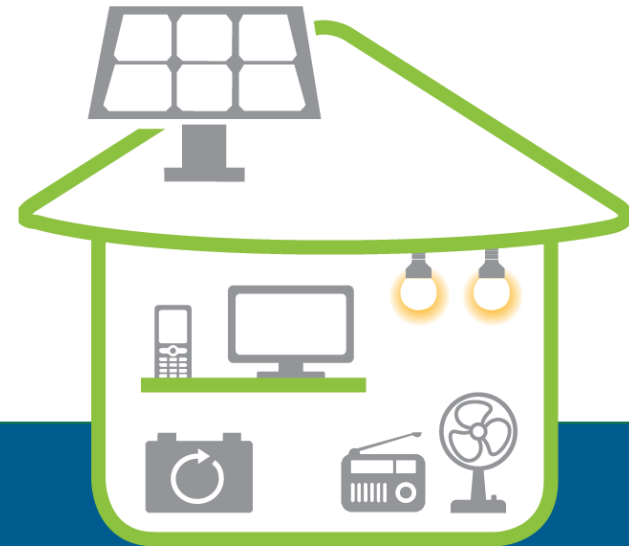


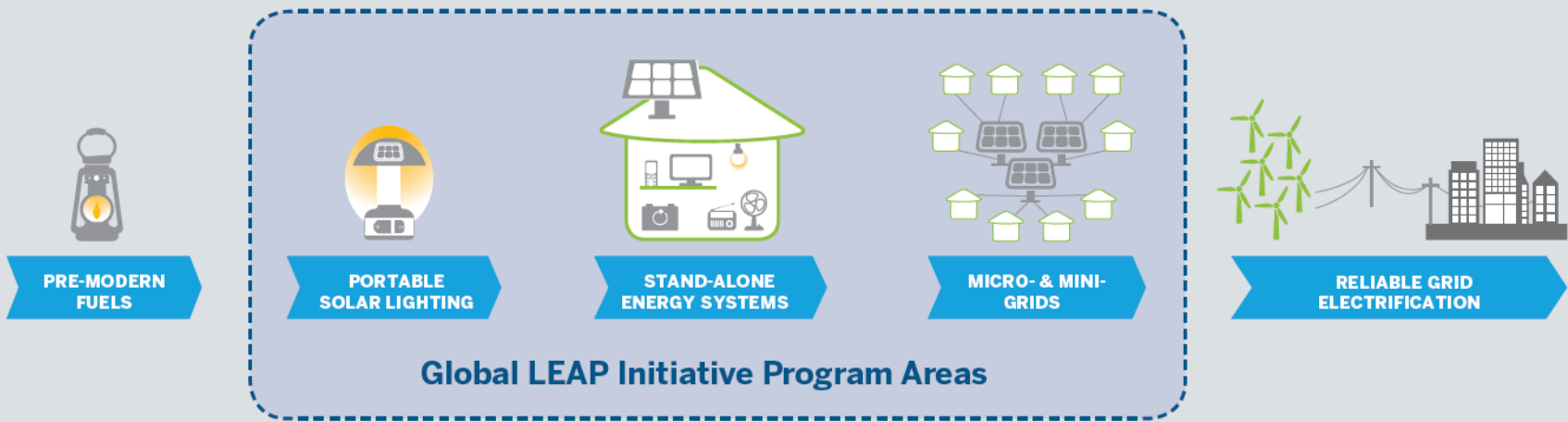
Global LEAP Off-Grid Appliance Programs

Accelerating the Global Off-Grid Appliance Market

Matt Jordan
Senior Manager – Clean Energy Access
CLASP



Global LEAP works by catalyzing markets for clean energy access products and services throughout the developing world.

