as a forum to embed virtual learning into the organizational psyche, reinforce lessons learned through practical shared experiences, and develop sector-wide thematic communities of practice.

"I loved this course (Self-awareness and the effective leader.) I have learned so much from it and plan on having the concepts as a lifelong journey." [redacted] **KenGen**

Power Africa plans to extend the training to other utilities in the region. For example, in January 2021, staff from Zanzibar Electricity Company enrolled in project management training, with six successfully completing 20 courses.

"Thank you very much… the course on leadership was very knowledgeable, and it will go a long way in my career." Susan Muiruri, **Kenya Power course – Relationship Management**

Power Africa will continue supporting power entities through organizational capacity development, which will help the energy sector broaden its pool of resources and grow through standard skillsets and competencies applicable across East Africa. It will also build power entities' in-house skills to support policies and strategic frameworks that lead to solvent and resilient utilities, offering improved electricity services to the consumers.

Working with KETRACO to Develop an Environmental and Social Management Framework

Power transmission lines cutting across the land, Suswa Kenya. Photo credit: Nyaga Ireri

As important as it is to develop new sources of renewable energy in East Africa, new power plants are useless without their associated transmission infrastructure. In fact, because development times range between 5 and 10 years, new transmission infrastructure requires the same legal, financial, technical, and policy support to reach financial close and commissioning as generation transactions This is why the Power Africa-funded East Africa Energy Program (EAEP) is directly supporting the commissioning of over 2,000 km of transmission lines in East Africa, along with 430 MW of transmission capacity, by the program's end in 2022.

One of the issues that makes transmission infrastructure difficult to develop in East Africa is its impact on communities and businesses—including farmland—through which it runs. If adequate attention is not paid to community concerns or environmental impacts during the project-planning

stage, the result can be endless delays in construction as grievances wind their way slowly through court. Because new transmission lines are critical to fulfill existing and proposed generation plans throughout East Africa, these delays can produce reverberations across the entire power sector.

In Kenya, EAEP has been working intensively with KETRACO, the state-owned transmission utility, to develop and implement an Environmental and Social Management Framework (ESMF)—that is, a set of guidelines for obtaining community consent, and adjudicating environmental issues, during the planning, siting, and construction of overhead transmission lines. Having this framework in place will expedite KETRACO's rollout of transmission infrastructure, since until now the utility has resorted to commissioning Environmental and Social Impact Assessments (ESIAs) on a project-by-project basis—a significant investment in time and money.

EAEP and KETRACO jointly developed the ESMF to align with Kenya's Vision 2030, which focuses on environmental conservation, pollution and waste management, disaster preparedness, and adaptation to the impacts of global climate change.

The new ESMF is based on seven core principles:

1. **Electricity supply as a catalyst for sustainable development.** Electricity has both direct and indirect impacts on natural resource conservation, by reversing deforestation and overreliance on wood fuel, enhancing the development of clean and efficient technologies, and reducing waste and environmental pollution.
2. **A rights-based approach to development.** The ESMF recognizes that the pursuit of social safety and environmental conservation contributes positively to the realization of human rights in Kenya.
3. **Safeguarding ecological integrity.** There are limits to the demands that can be placed on an ecosystem, while still maintaining its capacity to provide the goods and services that are the basis for human well-being and environmental sustainability.
4. **Public participation and empowerment.** The ESMF ensures that KETRACO will seek public input at specific points in its decision-making process, so as to identify possible issues before, rather than during, the building of transmission lines.
5. **Broad stakeholder engagement.** The equal and substantive participation of all stakeholders—communities, donors, utility staff, etc.—in the design and implementation of KETRACO's transmission projects will reduce project delays and build consensus.
6. **The precautionary principle.** The absence of full scientific information on the nature, severity, or irreversibility of an environmental or social risk posed by a transmission line should not be the basis for failing to provide appropriate mitigation measures.
7. **Transparency and accountability.** Once adopted, the ESMF will be effectively and consistently implemented, to mitigate environmental and social risks across all KETRACO projects.

An ESMF test case: The Olkaria–Lessos–Kisumu transmission line

At the same time the ESMF was under development, EAEP and KETRACO conducted an independent, transect-by-transect environmental audit of the Olkaria–Lessos–Kisumu high-voltage transmission line, which will run 308 km between Kenya and Uganda. Once operational, this line will help relieve Kenya's current oversupply of generation and facilitate cross-border power trade. The on-field audit process allowed EAEP and KETRACO personnel to test specific elements of the draft ESMF, to ensure its suitability in supporting KETRACO's overall project portfolio. These elements included:

- Validating the environmental and social management issues identified and documented by the ESMF.
- Identifying institutional arrangements with county governments, the National Environmental Management Authority, and the Kenya Forest Service to ensure the proper implementation of the ESMP.
- Examining the relevance, applicability, and implications of policies, laws, and protocols on environmental and social management, as captured by the ESMF.
- Understanding the capacity constraints of KETRACO's environmental and social management teams regarding ESMF training.
- Preparing a mock application of the ESMF monitoring and evaluation matrix.

