



Power Africa

Off-Grid Energy Grants Portfolio

Overview: The Off-Grid Energy Challenge began in Nigeria and Kenya in 2013. It has now expanded to 9 countries (Ethiopia, Ghana, Kenya, Liberia, Nigeria, Tanzania, Rwanda, Uganda and Zambia). To date, USADF has funded over 70 grants of up to \$100,000 each, totaling more than \$7 million dollars.

Program Strategy: The Off-Grid Energy Challenge is an open competition for energy entrepreneurs bringing off-grid energy solutions to unserved and underserved communities through self-sustainable and scalable business models.

U.S. African Development Foundation

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Grantee	Country	Year	Summary
Ethio Resource Group	Ethiopia	2014	Sector: Wind Summary: Ethio Resource Group (ERG) is installing six 1-kilowatt wind turbine systems to power six micro-grids, which will be run and managed by Ethio Resource Group as a distributed energy services company. The installations will consist of six small wind electric generators and batteries for energy storage which will deliver power to 300 households, 20 enterprises and 1 health clinic.
Organization for Rehabilitation and Development in Amhara (ORDA)	Ethiopia	2014	Sector: Biogas Summary: ORDA is constructing 470 biogas plants for cooking and lighting, provide training for proper operation and maintenance, and will also build the capacity of user cooperatives with the purpose of ensuring sustainable community project management. The project creates renewable energy access for 470 off-grid rural households living in Alefa district of Amhara region.
Sun Transfer Tech	Ethiopia	2014	Sector: Solar Summary: Sun Transfer Tech is selling solar home systems ranging in size between 20, 50 and 100 watt systems that will power a variety of appliances including light bulbs, radios, mobile chargers and solar TVs. These systems will be sold to over 325 rural households through an energy lending scheme, and empowering small solar entrepreneurs to sell, install, and provide after-sales service for the systems.
GM Clean Energy	Ethiopia	2015	Sector: Biogas Summary: GM Clean Energy is producing biogas stoves for use by off-grid, marginalized communities to cook injera, a major food staple consumed in Ethiopia. The grant from Power Africa/USADF will provide seed funding for the enterprise to scale up its operations, producing an initial batch of efficient stoves and establishing a rural distribution branch.
Guraghe Development and Cultural Association (GDCA)	Ethiopia	2016	Sector: Solar Summary: Guraghe Development and Cultural Association is selling solar home systems to low-income households through the establishment of three solar business centers across Guraghe Zone. The solar business centers will provide electricity for businesses, as well provide as a central area for community organization and development.



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Sky Power Enterprise	Ethiopia	2016	Sector: Solar Summary: Sky Power Enterprise is procuring, distributing, and selling solar home systems and products in Doolo Zone of Ethiopia's Somali Regional State, one of the most disadvantaged regions of the country. These products will include solar home systems which are mounted on customers' roofs, as well as household solar lanterns, solar kiosks, and other products.
RK Renew Energy PLC	Ethiopia	2016	Sector: Solar Summary: RK Renew Energy PLC is selling solar home systems using Pay-As-You-Go technology (through M-Birr) in the Oromia region of Ethiopia. The solar home systems will have three lights, and will be able to charge phones, radios, fans, televisions, and similar devices. RK Renew sees this as an opportunity to wean the population off of fossil fuels like kerosene.
NBK Electrical Consulting Engineers	Ethiopia	2016	Sector: Solar Summary: NBK Electrical Consulting Engineers is using its workshop to locally assemble 1,130 solar home systems for sale to rural households in the Oromia, Amhara and Southern Regions of Ethiopia. The systems feature internal radios and the capacity for mobile phone charging. NBK will scale up their production by purchasing production tools, a computer and design software, and other equipment, as well as materials for the first batch of 1,130 systems.
Alemu Assefa Solar Enterprise	Ethiopia	2016	Sector: Solar Summary: Alemu Assefa Solar Enterprise is installing solar cold storage facilities, mobile solar irrigation equipment, and selling solar home systems to Dek Island and the surrounding areas of Lake Tana, outside of concentrated populated areas. The solar cold storage services will serve fishermen and farmers, who will pay a rental fee for use of the facilities. The solar irrigation services will also be rented to local farmers.
Rensys Engineering and Trading	Ethiopia	2016	Sector: Solar Summary: Rensys Engineering and Trading is installing a 12 kilowatt solar mini-grid system to electrify a potential of 198 households, small businesses, and institutions. Rensys will also be installing a refrigerator for cold storage purposes for fishermen. Providing electricity through a solar mini-grid will allow community members to use electric products, have light at night, and mitigate the negative health impacts of using fossil fuels in the home.
NewEnergy	Ghana	2014	Sector: Solar Summary: NewEnergy is utilizing solar-powered water pumping and purification technology to supply clean water to over 980 inhabitants of Nabogo. The project will be run as a social enterprise, in which a community-owned cooperative takes over the operation and management after sufficient training has been provided.
Solar Light	Ghana	2014	Sector: Solar Summary: Solar Light Company is prototyping and piloting its "Sunana" solar powered mobile charging system in Accra, Sunyani, and Dawhenya. The Sunana unit consists of a solar panel divided into eight segments which can be "worn" on top of a trader's umbrella, and will be targeting Ghana's informal street vendors who often work for less than \$3 a day for long hours in the sun.

