



managed by



camco
CLEAN ENERGY

QUARTERLY IMPACT REPORT

Quarter 4 2020

ABOUT REPP



The Renewable Energy Performance Platform (REPP) works to mobilise private sector development activity – and investment – in small to medium-sized renewable energy projects (typically up to 25MW) in West, Central, East and Southern Africa to ensure access to clean energy for all and mitigate greenhouse gas emissions (GHG) in line with the Paris Agreement.

REPP is managed by Camco Clean Energy, a leading fund management company, and is supported with £148m funding from the UK's International Climate Finance through the Department for Business, Energy and Industrial Strategy (BEIS).

To date, REPP has financing agreements with **27 projects** or companies spread across **14 countries** and employing **5 different technologies** (solar home systems, solar PV mini-grids, grid-connected solar PV, run-of-river hydro, and on-shore wind).¹ A total of **£37m** has been contracted through these projects and a further **£82m** committed to projects in the pipeline.



Image source: PEG Africa



Image source: Rift Valley Energy

¹ Five earlier projects were terminated.

WELCOME

2020 was certainly a year that no one will easily forget. But in the face of the devastating pandemic, REPP-supported developers and their projects have shown remarkable resilience, sending out a clear message that Africa's renewable energy sector is ripe for investment.

Over the year's final quarter, REPP's operational projects have continued to make steady progress, with off-grid projects accounting for a 61% increase in the number of people connected to electricity for the first time, bringing the total to nearly 600,000 people. Installed capacity is increasing at a modest pace as projects mature, and greenhouse gases avoided have more than doubled in the quarter.

COVID-19 has certainly hampered full productivity across the sector as a whole, but as this impact report shows, renewables are continuing to assert their critical role in achieving universal energy access and global climate goals.

GVE MINI-GRIDS REACH C.O.D.

GVE Projects Ltd has commenced the operation of the first four REPP-financed solar PV mini-grids, providing clean energy access to rural communities in Nigeria. The developer plans to build a total of 72 mini-grids across seven states in the country.



Image source: GVE Projects Ltd

BATTERY RENTAL BIZ SECURES £1M

REPP has [invested £1 million](#) in solar-powered battery rental company Mobile Power, which provides affordable clean energy access to off-grid communities in Liberia and Sierra Leone. See *In the spotlight* on page 5 for more.



Image source: Mobile Power

UPOWA GETS FURTHER INVESTMENT

REPP has [increased its original investment](#) in the Cameroon-based developer's ambitious PAYG solar homes systems initiative by €500,000, bringing the total now invested by REPP to €1.8m.



Image source: upOwa



Image source: GVE Projects Ltd

DEVELOPMENT EXPERT JOINS REPP BOARD

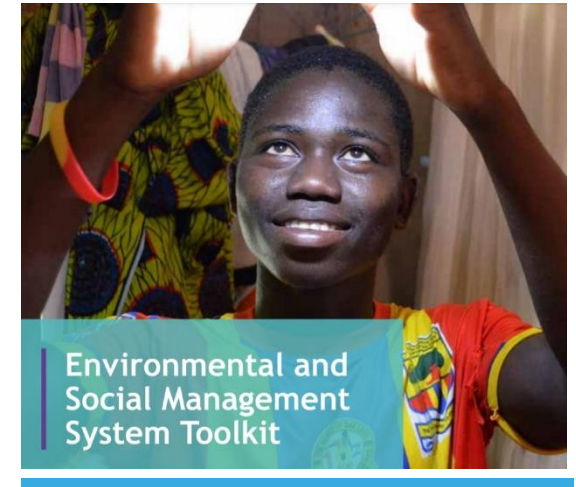
Andrew Stalbaum is Team Leader in Private Finance and Innovation at the UK's Department for Business, Energy and Industrial Strategy (BEIS). Find out more about Andrew and the rest of REPP Board [here](#).



REPP LAUNCHES ESMS TOOLKIT

This free-to-use resource aims to help renewable energy developers establish and implement a viable environmental and social management system (ESMS). The toolkit and accompanying workbook are available to all on the REPP website [here](#).

Image source: PEG Africa



Q&A WITH UPOWA'S CAROLINE FRONTIGNY

In the [second instalment](#) in our Talking Points interview series with REPP investees, we talk to the company's co-founder and leading female entrepreneur about building a SHS business from scratch in Cameroon, COVID-19 and how to accelerate gender mainstreaming in Africa's renewable energy sector.

