

EEP AFRICA CfP2023 PORTFOLIO



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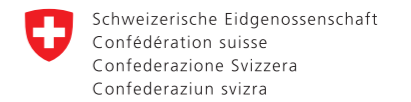
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About EEP Africa

The Energy and Environment Partnership Trust Fund (EEP Africa) is a clean energy financing facility hosted and managed by the Nordic Development Fund (NDF), with funding from Austria, Denmark, Finland, Iceland, NDF, Norway, and Switzerland. It is guided by a vision for a climate-resilient, zero-carbon future, with the aim of contributing to the achievement of the Paris Climate Agreement and Sustainable Development Goals (SDGs). The immediate objective is to enhance clean energy access, development, and investment, with a particular focus on benefitting vulnerable and underserved groups.

EEP Africa provides risk-tolerant early-stage grant financing for locally driven innovative clean energy projects, technologies, and business and delivery models in Southern and Eastern Africa. Since 2010, EEP Africa has committed more than EUR 98 million to more than 320 pioneering projects, creating more than 12,400 jobs, improving clean energy access for more than 5 million people, avoiding 1.8 million tonnes of CO₂e, and savings in energy expenditure is over 85 million euros.

1. CFP2023 OVERVIEW

a. The Cfp2023 process

The Call for Proposals 2023 (hereafter Cfp2023) included several selection stages: Expression of Interest (Eoi), pitch interviews, and the drafting and submission of full proposals (see Figure 1). Figure 2 presents the number of applications per stage.

At the Eoi stage, companies were selected based on eligibility criteria, followed by an evaluation of their proposed project against EEP Africa priorities. Candidates who advanced to the longlist stage participated in an online bootcamp designed to emphasize EEP Africa’s priorities, prior to proceeding to pitch interviews. During the pitch interviews, applicants presented their proposed project concepts in more detail, and engaged in a Q&A session with the EEP Africa team. Successful applicants were shortlisted and progressed to the development of full proposals. They were invited to submit a draft proposal for non-binding feedback from the EEP Africa team and, where deemed necessary, the EEP Africa team undertook reference checks and/or site visits. The shortlisted portfolio was presented to the EEP Africa Investment Committee for decision-making. The Investment Committee consists of experts, nominated by the EEP Africa donors, who have not been involved with the earlier evaluation process. Followed by No Objection from NDF, projects were contracted.

Applicants were expected to explain how their project was innovative within the market and geographical context of planned project implementation, [...] demonstrate that they had actively worked on the proposed projects [...], and prove that the project would not proceed without EEP Africa funding.

Applications not selected at the Eoi stage did not fully align with the EEP Africa priorities or did not meet basic eligibility criteria. Applicants were expected to explain how their project was innovative within the market and geographical context of planned project implementation. Applicants had to furthermore demonstrate that they had actively worked on the proposed projects before the launch of the Eoi. They also needed to prove that the project would not proceed without EEP Africa funding or other public money, and that the project was unlikely to be financed by commercial financiers.

Figure 1: The Cfp2023 process.



Figure 2: Number of applications per decision-making stage.

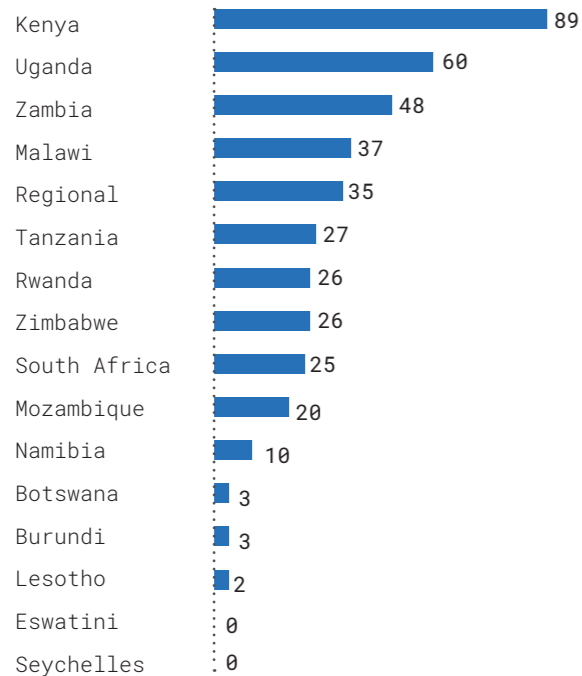


b. CfP2023 observations

I. Geographic distribution

The CfP2023 attracted 411 eligible applications¹ from nearly all EEP Africa countries. No eligible applications were received from Eswatini or the Seychelles (see Figure 3).

Figure 3. Number of EoIs per EEP Africa country.



¹ For the purpose of this report, "EoIs" refers to these 411 eligible EoIs.

² For definitions of these technologies, please refer to Box 1.


The highest number of submissions came from Kenya and Uganda, likely due to the existing favourable ecosystems for early-stage companies in both countries. It is also worth noting that only 35 applications (8% of all EoIs) proposed regional project implementation. This may speak to either a possible lack of cross-country integration or to the available EEP Africa funding amounts not being sufficient to implement across multiple countries.

II. Technology focus


The majority of EoI applications focused on three main technology groups²: PUE (35.5%), clean cooking (18%), and residential electricity access (16.5%). The technology categorisation with the lowest number of submissions was energy efficiency and storage (3.6%) (see Figure 4).

Figure 4 displays the primary technology focus of the proposed projects, while Figure 5 shows that 75% of the proposed projects focused on one primary technology. The 25% of proposed projects (103 applications) had a secondary technology focus, which was mostly focused on PUE or clean cooking, as seen in Figure 6.


Box 1. EEP Africa technology groups.




Productive use of energy (PUE): activities that use renewable electricity to generate income/ revenue (including C&I and medium-scale biodigester >20m³).




Energy efficiency and storage: activities associated with the storage of power and activities that seek to improve or promote the efficient use of energy sources.




Clean cooking: clean cooking activities, including cookstoves, fuel sources, smart meters, household biodigesters, and any other cooking for institutional or commercial purposes.




Mini-grids: both micro-grids producing at least 50 kW and larger grids producing more than 10 MW; includes both AC and DC micro- and mini-grids, and distribution network-related activities.



Residential electricity access: encompasses a range of technologies targeting household electrification through off-grid systems, mainly Solar Home Systems (SHS), as well as small-scale solar lanterns and larger residential systems below 50kW.

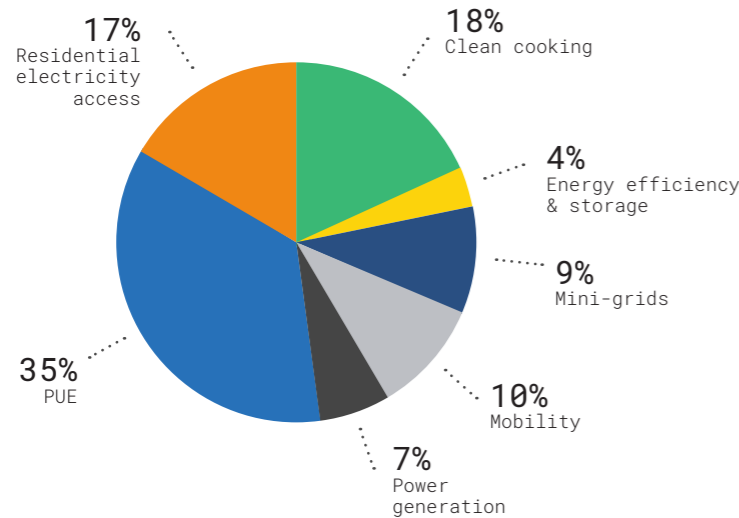


Power generation: stand-alone and/or grid-connected power generation activities based on wind, hydrogen, biomass, or solar, geothermal, and other renewable sources of energy.



Mobility: all activities aimed at decarbonising the transportation of people or goods.

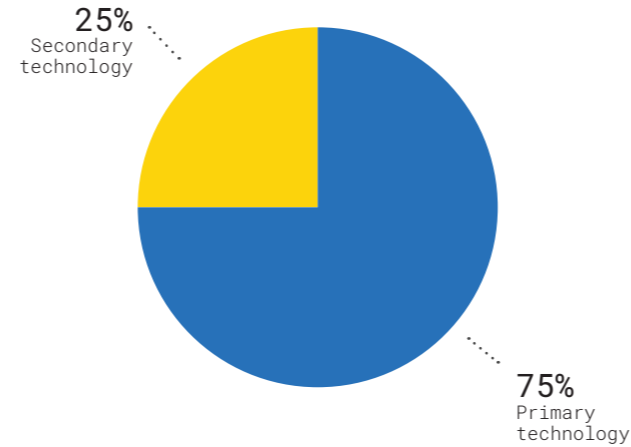
Figure 4. Technology composition of Eols.



Most of the proposed **PUE** projects focused on tailor-made technologies to increase farming efficiency such as solar water pumps, solar-powered agro-processing machines, and emerging innovations in the use of Internet of Things (IoT) devices. In addition, several cold storage projects were proposed, all with implementation in Eastern Africa.

A majority of the Eol applications for **residential electricity access** focused on deployment of SHS. The SHS companies operating in Kenya, Uganda, Rwanda, and Mozambique demonstrate a higher level of maturity, often also implementing pay-as-you-go (PAYG) payment options.

Figure 5. Primary and secondary technology of Eols proposed project scope.



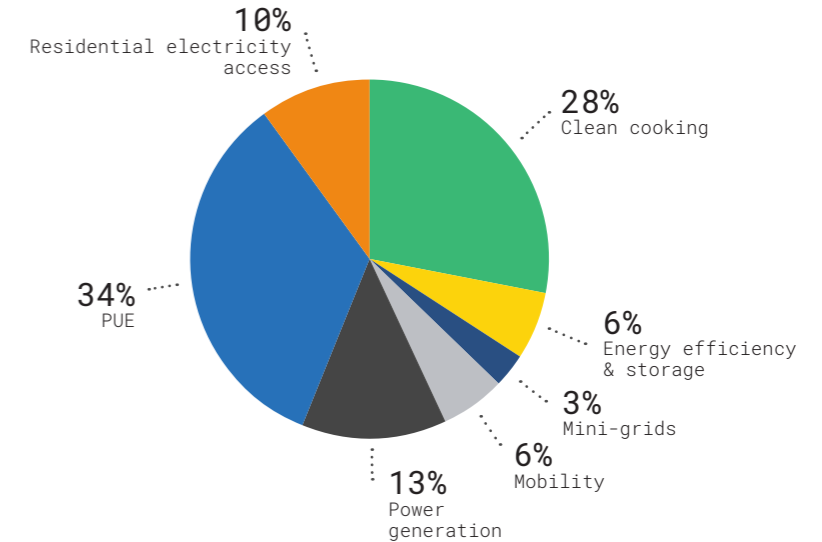
A significant number of the proposed **clean cooking** projects had an emphasis on tier 4-5 solutions, rather than tier 2-3 cookstoves commonly proposed in previous CfP rounds.