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The Kumasi Institute of Tropical Agriculture (KITA)	Ghana	2015	Sector: Biogas Summary: KITA is procuring and installing a 20 kilowatt gasifier plant to convert the town of Papasisi's biomass and agricultural residue into electricity. In addition, KITA will procure processing equipment including a palm kernel cracker, expeller, and oil squeezer to run on the produced electricity and allow the community to process its agricultural products less expensively and more efficiently.
Wilkins Engineering Limited	Ghana	2015	Sector: Solar Summary: Wilkins Engineering is designing, installing, and managing the operations of 100-watt and 200-watt home solar systems, solar street lamps, and a cold storage facility in the remote island community of Atigagome. The grant from Power Africa/USADF will provide startup capital to develop the business model in small island communities in Ghana, with the potential to replicate it in other island communities in the future.
Atlas Business and Energy Systems Limited	Ghana	2016	Sector: Solar Summary: Atlas Business and Energy Systems Limited (ABES) is installing 230 pico-solar systems, each with two lights and cell phone chargers, in an island community located on Lake Volta. In addition, ABES will construct and operate a solar powered facility that will provide cold storage services to fishermen and will be able to power micro-enterprises in the community.
Centre for Energy, Environment, and Sustainable Development (CEESD)	Ghana	2016	Sector: Solar Summary: Centre for Energy, Environment and Sustainable Development (CEESD) is installing 45 solar home systems of 250 watts each for 35 households and 10 small businesses in the Faaszo Battor community of Eastern Ghana. In addition, CEESD will install a 2 kilowatt system for the community health clinic, which will be used for lighting and refrigeration, and Faaso Batter's school will also receive a 500 watt system for lighting and computers.
Translight Solar Limited	Ghana	2016	Sector: Solar Summary: Translight Energy Limited is constructing a solar mini-grid to connect households in Kuliya, a village in Ghana's upper east region. The mini-grid will connect to 115 households, a maize processing mill to be used by community members, and a solar house where basic IT services can be provided in the future, including printing, mobile phone charging, and solar refrigeration.
Afrisol Energy Limited	Kenya	2014	Sector: Biogas Summary: Afrisol is constructing a bio-digester that converts fecal sludge into electricity. The electricity generated will serve as a source of power for the Kwa Njenga Primary School and will provide light for the surrounding area in a radius of 100 meters of the school with a high mask lighting system located in Mukuru kwa Njenga urban settlement. The grant from Power Africa/USADF will allow Afrisol to purchase equipment, including the bio-digester, and provide working capital to Afrisol.
Mibawa Suppliers Limited	Kenya	2014	Sector: Solar Summary: Mibawa is selling solar lighting kits to low-income rural households in the Meru, Kakamenga, Nandi Hills, and Mgori communities that also can charge small electronic equipment such as cell phones. Through a pay-as-you-go program, customers will pay an initial deposit followed by very low weekly installment payments allowing the customer to pay for the lights over time.

