Workshop Pre-Read:
*Grounding ourselves in the 5C's*

March 9, 2017
“Cooking shouldn’t kill. It’s about the toll that toxic cooking smokes takes on health, well-being and the environment.”

Radna Muthiah, GACC
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The task of the TAC consortium is to develop an evidence-based, behavior change communications campaign that shifts the target population’s attitudes, knowledge, beliefs and behavior about clean cookstoves to support ultimate uptake of LPG cookstove use.

The primary behavioral goals are for women to:

(1) Purchase a clean cookstove

(2) Promote the benefits of clean cookstoves within their social network

To the extent possible, we will also encourage women to use the clean cookstove consistently and exclusively.

Achieving these goals will result in saving lives due to decreased levels of household air pollutions, improving livelihoods, empowering women, and protecting the environment through the use of clean cookstove technologies and fuels.
CORE BUSINESS PROBLEM

HOW CAN WE GET OUR AUDIENCE TO STOP COOKING WITH BIOMASS FUELS AND KEROSENE AND START COOKING WITH LPG?
Over 80% of Nigerian households cook with kerosene and/or firewood which can cause serious health problems, if not premature death.

In fact, cooking smoke causes over 98,000 deaths, mostly women and children in Nigeria, annually.

It’s the 3rd killer after malaria and HIV/AIDS.

“If a woman cooks breakfast, lunch and dinner, it is equivalent to smoking between three and 20 packets of cigarettes a day.”

- WHO
CATEGORY TRUTHS
The LPG market has grown 400% since 2007.

Only 17% of LPG produced in Nigeria was consumed by the domestic market in 2016. Over 80% is exported.

Domestic LPG demand is expected to reach 1.7 million tonnes in 2020 if Nigeria’s growth mirrors the Indonesian growth rate.

**Source:** Domestic LPG Growth Prospects: Findings from the NLNG Market Study (Market Analysis Report, Jan 2017)
MAJOR STRUCTURAL CHALLENGES

- **Deregulated** and **increasingly fragmented** lower in the value chain (Ex. Pricing is determined by each individual street vendor)

- Proliferation of **non-compliant** skid plants & weak enforcement of existing regulations. ~ 80% of skid plants below operational & safety standards

- Trucking as only inland transportation mode results in **high transportation and retail prices**.

- **Inconsistent safety checks** on cylinders in circulation; insufficient number of facilities for cylinder revalidation and re-certification.

- **Insufficient number of retail outlets**. Over 2,000 registered LPG retail outlets, but 15,000 operating retailers. In fact between 30-40% of LPG is sold by unregulated street vendors.

- Very fragmented segment, difficult to regulate, weak enforcement of existing regulations. Limited knowledge of LPG handling & safety practices e.g. decanting by street vendors

“90% of gas cylinders sold in today’s market are expired which puts citizens at great risk.”

President, NALPGAM

Source: Market Analysis Report, January 2017
The % of people using LPG doubled between 2013 and 2015:

From 8% to 18% in Abuja and from 6% to 12% in Lagos.

Source: MIS 2015
The bad news is that as the high price and/or shortage of kerosene continues some people are slipping back down the energy ladder in favor of firewood and/or charcoal in both Abuja and Lagos.

“For me now what brought about it, where am staying before I use em the coal, but em now the reason why I still continue with the coal is because of the kerosene is high/costly, and coal work faster that is the reason why I continue with the coal.” (F, LAGOS, 18-29)

Source: MGH 5C landscape Analysis; Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
### Wood

Many people prefer kerosene, but use wood

A study conducted in 2012 found that while 78% of women preferred kerosene, 75% of the women cooked with wood/coal. A common practice is to collect free firewood from construction sites in Lagos and Abuja. If not collected free, it’s common practice to buy bundles of wood nearby.

**Inefficient and uneconomical:** Uses 90% more wood than is necessary, costing families money that could be better used for education, health and nutrition.

**Environmentally unfriendly:** Firewood is a major cause of deforestation CO2 emissions from millions of cooking fire are contributing to greenhouse gases.

**As far as we know right now, firewood is the most commonly used (37%) fuel in Abuja. Kerosene is a close second.**

### Charcoal

**Small market share**

Only accounts for about 6% of energy use in Nigeria.

- Abuja: Approx. 6%
- Lagos: % unknown

**Becoming more popular?**

A lot of people seem to be slipping down the energy ladder from kerosene to charcoal (FGD)*.

* Needs to be confirmed by quant. research

### Kerosene

**Prevalent in urban areas**

As of 2015, kerosene was the predominant fuel choice in Lagos (79%) and the choice of 1 in 3 Abuujans.

**Use is declining**

Prices of kerosene skyrocketed at the start of 2016 when the government partially removed the subsidy on kerosene making it too expensive for many to afford. It’s also often in short supply.

However, the fact that kerosene can be bought in a smaller quantity helps offset the pain felt by the higher price.
Household size is commonly positively correlated with likelihood of stove stacking - likely because they are able to cook greater amounts of food in a shorter period of time.