An EEP Africa portfolio manager stated that several submissions concentrated on the production of sustainable cooking fuels such as bioethanol, briquettes, pellets, and biogas:

“Fuel production companies are generally very early-stage, with the challenge to increase

the production capacity into a financially viable business model. This challenge can be attributed to the persisting competition with traditional charcoal and firewood, which continues to dominate the cooking fuel market.”

Figure 6. Technology focus of Eols proposed projects with secondary technology focus.



Ten percent of Eols focused on **mobility**, with a significant number of projects in Kenya (see Figure 7). An EEP Africa portfolio manager explained:

“The government [of Kenya] is implementing policies to support adoption of electric vehicles such as reductions in tax, import duties, and electric tariffs.”

Mini-grid projects emphasised expansion efforts through the improved utilisation of existing infrastructure rather than greenfield projects. Overall, mini-grids received fewer applications, constituting 9.5% of all Eols. An EEP Africa Portfolio Manager stated:

“[The lower share of applications for mini-grids] This is likely to be attributed, amongst others, to higher technical requirements, and higher capex required for mini-grid projects.”

Power generation projects constituted 6.5% of all Eols. Almost half of the 27 proposed projects were feasibility studies (see Figure 8), with the main objective to assess the viability of proposed business models for greenfield projects. In addition, new technologies were proposed for piloting, including hydrogen and wave energy.

Figure 8 presents the high share of pilot projects (see Box 2 for project type definitions) across all applications and reflects EEP Africa’s focus on innovation and early-stage companies and projects. The comparative market status of specific technologies is further reflected in the higher share of pilots for PUE, mobility, and energy efficiency & storage. Meanwhile, some appetite for scaling up can be observed for clean cooking and residential electricity access solutions. However, EEP Africa grant funding is not as well placed as results-based financing mechanisms, for example, to finance scale-up.

Figure 7. Country composition of mobility applications of Eols.

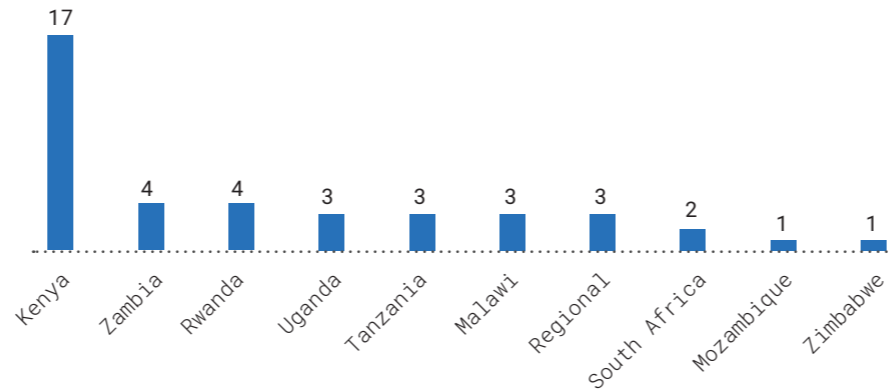
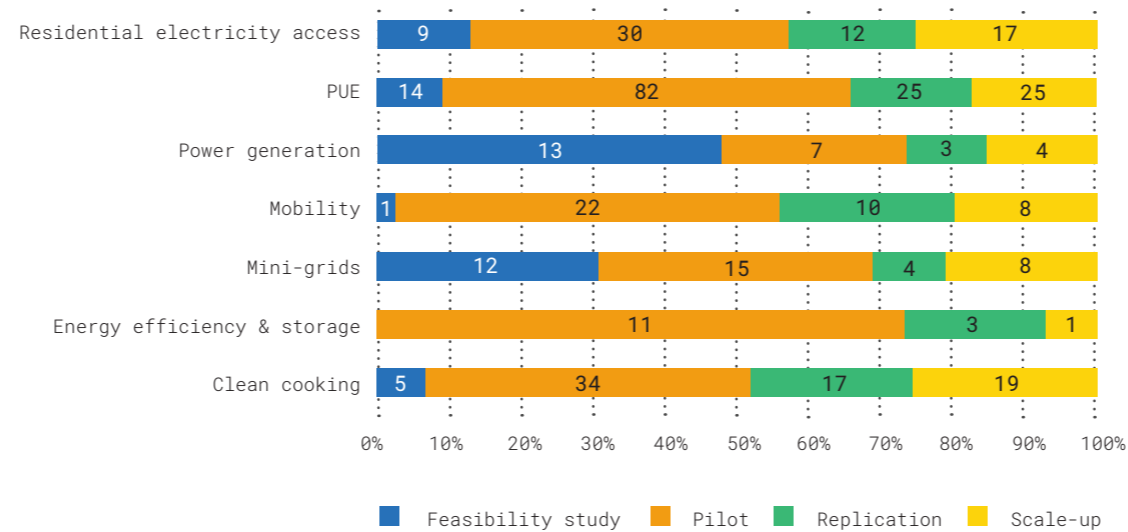


Figure 8. Project type per technology of Eols.



Box 2. Project type definitions.



Feasibility study: An analysis and evaluation to determine technological, commercial, social, environmental, and/or economic viability.



Pilot project: The testing and/or implementation of a minimum viable product, service, and/or business or delivery model for the first time or in a new market.



Replication project: A project that has proven the viability of its technology and the sustainability of its business model in one market, and then is taken to a new market. A replication project can be conducted either nationally, to a different geographical area within the existing country, or regionally, to another eligible EEP Africa country.



Scale-up project: A project that is looking to scale a specific technology and/or business model and has a high probability of reaching commercial viability with “bridging” finance from EEP Africa until other, more commercial finance can be unlocked.

III. Governance

For EEP Africa, it is essential that projects are firmly embedded in the local context. Projects that are initiated by nationals are likely to be more aligned with the specific needs and priorities of the local community and have a higher likelihood of long-term sustainability. A total of 74% of Eols were embedded within the EEP Africa region, either through their local parent company or company ownership by a national of the project country (see Figure 9).

At the Eol stage, 19% of the companies were women-led, which is defined as meaning that women play a significant role in the planning, development, management, and decision-making processes of the lead applicant company. Women-led companies were mostly identified in projects focused on PUE, residential electricity access, and clean cooking (see Figure 10). An EEP Africa portfolio manager elaborated on this concentration of women-led companies across three sub-sectors:

“We have observed that some technologies are more male-dominated than others. This is especially the case in the mini-grid and power generation sector.”

Around one-third of Eols were submitted in partnership with another organisation or company. Three types of relationship stood out in terms of complementarity:

1. Geographic: national-international partnerships.
2. Technical expertise: partnerships formed to pool or complement technical knowledge and skills, sometimes also characterised by a national-international relationship.
3. Products: collaborations aimed at combining manufacturing capabilities with distribution networks.

Figure 9. Company ownership of Eols.

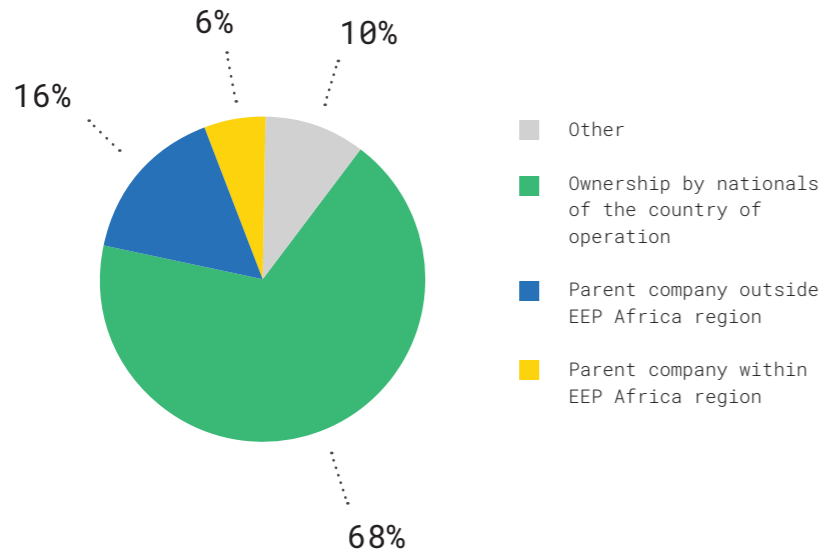
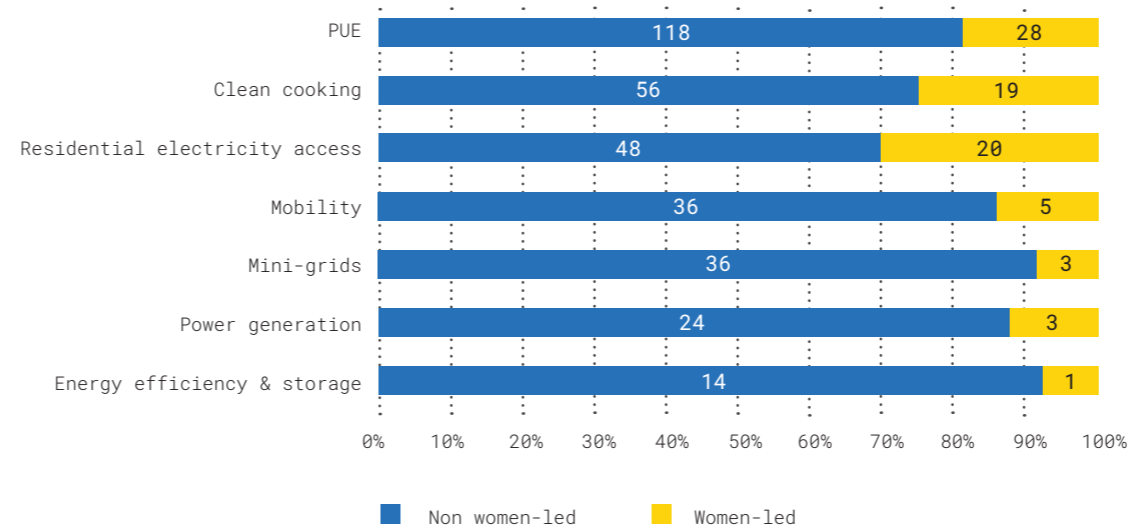


Figure 10. Women-led companies per technology.