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Solar World Limited	Kenya	2014	Sector: Solar Summary: Solar World is constructing five solar powered water points, each of which will be equipped with a borehole, water storage tank, water vending kiosk, and animal troughs to supply water. In addition, each water point will have an energy kiosk that will provide electrical services including mobile phone and portable LED lantern charging services.
Boma Safi Limited	Kenya	2014	Sector: Solar Summary: Boma Safi is addressing their distribution challenge of limited customer buying power by utilizing a “hub and spoke” model, in which rural energy hubs aggregate deliveries between the point of sale (typically rural savings and credit cooperatives), and central hubs. This method will be used to distribute solar lanterns to customers in five regions: Coastal, Lake Victoria, North Rift, South Rift, and Mount Kenya.
Kitui Industries Limited	Kenya	2014	Sector: Bio-diesel Summary: Kitui Industries Limited is investing in a bio-diesel plant that produces bio-diesel, which it uses to power its factory and vehicles. Kitui will produce and sell bio-diesel from cottonseed, and also sell multi-purpose diesel engines to farmers groups via a local MFI, which can be used to power small-scale agricultural processing.
SCODE Limited	Kenya	2014	Sector: Solar/Biogas Summary: SCODE is manufacturing its own high-efficiency forced-draft micro-gasifier stoves, and combines them with solar home systems assembled at their Nakuru workshop to give customers access to lighting, charging, and small appliances. SCODE is using a pay-as-you-go system for pre-financing 75-85% of the total costs of efficient cooking and lighting products to its clients, with repayment periods of 12 months on average.
Sollatek Kenya Limited	Kenya	2014	Sector: Solar Summary: Sollatek is addressing the constraints local coastal fishermen are facing by working with already-existing Beach Management Units (BMU) to create and run solar centers to power freezers, phone charging stations, and portable solar lantern rentals. USADF funded Sollatek to identify and train 15 BMUs on business management, bookkeeping, and solar product sales. Sollatek will install 15 solar charging centers in these rural communities and transition the ownership and management of the systems to the BMUs.
Rafode Limited	Kenya	2015	Sector: Solar Summary: Rafode is a micro-finance organization that is expanding its revolving loan fund to reach at least 1,000 fisherman and vendors who currently do not have access to the grid. Many fisherman use expensive kerosene lamps to fish at night, cutting their earnings in half each day and this technology will enable the fishermen to use efficient, effective, safe and affordable solar powered lights for fishing.
Ambalian Limited	Kenya	2015	Sector: Wind Summary: In the rural pastoralist region of Bubisa, northern Kenya, Ambalian is replacing diesel-powered generators currently being used to power water pumping with a locally assembled wind turbine system. Ambalian will then locally fabricate three local content components (blades, lattice structures and controllers) to be used for expansion of locally produced wind turbines in the region.