Once the new ESMF is operationalized, KETRACO will be in a better position to advance Kenya's energy agenda—both by expanding electricity access to more of Kenya's population and by making the country more resilient to the effects of climate change.

Advancing Public–Private Partnerships to Accelerate Energy Sector Development

Power infrastructure at Roysambu substation in Nairobi, Kenya. Photo credit: EAEP

Most African energy sector utilities and entities engage in frequent policy and regulatory reforms requiring legal expertise to negotiate and close energy transactions. To support them, the Power Africa East Africa Energy Program (EAEP), in collaboration with the Cyrus R. Vance Center for International Justice, began conducting regional legal fellows training sessions for East African countries aimed at the institutional strengthening of independent power producers (IPPs).

Energy sector overview

The African Development Bank (AfDB) has estimated that Africa needs at least $170 billion a year by 2025 to finance infrastructure needs, with a financing gap of $68 to $108 billion a year.[8] For the energy sector specifically, $29 billion is needed annually. However, most African governments

[8] Fisayo Alo and Eniayo Ibirogba, "Shaky Ground for PPPs in Africa's Energy Sector" (blog), Good Governance Africa, December 9, 2020. https://gga.org/shaky-ground-for-pps_in-africas-energy-sector/

encounter budgetary constraints affecting their development plans. This problem was exacerbated by the onset of COVID-19 on the continent early in 2020.

Strengthening institutions for public–private partnerships (PPPs)

Institutional reforms go a long way in advancing Power Africa's enabling environment pillar. The Vance Center's regional legal fellows training sessions involved participants from Ethiopia, Kenya, Nigeria, and most recently, Somalia. Additionally, the Vance Center is providing country-specific training sessions to build the capacity of various country institutions for PPPs in generation and transmission.

The trainings that took place between 2019 and mid-2021 were:

- Challenges and case studies on reaching financial close in energy project development and financing.
- Legal aspects arising from a financial model process in building and analyzing financial models.
- Project finance, including types of financing, with specific requests made by trainees for the curriculum to cover bond securitizations.
- PPPs, including controls, corruption, conflicts, and arbitration as well as PPP project management, structuring, and implementation.

The training is designed to strengthen government institutions' power project development, and in particular, structuring transactions and negotiating complex energy transactions.

> *"The Vance training has exposed me to great insights regarding financial close. For instance, I previously didn't know reaching financial close depends on the bankability."*
>
> *Ethiopian Electric Power participant*

The Vance Center identified local law firms in each of the participating countries to jointly deliver the training, in order to customize content to the local context. Attendees included participants from government and private practice across several African regions.

EAEP's role

Power Africa is helping governments improve legal and regulatory frameworks to stimulate investment by the private sector. In addition to the Vance training, Power Africa EAEP also conducts regional PPP training with participants from the DRC, Djibouti, Ethiopia, Kenya, Rwanda, Somalia, Tanzania, and Uganda. This 10-month intensive training program focuses on the financial and legal intricacies of PPPs and aims to increase capacity across the region for improved procurement and management of PPPs.

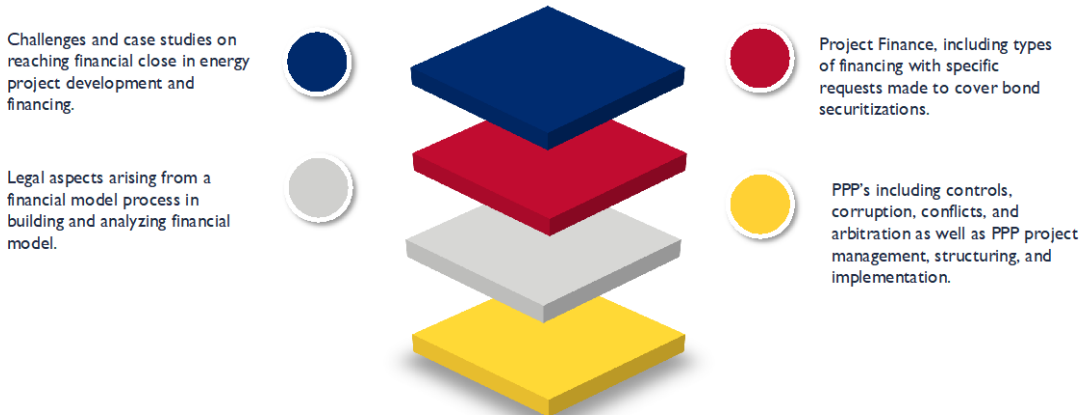
Additionally, EAEP advisors are supporting regulators, ministries, and utilities to facilitate a policy environment that embraces PPPs. EAEP advises on transactions to make deals bankable; offers technical support to revise and develop energy strategies and plans; and identifies off-takers to relieve excess supply.

