

Modern Energy Cooking Services East Africa Launch

Roundtable Report
May 2019



BACKGROUND

The Efficiency for Access Coalition is scaling up and bringing together a range of programmes and support mechanisms to accelerate energy efficiency in clean energy access efforts, driving markets for super-efficient technologies, supporting innovation, and improving sector coordination.

Coalition members recognize the latent demand for more and greater modern energy services and are seizing this opportunity to scale up markets and reduce prices for new super-efficient products (including fans, televisions, refrigerators, water pumps, electric pressure cookers, and more), supporting technology innovation, and improving sector coordination.

3 billion people rely on biomass as their main source of cooking, while 1 billion people do not have access to electricity. This implies that 2 billion people who have access to electricity still rely on biomass. Load shedding, weak grids, fear of expensive electricity bills, and a lack of suitable cooking appliances all act as barriers to scaling up the use of electricity for cooking. Thoughtfully designed, super-efficient electric pressure cookers (EPCs) have the potential to be as transformative for cooking as LED was for lighting.

Cooking is the most energy intensive activity in most sub-Saharan African households. EPCs combine advanced sensors, insulation and pressure to create a step-change in technology. Improvements in electric cooking efficiency could deliver benefits in health, gender equality, environment and household economics. Increased electrification levels with predictions of surplus generated electricity, upward social mobility, technologies such as PayGo have expanded opportunities to advance the clean cooking conversation.

On the 14-15th May, Modern Energy Cooking Services (MECS) -- a programme run by Loughborough University and ESMAP of the World Bank-- hosted a launch event and technical roundtable on EPCs. Efficiency for Access conducted the roundtable discussion with over 60 stakeholders to discuss the unique opportunities and challenges posed by EPCs in the East Africa region.



Photo: MECS, women pose with electric-pressure cookers

WORKSHOP OUTCOMES

The two-day workshop took place in Nairobi, Kenya for the launch of the MECs program in East Africa. The launch brought together key stakeholders to explore the potential market for electric pressure-cooking in sub-Saharan Africa.

The attendees took part in a wide-ranging discussion that covered nine categories of market barriers for EPCs in East Africa. Participants collectively identified and prioritized actions in each area. These are summarized below:

SUSTAINABILITY

- Develop testing for lifespan/durability
- Create end of life programmes that allow for service and maintenance, repair and recycling.
- Map roles and responsibilities of relevant stakeholders across the supply chain: manufacturers, distributors, consumers, government and regulatory bodies.
- Create and conduct product awareness programs in key markets to focus on proper use.
- Develop carbon off-set methodology to facilitate access to carbon financing.

CONSUMER & MARKET INTELLIGENCE

- Carry out awareness programs with focus on pilot demonstrations.
- Carry out research to gather data on most appropriate value proposition for target markets.
- Facilitate cooperation and engagement across the industry players through the organization of events.
- Research cooking habits, key selling points, market size and segmentation.

FINANCE & BUSINESS MODELS

- Pilot multiple business models in different target markets.
- Create a practitioner/experts network to facilitate information sharing.
- Explore the potential for local manufacturing and assembly.
- Understand finance needs across the supply chain.

SAFETY

- Develop certification program to comply with best existing standards
- Enforcement of labeling & standards policies
- Ongoing user training and easily understandable user guides
- Development of standard safety features that are integrated into all products

BEHAVIOR CHANGE

- Create of a comprehensive communications guide that clearly articulates the value proposition of EPCs for different target audiences: on-grid, off-grid users, urban, peri-urban and rural, low-medium and high income.
- Develop simple recipe books and cooking videos.

TESTING & QUALITY

- Create a test method linked to a standard and labeling program.
- Build database of tested products, and test methods for governments and distributors.
- Identify all relevant design specifications/ considerations needed to ensure safety.
- Create applications that enable product verification by stakeholders across the supply chain.

WORKSHOP OUTCOMES

POLICY & ENVIRONMENT

- Map and monitor existing policy environments in key markets i.e. import duties, VAT, subsidies for alternative stoves and fuel.
- Create policy best practice guides.
- Identify key enabling environmental indicators.
- Rollout programs such as awards and standards, bulk purchase incentives to prime markets.

RESEARCH & DESIGN

- Develop programs that engage universities and research institutions to accelerate innovation.
- Develop local appropriate tech designs that are robust, support load balancing and different power profiles.
- Carry out research to enhance existing designs and add features such as interoperability (AC/DC), energy storage and cooking equipment.

DISTRIBUTION, WARRANTY & SERVICE

- Facilitate market education on performance and warranty services.
- Engage manufacturers and importers on quality recognition and product availability.
- Develop after sale service guidelines.



Photo: MECS, participants observe electric pressure cooker demonstrations.

Quote from Dr. Jon Leary, MECS Researcher

“The EforA team’s structured methodology allowed us to really take advantage of the broad expertise we had assembled at the launch event and dive into the real issues that electric pressure cookers will face here in East Africa.”

Looking Ahead

Moving forward, the Efficiency for Access Coalition and MECS plan to work collaboratively on accelerating the uptake of clean cooking across East Africa. Upcoming activities include:

- Identify, reward, and promote best-in-class AC and DC EPCs through the **2020 Global LEAP Awards**. More information about the EPC competition will be made available soon.
- Initiate research activities that address underlying barriers to market scaling, such as consumer preferences and willingness-to-pay.
- Size and segment the current and potential market for on and off-grid EPCs.
- Procure and test the performance of EPCs currently available in selected off- and weak-grid markets to understand baselines. Initial test results will be available on efficiencyforaccess.org by early 2020.

Since its founding in 2015, Efficiency for Access has grown from a year-long call to action and collaborative effort by Global LEAP and Sustainable Energy for All to a coalition of 14 donor organizations. Coalition programmes aim to scale up markets and reduce prices for super-efficient, off- and weak-grid appropriate products, support technological innovation and improve sector coordination. Current Efficiency for Access Coalition members lead 12 programmes and initiatives spanning three continents, 44 countries and 19 key technologies.

This partnership supports the United Nations Sustainable Development Goal 7, to ensure access to affordable, reliable, sustainable and modern energy for all, and touches on all three pillars – energy efficiency, renewable energy, and energy access.