

EFFICIENCY FOR ACCESS

A COALITION TO ACCELERATE GLOBAL ENERGY ACCESS THROUGH ENERGY- EFFICIENT APPLIANCES

Due in large part to the improved efficacy and cost of the super-efficient LED, the quickly emerging off-grid solar market has delivered energy access to tens of millions of off- and weak-grid households and businesses worldwide. With similar shifts in efficiency and cost, other appliances appropriate for off- and weak-grid settings can enable consumers to reach even higher levels of energy access faster.

The Efficiency for Access Coalition recognises the increasing demand for modern energy services and is seizing the opportunity to scale up markets for super-efficient products by supporting technological innovation and improving sector coordination. In this way, the Coalition supports a number of the United Nations' Sustainable Development Goals (SDGs), in addition to SDG7 – access to affordable, reliable, sustainable, and modern energy for all.



28% of food produced in the developing world is wasted.

Cold chain refrigeration manages the temperature of perishable goods, maintaining quality and safety in the supply chain, reducing food loss, and increasing food supplies.

The Global LEAP Off-Grid Cold Chain Challenge is an international competition to identify and promote the most energy-efficient, cost-effective cold storage technologies across sub-Saharan Africa. Prizes totaling £250,000 will be awarded to entrepreneurs that develop innovative technologies that will stimulate advances in cold chain markets.

In partnership with Energy 4 Impact, we will launch the second round of the [Off-Grid Cold Chain Challenge](#) in March 2019.



Nearly a quarter of primary health centers in sub-Saharan Africa have no access to electricity.

Distributed solar energy systems equipped with high quality, super-efficient appliances can provide reliable access to health services for centers that currently lack it.

The Clinton Health Access Initiative and the Efficiency for Access Coalition are researching the co-benefits to health and climate change from low-cost solar clinic electrification.

[Visit our website](#) to learn more about how we are working to improve the availability and quality of primary health services.



40% of the global population relies on agriculture as its main source of income.

Improving farm productivity has a direct impact on poverty alleviation. Efficient, affordable, agricultural technologies can increase crop yields and enhance food and income security.

The Coalition's **Solar Water Pump Technical Working Group** brings key industry stakeholders together to develop a technology roadmap, which will shape our R&D funding and market development programmes for solar pumps.

If you are interested in joining our next Technical Working Group meeting, please express your interest [here](#).



EFFICIENCY FOR ACCESS COALITION

A coalition promoting energy efficiency as a potent catalyst in global clean energy access efforts.

Efficiency for Access was first launched in 2015 as a year-long call to action and collaborative effort led by Global LEAP & Sustainable Energy for All. Now, a number of donors have joined together under a scaled-up Efficiency for Access. [Coalition member programmes](#) aim to catalyse the uptake of appliances and technologies with the potential to increase the affordability and delivery of modern energy services. Current Efficiency for Access Coalition members have programmes and initiatives spanning three continents, 44 countries, and 19 technologies.



The Efficiency for Access Coalition is coordinated jointly by CLASP, an international appliance energy efficiency and market development specialist not-for-profit organization, and the UK's Energy Saving Trust, which specializes in energy efficiency product verification, data and insight, advice, and research.



INVESTOR NETWORK

Efficiency for Access and Acumen have partnered to create the [Efficiency for Access Coalition Investor Network](#), a group of almost 20 leading investors who have expressed strong interest in making investments into companies working on “productive use”, or income-generating, appliances, but first want to gain stronger market insights. The Efficiency for Access Investor Network seeks to break down barriers so that investors can pinpoint where the off-grid appliance market needs to further mature, and where capital can be instrumental in bringing productive use technologies closer to commercial viability.

If you are interested in joining the the Efficiency for Access Investor Network or becoming a Programme Partner, please contact info@efficiencyforaccess.org.



PROGRAMME PARTNERS

To ensure the Coalition has appropriate touchpoints and feedback mechanisms across the various stakeholders comprising the energy access space, and useful insights into the technologies and markets of focus, we work in partnership with a number of influential amplifiers, media outlets, and industry representatives, and specialists. These [Programme Partners](#) provide advice, consultation, and review of programmatic activities taken up under the Coalition, as well as support around communication and dissemination activities.

Collaborate with us to change the way the world accesses energy-dependent technologies.

EFFICIENCY FOR ACCESS COALITION INITIATIVES

CENTRAL AMERICA

AFRICA

SOUTH ASIA

COALITION MEMBERS

UK aid

Power Africa

Acumen

DOEN Foundation

Emerging Development

ESMAP

Good Energies Foundation

IFC

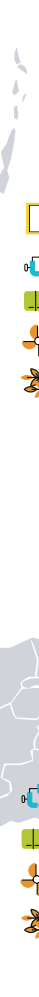
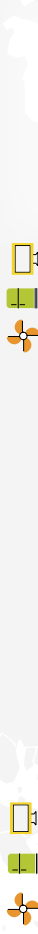
Rockefeller Foundation

Shell Foundation

Swedish International Development Agency (Sida)