Paving a way forward with PPPs

PPPs can bridge the energy sector financing gap to help accelerate infrastructure development in East Africa. As with many public sector needs, energy stakeholders will need to develop and strengthen PPP mechanisms to attract private-sector investment that enables development.

Problem: Most African energy sector utilities and entities engage in frequent policy and regulatory reforms requiring legal expertise to negotiate and close energy transactions.

Solution: Power Africa is building the capacity of East African governments and utilities, in collaboration with the Vance Center for International Justice, through institutional strengthening of IPPs. Additionally, Power Africa is helping governments improve legal and regulatory frameworks to stimulate private sector investment through transaction advisory support.



The Vance Center PPP Training Courses

Equipping Zanzibar's Energy Sector to Cope with Climate Change

Zanzibar Electricity Corporation employees verify two low-voltage lines connected to a distribution transformer in Makadara. Photo credit: EAEP

An archipelago located about 20 miles off the East African coast, Zanzibar (an autonomous republic of Tanzania) is uniquely positioned to confront the challenges of climate change. Zanzibar's two main islands—Unguja and Pemba—are threatened by rising sea levels in the Indian Ocean, and the Republic's approximately 1.5 million inhabitants rely mostly on wood burning and fossil fuels to supplement power supplied by undersea cables from mainland Tanzania. To better position itself to cope with the changing global climate, it is in Zanzibar's interest to reduce its dependence on the mainland and to develop renewable sources of energy.

Toward the end of 2020, the Power Africa East Africa Energy Program (EAEP) began intensive operations in Zanzibar, covering three of EAEP's four core objectives: optimized power supply, increased grid-based connections, and strengthened utilities. Activities in progress as of mid-2021 included the following.

Competitive procurement and battery-storage training for Zanzibar energy entities
The Government of Zanzibar has learned of a developers' interest in up to 40 MW of solar energy projects with potential to reduce the Republic's reliance on wood burning and fossil fuels. In early 2021, EAEP conducted a training for ZECO, the Zanzibar Utilities Regulatory Authority, the Ministry of Energy, and the Ministry of Finance and Planning. The aim of the training was to expand the capacity of Tanzanian energy institutions to engage in competitive and transparent procurement, and thus maximize access to least-cost energy services. Topics covered included project finance, sample

contracts for renewable energy projects, dispute resolution, and the proper valuation of energy-storage services.

Advanced GIS training for ZECO

Power utilities use GIS to capture, map, and display customer networks. It is an essential tool for achieving new connections in the shortest time and at the least possible cost. EAEP's training, for 10 ZECO engineers and technicians, focused on collecting data on distribution-network assets, using mobile technology, synchronizing, and editing data in ArcGIS (a widely used GIS program), creating advanced spatial queries for network analysis, designing and administering the spatial database (ArcGIS Online) for real-time data visualization, and managing the ArcGIS server. EAEP's goal is to facilitate 70,000 new connections by the end of the program in December 2022.

Revenue improvement and aggregate technical, commercial, and collections (ATC&C) loss reduction at ZECO

EAEP has been working intensively with ZECO to reduce the utility's ATC&C losses—that is, the difference between the monetary value of the electricity ZECO provides and the amount of money that it actually recoups. Reducing ATC&C losses is tantamount to reducing waste, an important consideration when greenhouse-gas-producing fossil fuels are used to generate energy.
EAEP is helping ZECO by:

- Collecting customer data, to better map customers to the ZECO network (thereby supporting energy accounting and loss localization)
- Building ZECO's capacity for data analysis, to better pinpoint where losses are coming from and where revenues can be improved
- Strengthening ZECO's revenue-protection unit through the development of standard operating procedures and tools
- Performing skills assessments and building the capacity of ZECO's commercial and operational employees
- Segregating losses, to distinguish between technical losses (suboptimal networks, incorrect installations, etc.) and commercial losses (theft, human error, inefficient metering, etc.)
- Conducting workshops for police, the prosecutor's office, and the court, to increase their awareness of and ability to deal with cases of power theft.

Especially important, and related to all the points above, is EAEP's support for ZECO's internal-audit department, which needs an efficient risk-assessment methodology. EAEP is helping to draft an internal-audit manual for this department, including standard operating procedures and a framework for annual planning related to information technology. Strengthened internal audits at ZECO ultimately will reduce the utility's losses and improve its operational efficiency.

Finally, EAEP is expanding its successful online trainings used in Kenya—with an emphasis on post-COVID-19 business resumption, business analytics, and organizational change—to interested ZECO staff in Zanzibar. EAEP has chosen the Coursera model for these trainings because of its virtual capabilities during COVID-19 office closures, its flexibility (participants can complete courses at their own pace), and the quality of the courses offered.