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Action in Community Environment (ACE), Ace Africa Kenya	Kenya	2016	Sector: Solar Summary: Action in Community Environment in Africa (Kenya), known as Ace Africa Kenya, is installing six solar powered drip irrigation systems in the Siaya, Nyanza Province of Kenya. Six women's groups of 20 members each will be selected to receive the solar drip irrigation units and will receive training in operations and maintenance.
Deevabits Green Energy	Kenya	2016	Sector: Solar Summary: Deevabits is implementing a last-mile distribution approach using Village Social Entrepreneurs (VSEs), many of whom are youth and women. The VSEs act as local sales agents to sell solar lamps and home systems to customers on a pay-as-you-go basis in Kenya's rural Mackakos and Makueni counties.
Magoya Konjra Hareka Self Help Group (MAKOHAA)	Kenya	2016	Sector: Solar Summary: Magoya Konjra Hareka Self Help Group (MAKOHAA) is installing a 12 kilowatt hydropower plant (with the potential for expansion to 700 kilowatts in the future) to connect 300 households, an irrigation system, and a refrigeration system. The residents of Magoya and Rambulla sub-locations of Siaya County have experienced persistent challenges in connecting to the national grid.
Renewable World East Africa	Kenya	2016	Sector: Solar Summary: Renewable World East Africa is constructing a 4.8 kilowatt solar energy hub that will connect 50 households and 5 micro-enterprises. In addition, they will create a solar water pump that will provide up to 20,000 liters of irrigation water per day. They will work with the local community to establish an Energy Management Committee who will maintain and manage revenue collection from households and micro-enterprises.
Alternative Energy Inc.	Liberia	2014	Sector: Solar Summary: Alternative Energy Inc. is installing mini off-grid solar systems for 90 households, 5 classrooms in 1 school, 1 clinic/drugstore, 11 shops, and 5 streetlights in Galama Town. This will greatly benefit the town and it's 2,750 residents, who currently have no access to basic energy services and rely on towns at least 25 miles away to purchase kerosene for homemade lamps and dry cell batteries.
Ecovillage Community Improvement Association, Inc.	Liberia	2014	Sector: Solar Summary: Ecovillage is deploying a 50 kW off-grid solar mini-grid, which will include DC to AC inverters and a distribution network with direct connections for households and businesses within 1 kilometer radius, and 2 small kiosks for affordable pay-as-you-go battery charging. Businesses and households with a direct connection will pay a small monthly fee and discounted power will be provided for schools and security lighting.
Liberia Engineering and Geo-Tech Consultants Company	Liberia	2014	Sector: Solar Summary: Liberia Engineering & Geo-Tech Consultants Company is currently providing electricity at a small scale to 13 households using a fuel based generator in the town of Totota, central Bong County. This project expands these activities by constructing a stand-alone PV 25 KW solar plant to serve 50 households through a mini grid, for which households will pay a small monthly fee based on metered usage of electricity.

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Liberian Energy Network (LEN)	Liberia	2016	Sector: Solar Summary: LEN is selling solar lanterns and solar home systems to members of the Firestone Agricultural & Workers' Union of Liberia (FAWUL). Solar lanterns will be paid by households on a two month installment plan, with the payments coming directly out of the customers' monthly salary.
Afe Babalola University (ABUAD)	Nigeria	2014	Sector: Hydro Summary: ABUAD of Ado-Ekiti is conducting a feasibility study to construct a renewable hydropower plant. The benefits of the hydropower plant will go to the university community and neighboring community settlement with a population of over 10,000. The feasibility study is the first step towards building a hydropower plant and consists of a detailed project report and an environmental impact assessment.
TransAfrica Gas and Electric (TAGE)	Nigeria	2014	Sector: Solar Summary: TAGE is constructing a standalone cold storage facility for the preservation of all types of vegetables, fish, and poultry. In addition, the facility will be equipped for ice making. The facility will be powered by an 8 kilowatt (kW) solar photovoltaic system. Farmers will then pay a small fee to warehouse their products and will purchase ice to preserve daily produce.
GVE Project Limited	Nigeria	2014	Sector: Solar Summary: GVE Projects Limited is expanding on their 6 kilowatt solar pilot project by providing electricity to an additional 140 homes in Egbeke community. Sixty homes will receive electricity by a direct connection to the solar electricity system and an additional eighty homes that are far from the electricity grid will receive electricity by portable battery home kits.
Ginphed Nigeria Limited	Nigeria	2014	Sector: Biogas Summary: Ginphed is constructing a bio-digester to convert animal manure into biogas to be used for electricity generation, which would be sold to farms and agro-processing cottage industries in the surrounding communities. Currently, many farmers rely on cottage industry processing for their farm produce, but electricity from the national grid is unreliable and much processing is fueled either by firewood or by expensive diesel-powered generators, which cuts significantly into profit margins.
Quintas Renewable Energy Solutions	Nigeria	2014	Sector: Biomass Summary: Quintas is developing a 500 kilowatt biomass power plant which will take advantage of Ofosu community's agricultural and forestry residue, including sawdust from the four sawmills in the area, which have an abundance of sawdust and currently rely on expensive diesel to power their mills. The power plant will include a steam turbine, generator, and gasifier with combustor--with electricity being paid for through pre-paid meters.
Sky Resources	Nigeria	2014	Sector: Solar Summary: Sky Resources is developing a small solar micro-grid in Nawqu in Anambra State, for which users will pay on a per-use basis, supplying electricity for up to 75 small and micro businesses. The village will benefit from the project because it has a small but thriving small and medium enterprise community which currently relies on costly and unreliable diesel for much of its energy needs, which significantly increases enterprise operating costs.