2. CFP2023 PORTFOLIO

a. About the new portfolio

Following Investment Committee decisions and contracting, the CfP2023 portfolio has a funding volume of EUR 13.3 million (13.27), out of a total project cost of EUR 24.5 million. The grant amounts range from EUR 200,000 to EUR 975,000. The average grant committed to in this round is EUR 428,000 while the average project cost is EUR 789,000. 87% of CfP2023 projects fall in the average funding range of EUR 250,000 to 500,000.

The new projects cover 11 of the 15 EEP Africa target countries. In addition, two regional projects cover Zambia/Namibia and Rwanda/Burundi (see Figure 11).

In terms of technology, the overall portfolio is fairly balanced; however, the technology focus is slightly stronger on PUE (22%), mobility (19%), and mini-grids (16%), demonstrating the potential for innovation in this space (Figure 12).

Mobility projects and mini-grids captured the highest amount of EEP Africa funding due to high capex requirements (see Figure 13).

Figure 11. CfP2023 portfolio projects across EEP Africa countries.

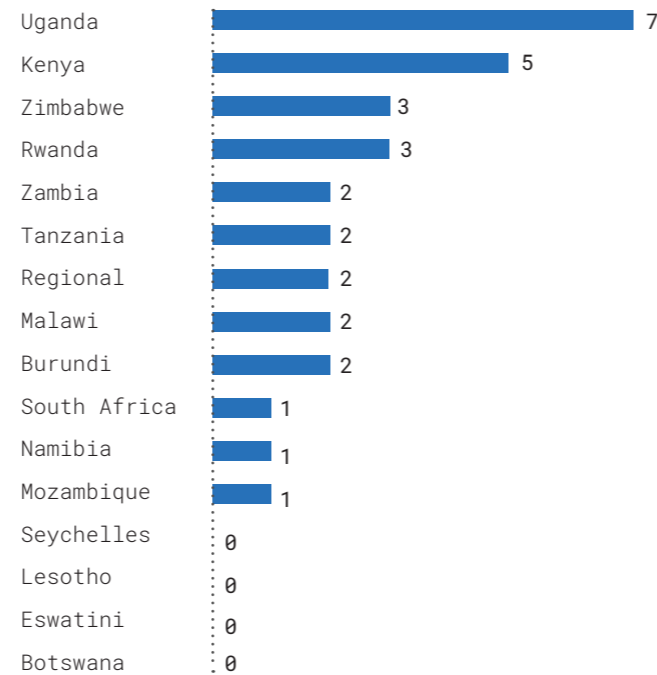


Figure 12. Technology distribution of CfP2023 portfolio.

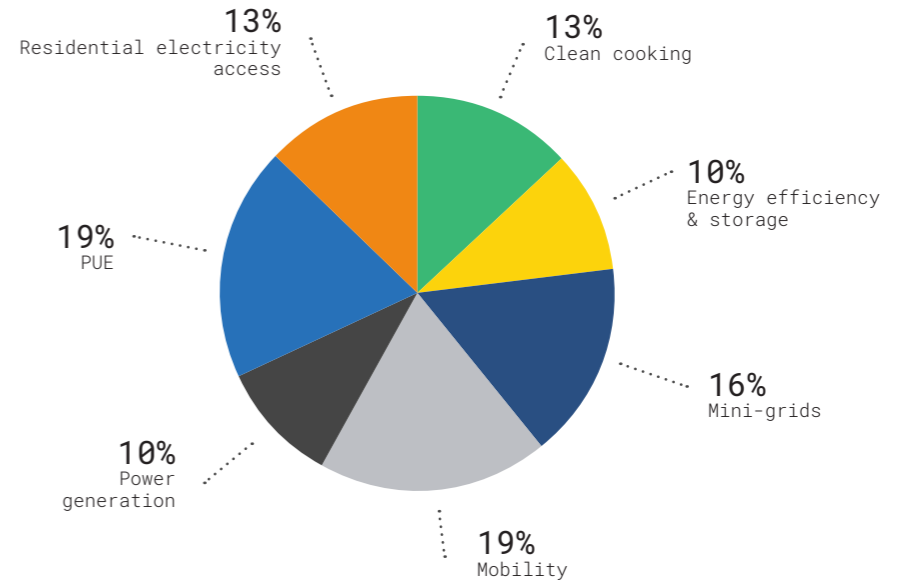


Figure 13. EEP Africa funding in final portfolio per technology.

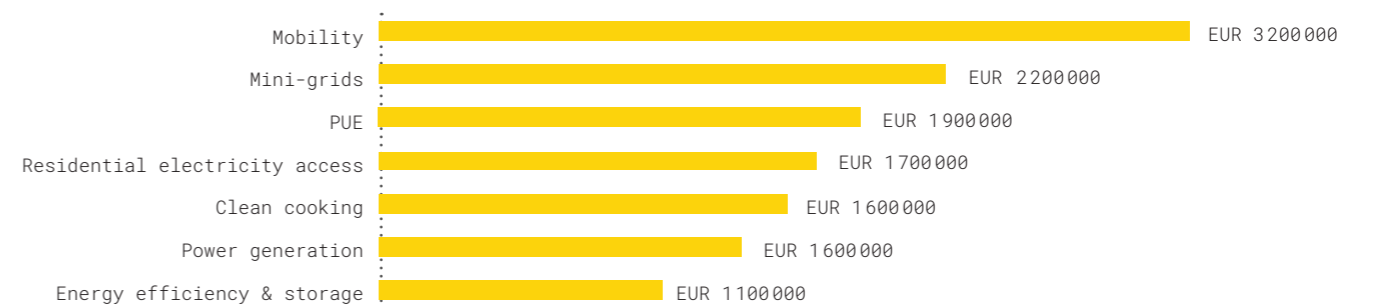
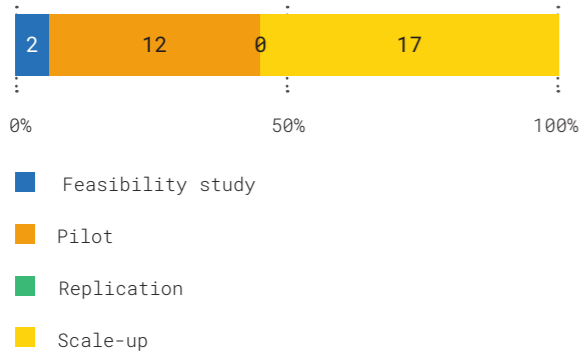


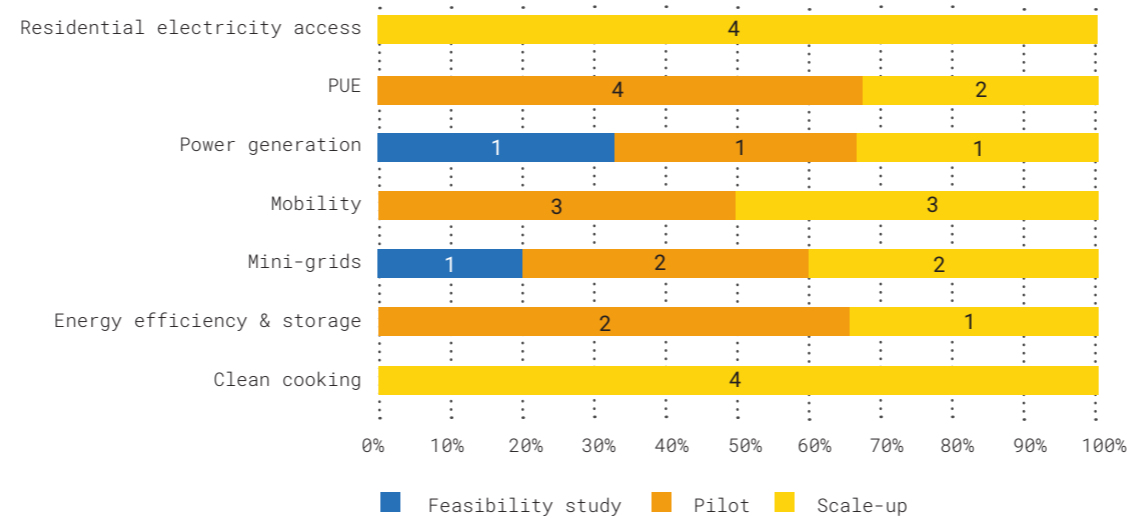
Figure 14. Project type composition in CfP2023 portfolio.



The new cohort is made up of mainly pilot and scale-up projects and two feasibility studies (see Figure 14). However, the two regional projects have a scale-up and a replication component.

The split of technology focus across project types reflects the relative market maturity of the sectors and geographies in which they will be implemented (see Figure 15). All clean cooking and residential

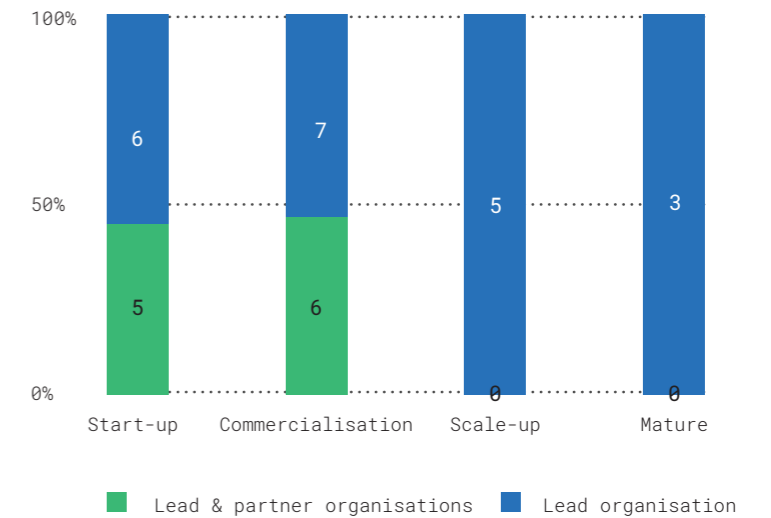
Figure 15. Project types per technology in CfP2023 portfolio.



electricity access projects in the new portfolio are scale-up projects, while the remaining mini-grid and power generation projects are split across pilots and scale-up.

Considering leadership, all companies in the new portfolio are locally led (meaning they have a strong local presence within the project country), and 25% are led by women.

