



# The Global Lighting and Energy Access Partnership (Global LEAP)

# Modern Energy Services Unlock Global Benefits

Globally, 1.2 billion people live without access to electricity, and another billion have only unreliable access. These unand under-electrified "off-grid" people are typically among the world's poorest and must rely on fuels like kerosene and diesel for their daily energy needs.

Clean energy technologies—ranging from small solar portable lanterns and pico-lighting systems to larger standalone energy systems and mini-grids—provide off-grid communities with higher-quality energy services, displacing pre-modern fuels and delivering numerous health, environmental, and socioeconomic benefits.

Achieving universal energy access will require unprecedented investments, and aid-based development models are inadequate to the scale of the challenge. Markets that enable private sector delivery of energy services must be developed.

## **About Global LEAP**

Global LEAP – the Clean Energy Ministerial's energy access initiative, which is led by the U.S. Department of Energy – catalyzes markets for clean energy access products and services through efforts focused on quality assurance, promotion of demand-side super-efficiency, and partner collaboration.

Global LEAP was launched as a commitment to the United Nations' Sustainable Energy for All campaign, and its programs and initiatives support the growth of sustainable commercial markets for clean energy products and services throughout the developing world.

#### **Core Efforts**

- Supporting quality assurance frameworks for off-grid energy products and services, which builds consumer and investor confidence
- Enabling the uptake of super-efficient off-grid technologies, which reduce energy supply costs
- Facilitating programmatic, policy, and research collaboration among energy access stakeholders







## Major Work Streams (2015-16)

### Quality Assurance of Off-Grid Solar Products and Mini-Grid Solutions

Markets for off-grid energy solutions have grown rapidly in recent years. However, the quality of off-grid products and services is inconsistent. Sub-standard products erode consumer trust and inhibit market growth. The quality assurance efforts supported by Global LEAP ensure that off-grid energy solutions deliver as promised.

- Lighting Global Quality Assurance Framework: Partnering with the World Bank and the International Finance Corporation, Global LEAP has supported the development and implementation of a global quality assurance framework for small-scale solar lighting devices. This quality assurance framework has enabled rapid development of the off-grid lighting market—sales have grown more than 100% per year, and the market share of quality-assured devices is now over 40%.
- Mini-Grids Quality Assurance Framework: Global LEAP is supporting the development of a quality assurance framework for mini-grids that will define standard technical thresholds for power quality, reliability, and availability that are appropriate for different tiers of end-user needs, and specify a common accountability and performance reporting framework. Data generated through implementation of the framework will provide the foundation for comparisons across projects, assessment of impacts, and greater confidence that will drive investment and scale-up in this sector.

# Developing the Market for Super-Efficient Off-Grid Appliances & Equipment

Energy efficiency is a powerful, but regularly overlooked driver of energy access. Super-efficient appliances and equipment require much less energy and therefore dramatically reduce the need for and costs of energy supply investment. Global LEAP works to develop the global market for high-quality, super-efficient off-grid appliances and equipment, which is essential to energy access efforts.

Awards & Incentives: The Global LEAP Awards identify and promote quality-assured, super-efficient off-grid appliances—products that drive and sustain demand for off-grid energy systems by offering off-grid populations better service at lower total cost. Through an innovative new partnership with Energising Development, resultsbased financing incentives and market development activities will accelerate entry of these products into crucial off-grid markets.

- Market & Technical Research: Global LEAP sponsors a range of market research and analysis efforts to increase understanding of key needs, trends, barriers, and opportunities in the nascent off-grid appliance market. For example, Global LEAP supported a recent study by Humboldt State University and Lawrence Berkeley National Laboratory that found that superefficient appliances can reduce the upfront costs of off-grid solar home systems by up to 50%.
- Market Development: Global LEAP undertakes a variety of efforts that help develop the market for high-quality, super-efficient off-grid appliances. Global LEAP is developing test methods for off-grid televisions and fans, and hosts business-to-business networking events to connect appliance manufacturers and off-grid energy companies. Through a new partnership with the ClimateWorks Foundation and CLASP, Global LEAP is creating a program to test off-grid appliances for their performance, and share the resulting data with industry, investors, and policymakers to facilitate informed decision-making and market action.

#### **Partner Collaboration**

Global LEAP works with public and private stakeholders to catalyze commercial markets for energy access solutions.

- Global LEAP member governments include Italy, Japan, South Africa, the United Kingdom, and the United States.
- Multilateral development institution partners include the African Development Bank, Global Environment Facility, International Finance Corporation, United Nations Development Programme, United Nations Environment Programme, and the World Bank.
- The Energy and Resources Institute, David and Lucile Packard Foundation, Department for International Development of the United Kingdom, Infrastructure Development Company Limited, Power Africa, Shell Foundation, and the United Nations Foundation are development partners.
- There are more than 130 private sector and civil society supporters of Global LEAP's Guiding Principles.