ANNEX E: EAEP TEAM TRAVEL DURING Q3 FY 2021

Dates	Traveler (s)	Purpose	Destination
March 14–April 9, 2021	[redacted]	• Develop a diagnostic report by conducting an internal-audit gap analysis for ZECO • Strengthen functions by reviewing team internal-audit roles: internal control; risk management; corporate governance, responsibilities, and authorizations • Conduct field visits to selected substations to understand the situation with energy balance and feeder metering/grid metering.	Zanzibar Tanzania
March 14–April 3, 2021	[redacted]	• Collect information for diagnostic report for KRECS. • Conduct meetings in the selected zones with staff responsible for sales and marketing, distribution, information and communication technology, human recourses, finance, legal issues, and internal audit. • Conduct field study visits to understand commercial operations, revenue protection, meter reading, disconnection, reconnections, new connections, and metering replacement and conditions. • Conduct field visits in selected substations to understand the existing energy balance and feeder metering/grid metering situation. • Meet with staff supporting essential utility commercial and technical functions.	Kampala, Uganda
March 14–April 3, 2021	[redacted]	• Collect information for diagnostic report for KRECS. • Conduct meetings in selected zones with staff responsible for sales and marketing, distribution, information and communication technology, human recourses, finance, legal issues, and internal audit. • Conduct field study visits to understand commercial operations, revenue protection, meter reading, disconnection, reconnections, new connections, and metering replacement and conditions. • Conduct field visits to selected substations to understand the existing energy balance and feeder metering/grid metering situation. • Meet with staff supporting essential utility commercial and technical functions.	Kampala, Uganda
April 14–28, 2021	[redacted]	• Work with Blue Sky, an ESP in Mogadishu, on data collection for diagnostic assessment.	Mogadishu and Garowe, Somalia

Dates	Traveler (s)	Purpose	Destination
		• Complete the data-request form and build the necessary working relationship to enhance cooperation going forward.	
April 14–21, 2021 May 2–8 and 23–29, 2021	[redacted]	• Follow up with the Permanent Secretary, Ministry of Energy, on the submitted CF and EAEP's work plan. • Meet the Permanent Secretary, Ministry of Finance and Planning, to provide consent for Permanent Secretary–MOE to sign the CF on behalf of the Government of Tanzania.	Dodoma, Tanzania
May 16–21, 2021	[redacted]	Support the ZECO advanced GIS training.	Arusha, Tanzania
May 16–21, 2021	[redacted]	Support the ZECO advanced GIS training.	Arusha, Tanzania
June 12–17, 2021	[redacted]	• Collect data to identify power-generation gaps, with the aim of adequately updating the Objective 1 new generation work plan for Somalia and addressing generation issues. • Conduct a two-day stakeholder consultative meeting with local EAEP-supported ESPs to identify, address, and prioritize operational and technical gaps. • Conduct a site visit to the NECSOM power station in Garowe and conduct a diagnostic assessment to plan next-stage activities under Objective 3. • Meet with representatives from the Puntland Ministry of Energy.	Garowe, Somalia
June 12–23, 2021	[redacted]	• Collect data to identify power-generation gaps, with the aim of adequately updating the Objective 1 new generation work plan for Somalia and addressing generation issues. • Conduct a two-day stakeholder consultative meeting with local EAEP-supported ESPs to identify, address, and prioritize operational and technical gaps. • Conduct a site visit to the NECSOM power station in Garowe and conduct a diagnostic assessment to plan next-stage activities under Objective 3. • Meet with representatives from the Puntland Ministry of Energy.	Garowe, Somalia
June 16–23, 2021	[redacted]	Follow up on the CF for mainland Tanzania and EAEP project document (work plan) from Permanent Secretary, Ministry of Finance and Planning to Attorney General for legal opinion before signing.	Dodoma, Tanzania

Dates	Traveler (s)	Purpose	Destination
June 27–July 3, 2021	[redacted]	Facilitate and support the Electric Network Simulation Workshop for ZECO.	Zanzibar
June 27–July 3, 2021	[redacted]	Facilitate and support the Electric Network Simulation Workshop for ZECO.	Zanzibar
June 27–July 3, 2021	[redacted]	Facilitate and support the Electric Network Simulation Workshop for ZECO.	Zanzibar