MOBILE POWER



Image source: Mobile Power



Image source: Mobile Power

A battery rental business operating in underserved communities in Sierra Leone and Liberia is set to scale up following a successful £2m Series A led by a £1m equity investment from REPP.

Through UK-based Mobile Power’s [innovative rental model](#), customers rent smart 50Wh lithium-ion batteries at a low cost and in 24-hour increments. The “MOPO Batteries” enable customers to use lights instead of candles and kerosene and charge appliances such as phones. The batteries are charged by solar-powered “MOPO Hubs”, providing a more affordable, lower carbon model than local alternatives.

Payments are made either in cash or using mobile money, making the service inclusive to those without mobile money or areas with weak phone signal. Additionally, the product requires no consumer debt or long-term commitment, unlike many solutions.

Following the successful Series A funding round in December, Mobile Power is set to deploy hubs at a rapid pace in West Africa, starting in Nigeria in early 2021.

COUNTRY POLICY ALIGNMENT

Mobile Power closely supports Sierra Leone’s national policy priority of promoting renewable energy development in rural areas, as well as its vision for low-emission development, as set out in its Nationally Determined Contribution (NDC, 2016). It is also in line with the country’s aims to develop the energy sector to support increased productivity, wealth creation and improved quality of life (National Energy Strategic Plan, 2009). Similarly, the project supports Liberia’s 2030 targets to reduce its GHG emissions by 10% and increase the share of renewable energy production to at least 30% (NDC, 2018).

LOCATION

Liberia and Sierra Leone

AT A GLANCE

Technology

Solar-powered battery hubs

Project type

Grid-connected

Offtaker

Rural communities

Supported SDGs



KPIs


Greenhouse gas emissions avoided: 12,750 tCO₂e per year

People with first-time access to clean energy: 266,364

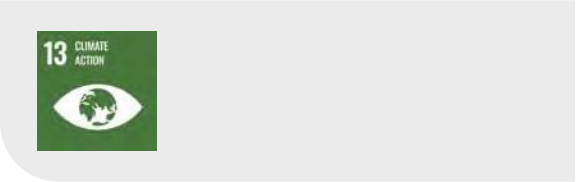
Installed capacity: 4.5 MW


REPP'S REALISED IMPACT AT A GLANCE¹

New connections increase by 61% as GHG avoided more than doubles

GHG AVOIDED 


Year to date: 16,317 tCO₂e
 For quarter: 8,400 tCO₂e
 Increase: 106%



INSTALLED CAPACITY 

To date: 8.41MW
 For quarter: 2.41MW
 Increase: 40%



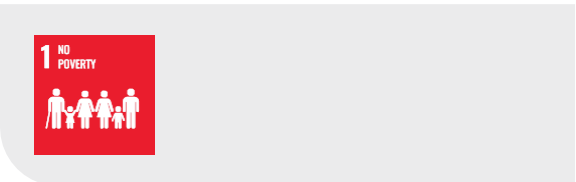
NEW CONNECTIONS 


To date: 598,920
 For quarter: 226,475
 Increase: 61%



FULL-TIME JOBS CREATED 


Year to date: 2,037



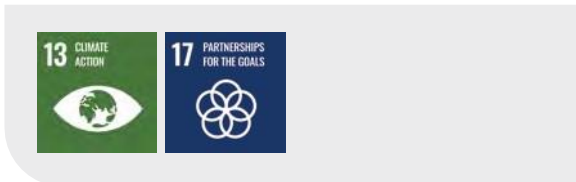
COMMITTED CAPITAL BY REPP 

To date: £37m
 For quarter: £7m
 Increase: 23%



ADDITIONAL FINANCE MOBILISED 

To date: £90m
 For quarter: £4m
 Increase: 5%



¹ See page 12 for definitions for greenhouse gases (GHG) avoided, installed capacity, new connections and finance mobilised.



LOOKING AHEAD

2021 is a critical year for the climate. Even with the world still gripped by COVID-19, attention must return to enabling the transition to a net zero economy and ensuring a green recovery from the pandemic. The UK is set to play a central role in this as it prepares to host COP26 in November and has made clear its determination to **raise nations' ambition on climate action** and put the world firmly on course for a sustainable, resilient and resilient future.

As a UK Government-funded programme, REPP is fully committed to supporting these objectives and is on track to further deepen its impact across countries in Africa in the next quarter and beyond.

