Clean Cooking Alliance Venture Catalyst

Lean Data Insights
Aggregate Report





Welcome To Your 60dB Results

We enjoyed hearing from 4,315 customers of 18 of your Venture Catalyst portfolio companies – they had a lot to say!

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Project Overview

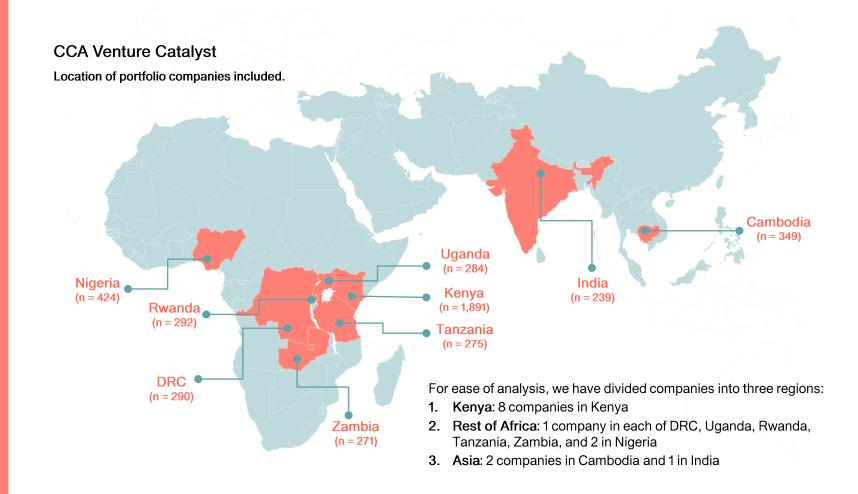
In this report, we have included 4,315 of these interviews, as these represent customers who started using the products and services from 1 May 2019 onwards.

For privacy reasons, participating companies have been anonymised throughout the report. They are displayed as Company 1 to 18.

Methodology overview:

- Survey method: phone interviews
- Average data collection: 5 weeks
- Average response rate: 81%
- Average survey length: 19 minutes
- Languages: Bemba, Bengali, English, French, Gujarati, Hindi, Kannda, Khmer, Luganda, Luo / Acholi Nyanja, Odia, Swahili, Tamil

We completed 18 impact studies between November 2021 and April 2023, talking to 4,812 customers of 18 CCA Venture Catalyst portfolio companies across 9 countries.



Executive Summary

Companies are providing products or services that most customers did not have access to before.

86% of customers did not have access to a clean cooking product or service before accessing the product or service through CCA portfolio companies, in particular customers in rural areas. 8 out of 18 companies have excellent First Access scores, above the 60 Decibels Energy and Cooking Benchmarks.

See pages 11 and 12.

Companies have contributed to improved quality of life, improved safety and health, and reduced fuel spending and cooking time for customers.

Impact performance is strong across all key areas, in particular quality of life and cooking time. 76% of customers say their CCA portfolio company product is their primary product for cooking now, with 37% using this product for all their cooking. Companies are generating similar impact despite having different offerings in diverse markets.

See pages 22, 32, and 33.

Around 1 in 3 customers live below the \$3.20 per day poverty line. There is room to reach more low-income customers.

The portfolio's Inclusivity Ratio of 0.57 is on par with the 60dB Cooking Benchmark of 0.52 but below the 60dB Energy Benchmark of 0.80. Portfolio companies could explore ways of making their products or services more affordable to low-income customers in their respective markets. We're happy to share more ideas on this!

See pages <u>10</u> and <u>15</u>.

The average portfolio Net Promoter Score of 40 is good. Customer service and issue resolution are key.

Despite scoring lower on impact performance and having higher challenge rates, the NPS for Asian companies is higher than African companies. This highlights the importance of customer service and issue resolution for customer satisfaction. We recommend that companies follow up with customers experiencing challenges to address these.

See pages <u>36</u>, <u>39</u>, and <u>41</u>.

Companies are filling a critical market gap, particularly among African customers, women, and those in rural areas.

71% of customers could not easily find a good alternative to their product or service. A higher proportion of customers in Asia have access to alternatives compared to Africa, suggesting Asian markets are relatively more competitive. 7 out of 18 companies are significantly above the 60 Decibels Energy and Cooking Benchmarks.

See pages <u>13</u>, <u>14</u>, and <u>15</u>.

Report Guide

CCA Portfolio Average

We calculated the average by equally weighting each companies' results.

Segmentation Analysis

We looked for differences in results by region, gender, location, and age. Where there are differences, we have called these out throughout the report.

Benchmarks

We have aggregated all the data we have collected over the years in the energy sector into our 60 Decibels Energy Benchmarks. We have compared your results to these Benchmarks throughout this report. Benchmark details are on the right.

A quick guide to the main concepts we use in this report.

60dB Energy Global Benchmark

• Companies: 110

Projects: 120

Respondents: 28,300+

Countries: 25

Products: home systems

lantern cooking mini-grid appliances

60dB Energy Africa Benchmark

• Companies: 86

• Projects: 95

Respondents: 24,100+

Countries: 17

Products: home systems

lantern cooking mini-grid appliances

60dB Energy Cooking Benchmark

• Companies: 24

• Projects: 24

Respondents: 8,400+

• Countries: 12

Products: cookstoves

briquette manufacturers

biodigesters PAYGO cooking fuel distributors

60dB Energy Asia Benchmark

• Companies: 22

• Projects: 22

Respondents: 3,900+

Countries: 6

• Products: home systems

lantern cooking mini-grid appliances

Performance Snapshot

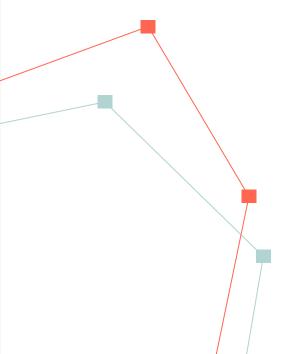
Given 18 out of 24 companies in the 60dB Cooking Benchmark are from the CCA portfolio, the average performance across most metrics is virtually the same as the benchmark (accounting for the 5% margin of error).

Metric	Kenya	Rest of Africa	Asia	CCA Average		60dB Cooking Benchmark		
First Access % accessing product for the first time	87%	87%	82%	86%		91%		
Access to Alternatives % with no easy access to good alternatives	78%	71%	53%	71%	<	77%		
Income Inclusivity Inclusivity Ratio	0.54	0.56	0.64	0.57	<u>=</u>	0.52		
Female Inclusivity % female customers	69%	54%	39%	58%	=	55%		
Net Promoter Score on a scale from -100 to 100	39	35	47	40		50		
Challenge Rate % not experiencing challenges	73%	69%	70%	71%	<u>=</u>	73%		
Customer Effort Score on a scale from 1 to 5	2.9	2.9	3.3	3.0	<u>=</u>	3.0		
Quality of Life % 'very much improved' quality of life	46%	33%	25%	37%	=	42%		
Value for Money % 'very good' or 'good' value for money	74%	70%	66%	71%		67%		

Note: Net Promoter Score is on a scale from -100 to 100, so a 5% difference (margin of error) is equivalent to 10 points.

Customer Voices

We love hearing customer voices. Here are some that stood out.



Impact Stories

84% shared how CCA portfolio companies' products and services had improved their quality of life

"[Product] saves on LPG cost. It produces organic fertiliser, that benefits my farm and through which crop productivity increases." – Male, 48

"Meals are clean and fresh without any smell of smoke. My meals are cooked on time. Sometimes I charge my phone from this product as well, so it is very helpful." – Male, 34

"[Product] helps me attract more customers because of its quality. The number of sales has increased, and I can save more money. More than this, [product] enables us to be flexible in cooking." – Male, 35

"We now cook different meals at the same time. None of our visitors can leave the house without eating now that we have the [company] product." – Female, 52

"Nowadays my kids don't sleep hungry even when I get to the house late, I make them food quickly and they eat before going to bed." – Female, 45

"I have cut back on the purchase of chemical fertilizers, and I really enjoy seeing the crops grow well. The kitchen is currently clean and free of smog." – Male, 30

Opinions On Portfolio Companies' Value Proposition

52% were Promoters and highly likely to recommend

"I find the product easy to use once you know how to use it. It uses less charcoal and cooks for long hours with small quantity of charcoal." – Female, 27

"It cooks fast and uses little charcoal. You can comfortably use it indoors without worrying of damage to the floor or smoke like with the normal stoves." – Female, 53

"The payment plan is good. Paying slowly for the [product] has enabled me to own something I didn't think I could own." – Female, 50

Opportunities For Improvement

30% had a specific suggestion for improvement

"I would appreciate it if the company could be more proactive and serious about follow ups and responding promptly. They should also conduct thorough quality assurance of their appliances." – Male, 53

"[Company] needs to improve on the stove by creating more holes to enable air to circulate and charcoal to burn properly. And they should also improve on the material so as to make the stove not too hot on the outer part." – Female, 50

"[Company] should look into their pricing. It's on the higher side." – Female, 46

Customer Profile

- Demographics
- Income Inclusivity
- First Access
- Access to Alternatives



Demographics

On average, Kenya has the highest percentage of female customers (69%), and Asia has the lowest (39%).

