

LPG Survey

June 2019

The objective of this study was to understand and compare across service centres 1) demand for an LPG (Liquefied Petroleum Gas) 6kg canister as an add-on upgrade product and 2) willingness to pay for the LPG canister:

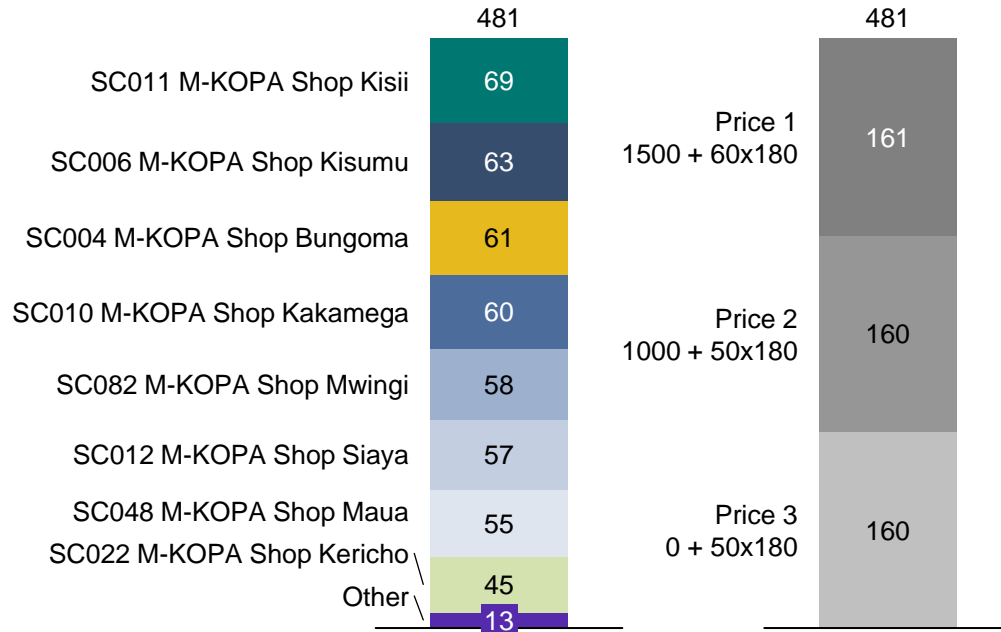
1. Demand for LPG:

1. Across service centres, demand for LPG exceeds current usage levels: overall 30% of customers prefer LPG over other fuel options while only 11% use LPG as their primary fuel source (a comparable delta is seen across service centres). The preference-usage gap is particularly large in Kisumu and Mwingi: in Kisumu, 41% of customers prefer LPG over other fuel options, but only 14% use it as their primary fuel, and only 29% in their top-3 fuels. In Mwingi, 36% of customers prefer LPG over other fuel options, but only 10% use it as their primary fuel, and only 28% in their top-3 fuels.
2. Instead of LPG, in 5/8 shops >50% of customers are using collected firewood as their primary fuel. In all shops, firewood (both collected and purchased) and charcoal are the primary fuel source for >80% of customers.
3. The primary reason (59%) customers want to cook with LPG is that it is fast to cook with; another 17% like LPG because they consider it a modern means of cooking.
4. Awareness of LPG is high: in 6/8 shops >75% of customers are aware of someone else in their neighbourhood who uses LPG.

2. Willingness to pay for LPG:

1. Overall, 44% of customers buy fuel at least weekly and 11% buy daily. In Maua, Kisumu, and Siaya customers buy fuel daily at above-average rates (27%, 19%, and 16% respectively).
2. Kisumu has significantly lower usage of collected firewood than other shops (21% use collected firewood as their primary fuel source vs. 47% average across all shops), indicating more customers in Kisumu are already paying for fuel.
3. Customers currently spend the most on fuel in Kisumu, Siaya, and Maua.
4. Customers showed little preference between the 3 price points tested for LPG:
 1. Price A: 1500 deposit + 60/day x 180 days
 2. Price B: 1000 deposit + 50/day x 180 days
 3. Price C: 0 deposit + 50/day x 180 days

We surveyed customers across service centres, divided into 3 price groups...

