### **EFFICIENCY** FOR ACCESS

60 \_\_ decibels

# **USES & IMPACTS OF ELECTRIC PRESSURE COOKERS**

UKaid

POWER AFRICA

AWARDS

Insights from Kenya

AUGUST 2021 Efficiency For Access Coalition & 60\_decibels

tendev



### **Executive Summary**

This report presents the results of the research carried out by the 60 Decibels team through 400 phone interviews on the impact and experience of electric pressure cooker (EPC) customers in 2020-2021. All of the customers purchased their EPCs through companies participating in the <u>Global LEAP Results-Based</u> <u>Financing facility</u>.

As the market for EPCs is relatively nascent, Kenya was selected as the target geography for the pilot due to the presence of early mover EPC distributors, electrification rates, as well as the cost of fuel.

This study aims to provide deeper insights into the impact of first-time appliance ownership. We conducted segmented analysis to look for trends by company and gender, and have presented this where we saw differences.

### Usage & Impact

Nearly all EPC customers are first-time users (90%). Only 15% say they could easily find a good alternative to the EPC, suggesting companies are providing access to a product not easily found elsewhere. Only 3% of customers used electricity for cooking before their EPC purchase, despite three-quarters having an electricity grid connection. Nearly all customers use another cooking product in addition to their EPC. Meal type and fuel availability are critical factors that affect stove usage.

### Satisfaction & Experience

Satisfaction is high among customers and electric pressure cookers have resulted in positive quality of life outcomes. Customers see improved quality of life outcomes including reduced expenses, increased time savings and overall efficiency gains. Customers are highly satisfied with the EPC features. Over half really like the different cooking modes/settings. The majority of customers rate the value for money of the EPC as good.

While only a small proportion of customers talked of challenges using the EPC – primarily related to poor product quality, the majority of these issues have not been resolved – this could influence usage, impact, and, in such a new market, may affect sales through word-of-mouth.

### Profile & Aspirations

A typical customer is female, age 39, living in a well-educated household of 4. EPCs are being accessed by relatively wealthier customers with 74% living above the international relative poverty line (\$3.20 per person per day).

#### 3

## Performance Snapshot

Customer satisfaction is high and EPC companies are successfully reaching an underserved customer base with their products.

Profile	Impact	What Impact	Contribution	Customer Voice
26% live in poverty	<b>45%</b> quality of life 'very much improved'	<ul> <li>35% see a reduction in expenses and improved savings</li> <li>31% talked about time</li> </ul>	90% first time accessing product provided	"It cooks food quickly and because of the comfort I can cook anywhere in the house. You don't see smoke while cooking and even if you have guests, within 10 minutes they can have food." – Female, 32 Data Summary
• • • •		saving	• • • • •	CLASP Performance: 400 electric pressure cooker customer phone interviews between August 2020 and May 2021 in Kenya.
Net Promoter Score®	Challenges	Customer Effort Score	Alternatives	Quintile Assessment compares Company Performance with 60dB Energy Benchmark comprised of 85+ companies, 25 countries, and nearly 40,000 customers. Full details can be found in the Appendix. Performance vs. 60dB Benchmark
61	14%	2.8	85%	<ul> <li>TOP 20%</li> <li>TOP 40%</li> </ul>
on a -100 to 100 scale	report challenges: 73% not resolved	out of a maximum score of 5	don't have access to alternatives	• • • • • MIDDLE
••••	••••		••••	BOTTOM 40%     BOTTOM 20%

# **Customer Voices**

We love hearing customer voices.

Here are some that stood out.



#### **Impact Stories**

#### 92% shared how the electric pressure cooker had improved their quality of life

"It saved me time to do other things especially when a visitor is in a rush, I can easily cook something. It is also a sign of luxury, and it has made others respect me more." - Male, 58

"There is no smoke in the house and now everything is clean. Like the *sufurias* with soot really made the house untidy but now they just stay in the kitchen as we don't use them to cook often." - Female, 45

"The cost has gone down from buying a sack of charcoal at 1,450 Shillings to now spending an extra 150 Shillings on electricity." - Female, 31

### **Opinions On EPC Value Proposition**

#### 70% were Promoters and were highly likely to recommend

"It is time saving and I don't spend a lot on fuel cost. It makes me very clean because there are no pots with soot in the house." - Female, 57