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Topstep Nigeria	Nigeria	2014	Sector: Solar Summary: Due to increasing demand, Topstep is expanding their current solar maize mill processing station, expanding the existing processing capacity to 1,400 metric tons of maize per year by installing 5 processing stations located near the farmer's fields. Each station will have 3 high quality milling machines powered by solar energy as well as portable batteries charged and available for farmers to use at their homes for a fee.
Ajima Farms and General Enterprises Nigeria Limited	Nigeria	2015	Sector: Biogas Summary: Ajima Farms is constructing a biogas plant that will convert poultry, livestock, and other waste sourced from Ajima Farms and from other surrounding poultry farms into biogas. The biogas will fuel a biogas generator that will produce electricity for a mini-grid connected to households and small businesses.
Kunak Community Healthcare Foundation	Nigeria	2015	Sector: Solar Summary: Kunak is constructing a meat and fish market building, which will be powered by a 7.5 kilowatt solar PV system to power lights, fans, and refrigeration equipment for the local vendors. The building will be used by vendors in the Yakowa market, who currently have no reliable refrigeration units or product storage areas for fish and meat.
Sosai Renewable Energies Company Limited	Nigeria	2016	Sector: Solar Summary: Sosai Renewable Energies Limited is installing two 10 kilowatt mini-grids, two solar kiosks, and two solar tunnel dryers in Kadabo and Baawa, two small villages in Kaduna State. The mini-grids will generate electricity for 50 households in the villages, providing them with light and potential for charging phones and other devices. The solar dryers will be used for drying agricultural produce to ensure that it doesn't get spoiled by dust or animals.
GoSolar Africa Limited	Nigeria	2016	Sector: Solar Summary: GoSolarAfrica Ltd is constructing a 5 kilowatt solar kiosk in each of five communities in Oyo State. The solar kiosks will provide solar powered refrigeration and freezing 24 hours a day. In addition, the kiosks will be able to charge cell phones and power transistor radios for community members.
Arnergy Solar Limited	Nigeria	2016	Sector: Solar Summary: Arnergy Solar Limited is selling solar home systems in the small village of Sob Maashi using a pay-as-you-go model. This will give community members access to basic lighting systems, radio, mobile phone charging, televisions, and other productive activities. It will also allow students to study at night, and will reduce the risk of respiratory diseases by limiting kerosene and fossil fuel lighting solutions.
Havenhill Synergy Limited	Nigeria	2016	Sector: Solar Summary: Havenhill Synergy Limited is building a 16 kilowatt solar mini-grid system to provide electricity and clean water to the small village of Kigbe. Providing electricity through a solar mini-grid will allow for community members to have light without the negative health implications associated with fossil fuels. Likewise, teachers will be able to adequately prepare their lessons, and students will be able to study longer