USAID

World Bank



TECHNOLOGIES

- Advanced Electric Cooking
- Advanced Refrigeration
- Agricultural Processing
- Efficient Biodigesters
- Brushless DC Motors
- Cold Chain Technologies
- Connectivity & Internet of Things
- Energy Efficient Storage

- Fans
- Health Technologies
- Interoperability & Compatibility
- Milk Chilling Unit
- Refrigerators
- Solar Sewing Machines
- Solar Water Pumps
- Solid State Lighting

- LED Fishing
- Televisions
- Efficient Cookstoves
- All Off-Grid Appliances

FEATURED COALITION PROGRAMMES

OFF-GRID APPLIANCE DATA PLATFORM

Inconsistent and incomparable product performance data prevents market actors from making effective and informed decisions. Developed with support from UK aid and Good Energies, the [Off-Grid Appliance Data Platform](#) is a resource for manufacturers and consumers seeking independent evidence of appliance performance and quality. The platform samples off-grid appliances from retail markets; tests them according to international best practices; and works with market stakeholders to interpret, share and use the data.

170

product models across off-grid TVs, fans, and refrigerators are included in the Data Platform to date.

“Making sense of the technical specifications and test methods of the solar appliances is one of the best gifts you could provide to the off-grid community.”

Gianluca Cescon
Co-Funder, Devergy

GLOBAL LEAP OFF-GRID APPLIANCE PROCUREMENT INCENTIVES PROGRAMME

The [Global LEAP Off-Grid Appliance Procurement Incentives programme](#), funded by Power Africa, the US Department of Energy, and Energising Development, accelerates the global off-grid appliance market by incentivising manufacturers and distributors to supply large quantities of winning and finalist products from the Global LEAP Awards cycles. The pilot round launched in Bangladesh in 2016 and expanded to East Africa in 2017. A new window of incentives will launch after the conclusion of the 2019 Global LEAP Awards for solar water pumps and off-grid refrigerators.

>245,000

best-in-class off-grid appliances have been purchased as part of the procurement incentives programme.

“The prizes were a major factor in our decision to participate in the Global LEAP Awards and improve our devices.”

David Bergeron
Founder and President,
SunDanzer Refrigeration

RESEARCH & DEVELOPMENT PROJECTS

The Efficiency for Access Coalition, with funding from UK aid, is investing in [Research & Development projects](#) that have the potential to improve the availability, affordability, efficiency, and performance of a range of energy efficient appliances suited to developing country contexts. The first round of the R&D grants, worth at least £1 million, is expected to increase with potential co-funding from other donors. Over the life of the programme, we will run three additional R&D grant rounds.

>£1M

in funding is available for the first round, with grants ranging from £50,000 to £200,000 per project.

“The expansion of energy access has, as of yet, not benefited the world’s cooks. With R&D funding for the development of super efficient electrical cooking appliances, we can provide products that nurture life.”

Peter Scott
Founder and CEO, BURN
Manufacturing

LOW-ENERGY INCLUSIVE APPLIANCES PROGRAMME



The flagship programme under the Efficiency for Access Coalition, the [Low-Energy Inclusive Appliances \(LEIA\) programme](#) supports research, innovation, and market development interventions that seek to double the efficiency and halve the cost of a range of electrical appliances suited to off- and weak-grid household and small business consumers.

Supported by UK aid, LEIA was designed with extensive industry consultation regarding the specific challenges and opportunities of the off-grid appliance market.

Over the next four years, LEIA will focus on accelerating the availability, affordability, efficiency, and performance of four near-to-market products (refrigerators, televisions, fans, and solar water pumps) and five cross-cutting horizon and enabling technologies (brushless DC motors, advanced electric cooking, advanced refrigeration technologies, interoperability, and internet of things).

Implementing Activities for Two Near-to-Market Technologies



SOLAR WATER PUMPS



REFRIGERATORS



MARKET STIMULATION & INCENTIVES

Awards and prizes that identify, reward, and promote innovative new technologies and best market actors.

2019 Global LEAP Awards Competitions



PRODUCT TESTING & QUALITY ASSURANCE

Appliance performance data and global market trend reports that enable actors throughout the supply chain to make informed business decisions.

Develop quality standards and quality assurance framework

Sample products from retail markets and test performance in laboratories

Publish data on product performance

Build test lab capacity

Develop field and lab test protocols



COORDINATION, COMMUNICATION & MARKET EDUCATION

Facilitation of knowledge sharing, and amplification of existing projects' contributions to the energy access agenda.

Facilitate dialogue with donors to leverage co-funding and guide programmatic activities

Convene market actors to strengthen networks and share information

Publish quarterly industry bulletins that summarize relevant Efficiency for Access Coalition activities



MARKET INTELLIGENCE & TECHNOLOGY ROADMAPPING

Field and test lab research to address gaps that characterise off-grid consumers and markets and measure the socioeconomic impacts of appliances.

Collaborate with companies on research to enable acquisition of new customers

Market segmentation to identify likely/viable customer groups

Convene Technical Working Group

Develop technology roadmaps

Publish global market trends reports

Measure socioeconomic impacts of technology adoption



R&D CO-INVESTMENT & PARTNERSHIPS

Research and Development funding to accelerate innovation in off-grid appliance technologies.

Second call for proposals starting in April 2019