Rural penetration is highest in Kenya and lowest in the Rest of Africa, where populations are concentrated in periurban and urban areas.

Location (urban, peri-urban, and rural) is self-reported by customers.

42% of customers we spoke to are female. The average age is 41 years old. 32% live in a rural area, with around five other household members.

Demographic Profile of CCA Portfolio Company Customers

Data relating to customer characteristics (n = 4,315)

				Ke	nya					Rest of Africa									
Company	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total / Avg
Sample Size	128	242	274	246	247	279	256	219	290	292	275	271	284	275	148	55	294	239	4,315
Females	55%	83%	90%	70%	72%	74%	64%	45%	33%	60%	34%	74%	58%	61%	57%	45%	34%	37%	42%
Age (average years)	42	41	47	41	39	35	44	50	37	42	39	39	34	42	42	33	43	42	41
Household Size	5.0	5.7	5.4	4.6	4.5	4.9	5.6	5.8	5.1	5.9	4.5	5.9	5.3	5.6	5.6	6.8	5.6	6.4	5.5
Urban (city)	34%	-	1%	15%	70%	100%	2%	-1%	35%	89%	67%	39%	30%	40%	74%	92%	13%	0%	39%
Peri-urban	55%	33%	23%	48%	28%	-	24%	18%	64%	10%	32%	35%	50%	52%	23%	6%	23%	3%	29%
Rural (village or countryside)	11%	67%	77%	37%	2%	-	74%	81%	1%	1%	2%	27%	20%	8%	3%	2%	64%	97%	32%

Income Inclusivity

The Inclusivity Ratio shows the degree to which companies reaching lowincome customers in their countries of operation. This allows us to compare income inclusivity across countries.

A ratio above 1 means that a company is serving a higher proportion of lowincome customers than the national population. A ratio below 1 means a company is reaching a lower proportion of low-income customers relative to the national average.

8 out of 18 companies are above the 60dB Cooking Benchmark (0.52), while companies 2, 13, and 18 are above the 60dB Energy Benchmark (0.73).

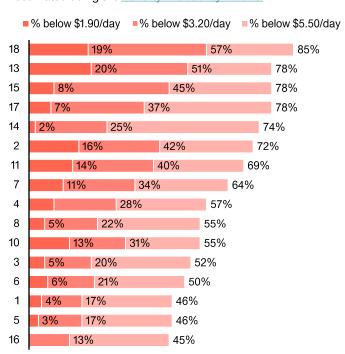
Company 9 is not included in this analysis because it operates in a country where the Poverty Probability Index® tool is not available.

9% of CCA portfolio company customers we interviewed live below the \$1.90/day poverty line, 32% below \$3.20/day, and 63% below \$5.50/day line.

Poverty Profile

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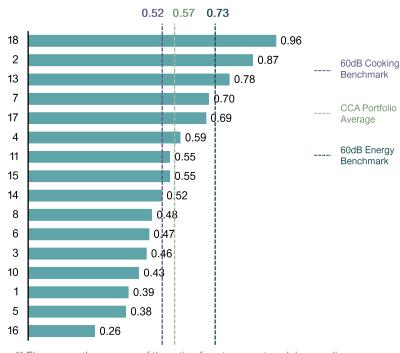
% of customers living below \$x.xx per person per day; estimated using the Poverty Probability Index®*



^{*} PPI is based on household surveys conducted in 2016 in Kenya, 2015 in Myanmar, 2013 in Uganda, 2011 in Cambodia, and 2010 in Zambia.

Inclusivity Ratio

Degree to which CCA is reaching population segments at \$1.90, \$3.20, and \$5.50 per day income lines**



^{**} Figures are the average of the ratio of customers at each income line (\$1.90/day, \$3.20/day, and \$5.50/day) compared to national figures.

First Access: Overview

The First Access indicator provides us insight into the degree to which companies are reaching unserved populations.

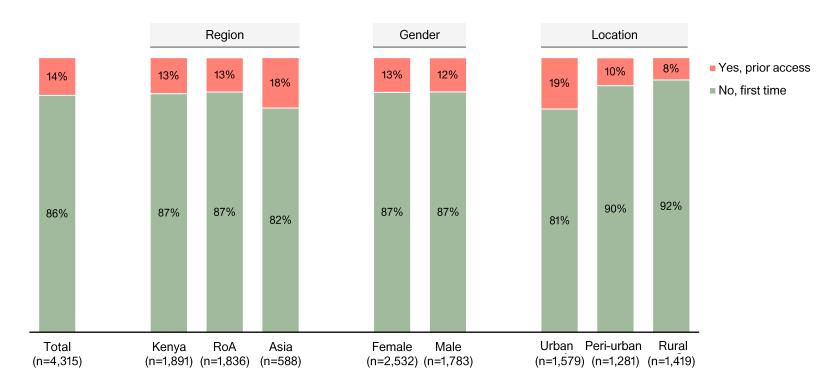
Customers in Africa (both Kenya and Rest of Africa) are accessing products for the first-time at a higher proportion than those in Asia.

There is a direct relationship between location and first-time access: those in rural (village) or peri-urban (town) areas are accessing products for the first-time at a higher proportion than those living in urban (city) areas.

86% of customers did not have access to a clean cooking product or service before working with CCA portfolio companies. First access is particularly high in rural areas.

First Access by Region, Gender, and Location

Q: Before [company], did you have access to a [product/service] like [company] provides? (n = 4,315)



First Access: Company Level

Contribution from companies 6 and 16 suggests that they are reaching a customer base in which a relatively larger group of customers have accessed a similar offering before.

If we exclude companies 6 and 16 from their respective regions, first-time access across regions averages 90%.

For reference, these are the relevant 60dB Energy Benchmarks:

(% accessing for the first time)

 Global: 79% (78 companies)

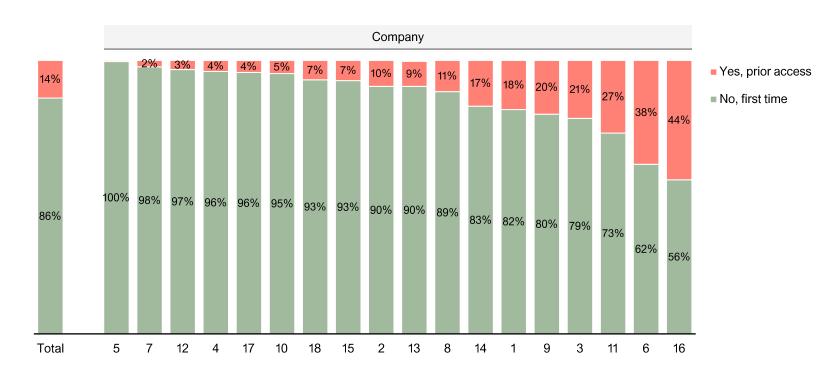
91% Cooking: (22 companies)

 Africa: 79% (66 companies)

93% Asia: (11 companies) 8 out of 18 CCA portfolio companies have excellent First Access scores, above the 60dB Energy Benchmark of 79% and Cooking Benchmark of 91%.

First Access by Company

Q: Before [company], did you have access to a [product/service] like [company] provides? (n = 4,315)



Access to Alternatives: Overview

Availability of alternatives provides insight into the competitive landscape and the degree to which CCA portfolio companies are providing a scarce product or service.

71% said they could not easily find a good alternative, suggesting that CCA portfolio companies are filling a critical market gap and are important players in the market.

This market gap filling is relatively more substantial in Africa (both Kenya the Rest of Africa), for women, and those in rural and peri-urban areas.

71% of CCA portfolio company customers say they could not easily find a good alternative to the products and services they now have.

Access to Alternatives by Region, Gender, and Location

Q: Could you easily find a good alternative to [company] [product/service]? (n = 4,315)



Access to Alternatives: Company Level

Companies 5, 7, and 12 are particularly strong performers, with 94% or more customers saying they could not easily find a good alternative to them.

Results for companies 16 and 17 suggest that they operate in a highly competitive market with other good alternatives they could shift to. This is aligned with their First Access results.