"They have a weekly bundle like those from Safaricom that cost 499 Shillings and you can use them to cook for long although they have a limited time. I also love how economical it is in terms of money and time." - Male, 40

"This one is very safe because it does not produce steam like other pressure cookers so even children can be able to operate it." - Female, 46 "The electric pressure cooker is very reliable since it cooks faster thus saving me a lot of time." - Female, 29

"My expenses on fuel have really gone down because I am not using gas currently only Jikokoa and pressure cooker." -Female, 35

"When I was at home, looking for firewood was stressful, and it was risky because going to the forest one risks being bitten by the snakes but all that is in the past ." - Male, 48

### **Opportunities For Improvement**

9% had a specific suggestion for improvement

"[Company] should reduce the payment because currently it is very high, and we cannot pay for it because there is no money." - Female, 30

"If it would cook everything it would be good. They should make it in such a way it can cook more things and it can be tasty. For example, vegetables cooked usually have lots of water and that is not good." - Female, 35

"They should provide an extra pot and also make it energy efficient although I'm still observing it." - Male, 76

### Contents

We enjoyed hearing from electric pressure cooker customers of companies supported by Global LEAP results-based financing in Kenya – they had a lot to share!

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### Introduction

As part of an effort to scale markets for super-efficient appliances, the Efficiency for Access Coalition partnered with 60 Decibels to explore the benefits and potential challenges experienced by electric pressure cooker customers

Thanks to:

> UK aid

> EnDev

> Power Africa

> for generously supporting this program.

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**The Efficiency for Access Coalition**, launched at COP 21 in Paris and co-chaired by UK aid and the IKEA Foundation, is a global coalition working to promote high performing appliances that enable access to clean energy for the world's poorest people. The Coalition has collectively invested over £200 million to support technology innovations for off-grid, solar-powered, appliances. It is a catalyst for change, accelerating the growth of off-grid appliance markets to boost incomes, reduce carbon emissions, improve quality of life and support sustainable development.

**The Global LEAP Awards** is an international competition that identifies and promotes the world's best, most energy-efficient off-and weak-grid appliances. The Global LEAP Awards pairs a competition with results-based financing, providing financial incentives to mitigate early risk for distributors and helping them buy and roll-out large volumes of best-in-class off-grid appliances. The incentives are also aimed at facilitating new business partnerships for appliance suppliers that have invested in the production of high-quality off-grid appliances.

Global LEAP results-based financing is an initiative of the Efficiency for Access Coalition and is managed by CLASP, with support from Power Africa, UK aid, Energising Development, and USAID through the Powering Agriculture Energy Grand Challenge. More information is available on globalleapawards.org.

**60 Decibels is** a tech-enabled impact measurement company, working in over 55 countries. Our repeatable, rapid approach to gathering impact indicators and customer insights (primarily through phone-based surveys) provides our clients with genuine benchmarks of impact performance. These benchmarks enable a deeper understanding of impact and help to inform better decision making as well as data-led impact management. Our clients include over 450 of the world's leading impact investors, companies, foundations, corporations, NGOs, and public sector organisations.

We are proud to be a Climate Positive company.

60 Decibels has offices in London, Nairobi, New York, and Bengaluru. To learn more, visit <u>www.60decibels.com</u>.

### **Data Collection**

60 Decibels supported this work by conducting 400 baseline interviews (Aug – Nov 2020) and 318 follow-up interviews (Apr – May 2021) with end-consumers to verify the purchase of eligible products and generate additional consumer insights on product usage, quality of life, satisfaction, and challenges.

This report presents data from those interviewed in the baseline and follow-up study – 718 interviews – on the experience of electric pressure cooker (EPC) customers in Kenya as part of monitoring and evaluation (M&E) for the 3rd round of Global LEAP results-based financing in Sub-Saharan Africa.

We conducted segmented analysis by company and gender and highlighted where there were any differences throughout this report.

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To begin with, this is who we spoke to and who the data presents insights on.



# **Electric Pressure Cookers**

<u>Four billion people</u> around the world still lack access to affordable, clean, efficient and safe cooking energy. Of these, 1.25 billion are transitioning to use modern cooking services, while the rest face high barriers to adoption.

