Supplementary Table 1a showing the summary of qualitative findings

Enablers	Barriers
LPG cooks food faster	Perceptions of RLP distribution preferences based on political parties
Men are more helpful with cooking activities	Financial constraints – particularly for those with seasonal incomes
Kitchens and utensils are cleaner due to less smoke	Fear of accidents due to news reports
Children spend more time on school work	Far distance to refueling station

Supplementary Table 1b showing the number of respondents for qualitative interviews

Stakeholders interviewed	Number of people
National level	
Ministry of Petroleum (MoPET, now Ministry of Energy)	3
Ministry of Health	1
National Petroleum Authority	1
Ghana Cylinder Manufacturing Company	1
National Association of LPG marketers	1
LPG model district	1
Community level	
LPG marketers	2
Local political and traditional leaders	2
Beneficiaries in 10 FGDs	71
Non-beneficiaries in 4 FGDs	24
Men in 5 FGDs	30
Community contact persons for the program	8

Supplementary Table 2: Characteristics of study participants

Parameter	Total
Age-Group	
18 – 40 years	114(57)
>40 years	86(43)
Sex	
Female	198(99.0)
Male	2(1.0)
Educational Level	
None and Primary	39(19.5)
Middle/JSS/JHS and above	103(51.5)
Ethnicity	
Akan	189(94.5)
Non-Akans	11(5.5)
Religion	
Christian	171(85.5)
Moslem	9(4.50)
Other religions	20(10.0)
Marital Status	
Married	152(76.0)
Living together	23(11.5)
Divorced/widowed/separated	25(12.5)
Household Size	
< 6	31(15.5)
> 6	122(61.0)
Main source of income	
Agriculture	183(91.5)

Working for wage	7(3.5)
Remittances	0(0.0)
Other(trading/unemployed)	10(5.0)

Supplementary Table 3: Household predictors of LPG stove use among respondents using Estimating Generalized equation.

Parameter	Odds Ratio	95% CI	P- Value
Age-Group			
18 – 30 years	1		
31-42 years	0.690	0.579 – 0.823	0.000
43-52 years	1.009	0.813 – 1.253	0.934
Above 53 years	0.824	0.611 – 1.112	0.205
Educational Level			
None	1		
Primary	1.031	0.781 – 1.361	0828
Middle	1.473	1.169 – 1.855	0.001
Technical	1.614	1.195 – 2.179	0.002
Post - Middle	2.649	1.203 – 5.832	0.016
Ethnical Background			
Akan	1		
Bimoba	3.406	1.525 – 7.606	0.003
Frafra	3.118	1.819 – 5.344	0.000
Sisala	1.221	0.616 – 2.419	0.567
Gonja	2.727	1.469 – 5.062	0.001
Konkomba	0.833	0.428 – 1.621	0.591
Other	0.675	0.260 – 1.749	0.418
Household Size	1.031	1.007 – 1.055	0.010