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Dassy Enterprise	Rwanda	2016	<p>Sector: Solar</p> <p>Summary: Dassy Enterprise is installing solar cold storage for 40 dairy and livestock processing units, as well as solar lighting and chargers for off-grid farmers in the Gishwati Highlands. By providing solar lights to 900 low-income residents, installing solar-powered cold storage for 40 farms groups, and providing 5 businesses with solar-powered hot water heaters, Dassy will strengthen the dairy and farming value chains in the Gishwati Highlands through reduced spoilage and product loss.</p>
RENERG Limited	Rwanda	2016	<p>Sector: Solar</p> <p>Summary: RENERG Limited is installing a 30 kilowatt solar micro-grid to generate electricity for 120 households in Muganza Community in Banda Cell, a small village 20 miles from the national grid. The micro-grid will reduce the community's reliance on kerosene lamps and candles for light, which present health, environmental, and safety issues and hamper educational and business opportunities in the community.</p>
Serve and Smile Limited	Rwanda	2016	<p>Sector: Solar</p> <p>Summary: Serve and Smile is selling 1,110 solar home systems to rural households in eight districts across Rwanda. After 12 months, Serve and Smile is expected to have sold 1,110 solar home systems to residents of eight different districts across Rwanda, allowing customers to pay a small deposit at the time of purchase and pay off their balance in installments to a local agent.</p>
Jamii Power Limited	Tanzania	2014	<p>Sector: Solar</p> <p>Summary: Jamii Power Limited is expanding its existing 11 kilowatt solar mini-grid in remote northern Tanzania to 33 kilowatts, and also to field-test and deploy a new smart meter prototype, which will give mini-grid operators the capacity to remotely monitor current, limit loads, cluster metering, and detect non-technical losses.</p>
L's Solution Limited	Tanzania	2014	<p>Sector: Solar</p> <p>Summary: L's Solution is installing and operating a 12-kilowatt solar PV power plant that will supply electricity to over 120 households, businesses, health centers, and schools. The solar mini-grid will provide first time access to electricity to residents in rural Samunge village, which falls within the border of Ngorongoro National Park and is about 60 km from the national grid.</p>
Lung'ali Natural Resources Company (LNRC) Limited	Tanzania	2014	<p>Sector: Hydro</p> <p>Summary: LNRC is establishing a revolving credit facility for households to pay a small upfront connection fee to their 2.4 Megawatt hydroelectric dam, and then repay the loan in quarterly installments over time. Currently, many households cannot afford the connection fees of up to \$500 to connect to the distribution network.</p>
Space Engineering	Tanzania	2014	<p>Sector: Solar</p> <p>Summary: Space Engineering is developing a 40 kW hybrid solar-biomass power plant, to use a combination of biomass gasification (rice husks and maize cobs) and solar to power the community of Mbeya 24 hours a day. For Mbeya's 500 households currently without electricity, the electricity from this project will be distributed through a mini-grid to households, schools, a health center, and local businesses.</p>

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Tanzania Human Development Foundation (TAHUDE)	Tanzania	2014	Sector: Biogas Summary: TAHUDE is establishing a revolving loan fund for the construction of 71 bio-digesters powered by cow dung in Karatu, in the Arusha region of Tanzania. Each of the bio-digesters will provide enough fuel to power a stove and a lantern for one day. 71 loans will be issued in the first year of the project and 78 loans will be issued in the second year of the project. The grant from Power Africa/USADF will be used to fund the revolving loan scheme for the bio-digesters.
Benedictine Sisters of St. Gertrude Convent Imilwaha	Tanzania	2015	Sector: Hydro Summary: The Benedictine Sisters of St. Gertrude Convent, Imilwaha, are developing a 317 kilowatt small hydroelectric power plant project, based on their experience running a similar power plant for the past three decades. The hydroelectric plant will allow rural households to access low-cost, sustainable electricity for the first time. Since many households cannot afford the connection fees of up to USD 500 to connect to the distribution network, USADF is funding the creation of a revolving credit facility for households to pay a small upfront connection fee, and then repay the loan in quarterly installments.
SESCOM	Tanzania	2015	Sector: Biomass Summary: SESCO is installing a 20 kilowatt micro-grid powered by biomass (primarily maize cobs) in rural Kibindu village in eastern Tanzania. By replacing diesel and kerosene energy with access to a biomass gasifier-based grid, households that currently spend 30% of their monthly income on lighting will experience significant cost savings that can be used to improve livelihoods and reduce poverty.
Maasai Pastoralist Development Organization (MPDO)	Tanzania	2015	Sector: Solar Summary: MPDO is installing solar PV systems at seven Maasai schools in rural northern Tanzania, providing reliable electricity to students, teachers, and the surrounding community. They will establish an off-grid energy credit fund in the community for further expansion in areas where population density is low and reaching pastoralist communities is difficult.
Watumia Umeme Cooperative Society	Tanzania	2015	Sector: Solar Summary: WUCS is working with a technical partner to install a 10-kilowatt solar micro-grid in Masimbwe, which will provide households with solar power and replace kerosene and firewood as primary fuel sources. USADF has funded the cooperative to create a solar micro-grid for thirty houses and one micro-enterprise, to be run by the cooperative.
Galaxy Energy Solutions Limited	Tanzania	2016	Sector: Solar Summary: Galaxy Energy Solutions Limited is installing a solar mini-grid in the small farming villages of Kalamba, Mkanoge, and Tipo. The solar mini-grid will be connected to one school, one health center, two water pumps, and 150 households, creating access to energy and clean water for 3,500 villagers.
Nishati Associates Limited	Tanzania	2016	Sector: Hydro Summary: Nishati Associates Limited is installing a 68 kilowatt micro-hydropower mini-grid in Ludilo, a remote village in Makete District. The hydro-power mini-grid will be connected to over 200 households and businesses in the village, which will improve the economic potential of local businesses, reduce respiratory diseases from indoor use of kerosene and fuelwood, and benefit the local primary school and its students.