Figure 16. Partnerships and company maturity in CfP2023 portfolio.





True to EEP Africa’s mandate, almost 80% of the new cohort is at the start-up or commercialisation stage in terms of company maturity based on their revenue, profitability, and funds raised to date (see Figure 16).


Only 28% of the new cohort qualify as scale-ups or mature enterprises. This is also reflected in the structure of partnerships, where earlier stage

companies are predominantly working with one or more partner organisations for complementary skills and expertise (see Figure 16).

b. Projected results


2,884 Direct jobs created 

960,969 People with enhanced clean energy access 

€13,149,176 Annual savings on energy-related expenditure 

755,330 tCO₂e CO₂ emissions reduced or avoided per year 

409,348 MWh Amount of clean electricity generated per year 

48% Women in leadership 

c. Productive use of energy projects

I. aQysta Malawi Ltd



Company description

aQysta Malawi Ltd is a subsidiary of Dutch firm aQysta BV and provides solar-powered irrigation pumps and agro-processing services for smallholder farmers in Malawi through an end-to-end service to farmers, including market access, training, and financing.

Project summary

aQysta will introduce a novel mobile agro-processing unit, and increase the capacity of an existing on-location agro-processing unit that will provide essential services to smallholder farmers such as solar-powered drying, cutting, threshing, and powdering.

Technology

PUE

Renewable energy source

Solar

Project type

Scale-up

Project code

2023-1350

Profitable Malawian Smallholder Farmers with Solar-Powered Processing Service

Location
Rural Malawi

This project will introduce mobile, on-location processing units that will serve smallholder farmers by providing solar-powered cutting, threshing, and drying services. The mobile processing facility will travel directly to farmers, effectively reducing logistical challenges and transportation costs for farmers. Farmers will access processing services without any upfront payment, operating on a benefit-sharing model. In addition, the project will establish market linkages for the processed products. aQysta will integrate the use of their in-house Grown ERP mobile app and software to educate smallholder farmers, analyse their farming practices, and connect them with buyers interested in traceability.

Outcome and Impact

By providing the solar-powered processing products, aQysta Malawi Ltd will create enhanced energy access for 18,000 people. On an annual basis, 222 tCO_{2e} will be reduced and 168 MWh of clean electricity will be generated. Furthermore, aQysta Malawi Ltd aims to create 80 temporary and 10 permanent jobs, with 43% of leadership positions filled by women.

Total project budget
EUR 510,097

EEP Africa financing
EUR 254,850



Relevant SDGs



II. Natfort Investments



Company description

Natfort Investments is a local engineering, procurement, construction, and last-mile solar product distribution company serving off-grid communities in Zimbabwe.

Project summary

Natfort Investments intends to introduce the EasyFreeze100, a solar fridge, to small-scale horticulture farmers in Zimbabwe to reduce post-harvest losses and improve their income.

Technology

PUE

Renewable energy source

Solar

Project type

Pilot

Project code

2023-1403

From Sun to Ice: Productive Solar Freezers in Zimbabwe

Location
Zimbabwe

This project will introduce Amped Innovation's solar fridge to small-scale horticulture farmers and women cooperatives. The solar fridge, EasyFreeze100, utilises an efficient phase change material battery, which is more cost-effective than a lithium battery, and incorporates PAYG technology. The fridge can function as both a fridge and freezer, making it versatile for various small business needs.

Outcome and Impact

The project aims to sell 280 fridge solutions, creating enhanced energy access for PUE purposes to 896 people. On an annual basis, 58 tCO_{2e} will be reduced and 184 MWh of clean electricity will be generated. Natfort Investments plans to create 40 temporary and 33 permanent jobs, with 66% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 53K. The success of this project is expected to stimulate the nascent small-scale cold-chain market in Zimbabwe.

Total project budget
EUR 340,000

EEP Africa financing
EUR 235,000



Relevant SDGs



III. SowPrecise Africa



Climate smart agriculture in arid semi-arid lands (ASALs) in Kenya

Company description

SowPrecise Africa is a women-led social enterprise with a mission to transform arid and semi-arid lands (ASAL) in Kenya into productive farms, using innovative agricultural technologies and shared resources.

Project summary

SowPrecise Africa aims to develop and implement portable solar-powered irrigation systems for low-income farmers in Kenya's ASAL, using innovative payment models.

Technology

PUE

Renewable energy source

Solar

Project type

Pilot

Project code

2023-0632

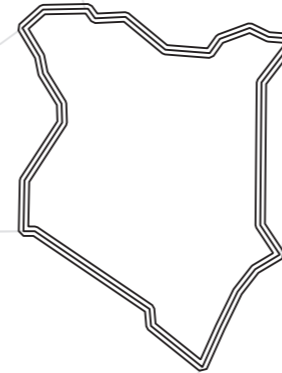
Portable Solar-Powered Irrigation Pumps in Kenya

The project will provide affordable irrigation to low-income farmers in Kenya's ASAL through the development and implementation of a mobile 15 solar-powered irrigation system called SunRider offered on a Pay-Per-Use model. The SunRider is cost-effective and integrated with user-friendly planning software to empower farmers with data-driven insights for optimised irrigation strategies. In addition, SowPrecise Africa incorporates soil moisture IoT devices for precise water management to address challenges with water scarcity.

Outcome and Impact

The project aims to develop seven portable solar irrigation pumps, creating enhanced energy access for 195 smallholder farmers. On an annual basis, the project will reduce 4,700 tCO₂e and 65 MWh of clean electricity will be generated. Furthermore, SowPrecise Africa plans to create 100 temporary jobs and 12 permanent jobs, with 67% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 28K.

Location
Kenya



Total project budget
EUR 285,800

EEP Africa financing
EUR 200,000

Relevant SDGs



IV. Urban Greens Ltd



Company description

Urban Greens Ltd is a Ugandan start-up company that sells solar-powered aquaponics and remote monitoring solutions to support household consumption and income generation.

Project summary

Urban Greens Ltd will pilot a small-scale aquaponics system for urban food production in Kampala, Uganda.

Technology

PUE

Renewable energy source

Solar

Project type

Pilot

Project code

2023-0890

Decentralised Small-Scale Commercial Urban Aquaponics in Uganda

The project aims to pilot a closed-loop aquaponics system (both kitchen garden and commercial systems), yielding fish and leafy greens. The aquaponics units are powered by an integrated solar PV and remote monitoring. Urban Greens will use an in-house IoT platform that enables tracking of key operational data as well as power generation and consumption details. The pilot project will validate business assumptions, and establish operational infrastructure for future growth. During the project, Urban Greens Ltd plans to develop a first version of a mobile application for growers to track financial information such as system payments, produce sales, purchase of inputs, and system performance.

Outcome and Impact

Through this project, 10 kitchen garden aquaponics systems and 21 commercial aquaponics systems will be distributed, providing enhanced energy access for 142 people. On an annual basis, 44 tCO_{2e} will be reduced and 6 MWh of clean electricity will be generated. Urban Greens Ltd plans to create 17 permanent jobs, with 50% of leadership positions filled by women.

Location
Uganda



Total project budget
EUR 414,666

EEP Africa financing
EUR 241,766

Relevant SDGs



V. Munyax Eco



Company description

Munyax Eco is a Rwandan women-led company that designs, installs, and commissions different solar-powered systems, while providing energy efficiency consultancy services.

Project summary

Munyax Eco aims to provide solar-powered walk-in cold rooms in rural Rwanda and Burundi to reduce post-harvest losses and increase income for smallholder farmers.

Technology

PUE

Renewable energy source

Solar

Project type

Pilot

Project code

2023-0890

Developing and Proving a Viable Business Model for Solar Cold Rooms in Burundi and Rwanda

This project aims to install five medium-scale solar cold rooms to provide cold storage operations and pilot various business models in Rwanda & Burundi allowing them to reach proof of concept and thereafter scale up the most successful business model across the two countries.

Outcome and Impact

Through the sales of five cold rooms, the project aims to create enhanced energy access for 500 people. On an annual basis, 23 tCO_{2e} will be reduced and 16 MWh of clean electricity will be generated. Munyax Eco plans to create 5 temporary and 10 permanent jobs, with 67% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 7K.

Location

Rwanda and Burundi



Total project budget

EUR 651,247

EEP Africa financing

EUR 456,569

Relevant SDGs



VI. Simusolar Ltd



Company description

Simusolar Ltd is a Tanzanian company that operates as an independent entity under the umbrella of its parent U.S. company. The company provides solar-powered irrigation systems in Tanzania and Uganda and provides an affordable PAYG purchase plan.

Project summary

Simusolar Ltd plans to deploy customised irrigation systems to smallholder farmers using the company's proprietary mobile phone application.

Technology

PUE

Renewable energy source

Solar

Project type

Scale-up

Project code

2023-1542

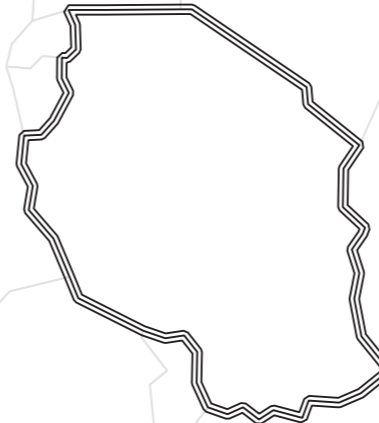
Improving Off-Network Smallholder Productivity and Climate Resilience Through Access to Affordable Solar Water Pumps

The project aims to deploy 900 customised solar-powered irrigation systems to smallholder farmers in Tanzania. Simusolar uses their proprietary mobile phone application which allows for tailored irrigation system design, ensuring efficient and effective water usage. To ensure affordability for smallholder farmers, the project will offer lease-to-own plans and expand the availability of off-grid PAYG Bridge controllers, making lease-to-own plans accessible to farmers in underserved regions. In addition, Simusolar Ltd will provide training on pump operation and maintenance, and after-sales support to its customers.

Outcome and Impact

The project aims to sell 900 solar irrigation pumps, providing enhanced energy access for 2,700 people. On an annual basis, 1,220 tCO₂e will be reduced and 541 MWh of clean electricity will be generated. The project will also create 450 temporary and 20 permanent jobs, with 56% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 630K.

Location
Tanzania



Total project budget
EUR 1,000,296

EEP Africa financing
EUR 500,000

Relevant SDGs



d. Mini-grid projects

I. Kaboni Energy Ltd



Company description

Kaboni Energy Ltd supports climate change mitigation through the development of clean energy programmes and provides expertise in renewable energy initiatives across sub-Saharan Africa and Europe. Kaboni Energy Ltd (Burundi) is a subsidiary of Kaboni Energy Ltd (UK).