ANNEX F: EAEP STAFFING PLAN, Q3 FY 2021

Status	Organization	Name	Job title	Work plan support area	Location	Nationality status
Senior Management Team						
Full Time	RTI Kenya	[redacted]	Chief of Party	Senior Management Team	Nairobi, Kenya	Third-Country National (TCN)
Full Time	RTI Home Office	[redacted]	Manager, Energy	Senior Management Team	Research Triangle Park, North Carolina	US
Full Time	RTI Kenya	[redacted]	Deputy Chief of Party – Program Management Unit	Senior Management Team	Nairobi, Kenya	US
Full Time	RTI Rwanda	[redacted]	Deputy Chief of Party – Regional Technical Unit	Senior Management Team	Kigali, Rwanda	US
Full Time	RTI home office	[redacted]	Senior Project Management Specialist	Senior Management Team	Washington, DC	US
Part-Time Support	RTI home office	[redacted]	Director, Energy	Senior Management Team	Washington, DC	US
Extended Management Team						
Full Time	RTI Kenya	[redacted]	Senior Legal and PPP Advisor – Objective 1 Lead	Objective 1	Dar es Salaam, Tanzania	TCN
Full-Time Subcontractor	TetraTech	[redacted]	Objective 3 Lead / Utility Strengthening	Objective 3	Nairobi, Kenya	TCN
Full Time	RTI Ethiopia	[redacted]	Objective 4 Lead/Senior Power Pool Advisor	Objective 4	Addis Ababa, Ethiopia	TCN
Full Time	RTI Kenya	[redacted]	Director, Institutional Performance-Improvement Unit	Cross-Cutting (IPIU)	Nairobi, Kenya	Local Hire

Status	Organization	Name	Job title	Work plan support area	Location	Nationality status
Cross-Cutting						
Full Time	RTI Kenya	[redacted]	Community-Engagement Advisor	Cross-Cutting (Community Engagement)	Nairobi, Kenya	Local Hire
Full time	RTI Kenya	[redacted]	Environmental Specialist	Cross-Cutting (Environment)	Nairobi, Kenya	Local Hire
Full Time	RTI Rwanda	[redacted]	WIRE Specialist	Cross-Cutting (Gender)	Kigali, Rwanda	Local Hire
Full Time	RTI Rwanda	[redacted]	WIRE Program Manager	Cross-Cutting (Gender)	Kigali, Rwanda	Local Hire
Full Time	RTI Kenya	[redacted]	Senior Gender Advisor	Cross-Cutting (Gender)	Nairobi, Kenya	Local Hire
Part-Time Support	RTI home office	[redacted]	Gender Specialist	Cross-Cutting (Gender)	Canada	TCN
Part-Time Support	RTI home office	[redacted]	Senior Capacity-Building Specialist	Cross-Cutting (Gender/IPIU)	Research Triangle Park, North Carolina	US
Full Time	RTI Kenya	[redacted]	Senior Organization Development Specialist	Cross-Cutting (IPIU)	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	Institutional-Strengthening Specialist	Cross-Cutting (IPIU)	Nairobi, Kenya	Local Hire
Objective 1						
Full Time	RTI Ethiopia	[redacted]	IPP Procurement Senior Technical Advisor	Objective 1	Addis Ababa, Ethiopia	Local Hire
Full Time	RTI Ethiopia	[redacted]	Senior Energy Sector Advisor	Objective 1	Addis Ababa, Ethiopia	US

Status	Organization	Name	Job title	Work plan support area	Location	Nationality status
Full Time	RTI Ethiopia	[redacted]	Senior Transaction Advisor / Office Director	Objective 1	Addis Ababa, Ethiopia	US
Full Time	RTI Kenya	[redacted]	Senior Technical Advisor Ministry Embedded	Objective 1	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	Transaction Advisor	Objective 1	Nairobi, Kenya	TCN
Consultant	RTI Kenya	[redacted]	Senior KenGen Advisor	Objective 1	Nairobi, Kenya	Local Hire
Consultant	RTI Kenya	[redacted]	Senior Advisor to Kenya Power and KETRACO	Objective 1	Nairobi, Kenya	Local Hire
Consultant	RTI Kenya	[redacted]	Tariff Specialist	Objective 1	Nairobi, Kenya	Local Hire
Part-Time Support	RTI home office	[redacted]	Tariff Specialist	Objective 1	Canada	TCN
Part-Time Support	RTI home office	[redacted]	Energy Specialist	Objective 1	Washington, DC	US
Part-Time Support	RTI home office	[redacted]	Battery-Storage Specialist	Objective 1	Washington, DC	US
Objectives 1–4						
Full Time	RTI Rwanda	[redacted]	Senior Energy Specialist (Rwanda, Burundi, DRC)	Objective 1 and 4	Kigali, Rwanda	US
Full Time	RTI Tanzania	[redacted]	Tanzania Technical Lead	Objective 1, 2, 3, 4	Dar es Salaam, Tanzania	Local Hire
Consultant	RTI	[redacted]	Power System Planning Advisor	Objective 1 and 4	Nigeria	TCN

