

RESEARCH AND DEVELOPMENT FUND PROJECT SPOTLIGHT

ANGAZA

AN OPEN-SOURCE SOFTWARE TO ALLOW COMMUNICATION BETWEEN OFF-GRID APPLIANCES

This project will develop software that will allow off-grid appliances to communicate with power generation systems and cloud services securely. Angaza will release this as an open-source product, will be available for new off-grid appliances in development.

Given the increasing diversity of off-grid software and hardware in the off-grid industry, it is challenging to ensure that products and services are compatible. Angaza aims to address this problem by developing secure, inter-device communication software to function in an off-grid setting. This has the potential to transform the industry by providing a common 'language' for off-grid products and services to communicate with. The software will enable consumers to connect off-grid appliances made by different manufacturers and access cloud services of their choice.

Pay-As-You-Go (PAYGo) financing is a crucial tool in enhancing energy access in off-grid areas. As consumers use more appliances, however, it will be challenging for them to manage the energy requirements and running cost of each product. Angaza will address this by introducing software that will help manage multiple devices. The software will collect performance data to detect and troubleshoot device problems remotely. It will be compatible with smartphones, which will reduce costs further for consumers. By implementing this software, appliances will last longer and be cheaper to run. This will mean that consumers can access more appliances.

Last-mile distributors will be able to detect problems and troubleshoot devices remotely by collecting performance data from the consumer's appliance. This will result in more efficient and cost-effective management of multiple PAYGo appliances for customers. The open nature of the protocol will encourage device manufacturers to build innovative functionality into their products in a standards-compliant way. This will benefit the entire industry.



AT A GLANCE

R&D Awardee
Angaza

**Efficiency for Access
Funding**
£237,613

**R&D Funding Unlocked
from Angaza**
£237,613

Project Locations
USA, Africa