Project summary

Kaboni Energy Ltd is looking to pilot a solar mini-grid operating under a Community Energy Cooperative model in Burundi.

Technology

Mini-grid

Renewable energy source

Solar

Project type

Pilot

Project code

2020-0394

Burundi Small Utility Renewable Energy Electrification Program

The project's core objective is to overcome the challenges of establishing economically viable mini-grids in rural Burundi, where regulatory constraints limit tariff rates. It will expand an existing low-voltage mini-grid and solar PV system, incorporating Lithium Iron Phosphate storage to provide high-quality 220V AC renewable electricity to local communities. Excess electricity will be monetised through an electric mobility business.

Outcome and Impact

Through this project, 4,200 people will gain enhanced energy access. Additionally, on an annual basis, 180 tCO_{2e} and 121 MWh of clean electricity will be generated. Furthermore, Kaboni Energy Ltd plans to create 6 temporary and 16 permanent jobs, with 29% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 291K.

Location
Burundi



Total project budget

EUR 704,298

EEP Africa financing

EUR 492,464

Relevant SDGs



II. Volt-Terra Farm & Energy Solutions Ltd

VOLT-TERRA

FARM & ENERGY SOLUTIONS

Company description

Volt-Terra Farm & Energy Solutions Ltd is a Ugandan start-up with the mission to empower rural communities by deploying sustainable and agriculture-centric mini-grid business models. The company's farming and agro-processing initiatives are in the developmental phase.

Project summary

Volt-Terra Farm & Energy Solutions Ltd is proposing a solar mini-grid pilot project in Uganda, strategically targeting organic chili and vanilla farmers to catalyse rural industrialisation.

Technology

Mini-grid

Renewable energy source

Solar

Project type

Pilot

Project partners

Gourmet Gardens Ltd,
INENSUS GmbH

Project code

2023-0476

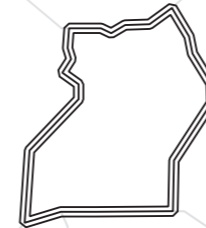
Financially Viable Mini-Grids Through Agricultural Rural Industrialisation

The project will drive economic growth in off-grid rural communities within Uganda's Kayunga District and to validate the financial validity of rural solar mini-grids. To achieve this, Volt-Terra Farm & Energy Solutions Ltd plans to expand its existing solar mini-grid and to install two supporting solar systems. These will enable additional connections, increase capacity, and support productive electricity use. In addition, the company will serve as an energy off-taker for agro-processing and export of chili and vanilla beans produced by contracted farmers who are also mini-grid customers, fostering business synergies and channelling funds back into the local community.

Outcome and Impact

Through this project, Volt-Terra Farm & Energy Solutions Ltd will establish 200 electricity connections, including approximately 40 commercial users. Additionally, the project will integrate productive use appliances within the mini-grid site. The company aims to provide enhanced energy access for 911 people. On an annual basis, the project will reduce 96 tCO_{2e} and will generate 147 MWh of clean electricity. Furthermore, the company plans to create 146 temporary and 3 permanent jobs, with 67% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 35K.

Location
Uganda



Total project budget
EUR 530,458

EEP Africa financing
EUR 368,127

Relevant SDGs



III. Umbane Net Trading as Zonke Energy



Company description

Zonke Energy is a locally-owned and locally-led business, whose innovations provide clean and affordable energy solutions to underserved, urban, off-grid informal settlements.

Project summary

Zonke Energy is looking to pilot meshed solar mini-grids and SHS for informal settlements in Cape Town, South Africa.

Technology

Mini-grid

Renewable energy source

Solar

Project type

Pilot

Project partners

The Sustainability Institute Lab (Pty) Ltd (Trading as iShack and iSolar Ngoku)

Project code

2023-1000

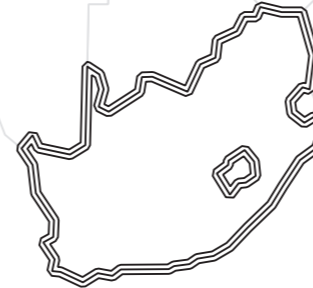
Piloting Meshed Mini-Grids and SHS for Informal South Africa

This project will introduce a hybrid business model that combines elements of energy-as-a-service with financed SHS purchases, to be piloted in the Qandu Qandu settlement in Cape Town. The project will establish 25 of their innovative solar towers, combining several essential components including solar PV panels, battery storage, battery protection, and remote monitoring capabilities, all housed within a 3-meter container. In addition, the company will distribute 250 SHS units through their partner, iShack. Incentives will be provided to encourage SHS owners to connect their systems to neighbouring solar tower, promoting a collaborative energy-sharing approach.

Outcome and Impact

The project aims to create 500 electricity access connections and to distribute 231 SHS kits, providing 2,475 people with enhanced energy access. On an annual basis, 137 tCO₂e will be reduced and 2,785 MWh of clean electricity will be generated. In addition, Zonke Energy plans to create 37 temporary jobs and 1 permanent jobs, with 25% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 17K.

Location
South Africa



Total project budget

EUR 685,936

EEP Africa financing

EUR 447,084

Relevant SDGs



IV. HydroBox NV



Company description

HydroBox NV is a Belgian holding company that oversees the HydroBox group. HydroBox NV focuses on technology development and production for deployment by HydroBox Kenya, including Run-of-River (ROR) power plants in Kenya.

Project summary

HydroBox NV is proposing to scale-up an ROR hydropower-based mini-grid operating on the Anchor-Business-Community (ABC) model in Central Kenya.

Technology

Mini-grid

Renewable energy source

Hydro

Project type

Scale-up

Project partners

Hydrobox Kenya, Gitungu Power Station

Project code

2023-1070

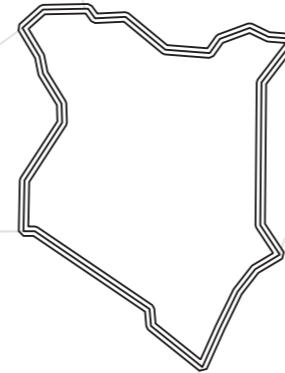
Run-of-River Rural Mini-Grid in Kenya

Location
Kenya

The project will introduce the first private sector-operated interconnected mini-grid in Kenya using ROR technology. The newly established plant will be integrated into a network of neighbouring plants to form a robust 900 kW mini-grid network. The project will provide cost-effective, dependable electricity to households, small businesses, community institutions, and anchor customers, utilising the ABC model.

Outcome and Impact

Through the construction of the ROR hydro power mini-grid, HydroBox NV aims to create enhanced energy access for 848 people. On an annual basis, 661 tCO_{2e} will be reduced and 841 MWh of clean electricity will be generated. Furthermore, 92 temporary and 15 permanent jobs will be created, with 33% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 111K.



Total project budget
EUR 998,594

EEP Africa financing
EUR 405,310

Relevant SDGs



V. Escas Power (Pvt) Ltd

**Company description**

Escas Power (Pvt) Limited, affiliated with the St. Anthony's Group of Companies, is a Sri Lankan firm specialising in hydropower projects across Asia and sub-Saharan Africa. The company specialises in planning and conducting feasibility studies, designing and constructing civil and mechanical structures, and overseeing project management.

Project summary

Escas Power (Pvt) Ltd, a Sri Lankan firm, is looking to undertake a feasibility study for the Mpulungu II 5.1 MW hydropower mini-grid project in Zambia.

Technology

Mini-grid

Renewable energy source

Hydro

Project type

Feasibility study

Project code

2023-1010

Feasibility Studies of Mpulungu II Small Hydropower Project

Location
Zambia

The project will bridge the gap of Zambia's electricity deficit by undertaking a feasibility study for a potential small hydropower project with a capacity of 5.1 MW in Mpulungu, in the Northern Province of Zambia. In addition to the electricity generation to stabilise the electricity network in the region, this project includes plans for environmental preservation and livelihood improvement at the project site. Escas Power (Pvt) Ltd has completed the pre-feasibility studies of the project and has concluded that investment is financially viable in terms of its return on investments and profitability of the operations.

Outcome and Impact

If the feasibility study reaches financial close, the project aims to establish 10,100 connections, providing 48,480 people with enhanced energy access. On an annual basis, 21,497 tCO_{2e} will be reduced and 18,666 MWh of clean electricity will be generated. Escas Power plans to create 10 temporary and 2 permanent jobs, with 52% of leadership positions filled by women.

Total project budget
EUR 674,320

EEP Africa financing
EUR 462,424

**Relevant SDGs**

e. Power generation projects

I. Umwela Energy Ltd



Company description

Umwela Energy Ltd is a Zambian company that specialises in the development of utility-scale wind power projects, aiming to drive the transformation of the country's energy landscape towards sustainability and cleanliness.

Project summary

Umwela Energy Ltd, a joint venture of Bazaruto Renewables and SOWITEC, targets to undertake a feasibility study for a 100 MW wind energy project in Mazabuka, Zambia.

Technology

Power generation

Renewable energy source

Wind

Project type

Feasibility study

Project partners

SOWITEC, Bazaruto Renewables, Kukula Capital

Project code

2023-1288

100 MW Mazabuka Wind Energy Project

Location
Zambia

The primary objective of this detailed feasibility study is to address the gap in Zambia's electricity generation capacity and improve the overall quality and reliability of the electricity supply. Zambia currently experiences frequent load shedding due to heavy reliance on hydropower, which becomes less efficient during periods of insufficient rainfall. By introducing a substantial wind energy project, this initiative aims to diversify the energy mix, reduce dependence on weather-sensitive sources, and contribute to a more stable and sustainable energy future for Zambia.

Outcome and Impact

The feasibility study aims to comprehensively evaluate the project's technical, economic, and environmental viability. Ultimately, this feasibility study could lead to the development of wind energy projects in the region. The project, if it attains a financial close, will provide 500,000 people with enhanced energy access. On an annual basis, 337,786 tCO_{2e} will be reduced and 350,400 MWh of clean electricity will be generated. Umwela Energy Ltd plans to create 250 temporary and 25 permanent jobs, with 33% of leadership positions filled by women.

Total project budget
EUR 708,774

EEP Africa financing
EUR 496,142



Relevant SDGs



II. AW-Energy Oy

**Company description**

AW-Energy is a pioneer in the green economy and is the global leader in wave energy technology. The company is based in Finland and operates in multiple continents cooperating with strong industrial partners.