For reference, these are the relevant 60dB Energy Benchmarks:

(% reporting no good access to alternatives)

 Global: 83% (80 companies)

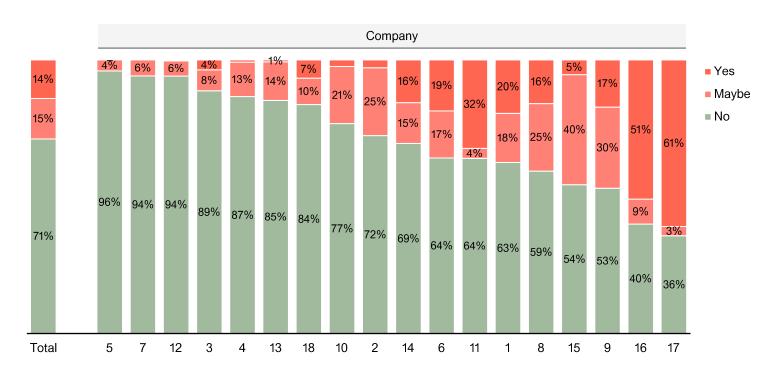
77% Cooking: (23 companies)

 Africa: 81% (67 companies)

Asia: 88% (11 companies) 7 out of 18 CCA portfolio companies have excellent results, above the 60dB Energy Benchmark of 83% and Cooking Benchmark of 77%.

Access to Alternatives by Company

Q: Could you easily find a good alternative to [company] [product/service]? (n = 4,315)



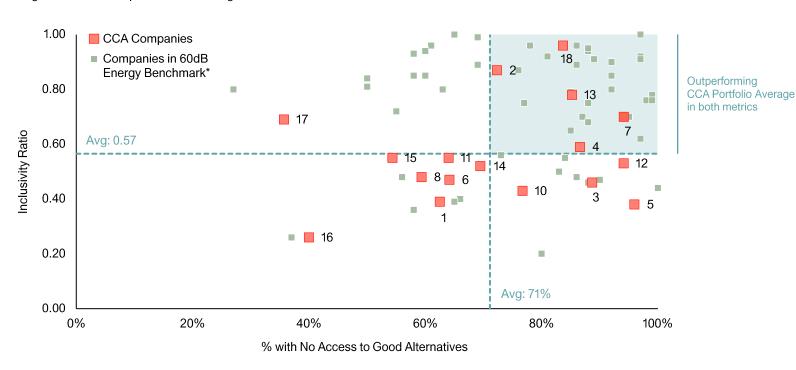
Income Inclusivity & Access to Alternatives

Combining lack of access to good alternatives with the Inclusivity Ratio enables us to identify companies who are reaching a high proportion of lowincome customers in markets with scarce alternatives.

Companies reaching the highest proportion of unserved customers are also more likely to be serving lower-income customers.

Inclusivity Ratio vs. Lack of Access to Good Alternatives

Degree to which companies are reaching low-income customers in markets with scarce alternatives.



^{* 60}dB Benchmark includes 68 company results for these indicators.

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Cooking Habits

- Sources of Energy
- Past Cooking Experience
- Current Cooking Experience



Sources of Energy

We asked customers what sources of fuel they used for cooking before and after purchasing products from the CCA portfolio companies.

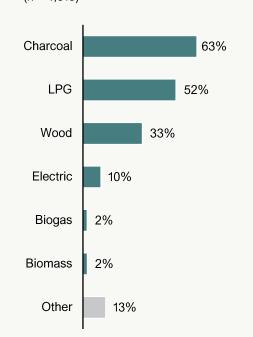
While charcoal remains the most commonly used source of fuel, 3% of customers have moved away from charcoal as their primary source. An additional 9% of them have moved away from wood.

Biogas and biomass used to account for 4% of primary sources of fuel before. Now, 1 in every 5 customers uses one of them, meaning they are utilising cleaner and safer fuels.

CCA portfolio companies are generally helping customers transition into cleaner and safer fuels. Customers have moved away from charcoal and wood, and into biogas and biomass.

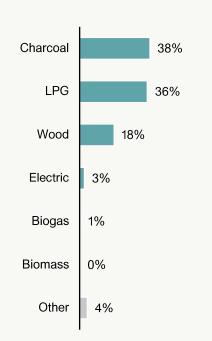
Previous Sources of Energy

Q: What sources of energy or fuel were you using for cooking before [product/service]? (n = 4,315)



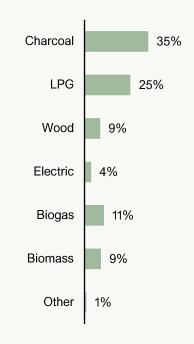
Previous Primary Energy Source

Q: What was your primary source before purchasing the [product/service]? (n = 4,315)



Current Primary Energy Source

Q: What is your primary source of fuel for cooking now? (n = 4,315)



Past Cooking Experience

58% of customers used an artisanal charcoal stove or woodstove for cooking prior to CCA portfolio companies' cookstoves.

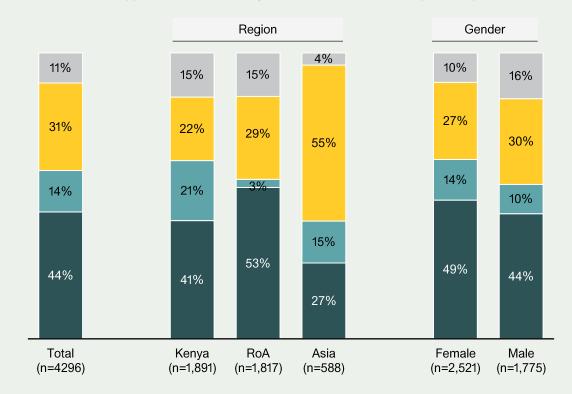
Customers in Asia were more likely to use a gas stove (55%) compared to Rest of Africa (29%) and Kenya (22%).

Female customers were more likely to use artisanal cook stoves (63%) compared to male customers (54%).

The average cost of previous cooking products for 72% of customers who shared the specific amount was \$26.



Q: Which product(s) did you use for cooking before [company] [product]? (n = 4,296)



Other

Gas stove

Artisanal wood stove

Artisanal charcoal stove

Current Cooking Experience: Primary

76% of customers say their CCA portfolio company product is their primary product for cooking now. 37% say they do all their cooking with their CCA company cookstove.

Customers in Asia are less likely to say their primary product for cooking is a CCA portfolio company product.

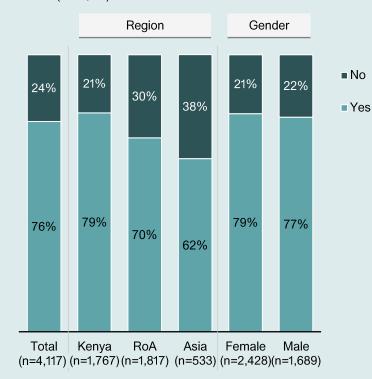
Younger customers, aged 18-29, are more likely to use their product as the primary one (85%) than those aged 30-49 (79%) or 50+ years old (77%).

Younger customers are more likely to use their product 100% of the time (51%) than those aged 30-49 (37%) or 50+ years old (32%).

Clients in Asia are most likely to not be using the CCA product at all.

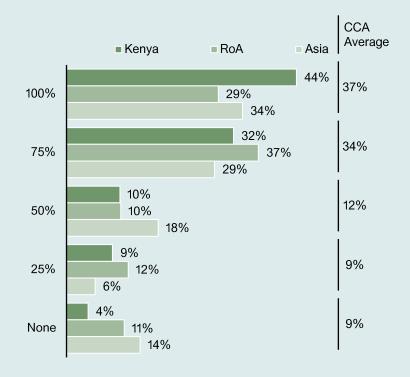
Current Cooking Product

Q: Is [company] [product] your primary product for cooking now? (n = 4,117)



Cooking Proportion

Q: What proportion of the household cooking is done with the [company] [product]? (n = 4.311)



Current Cooking Experience: Other

66% of customers use an additional cookstove. Meal type is the most important factor for these customers. However, urban customers consider this less of a factor (53%) than those in

The majority of these customers have another stove to cook for more (or less) people, to boil water, for slow cooking, or just as a backup.

peri-urban (73%) or rural areas (73%).

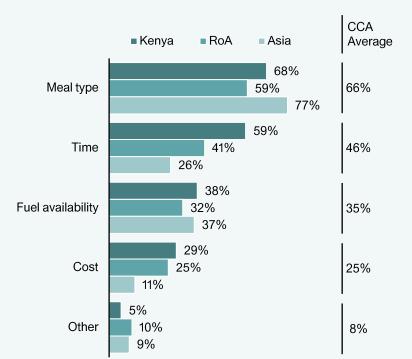
Cost is not one of the main factors. Still, a higher proportion of urban customers say cost is an important factor (38%), compared to those in a peri-urban (22%), or rural area (11%).

Younger customers, aged 18-29, are more likely to have only one other cookstove (65%) than those aged 30-49 (58%) or 50+ years old (59%).

Customers use other cookstoves mainly due to meal type and time constraints. 64% of them have only one other stove that they use regularly.