The commercial ecosystem for EPCs is still nascent. Lingering perceptions that e-cooking is not viable or too expensive, a lack of objective information about EPC quality and performance, and the relatively high upfront cost of EPCs, remain the biggest barriers to adoption. In 2020, the Global LEAP Awards launched an inaugural competition to help address this gap and identify best-in-class, energyefficient, durable and affordable EPCs. Winners and Finalists of the competition can be seen in the <u>2020</u> <u>Buyer's Guide for Electric Pressure Cookers</u>

This report is part of a series of publications by EforA including the <u>EPC technology brief</u> that synthesizes the latest market intelligence on EPCs and charts the pathway to commercialization. Advances in cooking technology and the growth of decentralised energy systems present an opportunity for communities to move from biomass cooking to modern energy cooking services.

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Electric pressure cookers (EPCs) are the primary technology driving a new generation of e-cooking for consumers living in off-grid and weak-grid conditions. EPCs are electricity-powered appliances with airtight pots that seal in steam during cooking, increasing the pressure and therefore the maximum temperature of liquids within the pot. The higher temperatures and pressurised steam that infuses the food allow for much shorter cooking times.

Leveraging the Global LEAP Awards programmatic framework, coupling product quality verification with bulk procurement incentives, a commercial pilot was launched in Kenya targeting early mover EPC distributors selling locally available products that had satisfactorily completed one of several existent EPC safety & performance testing protocols.

Between May and October 2020, the Global LEAP results-based financing pilot facilitated the procurement of 4,806 EPCs in Kenya, sold to households by 6 participating distributors. The financial incentives were particularly helpful in attracting new market entrants and helping early movers scale their operations. The 6 participating companies represent a diverse mix of players – 2 mini-grid companies (Powerhive, Rve.Sol), large traditional appliance distributor (Hotpoint), clean cookstove manufacturing and distribution expert (Burn Manufacturing), off-grid asset financing company (SCODE), and rural asset financier & LPG specialist (Bidhaa Sasa). Their total procurement represents a 203% increase in the number of EPC sales by these early movers in the Kenyan market. By the end of June 2021, 3421 of these products had been sold to endusers.

60 Decibels conducted interviews with a sample of end-consumers to verify the purchase of eligible products and collect additional consumer insights.



## **Customer Profile & Aspirations**

- Demographics & income profile
- First access and motivations
- Acquisition channels
- Availability of alternatives in the market
- Productive use

"We are saving a lot on fuel. Also, the food prepared by the electric pressure cooker is tasty and well-cooked!"

# Customer Profile: Demographics

We deployed a random sampling approach to speak to customers across four companies.

EPCs are primarily being purchased by women, suggesting the potential of this technology to positively impact the lives of women and girls often tasked with food preparation.

"I save on the cost of fuel simply because I do most boiling on this pressure cooker. Previously, I used to spend a fortune on fuel. This changed when I bought the pressure cooker."

– Female, 67

The typical EPC customer is female, 39 years old, and lives in a well-educated household with three others.

About the Customers We Spoke With

Data relating to customer characteristics (n = 400)



### Household

- 4.4 Average size
- 82% Male-headed household Region
- 45% Rural (village or countryside)
- 55% Urban (city or town)

### **Highest Education Level**

- Tertiary (75%)
- Upper Secondary (20%)
- Lower Secondary (1%)
- Primary (3%)
- None (0%)

### **Financing Methods**

We asked questions about customers' funding options for their EPC. 85% of those interviewed purchased their product using their income or savings.

53% of male customers bought their EPC through a one-off cash payment while 57% of female customers used financing. 8% of female customers received financing through their savings group or *chama*, or as a gift from their fellow group members and spouses.

Customers who made a one-off payment were more likely to use their income or savings and less likely to borrow money compared to customers who used financing.

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The majority of customers purchased their electric pressure cooker using their income or own savings.

### Access to Credit

Q: Did you purchase the electric pressure cooker as a one-off payment i.e. a cash purchase, or through financing with the company or elsewhere? (n = 400)



### Access to Credit

Q: [If one-off] How did you pay for the electric pressure cooker? [If financing] How did you pay for the deposit for the electric pressure cooker? (n = 400)



# Customer Profile: Inclusivity

Using the Simple Poverty Scorecard<sup>®</sup>, we measured how the income profile of EPC customers from Kenya compares to the national average.

Kenya is categorised as a low-income country. USD 3.20 / day is the recommended poverty line for lowincome countries.