Project summary

AW-Energy Oy is looking to pilot its certified WaveRoller technology in Namibia, in collaboration with local project developer Kaoko Green Energy Solutions (Pty) Ltd.

Technology

Power generation

Renewable energy source

Hydro

Project type

Pilot

Project partners

Kaoko Green Energy Solutions (Pty) Ltd

Project code

2023-0958

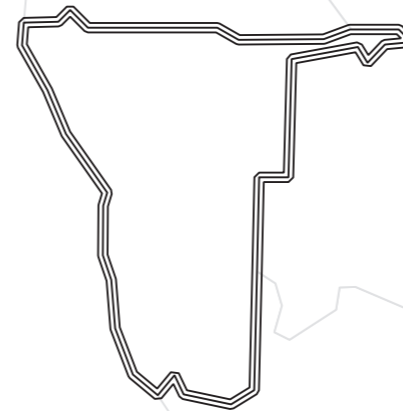
Namibia Wave Energy Power

The project will deploy a small-scale pilot wave farm of WaveRoller-X, the small-scale version of the WaveRoller technology, and operate the farm for a minimum of two years. This will serve as a pilot project with the objective to attract domestic and international interest in deploying larger wave farms. These farms can generate electricity based on an Independent Power Producer model. The project will install five units in collaboration with local partner Kaoko Green Energy Solutions (Pty) Ltd.

Outcome and Impact

The pilot project will offer data to further develop future projects. On an annual basis, the wave farm will reduce 332 tCO₂e and generate 350 MWh of clean electricity. Additionally, 8 temporary and 15 permanent jobs will be created, with 13% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 20K.

Location
Namibia

**Total project budget**

EUR 1,315,656

EEP Africa financing

EUR 500,000

Relevant SDGs

III. MPower Ventures AG

**Company description**

MPower Ventures AG is a Swiss fintech and impact start-up that provides clean energy in sub-Saharan Africa by combining plug & play solar products, financing, and its software & data solution for both rural and urban market segments, as well as for the agricultural sector. Through its business-to-business-to-consumer distribution model, MPower Ventures AG enters into partnership agreements with local resellers to distribute its products to off-grid or under-electrified households and small and medium-sized enterprises.

Project summary

MPower Ventures AG aims to scale-up MediHubs-energy hubs that power businesses, with health centres acting as anchor loads, providing a least cost model for sustainable health centre electrification.

Technology

Productive use of energy

Renewable energy source

Solar

Project type

Scale-up

Project code

2023-0031

MediHubs- MPowering Communities and Leaving No One Behind

The project will scale MediHubs in Zambia and Namibia. The MediHubs are easily deployable and power a range of productive use services, other than those required by health centres. The MediHubs are positioned close to health institutions which act as an off-taker to the MediHub, providing a least cost model for sustainable health centre electrification. MPower's primary innovation lies in a versatile remote monitoring system capable of measuring various parameters beyond solar generation, leading to improved MediHub performance and cost-efficiency.

Outcome and Impact

Through this project, MPower Ventures AG plans to sell 30 MediHubs, 60 electric vehicles, and 250 PUE appliances, providing 15,000 people with enhanced energy access. On an annual basis 212,868 tCO_{2e} will be reduced and 296 MWh of clean electricity will be generated. In addition, 213 permanent jobs will be created with 37% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 122K.

Location
Namibia, Zambia

**Total project budget**

EUR 757,100

EEP Africa financing

EUR 476,973

Relevant SDGs

f. Mobility projects

I. Sanguo Ventures Ltd



Company description

Sanguo Ventures Ltd is a full service electric mobility solutions provider for Southern Africa. A pioneer in electric mobility in Malawi, the company builds electric motorcycles, converts incumbent motorcycles to electric, and sets up EV charging stations.

Project summary

This scale-up project by Sanguo Ventures Ltd aims to promote the adoption of electric motorcycles among base-of-the-pyramid customers in Lilongwe, Malawi.

Technology

Mobility

Renewable energy source

Grid (mainly hydro)

Project type

Scale-up

Project partners

OIKA DoSyna

Project code

2023-0035

Extending E-Mobility to Base-of-the-Pyramid Malawians

Sanguo has for the last years sold electric motorcycles on a B2B model, this project will expand their customer base to a B2C model, targeting base-of-the-pyramid operators in Malawi with an aim of scaling to other Southern African countries. The project will sell 200 electric motorcycles and in partnership with Total Energies set up charging infrastructure for their customers.

Outcome and Impact

The project aims to lease 200 motorcycles, creating enhanced energy access for 200 people. On an annual basis, 410 tCO_{2e} will be reduced and 388 MWh of clean electricity will be generated. Sanguo Ventures Ltd plans to create 200 temporary and 14 permanent jobs, with 44% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 302K.

Location
Malawi



Total project budget

EUR 1,000,000

EEP Africa financing

EUR 500,000



Relevant SDGs



II. Fika Mobility



Company description

Fika Mobility is a locally-led electric mobility company in Kenya. Fika aims to be the leading provider of energy solution to Electric Vehicles (Evs) through Smart Battery Technology and interchangeable battery solutions across Africa with the ultimate aim of powering these stations via renewable energy, enabling refueling of electric vehicles at a lower cost and faster speed than conventional electric charging points.

Project summary

Fika's project in Kisumu represents an early-stage pilot aimed at testing the viability of its business model in a smaller city context. The project will provide electric two-wheeler motorcycles powered through a network of interchangeable battery-swapping solutions in Kisumu.

Technology

Mobility

Renewable energy source

Solar & grid

Project type

Pilot

Project code

2023-1248

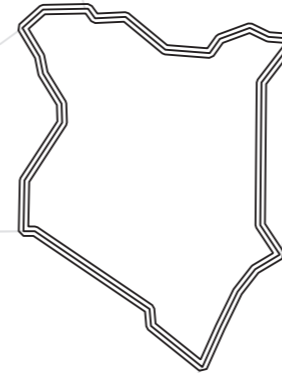
Piloting Electric Motorcycles with Battery-Swapping Stations in Kisumu

Location
Kenya

This project will acquire 140 batteries and 100 locally assembled electric motorcycles and establish 23 battery-swapping stations in Kisumu. The motorcycles will be sold on a lease-to-own model in partnership with local 26 asset financiers. The success of the pilot will pave way for the company to scale up its operations in other secondary cities in Kenya, further spreading the social, economic, and environmental benefits of electric mobility.

Outcome and Impact

The project aims to create enhanced energy access for 100 electric motorcycle drivers, by replacing petrol-powered motorcycles. On an annual basis, 190 tCO_{2e} will be reduced and 128 MWh of clean electricity will be generated. Additionally, Fika Mobility plans to create 30 permanent jobs, with 25% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 55K.



Total project budget
EUR 499,160

EEP Africa financing
EUR 348,590

Relevant SDGs



III. Knight and Apps Ltd



Company description

Knights and Apps is a locally-led EPC company in Kenya. In 2016, the company diversified into e-mobility with the sale of used electric cars and associated charging accessories, and currently has 30% market share in the used Electric Vehicles (EV) segment in Kenya.

Project summary

Knights and Apps aims to deploy electric four-wheelers and solar-assisted charging stations at strategic locations throughout Kenya to serve taxi and private electric vehicle drivers.

Technology

Mobility

Renewable energy source

Solar

Project type

Scale-up

Project code

2023-1368

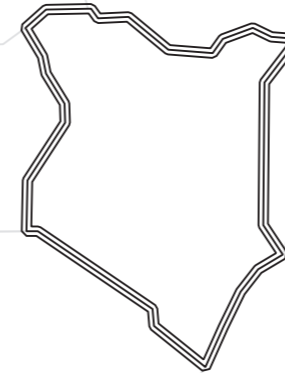
Accelerating Four-Wheeler Electric Vehicle Transition in Kenya Through Solar-Powered Rapid-charging and Asset Leasing

Location
Kenya

The project aims to increase the electric vehicle charging infrastructure in Kenya by increasing the charging EVs by 30 and their EV 4-wheelers fleet by 21 vehicles. The chargers will be set up in partnership with Total Energies,

Outcome and Impact

Through this project, 105 people will gain enhanced energy access. On an annual basis, 171 tCO_{2e} will be reduced and 240 MWh of clean electricity will be generated. Additionally, Knights and Apps Ltd plans to create 42 permanent jobs, with 31% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 309K.



Total project budget

EUR 2,024,050

EEP Africa financing

EUR 975,271

Relevant SDGs



IV. AG Energies Company Ltd



Company description

AG Energies is a Tanzanian renewable energy company that provides sustainable and affordable clean energy solutions to a wide range of customers in urban and rural Tanzania, including Zanzibar. The company provides PUE home appliances has ventured into e-mobility.

Project summary

AG Energies Company Ltd aims to provide electric 3-wheelers for mass transportation in Dar Es Salaam, Tanzania, in partnership with Total Energies for the solar-powered charging infrastructure.

Technology

Mobility

Renewable energy source

Solar

Project type

Pilot

Project code

2023-1368

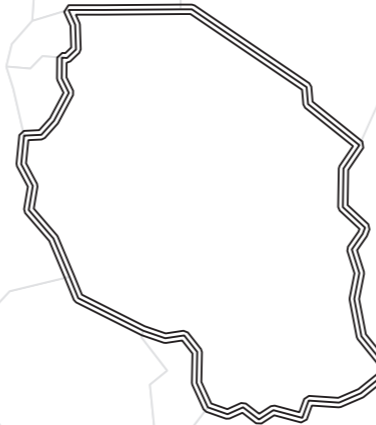
Enable Electric Tricycles for Passenger Transport in Dar Es Salaam, Tanzania

This project will introduce electric 3-wheelers as an alternative to traditional fuel-powered tricycles in Dar Es Salaam. In addition, and in partnership with Total Energy, battery swapping charging stations will be set up, ensuring that drivers have access to fully charged batteries during their operations. Through a B2B business model, AG Energies Company Ltd will act as a wholesaler, introduce a "lease-to-own" model, and manage the maintenance of the vehicles.

Outcome and Impact

Through the sales of 54 electric 3-wheelers, AG Energies Company Ltd will create enhanced energy access for 54 people. On an annual basis, 212 tCO_{2e} will be reduced and 267 MWh of clean electricity will be generated. The company plans to create 14 permanent jobs, with 38% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 20K.

Location
Tanzania



Total project budget
EUR 365,777

EEP Africa financing
EUR 250,599



Relevant SDGs



V. E-Safiri Charging Ltd



Company description

E-Safiri Charging Ltd is a women-owned start-up that expands e-mobility infrastructure beyond Kenya's capital. The company has a rural-based solar-powered charging hub, customised for battery charging and battery swapping operations, in Dunga Beach, Kisumu.