Status	Organization	Name	Job title	Work plan support area	Location	Nationality status
Objective 2						
Full Time	RTI Ethiopia	[redacted]	Engineer/GIS Specialist	Objective 2	Addis Ababa, Ethiopia	Local Hire
Full Time	RTI Ethiopia	[redacted]	Electrical/Distribution Engineer	Objective 2	Addis Ababa, Ethiopia	Local Hire
Consultant	RTI Ethiopia	[redacted]	Electrical Distribution Utility Customer-Connection Specialist	Objective 2	Addis Ababa, Ethiopia	Local Hire
Consultant	RTI Tanzania	[redacted]	Objective 2 Advisor	Objective 2	Dar es Salaam, Tanzania	TCN
Full Time	RTI Tanzania	[redacted]	Utility Advisor	Objective 2	Dar es Salaam, Tanzania	Local Hire
Full Time	RTI Uganda	[redacted]	REA–Uganda Advisor	Objective 2	Kampala, Uganda	Local Hire
Full Time	RTI Uganda	[redacted]	REA–Uganda Advisor	Objective 2	Kampala, Uganda	Local Hire
Full Time	RTI Uganda	[redacted]	REA–Uganda Advisor	Objective 2	Kampala, Uganda	Local Hire
Full Time	RTI Uganda	[redacted]	Senior Transmission and Distribution Advisor - Uganda	Objective 2	Kampala, Uganda	Local Hire
Full Time	RTI Somalia	[redacted]	Energy and Utility Advisor	Objective 2	Somalia	Local Hire
Objective 3						
Full Time	TetraTech	[redacted]	EEU Advisor	Objective 3	Addis Ababa, Ethiopia	TCN

Status	Organization	Name	Job title	Work plan support area	Location	Nationality status
Full Time	TetraTech	[redacted]	EEU Advisor	Objective 3	Addis Ababa, Ethiopia	TCN
Full Time	TetraTech	[redacted]	EEU Advisor	Objective 3	Addis Ababa, Ethiopia	TCN
Full Time	TetraTech	[redacted]	Utility Specialist	Objective 3	Addis Ababa, Ethiopia	Local Hire
Full Time	TetraTech	[redacted]	Utility Specialist	Objective 3	Addis Ababa, Ethiopia	Local Hire
Full Time	TetraTech	[redacted]	Utility Specialist	Objective 3	Addis Ababa, Ethiopia	Local Hire
Full Time	TetraTech	[redacted]	Kenya Power Loss-Reduction Advisor	Objective 3	Nairobi, Kenya	TCN
Full Time	TetraTech	[redacted]	Kenya Power Loss-Reduction Advisor	Objective 3	Nairobi, Kenya	TCN
Objective 4						
Full Time	RTI Ethiopia	[redacted]	Energy Specialist – Power Trade	Objective 4	Addis Ababa, Ethiopia	Local Hire
Project Management Unit – Communications						
Full Time	RTI Kenya	[redacted]	Director of Communications	PMU (Communications)	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	Communications / Events Specialist	PMU (Communications)	Nairobi, Kenya	Local Hire
Full Time	RTI home office	[redacted]	Technical Writer	PMU (Communications)	Research Triangle Park, North Carolina	US

Status	Organization	Name	Job title	Work plan support area	Location	Nationality status
Part-Time Support	RTI home office	[redacted]	Editor	PMU (Communications)	Washington, DC	US
Part-Time Support	RTI home office	[redacted]	Document Preparation Specialist	PMU (Communications)	Washington, DC	US
Part-Time Support	RTI home office	[redacted]	Communications Specialist	PMU (Communications)	Washington, DC	US
Part-Time Support	RTI home office	[redacted]	Senior Communications Specialist	PMU (Communications)	Washington, DC	US
Part-Time Support	RTI home office	[redacted]	Editor	PMU (Communications)	Washington, DC	US
Project Management Unit – Human Resources						
Full Time	RTI Kenya	[redacted]	HR Manager	PMU (Human Resources)	Nairobi, Kenya	Local Hire
Part-Time Support	RTI home office	[redacted]	Senior HR Business Partner	PMU (Humans Resources)	Research Triangle Park, North Carolina	US
Part-Time Support	RTI home office	[redacted]	HR / Recruiting Specialist	PMU (Human Resources)	Research Triangle Park, North Carolina	US
Full Time	RTI Kenya	[redacted]	Human Resource Assistant	PMU (Human Resources)	Nairobi, Kenya	Local Hire
Project Management Unit – MEL						
Full Time	RTI Kenya	[redacted]	MEL Manager	PMU (MEL)	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	MEL Specialist	PMU (MEL)	Nairobi, Kenya	Local Hire