EPC results-based financing companies are serving slightly wealthier customers than the Kenyan national average, resulting in an Inclusivity Ratio of 0.6. Compared to Kenya's national population, companies participating in results-based financing are serving relatively higher-income customers, leaving room to further reach lowincome customers.

### Income Distribution of Global LEAP Results-based Financing Companies Relative to Kenya Average

% living below \$3.20 per person / per day (2011 PPP) (n = 400)



### **Inclusivity Ratio**

Degree that companies participating in resultsbased financing are reaching low-income customers in Kenya.



We calculate the degree to which companies participating in results-based financing are serving low-income customers compared to the general population. 1 = parity with national population ; > 1 = over-serving; < 1 = underserving. See Appendix for calculation.

# Customer Profile: Adoption Persona

# 7 in 10 EPC customers are 'innovators' and 'early adopters' meaning they are more likely to adopt new innovations.

This question helps us understand EPC customers' likelihood to adopt new products. This is most often shaped by education, risk appetite, income level, and personality, as well as access. The theory comes from the *Diffusion of Innovations* by Rogers (1962).

71% of customers are categorised as 'innovators' or 'early adopters' and are likely to try new products before the general market.

### **Innovation Adoption Persona of the EPC Customers**

Data relating to customer characteristics (n = 400)

50%



\*We did not use these categories in the question but created statements to describe each category and a customer would choose one that described them best.

# Acquisition Channel & Decision to Purchase

Understanding how customers first heard about the EPC provides insights into the performance of the marketing and sales strategies in the target market.

In 56% of the households, the female adult was most likely the first to have heard about the electric pressure cooker compared to male adults at 28%.

In 59% of households, it was solely the female adult decision to purchase the electric pressure cooker. Male adults decided in 33% of households. In the rest of the cases, it was another male or female adult who made the decision.

# Family and friends were the most common route to customers hearing about the EPC, followed by company staff.

### **Acquisition Channel**

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Q: How did [person] first hear about the [company] electric pressure cooker? (n = 400)



### Motivation To Purchase

Identifying customer motivation to purchase an EPC can offer insights on how best to target and market to potential users.

The most common three motivating factors are similar among women and men.

# Customers said they were motivated to purchase the EPC because of time savings and ease of use.

### Motivation to Acquire / Purchase Electric Cooking Product

Q: What motivated [person] to purchase the cooker? (n = 400)

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# Customer Profile: Availability of Alternatives

Most customers (90%) are accessing an electric pressure cooker for the first time. The majority of customers say they cannot easily find a good alternative to the electric pressure cooker.

Availability of alternatives provides insights into the competitive landscape and the degree to which companies are offering customers a product they couldn't find elsewhere.

The fact that 85% cannot easily find a good alternative suggests that the companies are serving a less developed market.

### Access to Alternatives

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Q: Could you easily find a good alternative to [company] electric pressure cooker? (n = 318)

• • • • • - TOP 40%



"The cost of fuel was high, and I needed an alternative. The package including the solar and pressure cooker was affordable." - Male, 62

"I was looking for an alternative to charcoal because when I used it over the weekend to cook, I would get migraines." - Female, 35

"I would take longer to cook food when using charcoal, therefore my family would eat supper late. I was looking for a better and faster alternative." - Female, 38

### **Previous Energy Sources**

Only 3% of customers used electricity for cooking before their EPC purchase, despite three-quarters having an electricity grid connection.

Products nominated from the Global LEAP Awards EPC competition <u>indicate that AC-</u> <u>powered EPCs dominate the market</u>. DC EPCs constituted only 13% of nominated products highlighting a barrier for technology uptake in off-grid households. None were recognised as a competition finalist after failing portions of the product safety and quality tests in the Global LEAP Awards EPC Test Method.

Most respondents purchased cooking fuel (81%). 13% gathered the fuel used for cooking, while 7% both gathered and purchased the fuel.

Almost half of the respondents used LPG as their fuel source for cooking before purchasing EPCs, and most were connected to the grid.

**Prior Cooking Energy Source** 

Q: What source of energy or fuel were you using for cooking before the electric pressure cooker? (n = 400)  $\,$ 



### **Household Power Sources**

Q: How is your household powered? Do you have the following? (n = 400)



# **Stove Stacking**

As shown on the right, 89% of customers report using multiple cooking appliances in the household. We found that:

- 74% of EPC customers use an LPG gas stove as their additional cookstove, while 43% reported using a charcoal cookstove.
- Additional cookstoves are used for cooking *ugali*, tea, and chapati, while the electric pressure cooker is predominantly for cooking cereals and boiling water.

