Fact Sheet: Global Lighting and Energy Access Partnership

Overview

The Global Lighting and Energy Access Partnership (Global LEAP)—the energy access initiative of Clean Energy Ministerial (CEM)—catalyzes clean energy access markets through efforts focused on product quality assurance, promotion of demand-side super-efficiency, and partner collaboration. In a world where more than one billion people lack access to electricity, donor aid is inadequate to the scale of the need. The public sector's role must be to encourage market development and catalyze private sector delivery of energy services, across a variety of clean energy technology pathways. Since its launch at the third Clean Energy Ministerial (CEM3), Global LEAP and its partners have made significant progress in fostering clean energy access markets around the globe, benefitting millions of un-served and under-served off-grid populations.

Key Activities

- **Quality Assurance:** Global LEAP catalyzes markets through support for quality assurance frameworks for off-grid energy products and services, which build consumer and investor confidence.
- **Off-Grid Super-Efficiency:** Global LEAP enables the uptake of super-efficient off-grid technologies, which reduce energy supply costs.
- **Collaboration:** Global LEAP facilitates programmatic, policy, and research collaboration among energy access stakeholders.

Progress and Accomplishments

I. Support for Quality-Assurance Efforts in Off-Grid Markets

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.

- Global LEAP has supported the technical team that developed and maintains the quality assurance framework for the Lighting Africa and Lighting Asia programs (jointly called Lighting Global), led by the World Bank and IFC. This quality assurance framework has helped enable the sale of 9.9 million quality-assured off-grid solar lighting products in Africa, Asia and the Pacific, benefiting over 47 million people in 32 countries.
- 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.

II. Global Market Development for Super-Efficient Off-Grid Appliances

By providing the reliable modern services that energy-poor consumers demand—and by dramatically reducing energy supply investments—high-quality, super-efficient off-grid appliances like LEDs, televisions, fans, and refrigerators support and expand markets for off-grid clean energy solutions. Super-efficient technologies maximize the delivery of energy service while minimizing the financial, social, and environmental costs of energy supply, making modern clean energy services affordable for vast new markets. Global LEAP is leading global efforts to build sustainable markets for quality-assured, energy-efficient off-grid appliances.

- The inaugural Global LEAP Awards identified the world's best, most energy-efficient off-grid color televisions and LED room lighting appliances. The highly efficient and quality assured off-grid appliances identified through this program will help grow and sustain demand for distributed clean energy technologies like off-grid solar home systems and mini-grids.
- Building on the success of the inaugural Global LEAP Awards, Global LEAP has partnered with Energising Development (EnDev), the International Finance Corporation, CLASP, and the Clean Energy Solutions Center on a groundbreaking off-grid appliance market development initiative. Through this effort, Global LEAP will run new, iterative Global LEAP Awards competitions to identify best-in-class, super-efficient off-grid TVs, fans, and potentially refrigerators; implement results-based financing (RBF) to incentivize off-grid solar companies in key national markets to make large, timely purchases of these appliances, generating market scale and clear market signals about the value of super-efficient appliances; and conduct a suite of industry matchmaking and market development activities to address policy, financial, and institutional barriers to market development.
- Through a new partnership with the ClimateWorks Foundation and CLASP, Global LEAP will support the design and implementation of an ambitious program to address information gaps in the off-grid appliance market. A data-rich, interactive platform will aggregate and make public a wide range of appliance product performance and market data. This effort will enable market stakeholders from investors to policy makers to evaluate and compare off-grid appliances and take market-appropriate business decisions or policy actions. Among other interventions, this program will enable policy action such as establishing standards, labels, and certifications, and it will be a significant and timely contribution to the recent U.S.-India bilateral agreement on super-efficient off-grid appliances.
- A first-of-its-kind off-grid appliance and clean energy system "PlugFest" and business to business networking event was held at the fifth Clean Energy Ministerial (CEM5) in Seoul on 13 May 2014. This event helped promote and market super-efficient, quality-assured Global LEAP Awards-winning products by bringing the world's leading off-grid appliance manufacturers and solar companies to network and share best practices—and it resulted in business deals between many of the attendees. Building on the success of the first, Global LEAP is partnering with Bangladesh Solar and Renewable Energy Association (BSREA) to organize a second off-grid industry networking event in Dhaka, Bangladesh, in July 2015. A third event will be held at the 4th International Off-Grid Lighting Conference and Exhibition in Dubai in October 2015.

- Developing off-grid appliance test methodologies is an essential early step in the market's development that will allow meaningful product evaluation comparison and will enable a suite of policy and market interventions. In collaboration with partners in academia, industry, and development and test laboratories, the Global LEAP program is in the process of developing the first-ever test methodologies for off-grid TVs and off-grid fans. These test methodologies will become essential tools for evaluating the relative quality, energy performance, and off-grid appropriateness of appliances, and they are expected to be widely adopted by off-grid markets in the coming years.
- To inform market development and action, Global LEAP is supporting several off-grid appliance research and analysis efforts. Emerging research by Humboldt State University and Lawrence Berkeley National Laboratory, "*A Home Energy System in just 25 Watts: Super-Efficient Appliances Can Enable Expanded Energy Access Using Off-Grid Solar Power System*," is a groundbreaking study analyzing super-efficient appliances' impacts on off-grid solar prices. Global LEAP is also leading an off-grid appliance market research effort looking at trends, opportunities, and challenges in the off-grid appliance market.
- At the Second Annual Sustainable Energy for All (SE4ALL) Forum in New York, on 18 May 2015, Global LEAP convened leaders from industry, development, government, and partner organizations including the World Bank, IFC, the United Nations Foundation and more to draw attention to the powerful, often overlooked and underutilized role of energy efficiency in energy access.

Other Recommendations

Through expanded research and analysis, communications, and partner engagement, Global LEAP plans to expand the global understanding of the critical role of quality assurance and end-use efficiency in energy access. Global LEAP wishes to expand its market-catalyzing successes in off-grid solar devices, appliances, and mini-grid markets to benefit micro-enterprise, health, agricultural, and other off-grid applications. Closer, more frequent engagement between energy ministries and their development agency counterparts would be a positive step.

Current Participants and Partners

Global LEAP member governments include Italy, Japan, South Africa, the United Kingdom, and the United States. Multilateral development institution partners include the World Bank, International Finance Corporation, African Development Bank, UN Development Program, and Global Environment Facility. The United Nations Foundation, the Energy and Resources Institute, and the UK Department for International Development are development partners. There are more than 120 private-sector and civil society supporters of the Global LEAP principles.