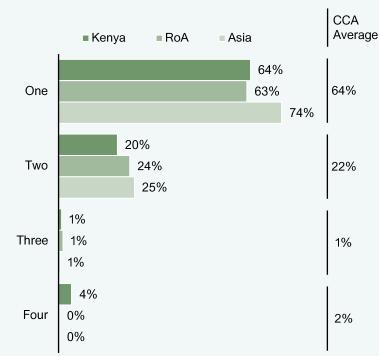
Cooking Proportion Reason

Q: What does this proportion of cooking depend on? (n = 2.806)



Number of Other Cookstoves

Q: In addition to your [company] [product], how many other cookstoves do you use regularly? (n = 2,843)



Impact Performance

- Quality of Life
- Safety
- Health
- Fuel Spending
- Cooking Time
- Productive Use
- Composite Index



To gauge depth of impact, customers were asked to reflect on whether their quality of life has changed because of CCA portfolio companies' products and services. Overall, 81% of them say their life has improved.

Rural customers are more likely to mention 'very much improved' (46%) compared to those in peri-urban (39%) or urban areas (30%).

For reference, these are the relevant 60dB Energy Benchmarks:

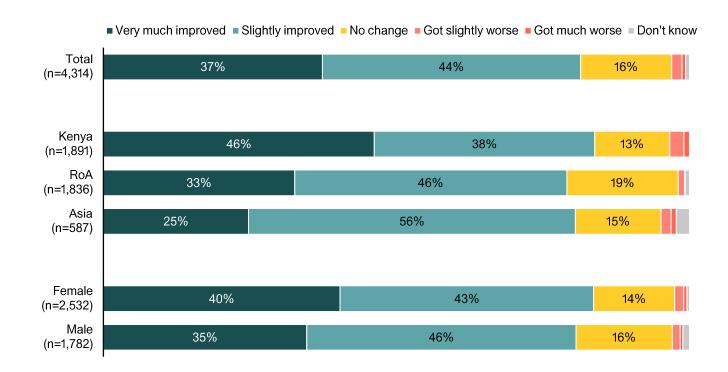
 Global: 53% (102 companies) 42% Cooking: (24 companies) Africa: 60% (79 companies)

Asia: 31% (22 companies) 37% of customers we interviewed say their quality of life has significantly improved because of the CCA company product or service. This is lower than the 60dB Energy Benchmark of 53% and the Cooking Benchmark of 42%.

Quality of Life by Region and Gender

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Q: Has your quality of life changed because of [company] [product/service]? (n = 4.314)



Quality of Life: Top Outcomes

Customers were asked to describe – in their own words – any changes they were experiencing because of the different CCA portfolio company products and services.

The homogeneity of results suggests that CCA portfolio companies are able to contribute similar impact despite having diverse offerings with different business models in various markets.

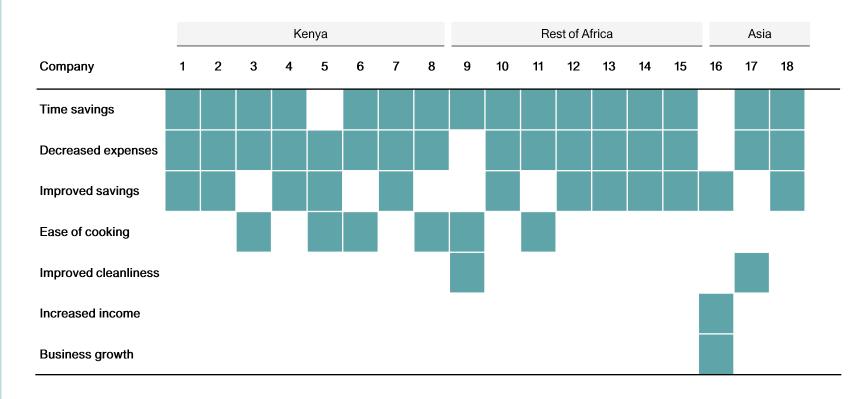
16% of customers consider that their quality of life has not changed – they mention they cannot see tangible benefits or that they don't use the product or service regularly.

3% of customers consider their quality of life got worse – they talk about increased expenses as a result of using the product or service.

Time savings, decreased expenses, and improved savings are the most common outcomes mentioned by customers who say their quality of life has improved.

Quality of Life Top Outcomes Experienced by 81% Who Report Improvements

Q: How has your quality of life improved? Open-ended, coded by 60 Decibels. (n = 3,555)



Safety

companies' products and services.

Customers who live in rural areas are more likely to mention higher rates of improvements in safety (85%) in comparison to those who live in periurban (77%) and urban areas (71%).

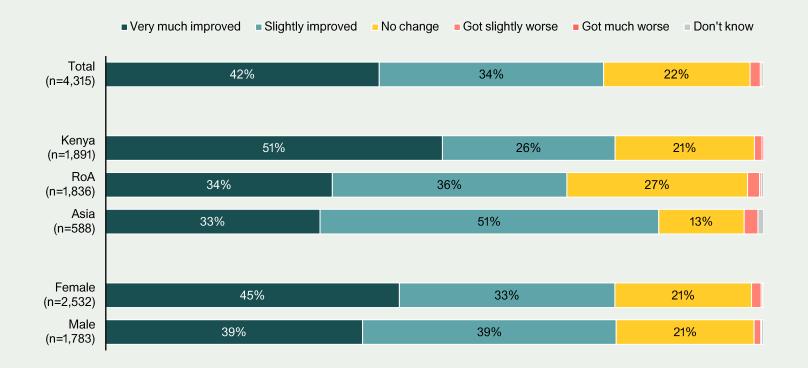
"I love the fact that my entire family can now cook because of [company] unlike before. The safety of my children is always guaranteed whether my wife and I are around or not." - Male, 35

Safety in Home or Business by Region and Gender

Q: Has how safe you feel in your home or business changed since having the [product]? Has it: (n = 4,315)

3 in 4 customers say that their feelings of safety at home or

at their businesses has improved since using CCA portfolio



Health: Overview

Health improvements are more significant in Kenya, with 32% mentioning 'very much improved', compared to 22% in the Rest of Africa and 21% in Asia.

This is likely related to prior energy sources. Customers in Kenya and the Rest of Africa were more likely to use charcoal or wood as their primary energy source (64% and 53%, respectively), compared to those in Asia (43%) whose main primary energy source was LPG (55%).

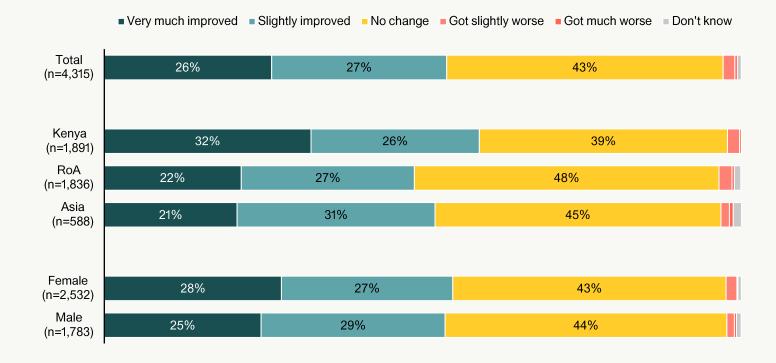
"I am weak and sick but this [product] has really helped me because I do not have to search for firewood and I can cook comfortably while seated anywhere in the house." - Female, 62

53% of customers say that their own or their family's health has improved since using products and services from the CCA portfolio companies.

Health by Region and Gender

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Q: Has the health of you or your family changed since having the [product]? (n = 4.315)



Health: Top Outcomes

Improvements in respiratory function, general physical wellbeing, and hygiene were the most cited health changes.

Customers were asked to explain any health changes they have experienced since using CCA portfolio companies' products and services.

Top Health Outcomes Experienced According to Customers

Q: Please explain how the health of you or your family changed. Open-ended, coded by 60 Decibels.

				Ke	nya				Rest of Africa								Asia			
Company	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Improved respiratory function																				
Better physical well- being																				
Less exposure to smoke																				
Better hygiene																				
Reduced headaches																				
Eye health																				
Personal safety																				
Less fatigue from cooking																				

Fuel Spending

Customers in rural and peri-urban areas are significantly more likely to say 'very much decreased' fuel spending (50% and 44%, respectively) than those in urban areas (28%).

72% of CCA portfolio company customers mention a decrease in weekly spending on fuel since having the product or service.

Average Weekly Spending by Region and Gender

Q: Has your average weekly spending on fuel for cooking changed since having the [product/service]? (n = 4,241)

■ Very much decreased ■ Slightly decreased ■ No change ■ Slightly increased ■ Very much increased ■ Don't know Total 38% 34% 14% 8% (n=4,241)Kenya 45% 28% 9% 10% 8% (n=1,817)RoA 37% 37% 17% 5% 3% (n=1,836)Asia 21% 41% 23% 10% 2% (n=588)Female 42% 33% 11% 8% 6% (n=2,487)Male 35% 38% 15% 8% (n=1,754)

Cooking Time

A higher proportion of customers in Africa report a decrease in cooking time, compared to customers in Asia. This could be due to those in Africa previously using mainly charcoal and wood as sources of fuel, while those in Asia mainly used LPG.