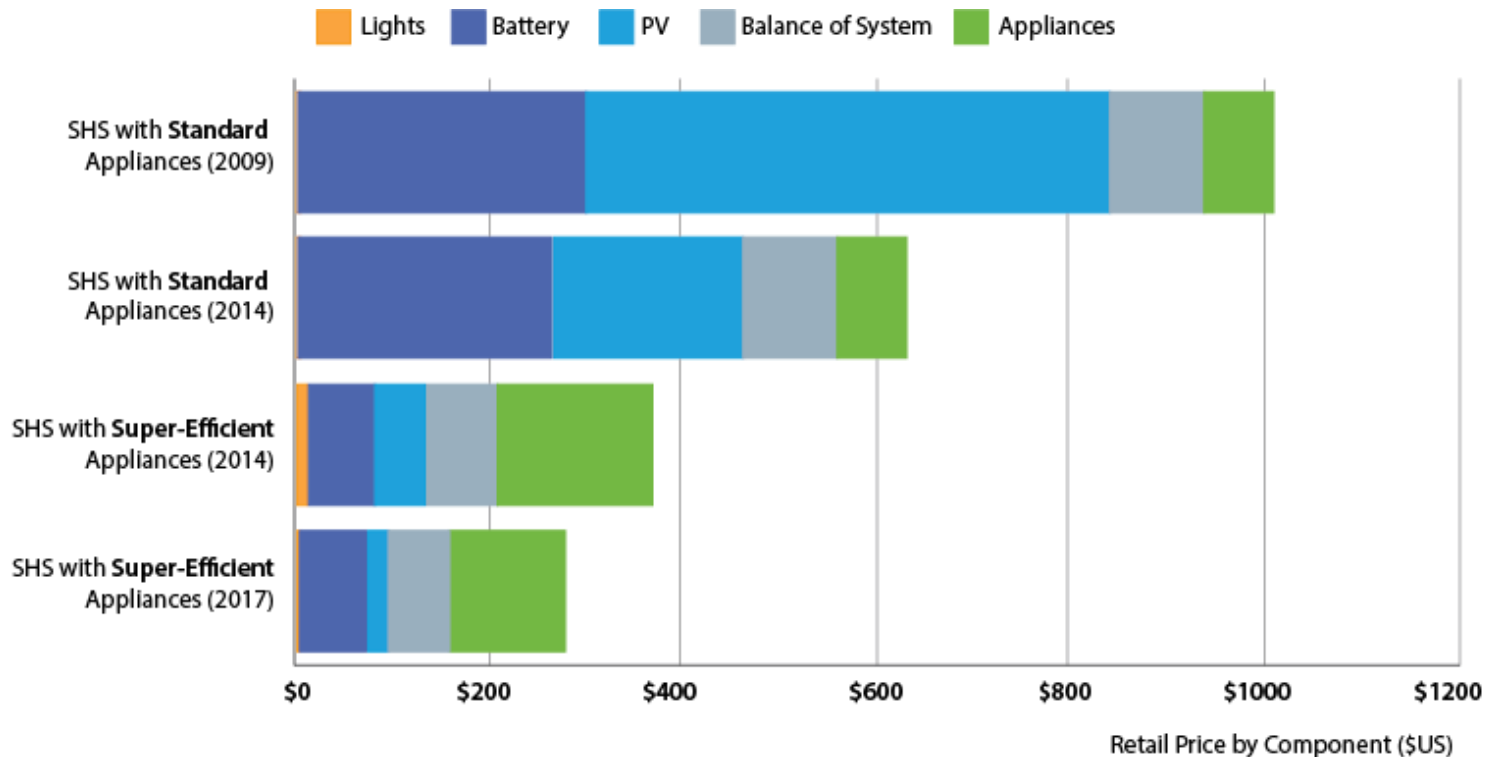


Core Global LEAP efforts :

- Supporting **quality assurance frameworks** for off-grid energy products and services
- Enabling the uptake of **super-efficient off-grid technologies**
- Facilitating **programmatic, policy, and research partnerships** among energy access stakeholders

Super-Efficient Appliances Drive Cost and Performance Benefits for Off-Grid Energy Systems