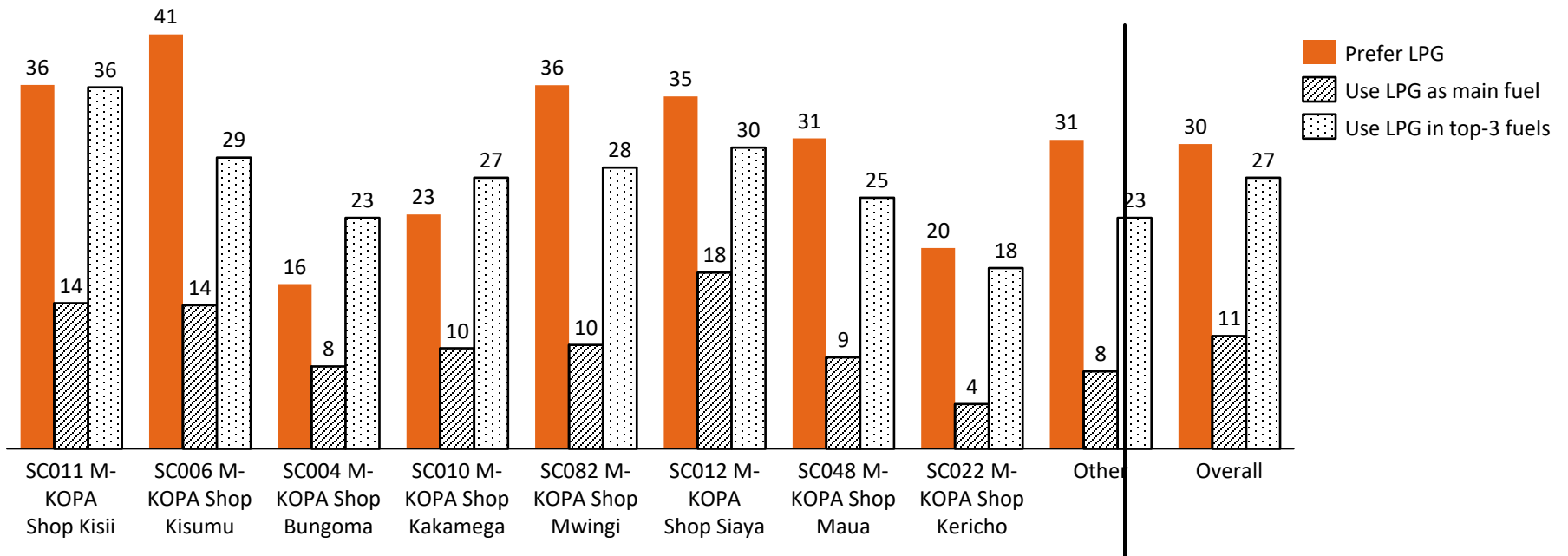


- 1 **Methodology** :Telephone Interviews
- 2 **Interviewers**: Internal Research Assistants
- 3 **Data Collection**: Structured questionnaire
- 4 **Sample size**: n = 481
- 6 **Data Collection**: June 2019

Further price details: Price 1: Deposit KES.1,500 + 60/day for 180 days, total price KES12,300 (30/day for refill). Price 2: Deposit KES.1,000+50/day for 180 days, total price KES 10,000 (30/day for refill). Price 3: Deposit KES.0 +50/day for 180 days, total price KES 9,000 (30/day for refill)

Customers prefer LPG more than they currently use it – the biggest preference-usage gaps are in Kisumu and Mwingi (based on top-3 usage)