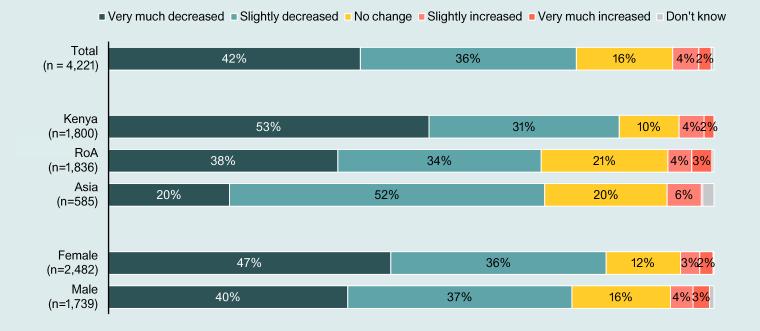
Customers who use the company's product or service for all their cooking are more likely to mention a significant decrease in cooking time (62%), compared to those who do not (35%).

77% of customers mention a decrease in the time spent on cooking each day since they started using the CCA portfolio company product or service.

Average Cooking Time by Region and Gender

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Q: On average, has the time spent on cooking each day changed since you started using [product/service]? (n = 4,221)



Productive Use: Overview

Overall, 14% of customers use their product or service for productive use – either in a place of business or at home for income-generating activities.

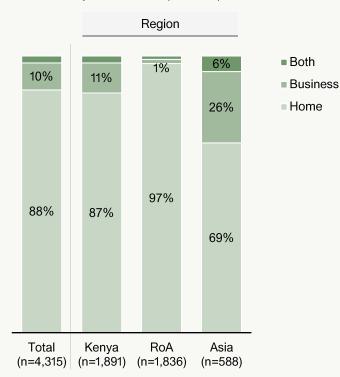
86% of customers used their cooking product or service for domestic use.

Urban and peri-urban customers are more likely to use products and services at their businesses (8% each), compared to those in rural areas (2%).

As a result, a higher proportion of urban (9%) and peri-urban (8%) customers use it for productive use, compared to those rural areas (3%).

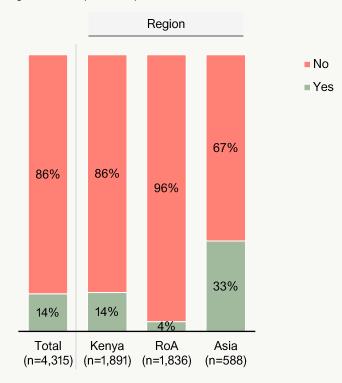
Business or Home

Q: Are you using your [company] [product/service] in your home and/or your business? (n = 4,315)



Productive Use

Q: Do you use the [company] [product/service] for incomegeneration? (n = 4,315)



Productive Use: Income Change

Of the 14% of customers who use their products or services for incomegeneration, 25% of them say that their income has 'very much increased' since using CCA portfolio companies' products and services.

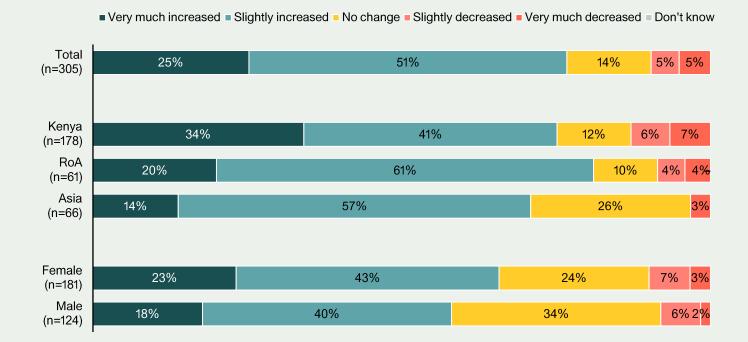
Income change is more significant in Kenya, with those saying 'very much increased' significantly higher than in other regions.

However, for 16 out of the 18 companies, sample size of those pursuing income-generating activity was below 30, so results should be seen as illustrative, not conclusive.

76% of customers who use products or services for productive use say that their income has increased. 25% mention that it has 'very much improved'.

Income Change

Q: Since you have had the [company] [product/service] have you seen any change in your income, related to the [product]? (n = 305)



Composite Index: Overview

Composite index impact areas:

- Quality of Life % improved
- 2. Safety % improved
- Health % improved
- Spending % decreased
- 5. Time % decreased

We compared each company's performance to the CCA average to see whether they are over or under performing in each impact area. For easier analysis, we equalised the CCA average to 100%.

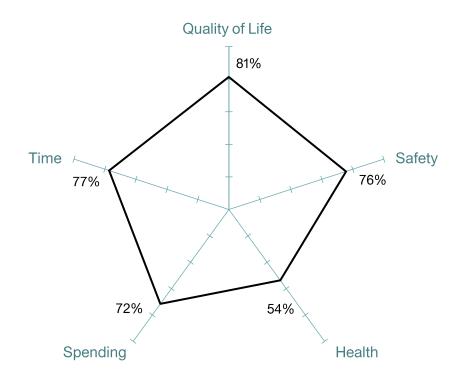
These results are on the next page. To see absolute results, go to page 46.

The CCA Composite Index captures performance across five main impact areas within clean cooking. Average impact performance is strong across all areas. Products or services are least likely to have an impact in health.

CCA Composite Index

Lean Data Insights for CCA

Relative performance across main impact areas.



Quality of Life = 81%

37% 'very much' + 44% 'slightly' improved

Safety = 76%

42% 'very much' + 34% 'slightly' improved

Health = 54%

26% 'very much' + 27% 'slightly' improved

Spending = 72%

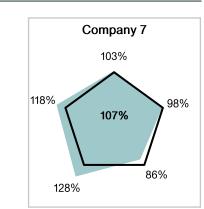
38% 'very much' + 34% 'slightly' decreased

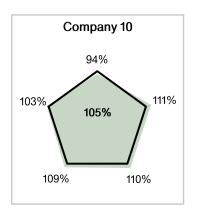
Time = 77%

42% 'very much' + 36% 'slightly' decreased

Kenya

Company 1 Company 4 104% 72% 116% 113% 77% 82% 113% 71% 110% 112% 118%





Company 11

88%

83%

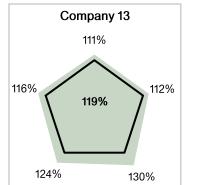
89%

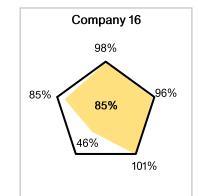
70%

83%

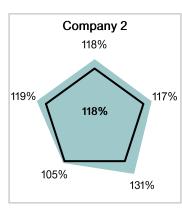
87%

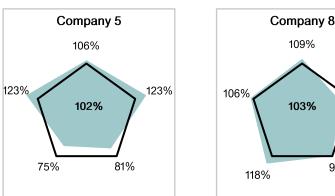
Rest of Africa

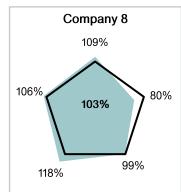


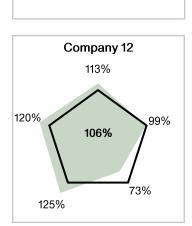


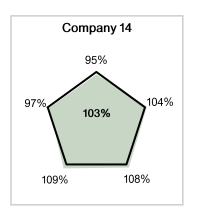
Asia

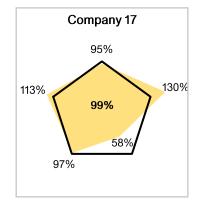


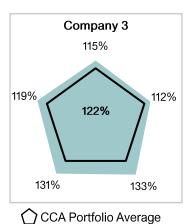


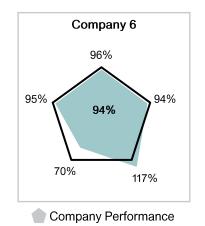


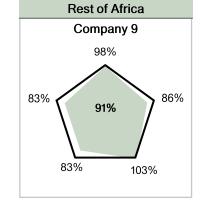


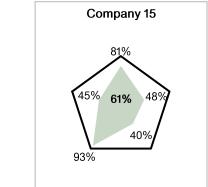


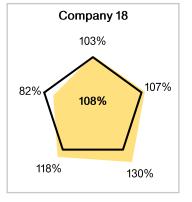








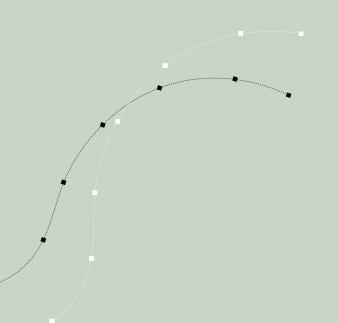


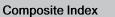


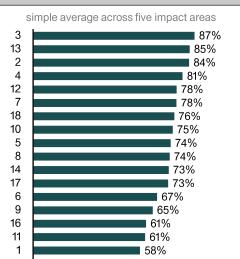
Composite Index: **Company Rankings**

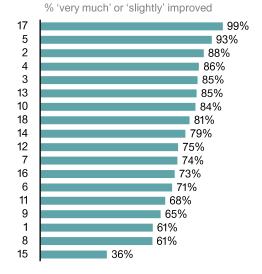
We ranked companies under each impact area and the composite index.