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Ageco Energy and Construction Limited	Tanzania	2016	Sector: Biomass Summary: Ageco Energy Limited is installing a 32 kilowatt biomass gasification system in Magungumka Village, a rice-farming community. The biomass gasifier will be powered by rice husks, which will eliminate existing pollution problems associated with their improper disposal, and will provide power to 200 households and businesses.
Ensol Tanzania Limited	Tanzania	2016	Sector: Solar Summary: Ensol (T) Limited is installing a 50 kilowatt Solar Hybrid Micro-grid plant to electrify 200 households and 29 additional institutions and small businesses in Mpale village. Providing electricity through a solar mini-grid will allow community members to use power products, provide light at night, and dramatically reduce the prevalence of fossil fuels in Mpale.
GRS Commodities	Uganda	2016	Sector: Solar Summary: GRS Commodities Limited is installing an additional 40 kilowatts of solar generation capacity on the Ssese Islands of Lake Victoria. By adding an additional 100 households and 50 more businesses, the project will increase access to local and sustainable sources of electricity, foster business creation, and improve household income by providing energy that can be purchased for less than the price of fossil fuels currently being used.
Green Heat Limited	Uganda	2016	Sector: Biogas Summary: Green Heat Limited is installing 20 biogas digesters to pasteurize and store milk on farms in the Teso region of Eastern Uganda. By installing biogas digesters on farmland, Green Heat will enable farmers to use the manure from their own livestock to power milk pasteurization and cooling equipment, strengthening the dairy value chain and reducing poverty through sustainable economic growth.
OneLamp Limited	Uganda	2016	Sector: Solar Summary: OneLamp Limited is creating a mobile phone platform that allows rural households to purchase solar products, which can be delivered directly to their door. Using the existing transportation infrastructure, OneLamp Limited's mobile phone platform will allow low-income, off-grid households to access an on-demand service for clean energy products that can be delivered to their doorstep.
Buntungwa Ventures Limited	Zambia	2016	Sector: Solar Summary: Buntungwa Ventures Limited is selling solar home systems to 450 households in the satellite villages near Mansa, with an estimated total generation capacity of 28 kilowatts. They will use a Pay-As-You-Go business model, which allows consumers to steadily pay for their system over time.
Muhanya Solar Limited	Zambia	2016	Sector: Solar Summary: Muhanya Solar Limited is installing a 20 kilowatt solar micro-grid in Sinda Village, in Zambia's Eastern Province. The micro-grid will provide energy to 60 families, a school, and small businesses in Sinda, which Muhanya hopes will provide an economic spark for the community and a blueprint for replicable micro-grids in rural areas in Zambia.
SuperRich Limited	Zambia	2016	Sector: Hydro Summary: SuperRich is installing three innovative hybrid hydro-solar systems on the Zambezi River, the first of 12 units which will ultimately have a generational capacity of 60 kilowatts. The systems utilize a unique floating turbine technology which floats on the surface of the river and does not require extensive civil works.



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