In the on-grid sector, steady progress is being made on the construction of **Kenya's 1.5MW Marco Borero solar PV plant** and **the flagship 8.67MWp Mubuga solar PV plant in Burundi**. Both projects are expected to reach commercial operation in Q1 2021. In Madagascar, work continues on the 5.7MW first phase of the **42MW Malile project to hybridise three existing heavy fuel oil plants with solar PV**. The first of the sites was inaugurated by the President of the Republic at the start of 2021, with the remaining two sites on track to reach commercial operation before 31 March.

Similarly, in the off-grid sector all operational projects REPP-supported are expected to continue to grow over the quarter, providing several thousand more people with first-time access to clean energy. The delayed completion of the mini-grid installation at **Ha Makebe, Lesotho**, is also expected within the quarter, **paving the way for up to 10 further mini-grids**.



Image source: Voltalia

REPP'S IMPACT

PROJECT BY PROJECT¹

ARC Power

Mini-grids project, Rwanda



20 tCO₂e



0.07 MW



6,235 new connections

CBEA

Mini-grids project, Tanzania



18 tCO₂e



0.04 MW



4,175 new connections

GVE

Mini-grids project, Nigeria



157 tCO₂e



0.43 MW



11,725 new connections

Malile

Solar PV hybridisation project,
Madagascar



Data not available at time of reporting



2 MW



Improved access to grid

Mobile Power

Solar-powered battery hubs
project, West Africa



9 tCO₂e



0.13 MW



37,530 new connections

Mwenga

On-shore wind project, Tanzania



820 tCO₂e



2.4 MW



Improved access to grid

¹ Figures shown for the number of new connections and installed capacity reflect total performance to date. Figures for GHG avoided are for the year to date..

REPP'S IMPACT

PROJECT BY PROJECT¹

PAS Solar

Solar home systems project,
Nigeria



659 tCO₂e



0.22 MW



21,980 new connections

PEG Africa

Solar home systems project, Cote
d'Ivoire, Ghana and Senegal



11,123 tCO₂e



1.91 MW



370,770 new connections

PowerGen

Mini-grids project, Nigeria and
Tanzania



222 tCO₂e



0.39 MW



18,630 new connections

Powerhive

Mini-grids project, Kenya



157 tCO₂e



0.43 MW



11,725 new connections

upOwa

Solar homes systems project,
Cameroon



3,223 tCO₂e



0.02 MW



107,765 new connections

¹ Figures shown for the number of new connections and installed capacity reflect total performance to date. Figures for GHG avoided are for the year to date..

WHAT				HOW MUCH								
Focus area	Performance indicators	Link to SDGs		Align-ment with IRIS+	Achieved			Forecast ¹		Target		Data quality
		SDGs	Target		2018	2019	2020	2021	2023	2021	2023	
Prosperity	Number of projects supported by REPP	7 13	7.1, 7.2, 13.1		19	25	27	39	39	44	60	High. Measured.
	Number of projects reaching financial close	7 13	7.1, 7.2, 13.1		4	8	16	44	45	27	44	High. Measured.
	REPP funding committed in £m	17	17.3	OD5990	12	14	37	57	57	80	125	High. Measured.
	Finance mobilised in £m	17	17.3		38	48	90	269	269	388	615	High. Measured.
Planet	Direct job creation in each year	1 8	1.2, 8.5	OI8869 OI9028	-	-	2,037	MNT	MNT	MNT	MNT	High. Measured.
	Installed renewable energy capacity in MW	1 7 8 13	1.5, 8.4, 7.1, 7.2, 13.1	PD1602	0.5	2.4	8.4	81.2	163.1	20.7	122.5	High. Measured.
	Number of countries whose NDCs are supported	13	13.2		-	-	14	MNT	MNT	MNT	MNT	High. Measured.
	Greenhouse gases avoided each year in tCO ₂ e	13	13.1	PI2764	2,021	4,206	16,317	111,473	351,035	55,766	298,091	Medium to high. ²
People	Number of people with first-time access to clean energy	1 3 7 11	1.4, 1.5, 3.4, 7.1, 7.2, 11.1	PI2822	60,105	174,220	598,920	2.9M	4.12M	60,253	356,579	Medium to high. ³
	Number of households using products to support business / microbusiness	1 8	11.2, 8.5		-	-	9,464	MNT	MNT	MNT	MNT	High. Measured.
	Number of critical services supported ⁴	1	1.4, 1.5	PI2822	-	-	371	MNT	MNT	MNT	MNT	High. Measured.
	Number of women in the workforce from direct jobs created ⁵	5	5.5	OI2444 OI6978	-	-	501	MNT	MNT	MNT	MNT	High. Measured.
	Investments aligned with X2 criteria (m£)	5	5.5	OI1571 OI8118 OI8709	-	-	15	MNT	MNT	MNT	MNT	High. Measured.