SHS Purchase Price Based on Appliance Type



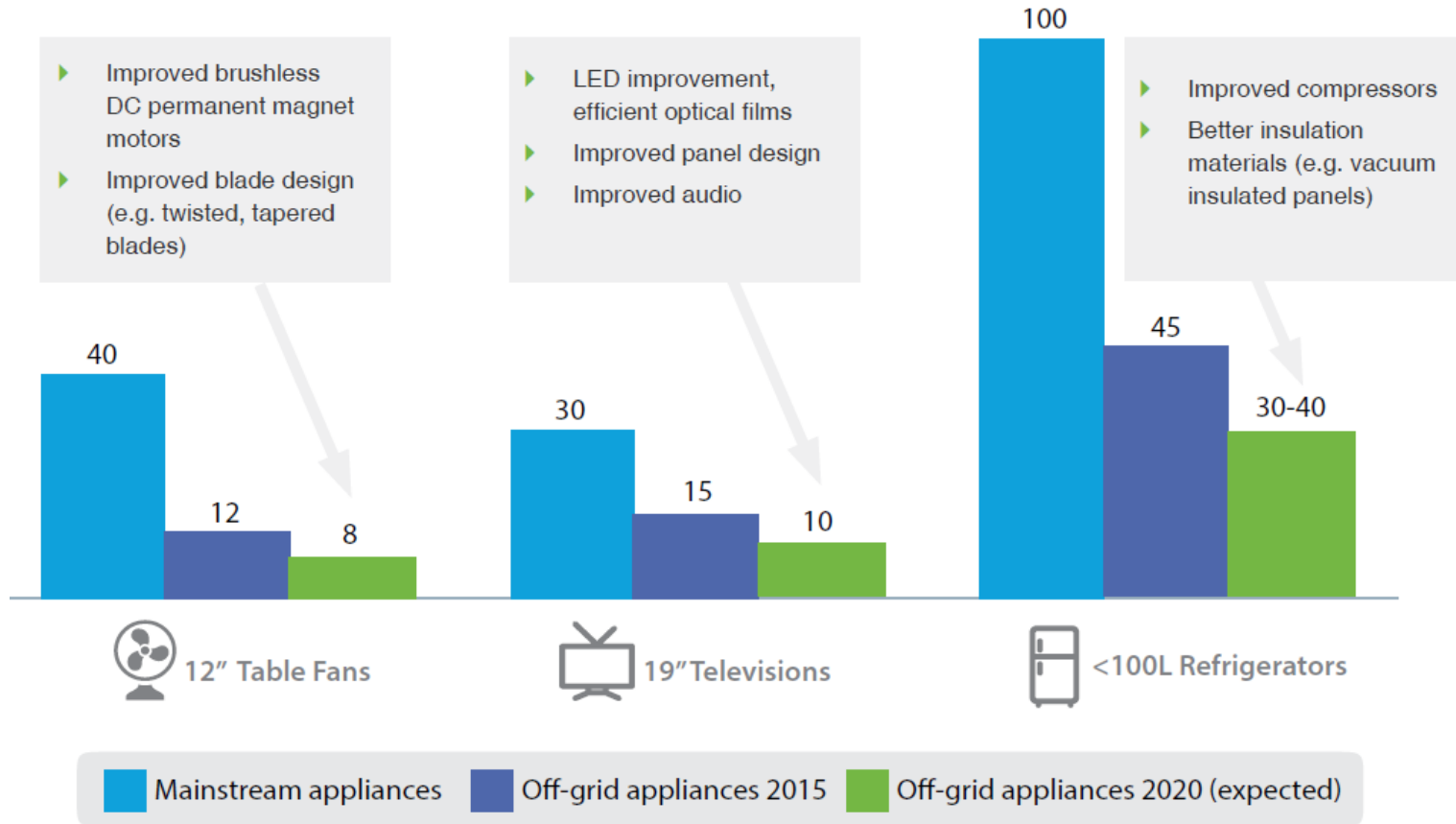
*Systems provide energy for 4 lights, a 19" color TV, a radio, and mobile phone charging

* Appliance use assumption: lights = 4hrs/day, TV = 3hrs/day, radio = 6hrs/day, mobile phone = 1 charge per day