Nearly all customers use another cooking product in addition to their EPC. Meal type and fuel availability are critical factors that affect stove usage.

**Proportion of Cooking Done with Product** 

Q: What proportion of your total cooking is done now with your electric pressure cooker? (n = 318)



#### **Reasons for Stacking**

Q: What does this proportion of cooking depend on? (n = 318)



## **Productive Use**

We asked customers if they use the EPC for income-generating activities and just 3% do. But for that 3%, the majority have seen an increase in their income as a result.

The few customers who use their EPC for income-generating activities, primarily use it for boiling cereals and water at their restaurants or workplaces.

### **Productive Use for Income Generation**

Q: Does the household use the [company] electric pressure cooker for income-generating activities? (n = 318)

### **Top Income-Generating Activities**

Q: Since you have had the electric pressure cooker, have you seen any change in household income related to the cooker? (n = 9)





# Impact

- Impact on quality of life
- Financial savings
- Time savings
- Health outcomes



# Impact Performance: Quality of Life

The EPC companies fall within the top 40% of 60dB's Energy Benchmark for the combined indicators of 'slightly' and 'very much' improved quality of life. However, the overall performance of quality of life 'very much improved' falls within the bottom 40%. This suggests that EPCs are having a positive impact, but are less significant than other energy products or services.

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Impact

21

Nearly half of the customers we spoke to believe their quality of life has significantly improved due to the EPC.

### Perceived Quality of Life Change

Q: Has your quality of life changed because of the electric pressure cooker? (n = 318)



#### Very much improved:

"Now I am living a more comfortable life that is modern because I am doing most of the cooking inside the house. I can do other things."

#### Slightly improved:

"Although I don't use it when I am alone, it does save a lot of time when I boil for many people. Cooking with it is so quick."

#### No change:

"I have another bigger pressure cooker which is not electric, so I don't see any difference."

# Quality of Life: Top Outcomes

Customers were asked to describe – in their own words – the changes they were experiencing using their pressure cooker.

The top outcomes are shown on the right. Others include:

- Cooking is easier (22%)
- Improved fuel use (12%)

For the 8% of customers who saw no change, they complained about high power consumption and poor product quality. Customers mention fuel and energy expense reductions, time savings, and convenience as the reason for quality of life improvements.

# Most Common Self-Reported Outcomes for 92% of Customers Who Say Quality of Life Improved

Q: Please explain how your quality of life has improved. (n = 318). Open-ended, coded by 60 Decibels.



### mention decrease in expenses and improved savings (31% of all respondents)

"Boiling dry beans at the period of 45 minutes is only using 20 shillings and charcoal would require 2kg which would cost 140 shillings, so this is definitely helping me save on fuel cost." - Male, 60



talk about improved time saving (29% of all respondents)

"I save a lot of time because now I don't spend a lot of time cooking and whenever I want a light meal before going to work, I can prepare it quickly." - Female, 54



report **convenience** (27% of all respondents) "Life has changed because we have time to do other things not spending all the time cooking and boiling things like before." - Male, 60

# **Financial Savings**

We sought to understand the impact of pressure cookers on fuel and energy spending. We found that almost a quarter of the respondents (22%) report a significant decrease in spending on fuel. This is compared to only 6% of customers who report a significant increase in electricity spending – suggesting there may be overall cost savings for customers.

Cost savings on cooking fuel is highest for customers living in cities, with 83% experiencing a reduction, compared to 66% of customers living in towns and 52% of rural customers. Two-thirds have seen a reduction in spending on cooking fuel, but over half have seen their electricity bill go up.

### Cooking Fuel & Energy Cost Savings by Company

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Q: On average, has your spending on cooking fuel / electricity bills changed since you started using your electric pressure cooker? (n = 318)



Impact

# **Time Savings**

We sought to understand the impact of EPCs on cooking behaviours within the household.

Only 28% of respondents report a change in who does the majority of cooking in their household. However, 44% of customers say other members of their household cook more often now that there is an EPC.

We asked the respondents to explain why other members of the household cook more often with the EPC. The top reasons reported were:

- Cooking has become easy (20%)
- The EPC is efficient and quick (16%)
- It is easy to use (11%).