LPG preference vs. usage, % of respondents

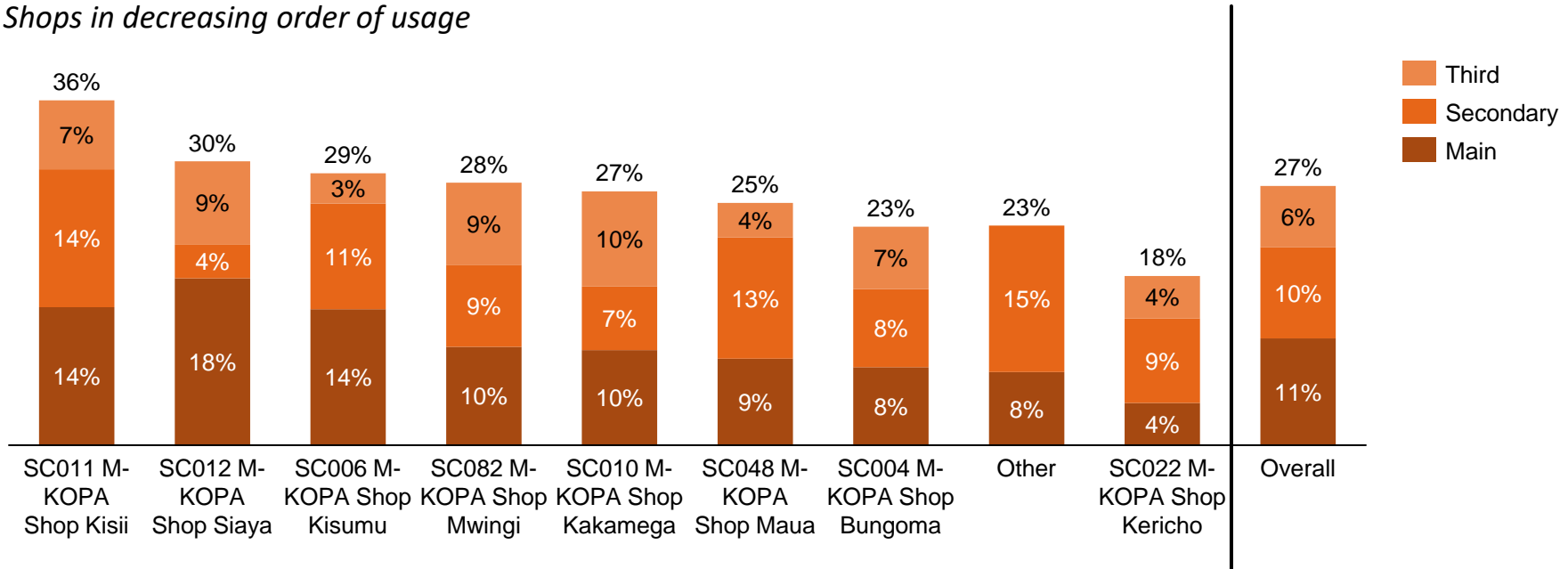


Confidential to M-KOPA Solar. All rights reserved

LPG most used in Kisii and Siaya, least used in Kericho and Bungoma

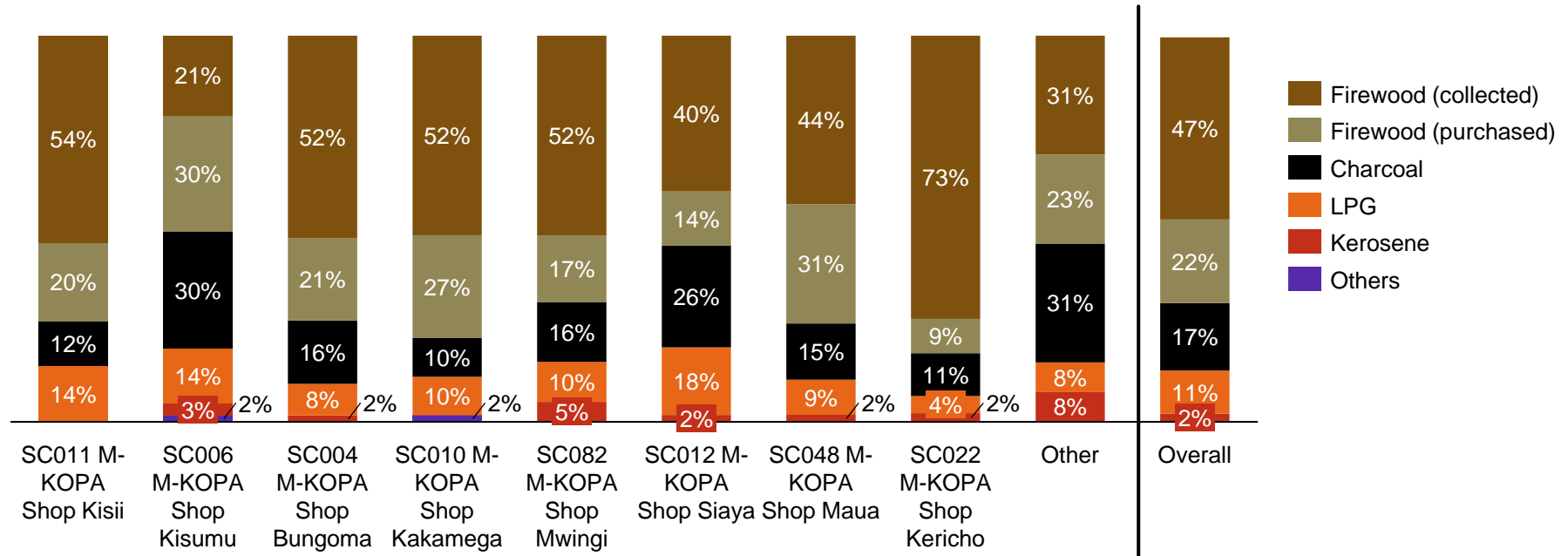
Use of LPG in any of top-3 fuel sources, % of respondents

Shops in decreasing order of usage



Across SCs, most customers use firewood as their primary fuel source; LPG use is highest in Siaya (18%) and lowest in Kericho (4%)

“What is your MAIN source of power for cooking?”, % of respondents

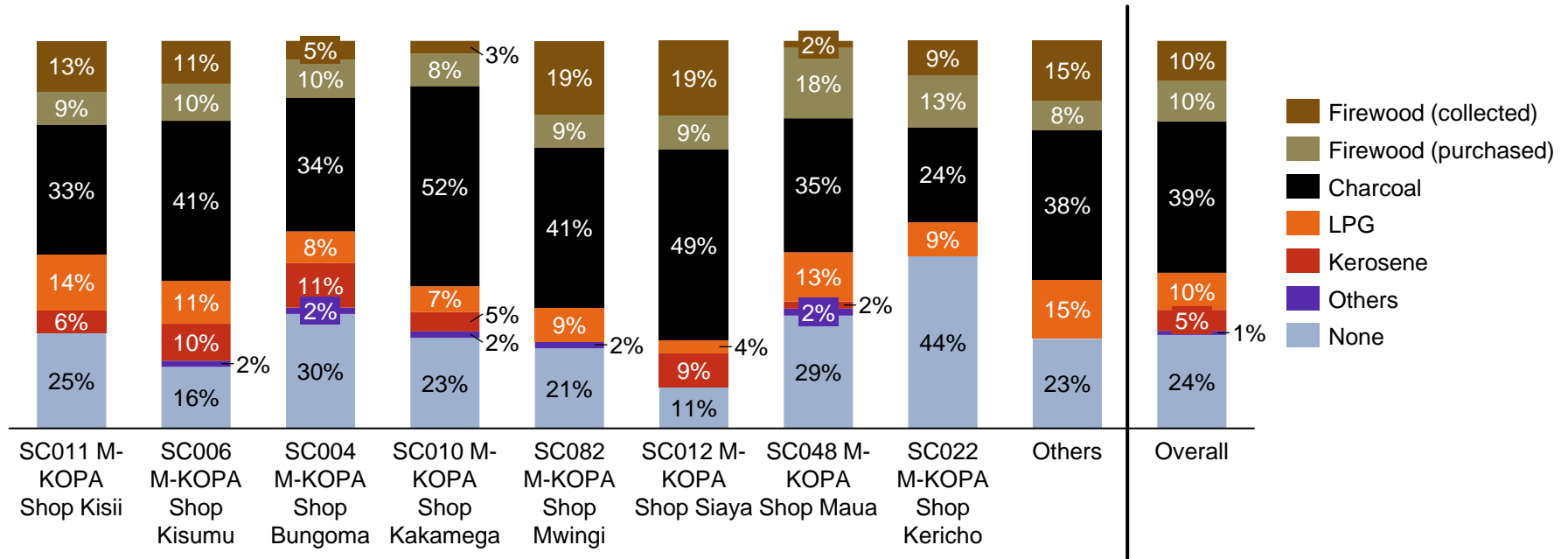


Confidential to M-KOPA Solar. All rights reserved

Source: M-KOPA LPG survey, Kenya, June 2019 (n=481)

Charcoal is the most common secondary fuel source across SCs; LPG use remains low as a secondary source