Source: "A Home Energy System in just 25 Watts: Super-Efficient Appliances Can Enable Expanded Energy Access Using Off-Grid Solar Power Systems" (1.usa.gov/1K6yfyn)

Projected Efficiency Progress in Off-Grid Appliances

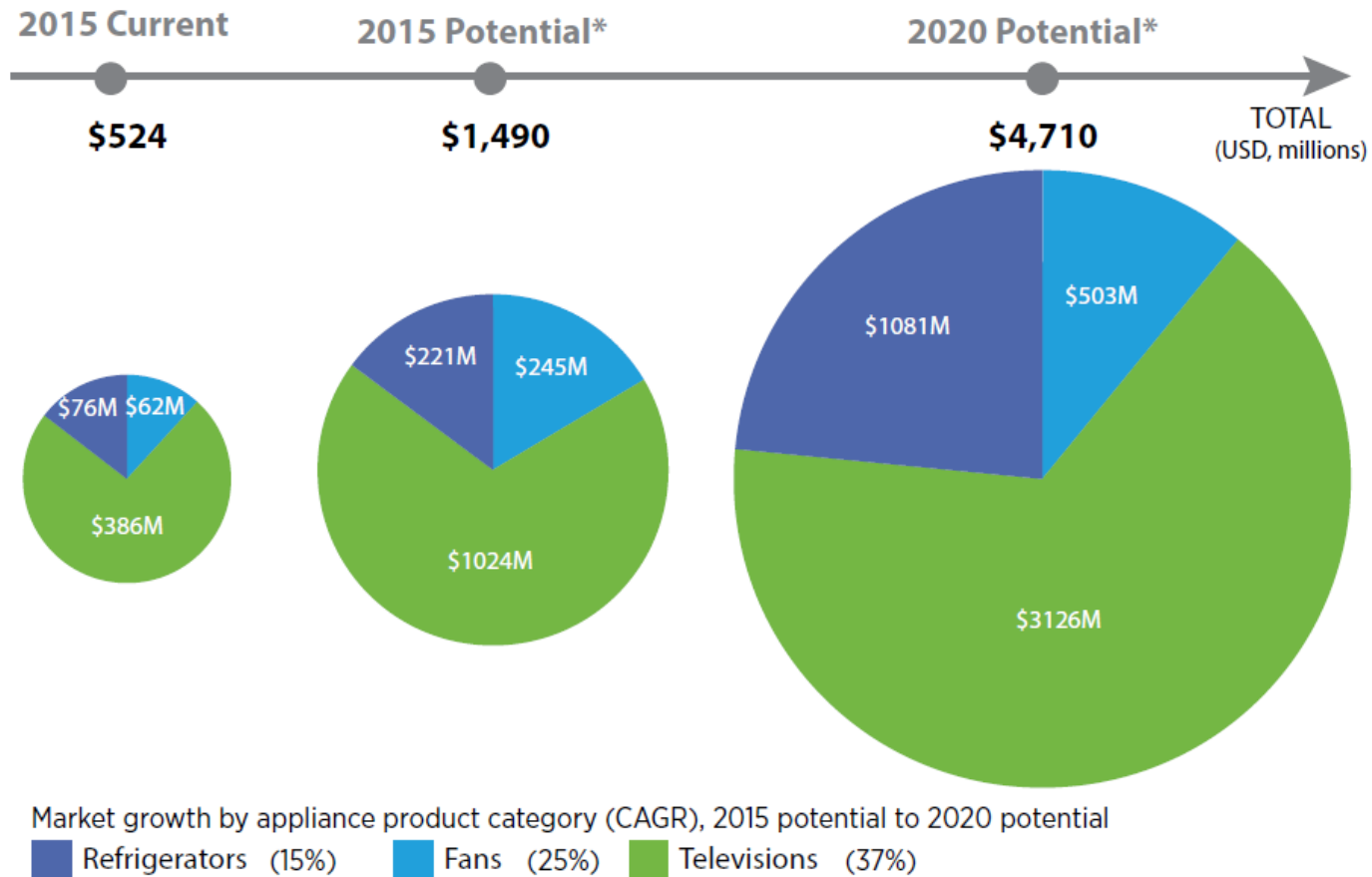
Estimated power rating (W) of off-grid appliances, 2015 and 2020