The majority of customers spend an average of 80 minutes less time cooking each day because of their EPC.

### Impact on Customers' Cooking Time

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Q: On average, has the time spent on cooking each day changed since you started using the electric pressure cooker? (n = 318)



### Average Change in Time Spent Cooking

Q: How much time does [person(s)] spend on cooking each day, on average? (n = 318)



## **Health Outcomes**

61% of all respondents said the health of household members has improved since they started using the EPC.

Customers who experienced health improvements point to the reduction in cooking smoke (28%) and improvements in nutrition (21%).

Somewhat surprisingly, a higher proportion of men reported improvements in health outcomes (68%) compared to women (58%). Despite further analysis, available data does not offer an explanation for this.

Those who are less satisfied with their EPC are less likely to experience these health improvements, likely driven by their limited use of the EPC.

Almost two-thirds of customers say that the health of household members has improved since they began using the EPC.

### **Change in Health of Household Members**

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Q: Have you noticed a change in the health of household members since you started using your electric pressure cooker? (n = 318)



### **Reason for Change**

Q: Please explain how the health of household members has changed / not changed. (n = 191) Open ended coded by 60 Decibels

Impact

#### 28% cited reduced smoke

"Using the charcoal stove was hazardous due to the smoke and heat. I now enjoy less of that due to the use of electricity." – Male, 25

### 21% talked of improved nutrition

"The cooker facilitates preparation of steamed low-fat foods which are good for our health and saves time in cooking." - Female, 35

### 21% mentioned the cleanliness of the product

"The cooker is clean and uses electricity, which is an efficient source of energy." – Female, 35

# Customer Satisfaction: Net Promoter Score

EPC companies in the RBF have a Net Promoter Score<sup>®</sup> of 61, which is very good.

The Net Promoter Score<sup>®</sup> (NPS) is a gauge of satisfaction and loyalty. Anything above 50 is considered very good and a negative score is considered poor.

Asking respondents to explain their rating provides insight into what they value and what creates dissatisfaction. These details are on the next page.

### Net Promoter Score<sup>®</sup> (NPS)

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Q: On a scale of 0-10, how likely are you to recommend [company] electric pressure cooker to a friend or family member, where 0 is not at all likely and 10 is extremely likely? (n = 318)



NPS = % Promoters — % Detractors

9-10 likely to	0-6 likely to
recommend	recommend

### NPS Benchmarks



60 Decibels Global average 400+ companies	42
Eastern Africa average 150+ companies	42
Energy average 80+ companies	45

Satisfaction

## **NPS** Drivers

Over two-thirds of the customers are Promoters who value both increased overall efficiency and energy efficiency. Detractors complain about high power consumption.

### 70% are Promoters

### They love:

1. Increased efficiency and time savings (57% of Promoters / 40% of all respondents)

:)

- 2. Ease of use (16% of Promoters / 11% of all respondents
- 3. Energy efficiency (14% of Promoters / 9% of all respondents)

"It is very easy to cook. Meals don't take long. For example, in 30 minutes you can have a ready meal without much effort." – Female, 54

### 21% are Passives

### They like:

- 1. Increased efficiency and time savings (26% of Passives / 6% of all respondents)
- 2. Good product quality (16% of Passives / 4% of all respondents)

### But complain about:

High power consumption

 (1% of Passives/ <1% of all respondents)</li>

"The electric pressure cooker has nothing bad about it. I like it a lot. I believe it has helped my friends but it's just small." – Female, 40

### Tip:

Passives won't actively refer you in the same way that Promoters will. What would it take to convert them? 9% are Detractors : (

### They want to see:

- 1. Improved power consumption (21% of Detractors / 2% of all respondents)
- 2. Improved quality (18% of Detractors / 2% of all respondents)

"I have to spend a lot of money because of the high-power consumption." – Male, 52

#### Tip:

Negative word of mouth is costly. What's fixable here?

Satisfaction

# Customer Challenges & Customer Service

14% of customers have experienced a challenge using the EPC. Among those, three-quarters have unresolved issues.

Among the 14% of customers with challenges, only 27% had had their challenges fixed.

Customers who have experienced a challenge were asked how easy it was to get an issue handled. The Customer Effort Score (CES) is the average rating of all customers.