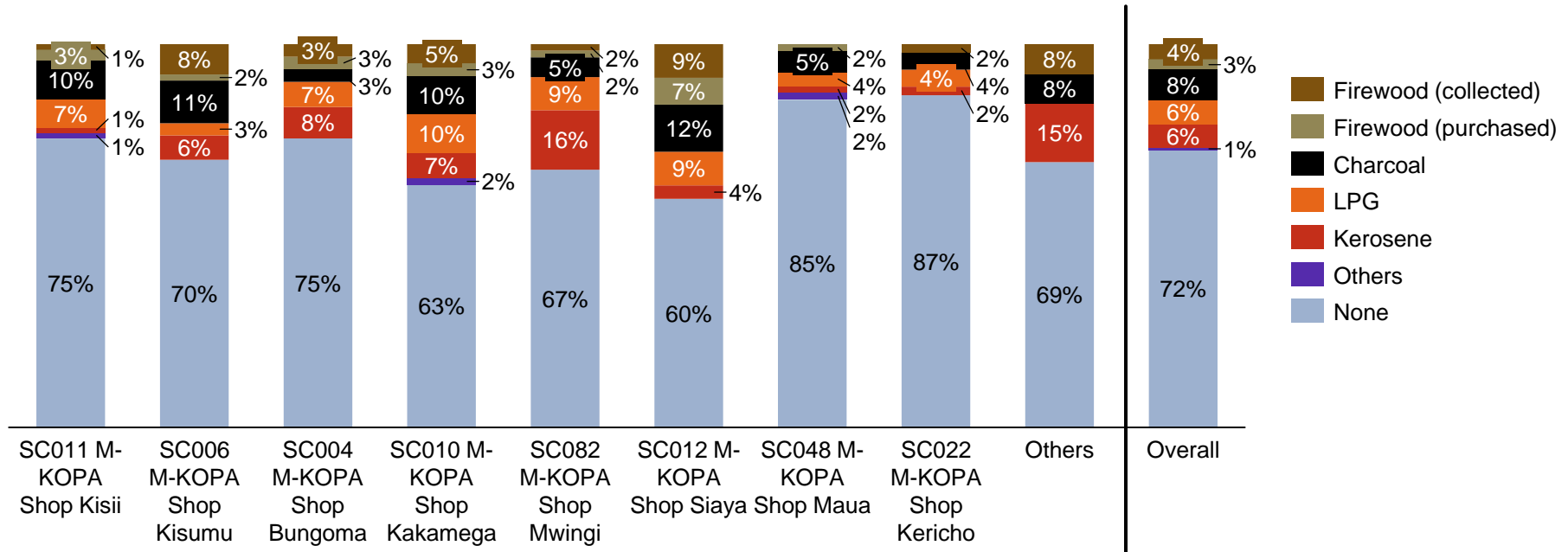
“What is your **SECONDARY** source of power for cooking (if any)?, % of respondents



Confidential to M-KOPA Solar. All rights reserved

Most customers don't use a third fuel source

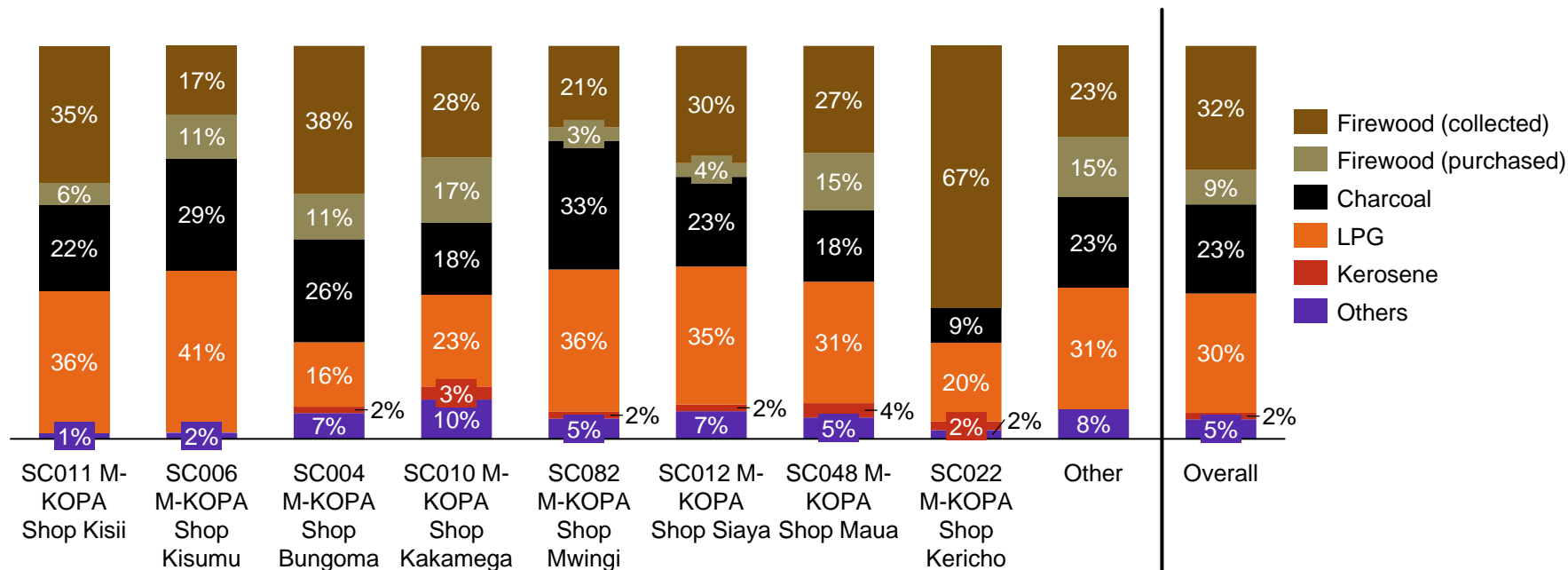
“What is your **THIRD** source of power for cooking (if any)?, % of respondents