Status	Organization	Name	Job title	Work plan support area	Location	Nationality status
Full Time	Khulisa	[redacted]	MEL Specialist	PMU (MEL)	Nairobi, Kenya	Local Hire
Full Time	RTI Rwanda	[redacted]	MEL Assistant	PMU (MEL)	Kigali, Rwanda	Local Hire
Project Management Unit – Finance						
Full Time	RTI Kenya	[redacted]	Director of Finance	PMU (Finance)	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	Senior Accountant	PMU (Finance)	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	Accountant	PMU (Finance)	Nairobi, Kenya	Local Hire
Full Time	RTI Ethiopia	[redacted]	Accountant	PMU (Finance)	Addis Ababa, Ethiopia	Local Hire
Full Time	RTI Tanzania	[redacted]	Finance and Administrative Assistant	PMU (Finance/ Operations)	Dar es Salaam, Tanzania	Local Hire
Full Time	RTI Rwanda	[redacted]	Finance and Admin Officer	PMU (Finance/ Operations)	Kigali, Rwanda	Local Hire
Full Time	RTI Uganda	[redacted]	Finance and Administration Officer	PMU (Finance/ Operations)	Kampala, Uganda	Local Hire
Part-Time Support	RTI home office	[redacted]	Finance / Accounting Specialist	PMU (Operations)	Research Triangle Park, North Carolina	US
Part-Time Support	RTI home office	[redacted]	Director Finance	PMU (Operations)	Research Triangle Park, North Carolina	US

Status	Organization	Name	Job title	Work plan support area	Location	Nationality status
Project Management Unit – Contracts and Operations						
Full Time	RTI Kenya	[redacted]	Director, Contracting and Operations	PMU (Operations)	Nairobi, Kenya	Local Hire
Full Time	RTI Ethiopia	[redacted]	Operations Officer	PMU (Operations)	Addis Ababa, Ethiopia	Local Hire
Full Time	RTI Ethiopia	[redacted]	Administrative Assistant	PMU (Operations)	Addis Ababa, Ethiopia	Local Hire
Full Time	RTI Rwanda	[redacted]	Administration and Operations Officer	PMU (Operations)	Kigali, Rwanda	Local Hire
Full Time	RTI Kenya	[redacted]	Operations and Administration Officer	PMU (Operations)	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	IT Specialist	PMU (Operations)	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	Procurement Officer	PMU (Operations)	Nairobi, Kenya	Local Hire
Full Time	RTI Kenya	[redacted]	Office Manager	PMU (Operations)	Nairobi, Kenya	Local Hire
Part-Time Support	RTI home office	[redacted]	Senior Contracting Officer 3	PMU (Operations)	Research Triangle Park, North Carolina	US
Part-Time Support	RTI Kenya	[redacted]	RTI Regional Security Officer	PMU (Operations)	Nairobi, Kenya	Local Hire
Part-Time Support	RTI home office	[redacted]	Project Associate	PMU (Operations)	Washington, DC	US
Part-Time Support	RTI home office	[redacted]	Project Associate	PMU (Operations)	Washington, DC	US

ANNEX G: MONTHLY REPORTS

Adobe Acrobat Document

April Power Africa EAEP Monthly_Newsletter_2021.pdf

Adobe Acrobat Document

May Power Africa EAEP Monthly_Newsletter_2021.pdf

Adobe Acrobat Document

June Power Africa EAEP Monthly_Newsletter_2021.pdf

ANNEX H: TRAINING AND EVENTS, APRIL–JUNE 2021

Dates	Event Name	Highlights/Objectives	Location
March 22–June 11, 2021	PPP strengthening for East African countries: Financial analysis techniques for infrastructure projects (online program)	1. Essentials of financing PPP (Mar 22–Apr 2) 2. Financial analysis techniques for PPPs (April 5–16) 3. Project risk analysis for investors, lenders, and governments (Apr 19–30) 4. Transaction toolkit for PPP procurement (May 3–14) 5. Understanding financial statements and project-finance models (May 17–28) 6. Designing a project-finance model (May 31–June 11)	Virtual *(DRC, Djibouti, Ethiopia, Kenya, Rwanda, Somalia, Tanzania, and Uganda)*
April 12–16, 2021	Advanced GIS training for ZECO	Share detailed information on the design, deployment, and operation of GIS systems	Zanzibar, Tanzania
April 20, May 4, May 18, June 8 and 22, and July 6, 2021	Brown-bag learning series	• Electricity consumers: Study reports from Kenya and Ethiopia • GIS 101 • Best practices in designing and implementing grievance and complaints-handling mechanisms for development projects • Transaction A–Z process to reach financial close • Pilot areas: Successes in Kenya and Ethiopia • Competitive procurement: Reverse auctions	Virtual
April 26– 27, 2021	Pause-and-reflect session	Meet for work plan review	Virtual
May 16–21, 2021	Training on tariff setting for ZECO	Enable ZECO's staff to determine a tariff methodology, then prepare and analyze a tariff model. The model would facilitate frequent tariff reviews by ZURA to ensure a cost-reflective tariff that would cover the total costs of ZECO's operations.	Zanzibar Tanzania
June 28–July 2, 2021	Electricity network simulation workshop for ZECO using DIgSILENT Power System software	Help ZECO improve its planning model, operational efficiency, and service delivery to existing and new customers	Zanzibar, Tanzania
July 2, 2021	Second KETRACO annual conference	Make a community-engagement presentation on wayleaves	Nairobi, Kenya
July 3–31, 2021	Workforce-readiness training	Improve workforce-readiness skills for 35 prospective apprentices	Virtual