The CES is **2.8 out of 5**, suggesting that customer service or after-sales care could be better. CESs among participating companies ranged from 3.3 to 2.1.

Unresolved challenges can encourage negative word-of-mouth and detract from positive impact. The next page shows the most common challenges.

### **Proportion of Customers Reporting Challenges**

- TOP 20%

Q: Have you experienced any challenges with using [company] electric pressure cooker? (n = 318)



### **Customer Effort Score**

Q: How do you feel about the statement? Overall, [company] made it easy for me to handle my issue. Do you: (n = 44)





# Customer Challenges: Top Issues

We asked about challenges as framed by customer experience rather than fault. Therefore, challenges can sit in three different themes and can be best addressed in different ways. Often the customer (and our Research Assistants) won't know which category the challenge fits into:

- Technical fault there is something wrong with the product.
- Mismatched expectations the customer says the product/service isn't working because they expected it to work differently, but it is working as intended.
- Misuse the customer isn't using the product properly, often not deliberately but through lack of awareness/training.

Satisfaction

# The most common issues for EPC customers were poor product quality, general unreliability, and poor training or instructions.

### Most Common Issues for 14% of Customers Who Say They've Experienced a Challenge

Q: Please briefly explain the challenge you have faced. (n = 318). Open-ended, coded by 60 Decibels.



### Poor quality

(5% of all respondents)

"It release pressure all the time and stopped being a pressure cooker... I reported and a lady told me that she would come to Eldoret, but she is yet to come." - Female, 50



Unreliable product (4% of all respondents)

"The pressure cooker does not work. It does not turn on. I reported but was told to wait as there are no pressure cookers available." - Male, 27

### 11%

Poor training or instruction (2% of all respondents)

"There are different functions such as baking, yoghurt, but no clear indication on how to use them." -Female, 32

#### 30

Satisfaction

### Value for Money

Over three-quarters of customers consider their electric pressure cooker 'very good' or 'good' value for money.

We use the value for money question to understand whether customers feel using the electric pressure cooker is worth the money they spent on it.

86% of customers rate the value for money of the product as 'very good' or 'good'.

### Insight

Female customers are more likely to rate the product's value for money as 'very good' (70%) compared to male customers (56%).

### Value for Money

Q: How do you rate the value for money of your [company] EPC? Would you say it is:? (n = 318)



Satisfaction

79%

### **Appliance Features**

Customers are highly satisfied with the EPC features. Over half really like the different cooking modes/settings.

To better understand drivers of satisfaction, we asked customers about the features they like or dislike. 79% of those interviewed could not find a feature they disliked.

The most liked EPC features are shown on the chart to the right. Customers say they would appreciate if the EPC had more pots and quality was improved.

EPC product design does not always reflect the needs and aspirations of everyday cooks. To better understand users, the 2020 Global LEAP Awards EPC Competition included an innovative <u>usability testing process</u> aimed at measuring appliance performance in reallife conditions. The most valued features were found to be size, safety, and functionality.

### **Appliance Features Liked by Customers**

Q: What feature(s) of the product do you like? (n = 318). Openended, coded by 60 Decibels.



### **Appliance Features Disliked by Customers**

Q: What feature(s) of the product do you dislike? (n = 318). Openended, coded by 60 Decibels.



Satisfaction

### **Customer Suggestions**

# Customers want companies to add more products and pots to their EPC package.

At the end of the interview, we asked respondents if there was anything else they'd like to share, as we always do.

Other than requesting additional pots and products, customers expressed appreciation and satisfaction with their EPC. Key attributes such as good quality and efficient power consumption are the overriding themes in customers' comments.

These attributes came up as a response to multiple questions throughout the survey; the reasons for NPS rating, quality of life, and as a common challenge.

### Suggested Improvements

Q: Is there anything else you would like to share? (n = 318). Open-ended, coded by 60 Decibels.



"Please bring the TV. This company is really good. Please tell the boss to add points for the loyal customers that can be redeemed like bonga points." - Female, 32

"This thing is very clean because there is no smoke. They should add more pots but leave the price as it is because life currently is hard." - Female, 40 Lean Data Insights

# Appendix

- / Who is in the 60 Decibels Energy Benchmark?
- / More info on sampling
- / Additional data collected not in this report
- / Indicator glossary

# The 60 Decibels Energy Benchmark

The 60dB Energy Benchmark is made up of the average performance of the energy company projects conducted since 2016. This includes 100+ off-grid energy companies across 270+ Lean Data projects.