Confidential to M-KOPA Solar. All rights reserved

Customers prefer LPG more than they currently use it

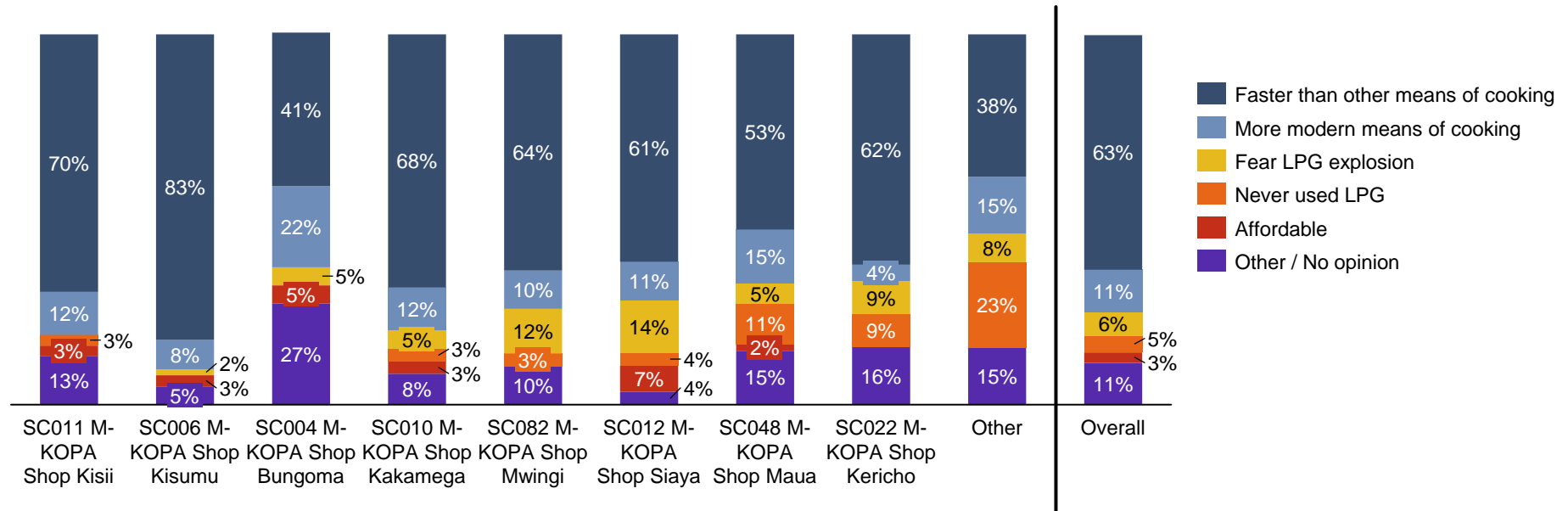
“What is your preferred method of cooking?”, % of respondents



Confidential to M-KOPA Solar. All rights reserved

Nearly 75% of customers think LPG is faster and more modern than other means of cooking; these sentiments are strong across every SC

“What is your primary opinion about cooking with LPG?”, % of respondents



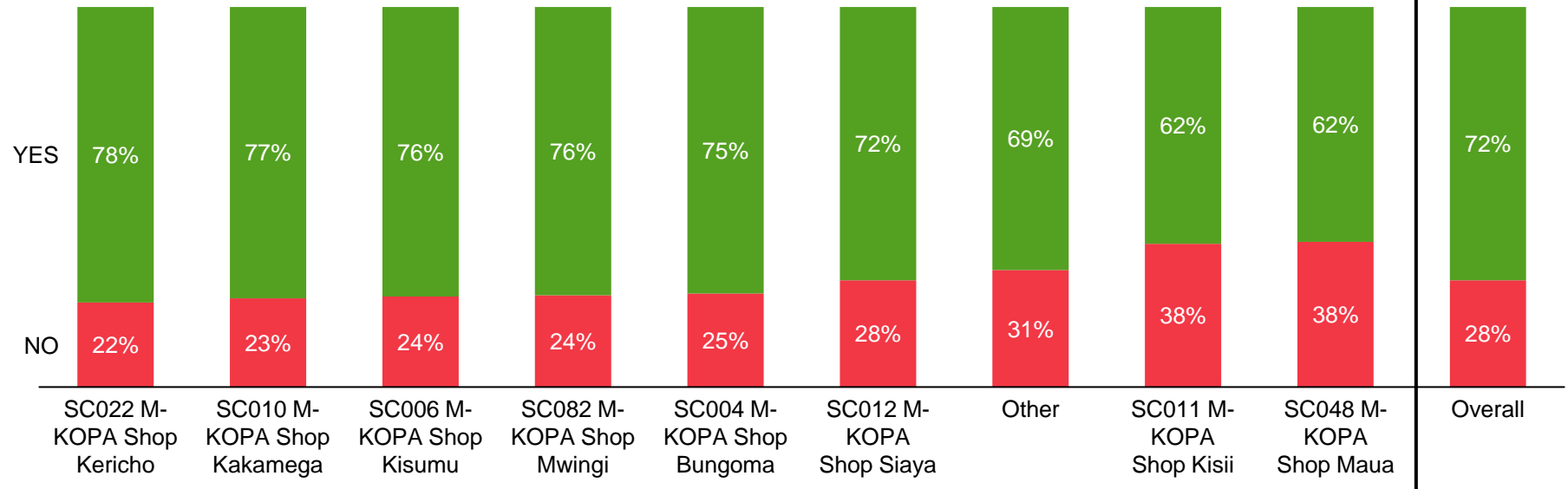
Confidential to M-KOPA Solar. All rights reserved

Source: M-KOPA LPG survey, Kenya, June 2019 (n=481)

Overall 72% of customers would like to cook with LPG given the opportunity; only Kisii and Maua have significantly lower rates of willingness