Source: Global LEAP. "State of the Global Off-Grid Appliance Marketing" (forthcoming)

Projected Market for Appropriate Off-Grid Appliances

Estimated global potential annual spend on target off-grid appliances, 2015 & 2020



Source: Global LEAP. "State of the Global Off-Grid Appliance Marketing" (forthcoming)

Critical Barriers Inhibiting the Off-Grid Appliance Market

The global off-grid clean energy market needs a complementary market of high-quality, super-efficient off-grid appliances to reach its full potential, but **significant barriers inhibit that market's development**:



Off-Grid Energy Service Companies struggle to identify and source super-efficient, high-quality, and affordable appliances



Appliance Manufacturers often are not familiar enough with the off-grid marketplace to design and market their products effectively



Investors & MFIs lack reliable benchmarks against which to target investment or evaluate and incentivize appropriate appliance procurement



Policymakers lack the market and product performance data to target and scope market transformation policies or programs

These barriers **inhibit growth** in the global off-grid clean energy market and **exclude off-grid communities** from the socioeconomic, health, and environmental benefits of improved and expanded modern energy services

Current Global LEAP Off-Grid Appliance Market Development Activities

Building
Technical
Capacity

Driving &
Demonstrating
Scale

Creating &
Sharing Market
Intelligence

Facilitating
Business &
Investment

Policymaker
Technical
Assistance

Global LEAP Filling Critical Gaps in Off-Grid Appliance Market

Building Technical Capacity

New **Global LEAP Off-Grid TV & Fan Test Methods** enable meaningful comparison and evaluation of products



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Global LEAP Filling Critical Gaps in Off-Grid Appliance Market

Driving &
Demonstrating
Scale

The **Global LEAP Awards** identify and promote world's best off-grid appliances



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Global LEAP Filling Critical Gaps in Off-Grid Appliance Market

Driving & Demonstrating Scale

Global LEAP+RBF reduces early-mover risk and drives and demonstrates scale through targeted procurement incentives



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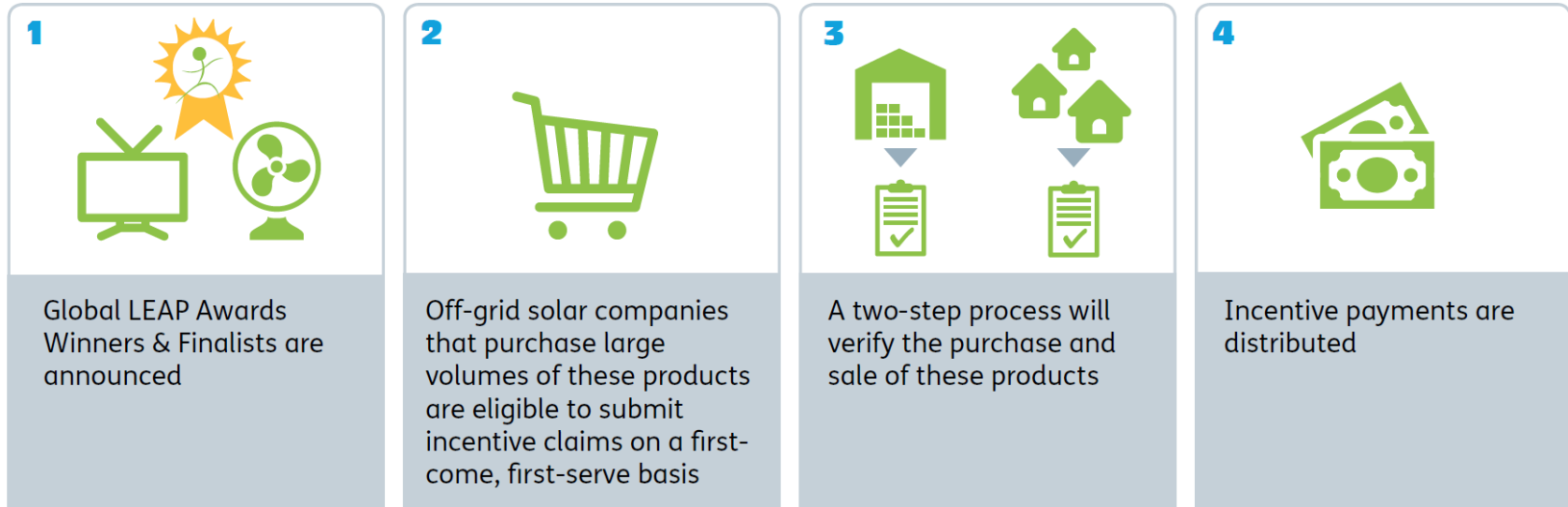
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Policymakers lack the market and product performance data to target and scope market transformation policies or programs