MNT = Monitored. No Targets.

¹ Risk-adjusted pipeline includes committed projects and projects in advanced pipeline.

² Calculated from kWh produced and UNFCCC-approved country specific grid emission factor. For SHS projects, calculated based on sales and a conservative emission factor of 0.15 tCO₂/SHS/year.

³ Calculated based on sales / customers and conservative average household size of 5 people.

⁴ Refers to schools, clinics, hospitals, waterworks and water-pumping stations that have received electricity through the projects.

⁵ Agent jobs not included



HOW CAN REPP HELP?



DEVELOPMENT PHASE CAPITAL AND SUPPORT

REPP provides loans for selected third party development expenses (such as feasibility studies, environmental and social impact assessments, legal advice etc.), financial structuring support, general project guidance and, in selected cases, developer capital.



TECHNICAL ASSISTANCE

REPP supports developers with business planning, training, workshops and seminars, and facilitates learning and exchange between developers.



GAP FINANCING

REPP helps to bring projects to financial close by providing funding using a range of finance products, from equity to senior debt.



ACCESS TO RISK MITIGATION INSTRUMENTS

REPP helps projects and developers to access appropriate risk mitigation instruments provided by third-party providers. These instruments typically focus on risks that cannot be cost-effectively managed by the private sector - in particular, political, regulatory, currency and offtaker risk. REPP also works with governments and other stakeholders on regulatory improvements to reduce risk in the long-term.



ACCESS TO LONG-TERM CAPITAL

REPP helps developers to structure project finances in the right way, and to secure finance from REPP partners and other sources of capital - both private and public. It also works with lenders and risk mitigation instrument providers to coordinate their approval and due diligence requirements so that the funding process is simplified for developers.

DEFINITIONS

Finance mobilised - financial resources committed by third parties to a project being supported by REPP.

Greenhouse gases (GHG) avoided - the amount of emissions, in tonnes of carbon dioxide equivalent (tCO₂e), which would have been created to generate the same amount of electricity produced by a REPP-financed renewable energy project if fossil fuels had been used.

Installed capacity - The rated power output, in MW, of a power plant or other electricity generator when operational. Also known as nameplate capacity and rated capacity.

New connections - the number of people connected to an off-grid renewable energy project. It is calculated as the number of customers served by the project multiplied by the average number of people per household, which is deemed to be five persons.



Image source: Powerhive



Image source: PEG Africa

DISCLAIMER

The information contained in this Report is strictly confidential, legally privileged and protected by relevant laws, and is provided by Renewable Energy Performance Platform (“REPP”) and/or its manager Camco Management Limited* to you solely for informational purposes. Everything in this Report is proprietary to REPP. Subject to applicable laws, any reproduction, dissemination or onward transmission of this presentation or the information contained herein is strictly prohibited. By accepting delivery of this Report you acknowledge and agree to comply with the foregoing restrictions.

This Report includes forward-looking statements that reflect the REPP’s current views with respect to future events and financial performance. These views are based on a number of assumptions and are subject to various risks. Such forward-looking statements are not a guarantee of future performances and no assurance can be given that any future events will occur, that projections will be achieved or that REPP’s assumptions will prove to be correct. Actual results may differ materially from those projected, and REPP does not undertake to review any such forward-looking statements to reflect future events or circumstances.

* Camco Management Limited is authorised and regulated by the UK Financial Conduct Authority. More information on Camco is available at www.camcocleanenergy.com. The registered details of Camco are: Registered in England No. 09902551, Registered Office 28 St John’s Square, EC1M 4DN, London.

FOR MORE INFORMATION, PLEASE CONTACT:

Renewable Energy Performance Platform

28 St John's Square

London EC1M 4DN

United Kingdom



repp.energy



+44 (0) 207 121 6101



info@repp.energy



managed by  **camco**
CLEAN ENERGY