“Would you like to cook with an LPG?”, % of respondents

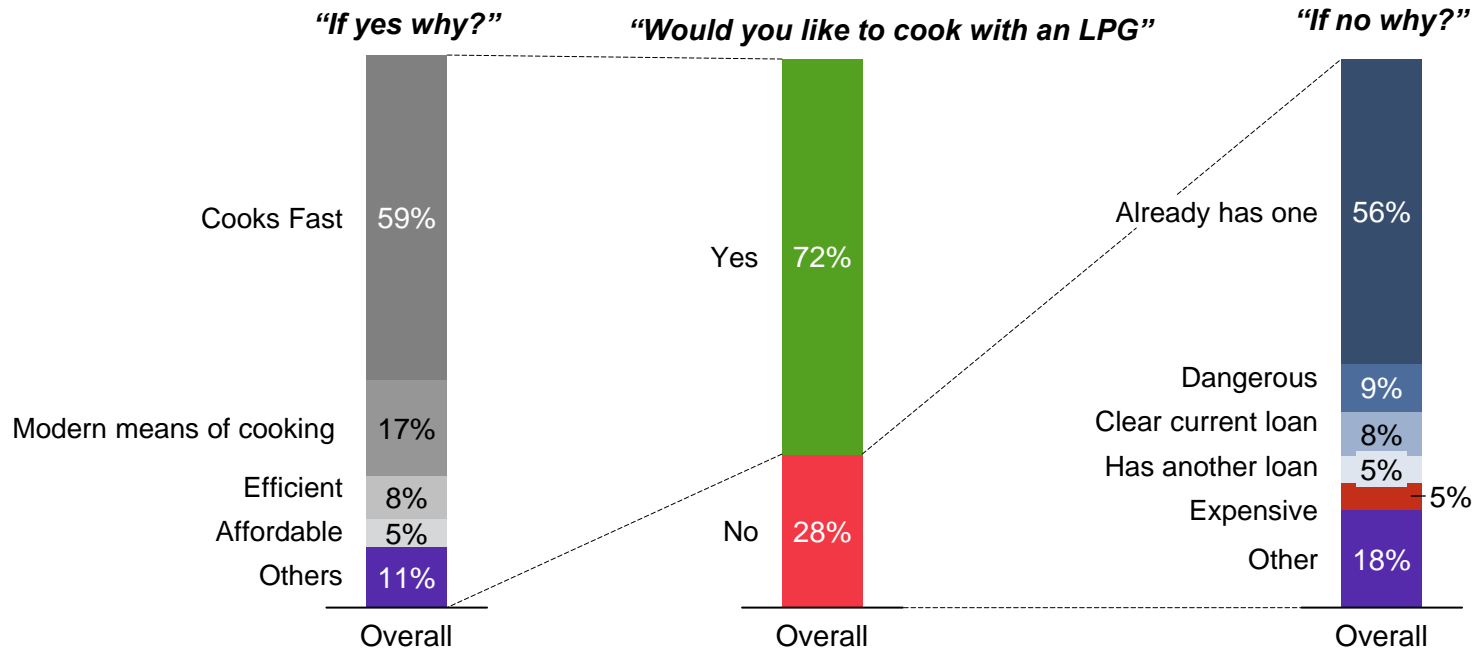
Shops in decreasing order of “Yes” response



Confidential to M-KOPA Solar. All rights reserved

Primary motivators for LPG use are fast cooking

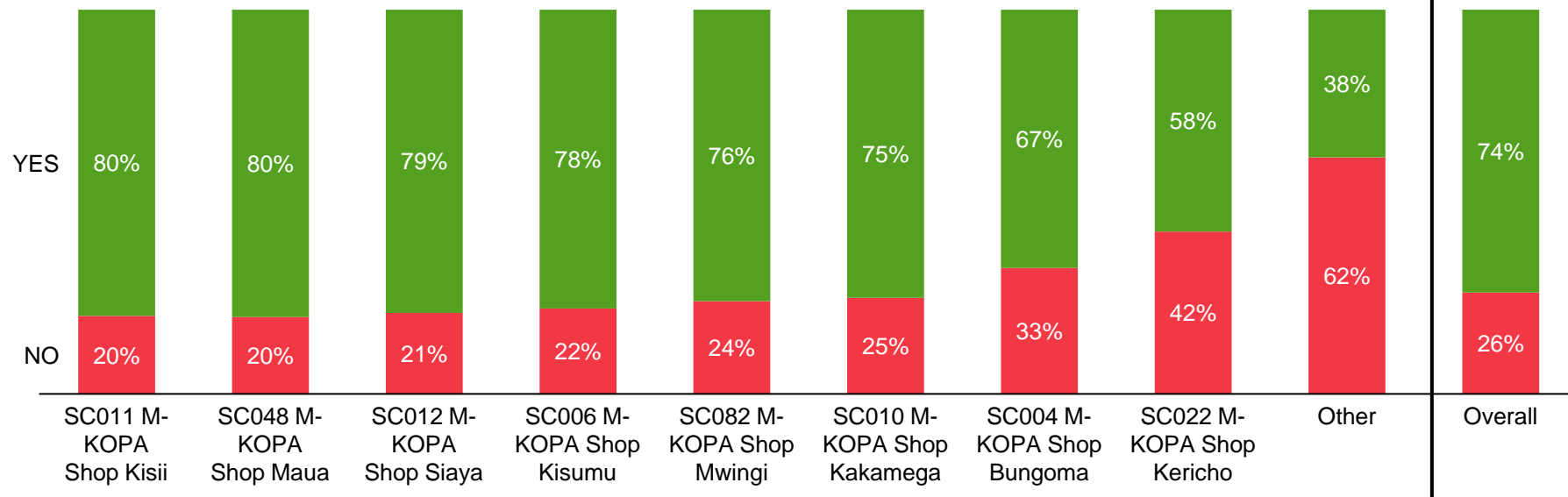
Reasons for willingness / unwillingness to use LPG, % of responses



Across most SCs surveyed, LPG is present elsewhere in the customer's neighbourhood