As seen in previous slides, companies 2, 3, and 13 are usually among the top performers. On the other end, 1 and 10 are usually among the worst.



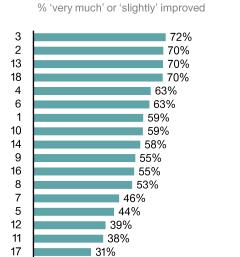






Safety

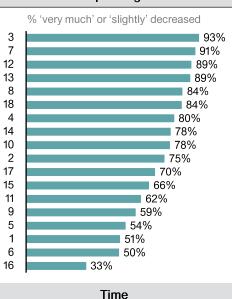
Health



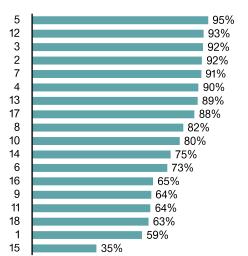
21%

15

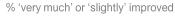
Spending

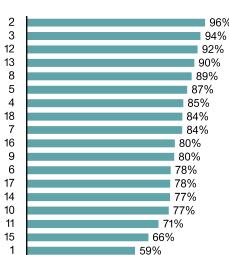


% 'very much' or 'slightly' decreased









33

Customer Experience

- Challenges Experienced
- Net Promoter Score
- Value for Money
- Ranked Performance
- Closing Thoughts



Challenges Experienced: Overview

As opposed to other 60dB metrics, a lower rate signals better performance.

There is significant room for improvement in companies 1, 6, 8, 11, 15, and 17, all of which have challenges rates 40% or above. The next page shows the most common issues experienced.

For reference, these are the relevant 60dB Energy Benchmarks:

 Global: 30% (100 companies)

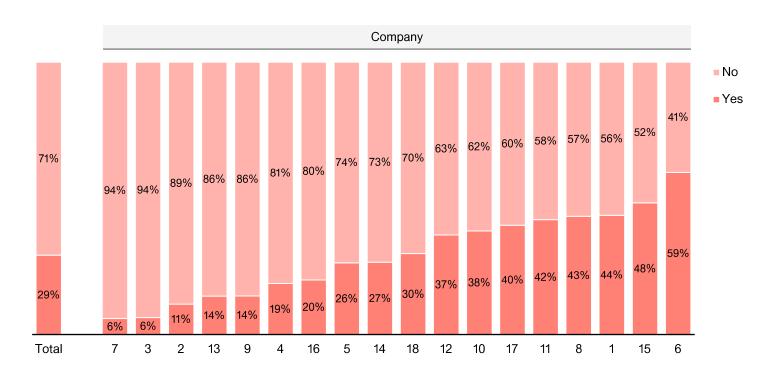
27% Cooking: (24 companies)

 Africa: 31% (81 companies)

Asia: 24% (17 companies) 29% of customers have faced a challenge with a product or service. This is slightly below the 60dB Energy Benchmark of 30% and above the Cooking Benchmark of 27%.

Customers Reporting Challenges by Company

Q: Have you experienced any challenges with using [company] [product]? (n = 4,315)



Challenges Experienced: Top Issues

We ask this question framed by customer experience rather than fault. Therefore, challenges sit in three 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 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.

We coded customers open-ended responses to group their challenges. The most common were parts breaking or not working, poor quality product, and poor product functionality.

Most Common Issues for 29% of Customers Experiencing Challenges

Q: Please explain the challenge you have experienced. (n = 1,239). Open-ended, coded by 60 Decibels.

				Ker	ıya						Asia							
Company	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Parts breaking or not working																		
Poor quality product																		
Poor customer service																		
Insufficient / low biogas levels																		
Smoke and ash emission																		
Difficulty lighting																		
Poor product functionality																		

Cooking

Challenges Experienced: Resolution

74% of customers who have experienced a challenge have not had their issue resolved. Customer service in most of the CCA portfolio companies has room for improvement.

Of the 29% who experienced challenges, 74% said that their challenge had not yet been resolved (20% of total customers). Unresolved challenges can encourage negative word-of-mouth and detract from positive impact.

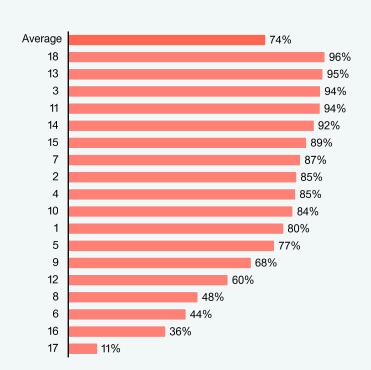
Customers who have experienced a challenge are asked about how easy it was to get an issue handled. This is the Customer Effort Score (CES), and it is the average rating of all customers.

The average CES of CCA portfolio companies is 3.0 out of 5. This rating suggests that customers have mixed views on the customer service the portfolio companies offer.

Unresolved Challenges

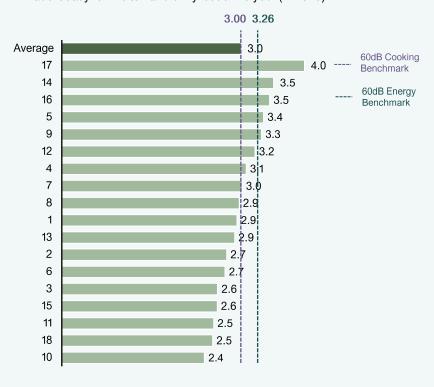
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Q: Has the challenge been resolved? (% 'no', n = 848). From those experiencing challenges.



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 = 848)



Net Promoter Score: Company Level

The Net Promoter Score® (NPS) is a gauge of customer satisfaction and loyalty. A score above 50 is considered very good, a negative score is poor.

Companies 7, 2, 12, and 16 stand out with excellent scores, while 1, 9, 15, and 6 have room for improvement.

On average, 52% of customers are Promoters, which suggests that the majority of CCA portfolio company customers are relatively satisfied with the product or service they receive.

For reference, these are the relevant 60dB Energy Benchmarks:

(% Promoters - % Detractors, from -100 to 100)

• Global: 49 (109 companies)

• Cooking: 49 (23 companies)

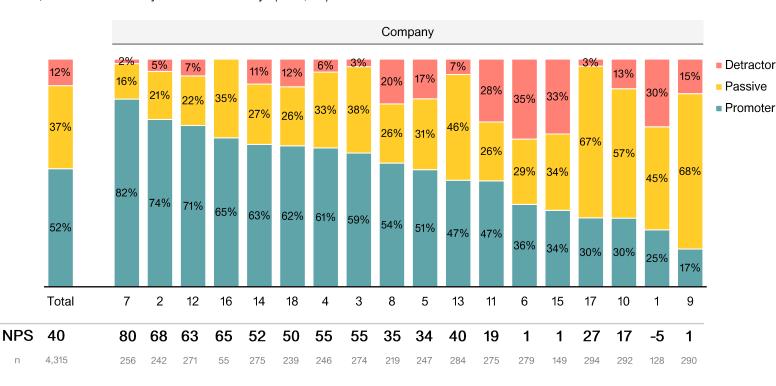
• Africa: 51 (80 companies)

• Asia: 44 (22 companies)

The Net Promoter Score ranges from -5 to 80, with Company 7 leading the group. The NPS for 8 out of 18 companies is above the 60dB Energy Benchmark of 49.

Net Promoter Score® by Company

Q: On a scale of 0 to 10, how likely are you to recommend the [company] [product] to a friend or family member, where 0 is least likely and 10 is most likely? (n = 4,315)



Net Promoter Score: Segments

The Net Promoter Score® (NPS) for Asian customers is the highest despite reporting a high rate (30%) like the Rest of Africa (31%) and Kenya (27%).

However, challenge resolution is key: Asian companies have a significantly higher proportion of resolved challenges (52%), compared to Kenya (25%) and the Rest of Africa (17%).

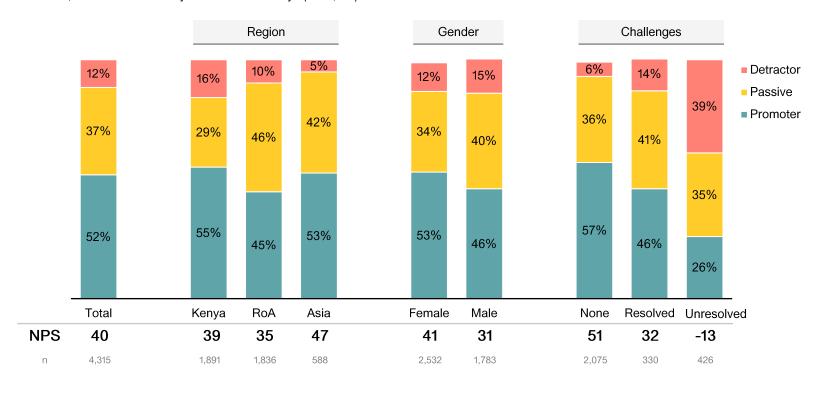
Still, avoiding challenges in the first place drives higher customer satisfaction, as shown on the right.