Project summary

Leveraging the use of solar power, E-Safiri Charging Ltd is using available technology to provide access to sustainable energy, with e-mobility as an anchor load among other productive use applications.

Technology

Mobility

Renewable energy source

Solar & grid

Project type

Pilot

Project code

2023-0187

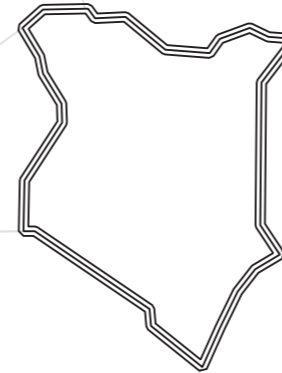
SolarRide-Harnessing Solar Power and Innovative Business Models for Sustainable Mobility in Rural Kenya

This project will set up two solar-powered charging hubs that will primarily be used to charge an EV fleet through charging points and battery swapping stations. The solar system provides energy cost savings, as well as a backup power supply during grid outages. The excess power generated will be used for productive use such as ice making and cold storage for fish. The business model will provide a solution to ownership of electric vehicles on a PAYG model.

Outcome and Impact

Through the cold storage PUE and EV fleet, E-Safiri Charging Ltd aims to provide enhanced clean energy access for 138 people. On an annual basis, 50 tCO_{2e} will be reduced and 24 MWh of clean electricity will be generated. E-Safiri Charging Ltd plans to create 3 temporary and 9 permanent jobs, with 67% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 6K.

Location
Kenya



Total project budget
EUR 310,613

EEP Africa financing
EUR 225,129

Relevant SDGs



VI. OX Rwanda Ltd



Company description

OX Rwanda is an e-mobility company that deploys electric trucks in Rwanda in partnership with their parent company Ox Delivers in the UK.

Project summary

OX Rwanda will procure 8 purpose build electric trucks and set up a depot in Musanze, Rwanda to provide transport to last mile customers on a transport-as-a-service model.

Technology

Mobility

Renewable energy source

Solar

Project type

Scale-up

Project code

2023-1042

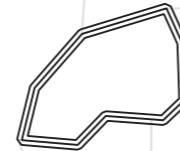
Scaling Zero-Emission Vehicles in Rural Rwanda

The project aims to increase Ox's electric trucks fleet and depots in Rwanda. The electric trucks will provide transport services at the last mile to bottom of the pyramid customers, reducing post-harvest losses of produce and improving access to markets.

Outcome and Impact

Through this project, 4,482 people will gain enhanced energy access. On an annual basis, 227 tCO_{2e} will be reduced and 68 MWh of clean electricity will be generated. OX Rwanda Ltd plans to create 50 temporary and 28 permanent jobs, with 54% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 5K.

Location
Rwanda



Total project budget

EUR 1,986,197

EEP Africa financing

EUR 949,895

Relevant SDGs



g. Energy efficiency & storage projects

I. Xiphefu Digital Light - Sociedade Unipessoal, Lda



Company description

Xiphefu Digital Light is a youth-led company, introducing locally tailored automation solutions to enhance energy efficiency. Initially focused on smart and sustainable home lighting, the company has expanded its offerings to include innovative solutions like electric water heater optimisation and air conditioner energy management.

Project summary

This project aims to expand the usage of locally designed and manufactured energy-efficient automation devices and smart solar lanterns in Mozambique.

Technology

Energy efficiency and storage

Renewable energy source

Solar

Project type

Pilot

Project code

2023-0151

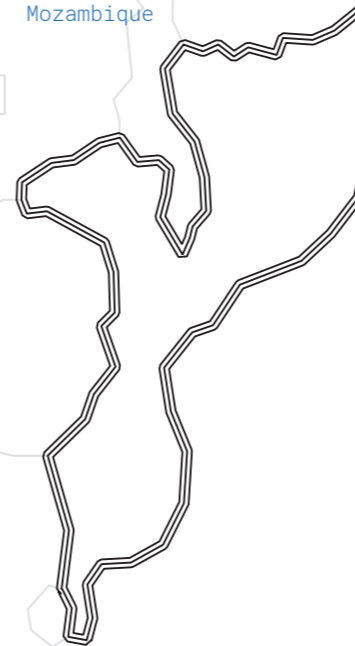
Smart Energy Solutions for Mozambique

Xiphefu Digital is developing autonomous, internet-dependent IoT solutions for urban and peri-urban homes. Its device enables energy-efficient management of water heaters, lighting, and air conditioning, even without continuous internet access. The project will expand the usage of locally designed energy-efficient automation devices and smart solar lanterns, and focus on last mile distribution sales channels.

Outcome and Impact

The project aims to sell 2,900 automated solar lights and energy-efficient devices, creating enhanced energy access for 12,470 people. On an annual basis, 6,068 tCO₂e will be reduced and 6,337 MWh of clean electricity will be generated. Xiphefu Digital plans to create 12 temporary and 50 permanent jobs, with 50% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 273K.

Location
Mozambique



Total project budget

EUR 292,860

EEP Africa financing

EUR 204,600



Relevant SDGs



II. Vittoria Technology



Company description

Vittoria Technology is a South African owned and led social enterprise that provides sustainable access to clean, affordable electricity, primarily through the development and offering of the company's Battery Bank Africa (BBA) service to mini-grid developers.

Project summary

Vittoria Technology will construct three scalable mini-grids using its BBA battery leasing/Storage-as-a-Service solution in Uganda.

Technology

Energy efficiency and storage

Renewable energy source

Solar

Project type

Pilot

Project partners

Foundation Rural Energy Services Uganda, AVSI Foundation Uganda

Project code

2023-0887

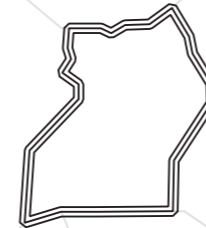
Scalable Battery Leasing (+) for Sustainable Uganda Mini-Grids

The project will leverage BBA's scalable battery finance and technology to offer affordable, reliable clean energy access through three rural mini-grids. The project will utilise the BBA digital platform to confirm battery expansion sizing of each site, based on site engagement, which will enable the partner organisation to extend power service to surrounding home-based businesses and to sufficiently power PUE appliances and home electronics.

Outcome and Impact

Vittoria Technology aims to build three mini-grids, including 130 connections, and to distribute 57 PUE products. A total of 745 people will gain enhanced energy access. On an annual basis, 141 tCO_{2e} will be reduced and 423 MWh of clean electricity will be generated. Through this project, 1 temporary and 6 permanent jobs will be created, with 50% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 94K.

Location
Uganda



Total project budget

EUR 715,904

EEP Africa financing

EUR 499,989



Relevant SDGs



III. Soleil Power

Soleil Power

Company description

Soleil Power, a subsidiary of Aptech Africa, is an early-stage manufacturing company set up for the production and sales of batteries for e-mobility applications and stationary energy storage systems solutions.

Project summary

Soleil Power will address market and design challenges relating to the repurposing of retired two-wheeler EV lithium-ion battery cells for use in second life energy storage applications in East Africa.

Technology

Energy efficiency and storage

Renewable energy source

Solar & grid (hydro)

Project type

Pilot

Project partners

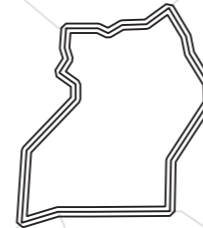
Aptech Africa

Project code

2023-1429

Innovating Lithium-Ion Battery Circularity in East Africa

Location
Uganda



This project will repurpose two-wheeler EV batteries into second life batteries contributing to the end-of-life management of the solar sector and growing e-mobility sector. In addition, the company plans to build and test batteries that can be repurposed to second life energy storage products, while its first life EV batteries will be distributed to e-mobility companies.

Outcome and Impact

The project aims to sell 240 energy efficient storage products, creating enhanced energy access for 240 people. On an annual basis, 408 tCO₂e will be reduced and 180 MWh of clean electricity will be generated. In addition, Soleil Power plans to create 36 permanent jobs, with 50% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 5K.

Total project budget
EUR 631,430

EEP Africa financing
EUR 439,320



Relevant SDGs



h. Residential electricity access projects

I. ReNewGen AS Burundi



Company description

ReNewGen AS Burundi imports and distributes solar energy kits for rural and peri-urban households and Village Savings and Lending Associations through partnerships with manufacturers, NGOs, Micro-Finance Institutions, and local authorities. In addition, the company carries out small and medium-sized solar-powered installations.

Project summary

ReNewGen AS Burundi plans to scale the distribution of solar lanterns and SHS to rural, low-income communities in Kirundo Province, Burundi.

Technology

Residential electricity access

Renewable energy source

Solar

Project type

Scale-up

Project code

2020-0340

Improved Clean Energy to Communities in Burundi

This project will scale up distribution of clean and affordable energy products to households in Kirundo Province, Burundi, where currently only 4% of households have access to electricity and more than 90% of households still rely on kerosene lamps and candles. The three products include family lanterns, farmer lanterns, and a SHS that comes with USB ports, an FM radio, and a torch. Through this project, ReNewGen AS Burundi will be the first company to operate a PAYG model for solar in Burundi at scale.

Outcome and Impact

The project aims to sell 9,087 of its solar products, creating enhanced energy access for 38,898 people. On an annual basis, 5,567 tCO_{2e} will be reduced and 30 MWh of clean electricity will be generated. ReNewGen AS Burundi plans to create 133 temporary jobs and 28 permanent jobs, with 40% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 534K.

Location
Burundi



Total project budget
EUR 520,000

EEP Africa financing
EUR 364,000

Relevant SDGs



II. VIRL Financial Services



Company description

VIRL Financial Services is a Zimbabwean women-founded and women-led microfinance institution, with the goal to bridge the gap in access to finance for rural communities, particularly for smallholder farmers, women, and youth. The company currently operates through a network of six branches and 68 agents.

Project summary

VIRL Financial Services seeks to provide green loans for SHS and PUE technologies targeting rural communities in Zimbabwe.