Dates	Event Name	Highlights/Objectives	Location
	cohort for POWERHer		
July 8, 2021	KETRACO Resettlement Action Plan Workshop	Review the KETRACO Resettlement Action Plan Policy Framework	Nairobi Kenya
July 16, 2021	TaWoED network launch	Enhance participation of women in the Tanzania energy sector	Dar Es Salaam, Tanzania
July 16–August 6, 2021	Gender foundation training	Train WIRE partners on gender inclusion	Virtual
July 29, 2021	Graduation cere-mony – Coursera virtual learning for Kenyan utilities	Train and coach power entities for organizational development	Virtual
July 29, 2021 (to be continued [TBC])	Regional Energy Café	Share means to pave a way forward with PPPs	Zoom
July 28–29 or August 18–19, 2021	Energy Mkutano Workshop	Drive conversations on PPP in transmission and discussions on the rebundling process	Kampala, Uganda
TBC	GIS training for Uganda utilities	EAEP's GIS specialist will deliver training to build the capacity of various utilities in using GIS technologies to improve the quality of spatial data collection for decision-making and project planning.	Virtual and Kampala, Uganda
TBC	KETRACO ESMF deployment training	EAEP will deliver training to KETRACO's environmental and social unit on practical applications of the ESMF and the attendant web-based screening tool. This session will ensure that KETRACO staff hold a common understanding of the ESMF concept and will transfer the skills they will need to deploy the framework effectively.	Nairobi, Kenya, or virtual

ANNEX I: ENVIRONMENTAL MANAGEMENT PLAN QUARTERLY UPDATE

To adhere to the draft Environmental Management and Mitigation Plan, outlined below is EAEP progress by activity category for Q3 FY 2021.

Environmental Management and Mitigation Plan activity table: Environmental status update for Q3 FY 2021

Activity and sub-activity	Q3 progress report
Activity Category 1: Optimized Power Supply	
1.1. Bringing new power generation to financial close and commissioning	EAEP did not review any PESRM documents for existing transactions during Q3 FY 2021. EAEP will continue to monitor PESRM needs for all transactions.
1.2 Accelerating national transmission projects	EAEP finalized the KETRACO ESMF (Environmental and Social Management Framework) during Q3. KETRACO confirmed the activity supported the commissioning of the 308 km Olkaria–Lessos–Kisumu high-voltage transmission line, which was used as a case study on the ground to implement the framework. Additionally, EAEP reviewed the following national transmission ESIAs: • Final technical review and clearance of ESIA for the transport, distribution, and marketing of electrical energy in the northeast of the Democratic Republic of Congo from Bwera in Uganda • Technical review of ESIA and ESMP for the high-voltage transmission lines for Rwanda's EDCL
1.3: Supporting government and utilities to improve power generation, transmission, and distribution planning	No updates to report during Q3
1.4: Improving legal and regulatory frameworks to stimulate private-sector investment	
1.5: Improving the capacity of governments and utilities to negotiate, produce, and manage power-generation and transmission projects	
1.6: Strengthening the capacity of regulators	

Activity and sub-activity	Q3 progress report
1.7: Strengthening the capacity of private-sector partners, host-country entities, and community-based groups to promote environmentally and socially responsible power projects	In Q4 FY 2021, EAEP will lead rollout training for the KETRACO ESMF mentioned above. Additionally, KETRACO requested EAEP support for early-stage transmission transaction reviews applying the new ESMF. In Q3, EAEP kicked off a wildlife management guide that will support utilities throughout the region to mitigate challenges linked to wildlife interactions. The guide, expected to be ready in Q4 FY 2021, is being developed in tandem with Southern Africa Energy Program and EAEP subcontractor Endangered Wildlife Trust.
Activity Category 3: Strengthening Utilities and Power-Sector Entities	
3.1 Upgrading and rehabilitating distribution systems to improve power delivery and reduce losses	None in Q3.
3.2 Establishing energy-accounting processes	
3.3 Improving processes for the installation and maintenance of smart meters and other control technologies, including transformers	
Activity Category 4: Increasing Regional Power Trade	
4.5 At least three priority regional transmission and interconnection projects developed or accelerated	Participated in follow-up meetings with stakeholders regarding EAEP's review of revised ESIA documents for the Nuru transaction for the Uganda–DRC interconnector.