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

The average NPS for Asian customers is higher than for African ones. The average NPS for female customers is higher than for males.

Net Promoter Score® by Segment

Q: On a scale of 0 to 10, how likely are you to recommend the [company] [product] to a friend or family member, where 0 is least likely and 10 is most likely? (n = 4,315)



Net Promoter Score: Drivers

Drivers listed as other include:

- Clean product / burns well
- Flexible payments
- Good customer service
- Access to fertiliser
- Good product quality
- Reliable product

Make sure to highlight these value drivers in marketing materials. Promoters are powerful brand ambassadors - can they be rewarded for positive word of mouth?

We coded customers open-ended responses to group their top value drivers. The most common are that the product or service cooks fast, saves energy, and reduces smoke.

Most Common Drivers for 52% of Customers Who are Promoters

Q: What specifically about [company [product/service] would cause you to recommend it to a friend or family member? (n = 2,163). Open-ended, coded by 60 Decibels.

	Kenya									Rest of Africa							Asia		
Company	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Cooks fast																			
Saves energy																			
Reduces smoke																			
Affordable																			
Easy or safe to use																			
Durable product																			

Customer Satisfaction & Challenge Experience

Generally, the higher the proportion of customers not experiencing challenges, the higher the Net Promoter Score.

The same relationship applies to gender differences: a higher proportion of females have not experienced challenges (73%) than males (68%), which results in a higher NPS for females (41) than for males (31).

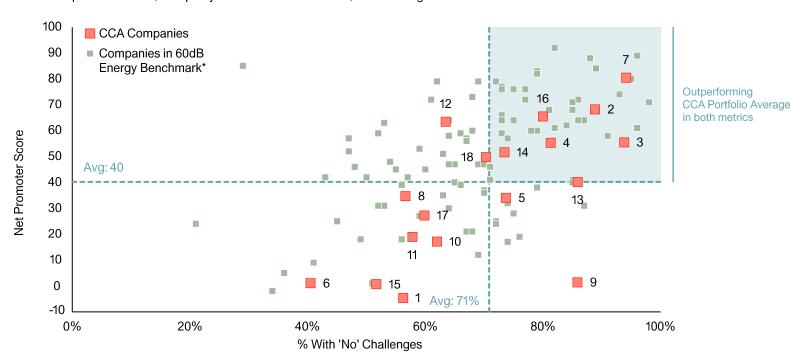
In order to improve customer satisfaction, CCA portfolio companies should aim to reduce their challenge rate (i.e. increase the proportion of those reporting no challenges).

Customer satisfaction is driven by the challenge rate. Companies with the highest NPS have the largest proportion of customers who have not experienced challenges.

Net Promoter Score vs. No Challenges Experienced

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Relationship between NPS, as a proxy for customer satisfaction, and challenge rate.



^{* 60}dB Benchmark includes 102 company results for these indicators.

Value for Money

We use the value for money question to understand whether customers feel the product or service offered is a good use of the money they spend on them.

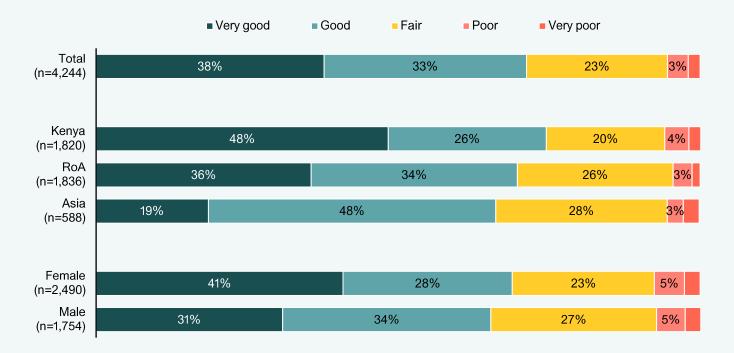
Rural customers are more likely to say value for money is 'very good' (47%, compared to customers in peri-urban (36%) and urban areas (28%).

Value for money and NPS are closely linked. A larger share of Promoters rate the product or service as good value for money (84%), compared to Passives (59%) and Detractors (25%).

71% of customers rate the product or service they have as good value for money. Customers in Kenya and women give a higher rating than those in other regions and men.

Value for Money

Q: How do you rate the value for money of [company] [product/service]? (n = 4,244)



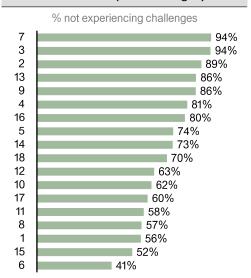
Ranked Performance

We ranked companies for the experience metrics in this section.

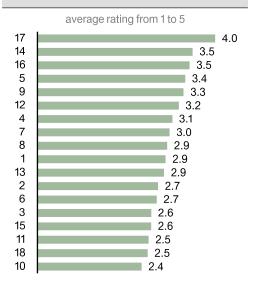
Companies 2, 7, and 16 are the top performers across all metrics. On the other end, companies 1, 10, and 17 are usually among the worst performers.



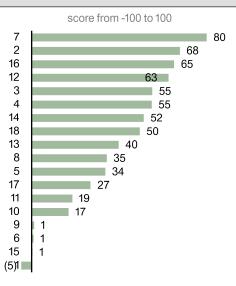
Ease of Use (No Challenges)



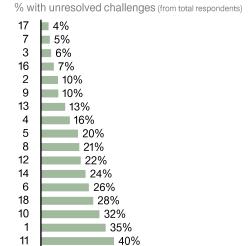
Customer Effort Score



Net Promoter Score



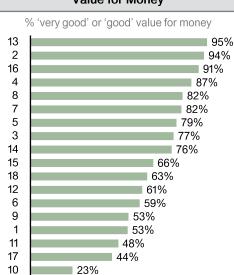
Challenge Resolution



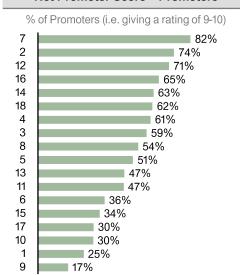
43%

15

Value for Money



Net Promoter Score - Promoters



the most common suggestions shared by customers.

Cooking

Experience

Closing Thoughts

60 __decibels

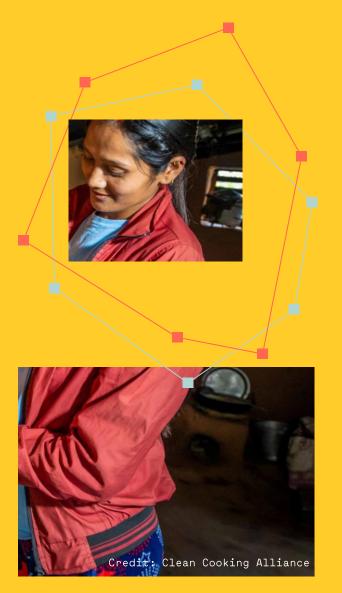
Q: Is there anything else you'd like to share related to what we've been talking about? (n = 4,315). Open-ended, coded by 60 Decibels.

		Kenya						Rest of Africa							Asia			
Company	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
% who provided suggestion	34%	55%	18%	21%	53%	42%	11%	42%	40%	47%	73%	43%	34%	32%	38%	25%	22%	23%
Suggestion #1	Improve product quality (11%)	Improve customer service (18%)	Improve product availability (9%)	Improve product quality (7%)	Improve fuel price (32%)	Improve customer service (22%)	Improve product quantity (6%)	Improve customer service (22%)	Reduce price paid (13%)	Improve fuel price (23%)	Improve product availability (44%)	Improve product availability (12%)	Improve product availability (13%)	Improve product durability (22%)	Improve product quality (32%)	Improve product quality (13%)	Improve customer service (5%)	Improve customer service (9%)
Suggestion #2	Improve marketing (7%)	Improve customer experience (15%)	Improve customer service (6%)	Improve product availability (4%)	Improve product availability (16%)	Improve customer experience (21%)	Improve product availability (5%)	Improve product quality (10%)	Improve gas quantity (8%)	Improve product availability (22%)	Improve fuel price (20%)	Improve product quality (9%)	Improve customer experience (11%)	Increase product size (10%)	Improve product availability (5%)	Reduce price paid (11%)	Increase product size (5%)	Improve post-sales services (9%)
Suggestion #3	Reduce price paid (7%)	Improve product availability (14%)	Improve product quality (2%)	Improve customer experience (4%)	Improve product quality (16%)	Improve product availability (11%)	-	Improve product knowledge (7%)	Improve customer service (6%)	Improve product functionalit y (11%)	Improve product quality (13%)	Improve customer service (6%)	Improve product quality (11%)	Improve cookstove combustio n (3%)	Improve fuel price (3%)	Improve customer service (2%)	Reduce price paid (3%)	Improve reliability (5%)