We have completed Lean Data projects for some companies in multiple countries, for multiple services, or multiple timeframes; providing deeper learning over time or cross-geography.

Energy companies: mini-grid providers, solar home system, solar lantern, off-grid appliances, improved cooking solutions, and more.

### Companies we've worked with

- Altech
- ARED
- Arnergy
- Auxano Solar
- Azuri
- Baobab+
- Bboxx
- Bidhaa Sasa
- BioLite
- Bonergie
- BrightLife FINCA Plus
- BURN
- d.light
- Davis & Shirtliff
- Deevabits
- Devergy
- Easy Solar
- Ecozen
- Emel Solar
- Energy+
- ENGIE Fenix
- ENGIE Mobisol
- ENGIE PowerCorner
- EnVenture
- Frontier Markets
- Futurepump
- Global Ice Tec
- Green Energy Biofuels

- Greenlight Planet
- Greenserve

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- Greenway GrameenGVE Projects
- Harness Energy
- HelloSolar
- Husk Power Systems
- Ignite PowerIMED
- Inspirafarms
- Jaza Energy
- Jumeme
- Kalangala Infrastructure
   Services (KIS)
- Kazang Solar
- KCKM
- KopaGasLendable
- Lumir
- Lumos
- Mango Energy
- Mega Global Green
- M-KOPA
- Mobile PowerMREF
- Mwezi
- IVIWEZI
- NAL OffGridNizam Bijili

- NRSP
- OffGridBoxOMC Power
- OMC P

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- Ongeza
- Oolu Solar
- OPES Solutions
- Orb Energy
  - PACOS Trust & Tonibung •
  - PACT
  - Parami Energy
  - Pawame
- PEG
- Pollinate GroupPowerGen
- Powerhive
  - Pro Engineering
  - Promethean
- PSFI
- REDAVIA
- Rubitec
- RUH
- RVE.SOL
- SCODE
- SELCO

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- Simusolar
  - Solar Panda
- Solar Sister

- Solaris Offgrid
- SolarNow

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- Solutions Height
- SparkMeter
- Standard Microgrid
- Sun Power
- SUNami Solar Kenya
  - SunCulture
- Sunny Irrigation
- SunnyMoney
- SupaMoto
- Talent & Technology
- Tara Urja
- Techno-Hill
- Trend Solar
- Ultratec
- Umeme

upOwa

Winsol

Zhidao

Zuwa

VITALITE

WANA Energy

Winock Solar

**ZOLA Electric** 

Zonful Energy

# Calculations & Definitions

For those who like to geek out, here's a summary of some of the calculations we used in this deck.

Metric	Calculation
Net Promoter Score®	The Net Promoter Score is a common gauge of customer loyalty. It is measured through asking customers to rate their likelihood to recommend your service to a friend on a scale of 0 to 10, where 0 is least likely and 10 is most likely. The NPS is the % of customers rating 9 or 10 out of 10 ('Promoters') minus the % of customers rating 0 to 6 out of 10 ('Detractors'). Those rating 7 or 8 are considered 'Passives'.
Inclusivity Ratio	The Inclusivity Ratio is a metric developed by 60 Decibels to estimate the degree to which an enterprise is reaching less well-off customers. It is calculated by taking the average of Company % / National %, at the \$1.90, \$3.20 & \$5.50 lines for low-middle income countries, or at the \$3.20, \$5.50 and \$11 lines for middle income countries. The formula is: $\sum_{x=1}^{3} \frac{([Company] Poverty Line $x)}{(Country Poverty Line $x)} / 3$
Customer Effort Score	How easy do you make it for your customers to resolve their issues? This measure captures the aftersales care and customer service. Customers who have experienced a challenge are asked to what extent they agree with the statement: Do you agree or disagree with statement: Overall, [Company] made it easy for me to handle my issue : disagree (1), somewhat disagree (2), neither agree or disagree (3), somewhat agree (4), agree (5). The CES is the average score between 1 and 5. It is an important driver of uptake, adoption, and referrals, as well as of impact.



I can comfortably do other things inI spend less time cooking and myI do not depend on gas and charcoal like

the house now. expenses have before.

gone down.

It is

cheaper,
clean
and faster to cook.

Have questions? Get in touch:

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