Technology

Residential electricity access

Renewable energy source

Solar

Project type

Scale-up

Project code

2023-0446

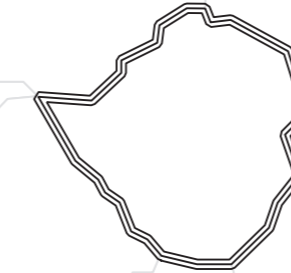
VIRL Green Solar

This project will offer targeted green loans in combination with PAYG-enabled solar products (Spark SHS units and Sunking SHS systems, but also solar water pumps and 100 L fridges from Amped Innovation). VIRL Financial Services will also provide financial literacy and credit and business management training to customers. Customers will be able to leverage their solar systems as collateral to acquire larger solar solutions and appliances for their product portfolio, or to acquire external loans beyond energy financing. VIRL Financial Services will expand its branch network, reaching more isolated rural communities. In addition, it will develop capacities for e-waste management.

Outcome and Impact

The project aims to distribute 13,410 solar and 170 PUE products, providing enhanced energy access for 11,619 people. On an annual basis, 6,765 tCO_{2e} will be reduced and 25 MWh of clean electricity will be generated. Additionally, VIRL Financial Services aims to create 200 temporary and permanent jobs, with 44% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 425K.

Location
Zimbabwe



Total project budget

EUR 1,300,000

EEP Africa financing

EUR 650,000

Relevant SDGs



III. Fena Solar Ltd



Company description

Fena Solar Ltd is a women-owned and -led Ugandan solar lantern and SHS company, with one energy hub in Arua City and a distribution network of 24 agents.

Project summary

Fena Solar Ltd seeks to scale up the distribution of solar lanterns and SHS to the refugee and hosting communities in the West Nile region in Uganda.

Technology

Residential electricity access

Renewable energy source

Solar

Project type

Scale-up

Project code

2023-1205

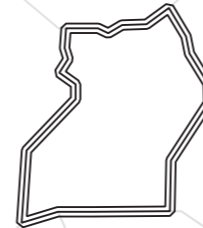
The “Light for West Nile Project” a Refugee and Host Community Solar Lantern and Solar Home System Project

The project will expand and strengthen Fena Solar Ltd’s distribution chain, offering its products for cash and PAYG. Fena Solar Ltd will deploy solar lanterns with phone charging capabilities and two types of SHS, sourced from contracted manufacturers SunKing and Omnivoltaic. In addition, Fena Solar Ltd aims to deploy related products, including solar-powered sewing machines and barber kits with charging stations.

Outcome and Impact

Through the sale of 3,318 of Fena Solar Ltd’s products, 6,448 people will gain enhanced energy access. On an annual basis, 2,024 tCO_{2e} will be reduced and 6,251 MWh of clean electricity will be generated. Additionally, 24 temporary and 53 permanent jobs will be created, with 100% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 205K.

Location
Uganda



Total project budget
EUR 286,890

EEP Africa financing
EUR 200,009



Relevant SDGs



IV. NESELTEC Ltd



Company description

NESELTEC Ltd is an engineering and consultancy company in the renewable energy market in Rwanda that primarily operates in rural areas with poor and unreliable electricity grids. The company provides feasibility studies for governmental institutions and private sector entities, distributes SHS and solar water heaters through contracted sales agents, supplies and distributes clean cooking appliances, and operates a solar mini-grid.

Project summary

NESELTEC Ltd seeks to scale up distribution channels for 35,000 modular and PAYG Spark SHS to households and small businesses in rural Rwanda.

Technology

Residential electricity access

Renewable energy source

Solar

Project type

Scale-up

Project partners

Rural Spark BV

Project code

2023-0059

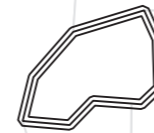
Modular Solar Home Systems to Crack Down on Energy Poverty and Gender Inequality

NESELTEC Ltd will use a locally-led distribution network for the Spark solar kits, in areas where commercial adoption of SHS has been limited due to high initial down payments and overall lack of PAYG options. The project will offer PAYG solar kits, enabling customers to make micro-payments, tailored to the customers' needs, income, and expenditure behaviour. The modular technology of the Spark solar kits allows customers to expand the energy capacity of the system and add appliances as needed.

Outcome and Impact

Through the sales of 35,000 Spark solar kits, the project will create enhanced energy access for 140,000 people. On an annual basis, 73 tCO_{2e} will be reduced and 1,999 MWh of clean electricity will be generated. NESELTEC Ltd plans to create 10 temporary and 220 permanent jobs, with 64% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 1.8M.

Location
Rwanda



Total project budget

EUR 2,315,880

EEP Africa financing

EUR 500,000

Relevant SDGs



I. Clean cooking projects

I. PowerUp



Company description

PowerUp is a clean-tech venture based in Mauritius. PowerUp, through its Ugandan subsidiary, TEECO Uganda, designs and sells PAYG-enabled Electric Pressure Cookers (EPCs) in Kampala, Uganda.

Project summary

PowerUp proposed to provide distributors in Uganda with quality IoT-enabled connected EPCs that will be linked to a data analytics platform, in combination with vendor financing.

Technology

Clean cooking

Renewable energy source

Grid (hydro)

Project type

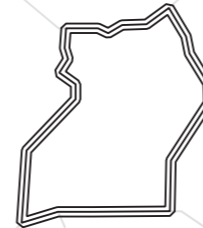
Pilot

Project code

2023-0808

Electric Cooking Distribution Network

Location
Uganda



PowerUp will address the current barriers for distributors to venture into e-cooking by testing and deploying an Electric Cooking Distribution Network. The company will bring together multiple components to enable last-mile distributors to have profitable e-cooking distribution businesses. In addition, the project will develop an IoT-enabled PAYG system and an e-cooking data cloud platform for analysis and software integration. The platform will allow for remote monitoring of the EPCs' usage and analysis of e-cooking profiles for the stove distributors.

Outcome and Impact

The project aims to sell 30,000 EPCs, creating enhanced energy access for 138,000 people and reducing 106,421 tCO₂e annually. In addition, PowerUp plans to create 13 permanent jobs, with 33% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 2.2M.

Total project budget

EUR 608,880

EEP Africa financing

EUR 392,974



Relevant SDGs



II. BioMassters Ltd



Company description

BioMassters Ltd is a Rwandan pellet manufacturing company and distributor of the Mimi Moto stove.

Project summary

BioMassters Ltd and its partner Mimi Moto BV plan to roll out a locally assembled version of the tier 4 biomass Mimi Moto gasifier stove in Rwanda.

Technology

Clean cooking

Renewable energy source

Biomass

Project type

Pilot

Project partners

Mimi Moto BV

Project code

2023-0999

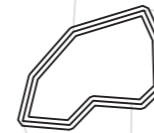
Transitioning Pellet Stove Production: China to Rwanda

BioMassters Ltd and Mimi Moto aim to develop local assembly capacity and distribution for a built-in gasifier stove model in Rwanda, expected to have tier 4 performance, and with a 20% cost reduction due to reduced transport, import duty, and production costs.

Outcome and Impact

The project aims to sell 4,000 built-in stoves, resulting in enhanced energy access for 16,000 people. On an annual basis, 36,618 tCO₂e will be reduced and 6,682 MWh of clean electricity will be generated. In addition, BioMassters Ltd plans to create 13 permanent jobs, with 33% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 680K.

Location
Rwanda



Total project budget
EUR 467,340

EEP Africa financing
EUR 288,400

Relevant SDGs



III. Divine Bamboo Group Ltd



Company description

Divine Bamboo Group Ltd is a social enterprise founded by two Ugandan women that utilises industrial waste in the briquette production process, adopting a circular approach that efficiently utilises resources, minimises waste, and optimises the overall production cycle.

Project summary

Divine Bamboo Group Ltd will promote clean cooking through the production of bamboo briquettes, using fast-growing, non-invasive bamboo species as an alternative to charcoal and firewood in Uganda.

Technology

Clean cooking

Renewable energy source

Biomass

Project type

Scale-up

Project code

2023-1565

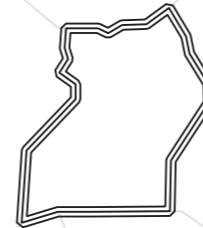
Bamboo Biomass: Clean Cooking Fuel for Uganda

Location
Uganda

The project will scale up the production of the existing bamboo briquette facility from 120 MT to 2,400 MT annually. Bamboo briquettes are made by a specialised press to compress the bamboo. They burn longer, produce minimal smoke, and are 30% more cost-effective than regular charcoal. To serve its customers, Divine Bamboo Group Ltd will utilise a range of distribution channels, including partnerships with community-level organisations and local retailers.

Outcome and Impact

Through this project, 10,147 people will gain enhanced energy access. On an annual basis, 2,664 tCO_{2e} will be reduced and 3,785 MWh of clean electricity will be generated. In addition, Divine Bamboo Group Ltd plans to create 60 temporary and 71 permanent jobs, with 50% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 69K.



Total project budget
EUR 726,828

EEP Africa financing
EUR 500,000



Relevant SDGs



III. Lanforce Trading T/A Lanforce Energy



Company description

Lanforce Energy, a company founded, directed, and operated by women, is one of the largest clean cooking solution providers in Zimbabwe. The company sells and distributes prefabricated and fixed dome biodigesters on a PAYG basis. In addition, the company provides training and after-sales services, and monitors biodigester performance.

Project summary

Lanforce Trading T/A Lanforce Energy plans to distribute prefabricated biodigesters on a credit basis to Zimbabwean farmers, rural and peri-urban households, and institutions.

Technology

Clean cooking

Renewable energy source

Biogas

Project type

Scale-up

Project code

2023-0168

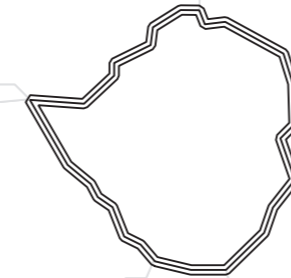
Reducing Domestic Drudgery for Female Farmers

The project will install 619 biodigester units (incl. biogas cookstoves). 100 units will also be equipped with a smart meter to support remote monitoring. In addition, Lanforce Energy will pilot other productive uses of biogas through the distribution of 200 brooder heaters and 120 cooling appliances, unique for African markets where productive appliances for biogas have not been explored extensively by biodigester distributors to date.

Outcome and Impact

Lanforce Energy aims to sell 1,538 of its products, creating enhanced energy access for 2,476 people. On an annual basis, 7,297 tCO_{2e} will be reduced and 7,962 MWh of clean electricity will be generated. In addition, through the project, 12 temporary and 38 permanent jobs will be created, with 67% of leadership positions filled by women. Savings on energy-related expenditure is estimated to be EUR 5.1M.

Location
Zimbabwe



Total project budget
EUR 850,000

EEP Africa financing
EUR 450,000

Relevant SDGs





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