“Do you know anyone in your neighbourhood who uses LPG?”, % of respondents

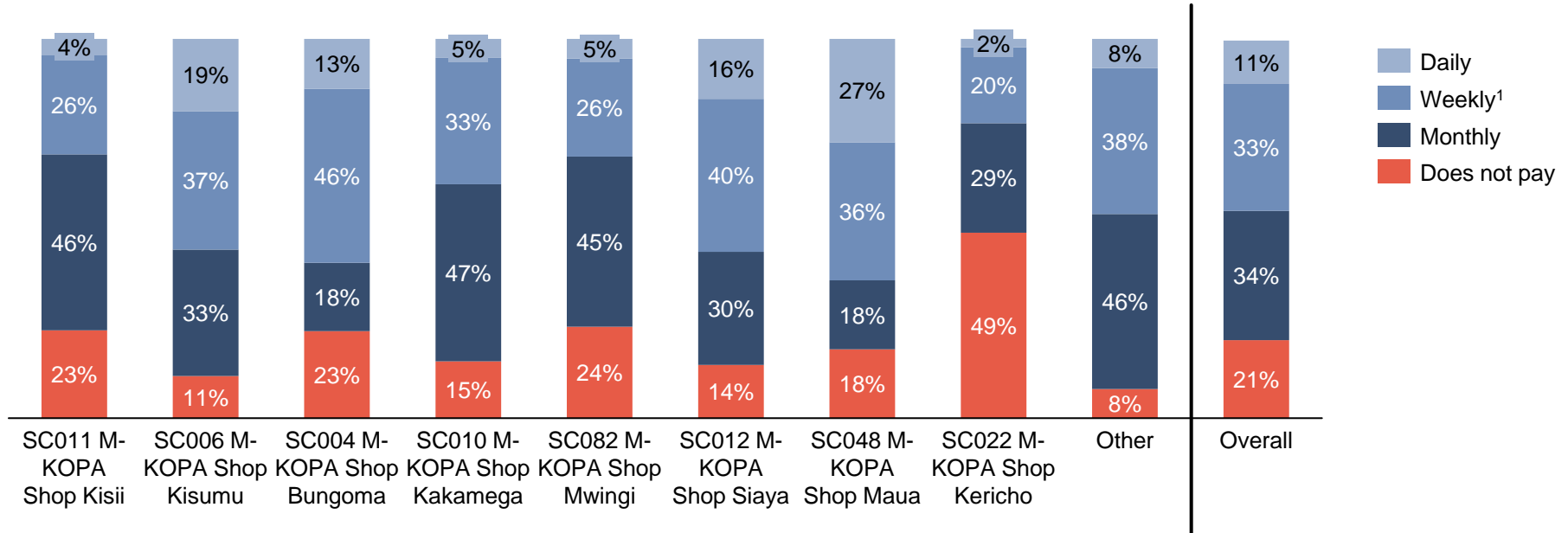
Shops in decreasing order of “Yes” response



Confidential to M-KOPA Solar. All rights reserved

Customers buy fuel most frequently in Maua, Bungoma, Siaya, and Kisumu

“How often do you buy the cooking fuel?”, % of respondents



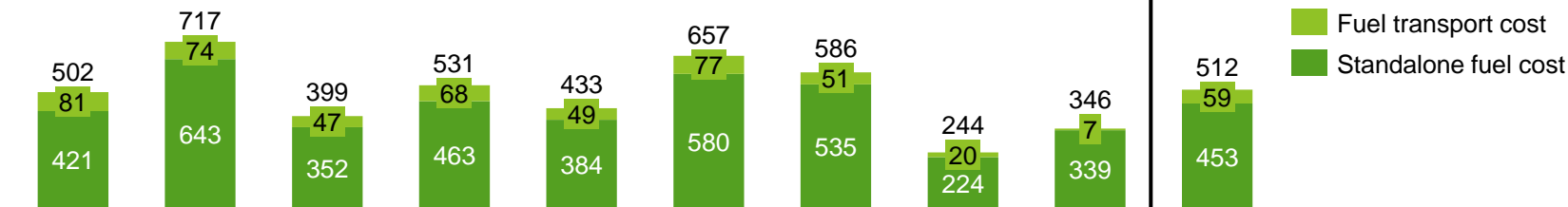
Confidential to M-KOPA Solar. All rights reserved

1 “Weekly” = 1-3x per week

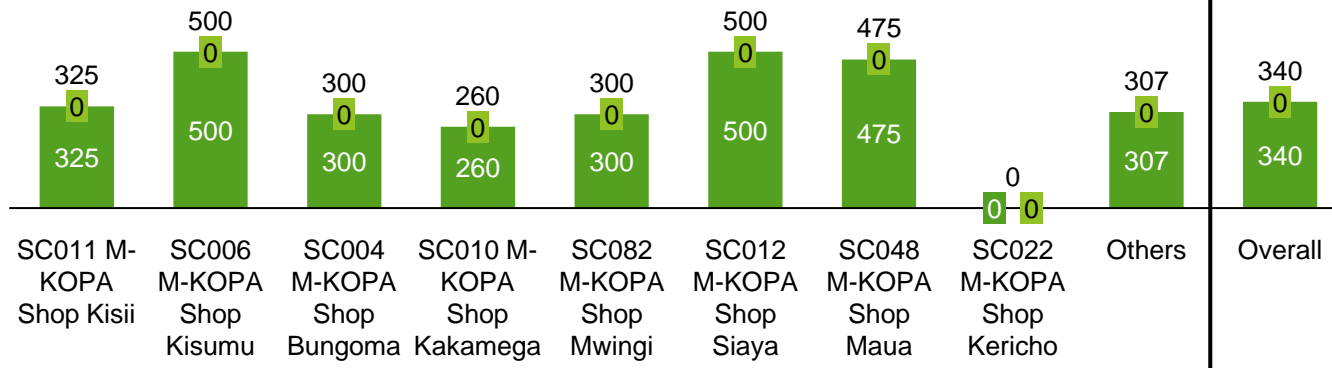
Customers currently spend the most on fuel in Kisumu, Siaya, and Maua