Program Snapshot: Global LEAP+RBF Awards & Procurement Incentives Program

Program Structure



Program Benefits

- Off-grid solar companies receive credible information about high-quality, energy efficient appliances
- Great appliance manufacturers recognized
- Off-grid solar companies have the risk of new product ventures reduced
- Appliance manufacturers will have a clearer path into the off-grid market
- Verification data will provide valuable insights on off-grid customer preferences and purchase decisions
- Off-grid appliance market develops and scales up

Pilot year incentives launch 28th February in Bangladesh

Global LEAP Filling Critical Gaps in Off-Grid Appliance Market

Creating & Sharing Market Intelligence

The **Global LEAP Off-Grid Appliance Data Platform** provides easy access to appliance test and market data



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Program Snapshot: Global LEAP Off-Grid Appliance Data Platform



Product Sampling

Sample off-grid appliances from marketplace, distributors and manufacturers



Product Testing

Test products according to international laboratory best practice, using new Global LEAP test methods



Database Design

Organize product performance, quality and market data in interactive, user-friendly online platform



Data Sharing

Share data with policymakers, investors, off-grid energy companies, and manufacturers to inform off-grid appliance design, business decisions, and policy

**Early work focused on off-grid TVs and fans...
Approach scalable and transferable to other products**

Global LEAP Filling Critical Gaps in Off-Grid Appliance Market

Creating & Sharing Market Intelligence

Global LEAP **Market Research** and program data informs smarter action throughout the value chain



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Global LEAP Filling Critical Gaps in Off-Grid Appliance Market

Facilitating Business & Investment

Industry Matchmaking connects manufacturers, distributors, and investors in a young and disorganized market



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Global LEAP Filling Critical Gaps in Off-Grid Appliance Market

Policymaker Technical Assistance

Global LEAP provides **Policymaker Support** to public and private institutions



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Benefits to Off-Grid Market Stakeholders

Off-Grid BoP Consumers

Greater access to more affordable, more reliable modern clean energy services and their socioeconomic and environmental benefits

Appliance Manufacturers

Develop new lines of business and customers; compete to innovate on quality and efficiency