Appendix

- Benchmarking Comparison
- Calculations & Definitions
- Social Media Content



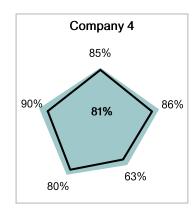


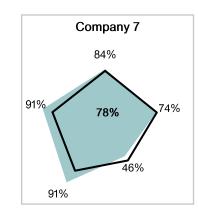
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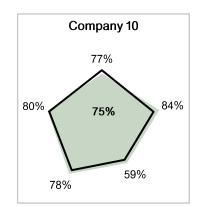
46

Kenya

59% 58% 61% 59%

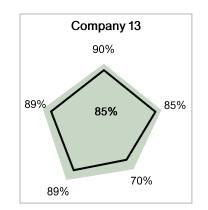


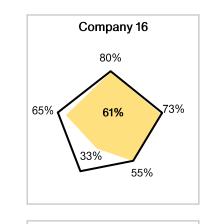




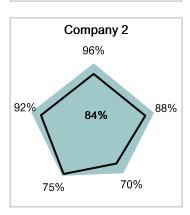
Company 11

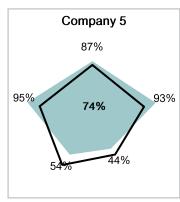
Rest of Africa

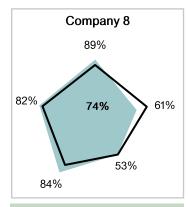


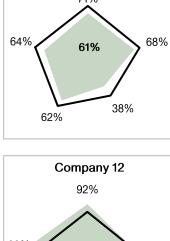


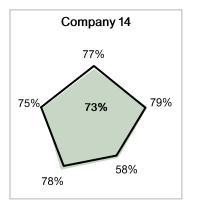
Asia

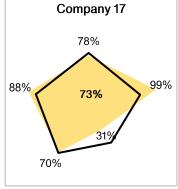


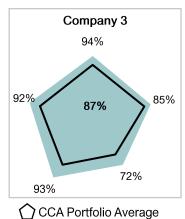


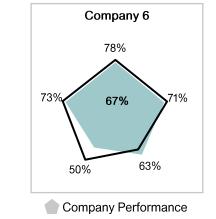


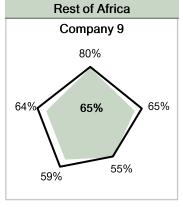


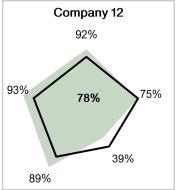


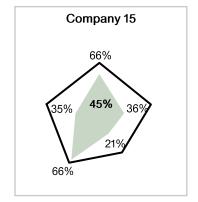


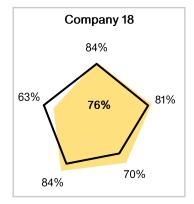












60 _ decibels

Lean Data Insights for CCA

Impact Management Project

We aligned your results to the Impact Management Project. We're big fans of the IMP – it's a simple, intuitive and complete way of conceptualizing impact.

We take pride in making the data we collect easy to interpret, beautiful to look at, and simple to understand and act upon.

We also align our data with emerging standards of best practice in our space, such as the Impact Management Project (IMP).

The IMP introduces five dimensions of impact: Who, What, How Much, Contribution, and Risk.

These dimensions help you check that you haven't missed any ways of thinking about, and ultimately measuring, the positive and negative changes that are occurring as a result of an intervention.

IMPACT MANAGEMENT PROJECT

Dimension	Explanation
Who	The Who of impact looks at the stakeholders who experience social and environmental outcomes. All things equal, the impact created is greater if a particularly marginalised or underserved group of people is served, or an especially vulnerable part of the planet protected. For the who of impact, we tend to work with our customers to understand poverty levels, gender and disability inclusivity.
What Impact	What investigates the outcomes the enterprise is contributing to and how material those outcomes are to stakeholders. We collect most of this what data using qualitative questions designed to let customers tell us in their own words the outcomes they experience and which are most important to them.
How Much ≣	How Much looks at the degree of change of any particular outcome.
Contribution +	Contribution seeks to understand whether an enterprise's and/ or investor's efforts resulted in outcomes that were better than what would have occurred otherwise. In formal evaluation this is often studied using experimental research such as randomised control trials. Given the time and cost of gathering these data, this is not our typical practice. We instead typically ask customers to self-identify the degree to which the changes they experience result from the company in question. We ask customers whether this was the first time they accessed a product of technology like the one from the company, and we ask how easily they could find a good alternative. If a customer is, for the first time, accessing a product they could not easily find elsewhere, we consider that the product or service in question has made a greater contribution to the outcomes we observe.
Risk ∆	Impact Risk tells us the likelihood that impact will be different than expected. We are admittedly still in the early days of figuring out how best to measure impact risk – it's an especially complex area. That said, where customers experience challenges using their product or service, we do think that this correlates with a higher risk that impact does not happen (i.e. if a product or service is not in use then there's no impact). Hence, we look at challenge rates (the percent of customers who have experienced challenges using a product or service), and resolution rates (the percent of customers who experienced challenges and did not have them resolved) as customer based proxies for impact risk.

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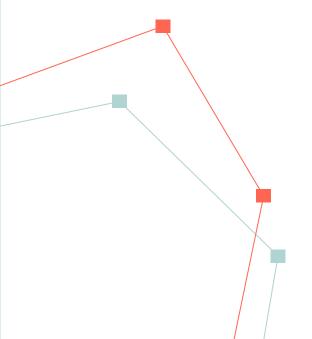
Calculations & Definitions

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.

Social Media Content

Strengthen your brand by showing you #ListenBetter.



Why not share these findings with your team and partners? This helps demonstrate you take impact measurement seriously.



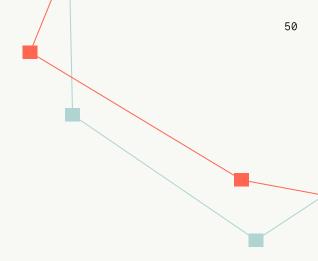


Tweets or WhatsApp messages to share publicly or with Partners and Staff

- 81% of our customers across our Venture Catalyst portfolio companies say the
 quality of their lives has improved since using their new product/service. "My life
 has improved because I make use of the money that I save from buying wood and
 cooking has become easy. I can also cook from the house unlike before." We
 #ListenBetter with @60_decibels
- CCA Venture Catalyst portfolio companies are increasing energy access for families in Africa and Asia; 86% of customers are accessing a clean cooking product or service for the first time. We #ListenBetter with @60_decibels
- 72% of CCA Venture Catalyst portfolio company customers report that their average weekly spending on fuel for cooking has decreased since working with our portfolio companies. "I have been able to reduce fuel costs and save some money, which has helped me supplement my diet." We #ListenBetter with @60_decibels
- 71% of customers rate CCA Venture Catalyst portfolio companies' products and services as good value for money don't miss out!
- 52% of our CCA Venture Catalyst portfolio companies' customers would recommend them to a friend or family member what are you waiting for?
- 29% of CCA Venture Catalyst portfolio companies' customers have faced a challenge with their product or service which changes would you like to see?

Lean Data Insights for CCA

Let's do it again sometime.



Thank You For Working With Us!

About 60 Decibels

60 Decibels makes it easy to listen to the people who matter most. 60 Decibels is an impact measurement company that helps organizations around the world better understand their customers, suppliers, and beneficiaries. Its proprietary approach, Lean Data, brings customercentricity, speed and responsiveness to impact measurement.

60 Decibels has a network of 1,000+ trained Lean Data researchers in 80+ countries who speak directly to customers to understand their lived experience. By combining voice, SMS, and other technologies to collect data remotely with proprietary survey tools, 60 Decibels helps customers listen more effectively and benchmark their social performance against their peers.

60 Decibels has offices in London, Nairobi, New York, and Bengaluru. To learn more, visit 60decibels.com.

We are proud to be a Climate Positive company. (\$\hat{\omega} \) positive company.



Your Feedback

We'd love to hear your feedback on the 60dB process; take 5 minutes to fill out our feedback survey here!

Acknowledgements

Thank you to Ronan, Shrikant, Rose, Shannon, Irfan, and Gathoni at CCA for their support throughout the project. This work was generously sponsored by the Clean Cooking Alliance.

is safe my children. The stove to use around The kitchen is now cleaner before. than and less time when spend less on charcoal cooking.

I am able to

- > cook
- > two
- > meals

in about two hours which is quicker than before.

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