Estimated weekly fuel expenditure, KES

Mean



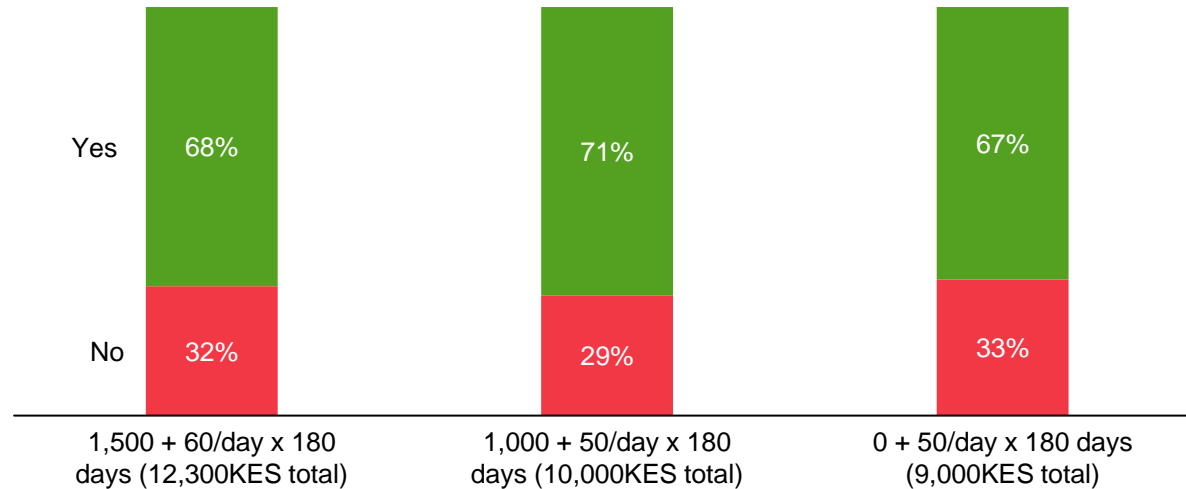
Median



Willingness to pay was comparable across price options

Willingness to pay by price option, % of respondents

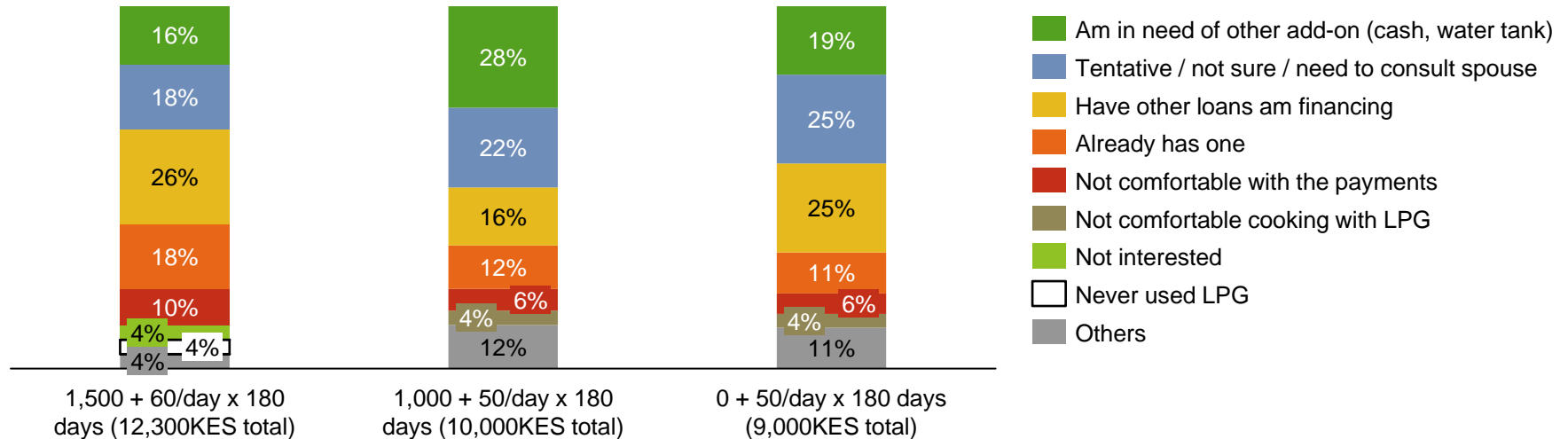
Note: Each customer was presented with only one option and asked whether they would be willing to pay that price



Main reasons customers didn't want to pay across the price options were other ongoing loans and demand for higher priority add-ons

Reasons customers weren't willing to pay, % of "No" respondents

Note: Each customer was presented with only one option and asked whether they would be willing to pay that price

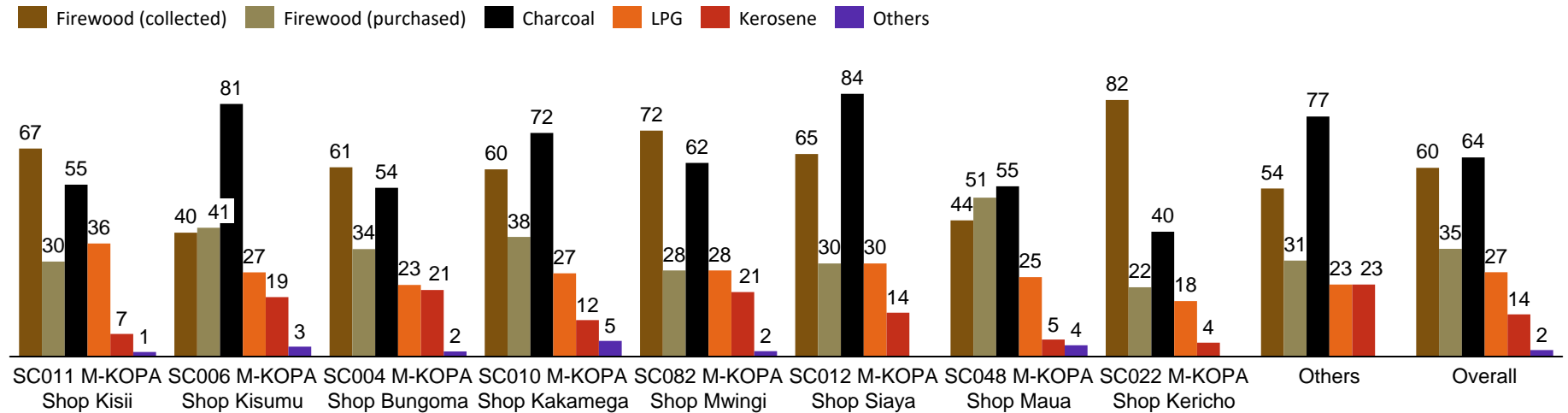


Confidential to M-KOPA Solar. All rights reserved

1 All price options included 30/day for refills
 Source: M-KOPA LPG survey, Kenya, June 2019 (n=481)

Firewood and charcoal dominate cooking fuel categories across SCs

Top-3 fuel sources, % of respondents



Confidential to M-KOPA Solar. All rights reserved