Off-Grid Energy Service Companies

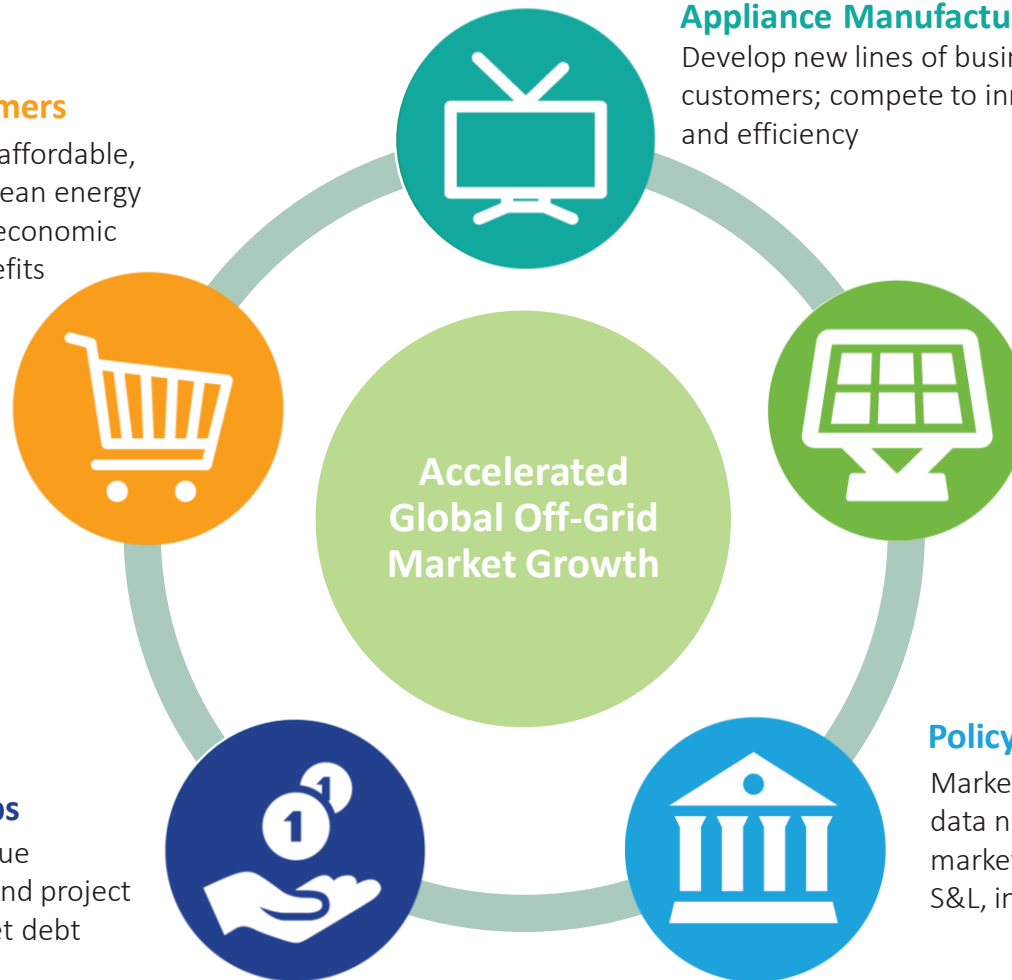
Faster, better-informed appliance decisions; significant new revenue streams

Investors & Micro-Finance Groups

Faster, better-informed due diligence on companies and project investments, and to target debt

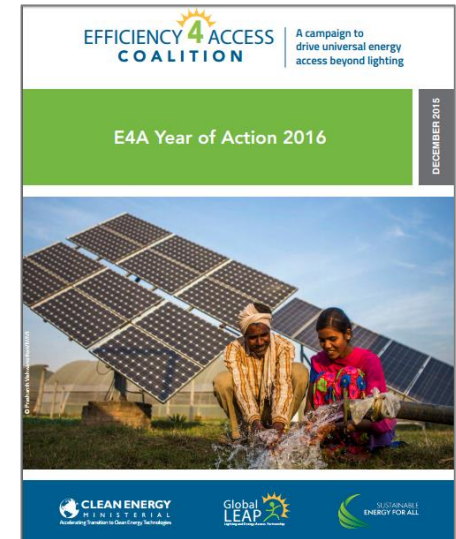
Policymakers

Market and product performance data needed to develop and target market transformation efforts, e.g. S&L, incentives, etc.



Efficiency for Access: the New E4A Coalition

- A collaborative effort led by Global LEAP & SE4All to harness the power of energy efficiency to accelerate universal access to energy
- Launched at COP21; a “Year of Action” will culminate at COP22
- Partners from government, multilateral organizations, the private sector, non-governmental organizations, research institutions, universities, philanthropic organizations, and others are welcome to join the Coalition.
- Visit www.ency4access.org for more information



EFFICIENCY **4** ACCESS
COALITION

A campaign to
drive universal energy
access beyond lighting

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***Global LEAP State of the Global Off-Grid
Appliance Market report due out soon!***