Negative perceptions regarding the reliability and the availability of fuel may drive families to keep traditional stoves in place “just in case.”

Due to rising prices of kerosene, rather than cooking with kerosene many families choose to instead use it only to light biomass.

“Even in my house now we have a roster. On Monday we kerosene, Tuesday kerosene, Wednesday til Friday make use of charcoal, just to make sure that the kerosene last, when, to the period of, we are able to avoid the new one.” (M, Lagos, 30-45)

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
LPG COMMUNICATION

Lacks focus and scale

The focus group discussions revealed that very few people are aware of any LPG campaigns in Nigeria, whether past or present.
Gas to Health Initiative (GTHI) is an NGO dedicated to promoting the use of liquefied petroleum gas (LPG) as the main domestic fuel source for Nigerians. Their campaign is active on social media but reach may be limited by lack of funding. The exact message on social media is unclear however communication seems to be focused on educating people on the dangers of biomass fuels and kerosene, including the environmental risks.

Other efforts include:

GTHI donated free cooking gas stoves to local food vendors in Awka, Anambra State. This was done during an awareness campaign organized by GTHI to sensitize the masses on the safe-use and benefits of liquefied petroleum gas (LP Gas) at the Anambra State 2016 trade fair held in Awka. The beneficiaries were trained on the safe-use and benefits of liquefied petroleum gas and were also given the LP Gas cooking gadgets free of charge.

“Cook To Live” radio show with previous episodes available on Youtube. The “Cook To Live” handle is not being used anywhere else.

Facebook: 751 likes
Twitter: 1,287 followers
Youtube: 26 subscribers
VO1-Madam Area where are you going?

VO2- ummm, I am hurrying out to buy cooking gas and burner before I die, you are now wasting my time.

VO1-Cooking gas and burner? please Madam Area what is the relationship with that and death?

VO2- My dear, I saw GTHI people today, they came to enlighten me that I am using my own hands to kill myself, Mary bye bye.

VO1- What, what is the relationship between GTHI, cooking gas and burner with death now?

VO2- GTHI is Gas to health initiative and they are the ones that preach on the use of cooking gas instead of kerosene and firewood because the smoke that comes from them are not good for our body. My people this is the story that Gas to health Initiative brought, all those dirty smoke that comes from firewood and Kerosene is not good. It is killing us little by little, please let us leave them and use cooking gas.

All- GTHI Efficient Energy for healthy living.

This message is brought to you by Gas to health initiative in partnership with PMC and NNPC retail limited.


**EKO AS CAMPAIGN (2013)**

Goal: To introduce one million LP gas cylinders to Lagos homes in five years, however only 20,000 were ultimately distributed in Lagos.

**OANDO**

Oando Marketing Plc, has initiated several programmes to promote clean cooking.

Oando collaborated with *Micro Finance Banks* to provide small loans for low-income households and they introduced portable 3kg cylinders to better suit their needs.

Campaigns include “Teen can cook”. It is aimed at encouraging the cooking of secondary school students with LP gas.

They also introduced LPG cooking stoves to female entrepreneurs in Osun State (mainly among those in the business of beans cake, or “Akara”).

Lastly, they have done a safety tips campaign which discouraged the use of expired cylinders.

*Source: STB*
CULTURAL TRUTHS
RAPID PACE OF CHANGE IN BOTH LAGOS AND ABUJA

At the national scale, the most extensive urban spatial expansion has been concentrated around 4 massive urban fields, 2 are Abuja & Lagos.

ABUJA

Abuja is the capital city of Nigeria. Between 2000 and 2010 Abuja grew at the rate of 139.7%, the fastest in the world. It is located in the center of Nigeria, within the Federal Capital Territory.

According to the World Economic Forum Abuja is growing at an “eye-wateringly fast rate”, and its current infrastructure is not readily equipped to handle it.

Slums and settlements are interwoven in between modern buildings.

LAGOS

Lagos, Nigeria’s largest city, was once once the capital of Nigeria. While it may not be the judicial capital, it is the economic capital of Nigeria. It is located in South west of Nigeria on the southern coast of Lagos State.

Lagos is “bursting at its seems”, the population is ever increasing and it is estimated that 66% of the population is living in slums.

Source: MGH 5C Landscape Analysis
DIFFERENT CITY = A DIFFERENT LIFESTYLE

LAGOS

**Perceptions:** Melting pot, cosmopolitan, hustle/bustle, more cutting edge, heterogenous, younger, faster moving

**Primary language:** Yoruba


ABUJA

**Perceptions:** Less stressful, more space, more “rural” neighborhoods, more conservative, slower

**Primary language:** Hausa

“Me I don’t like stress , I have brothers that asked me to come to Lagos I said no , Abuja is a bit stressless anything you do, if you know what you are doing even though if the money is not much , as far as you put your concentration there , and also is a peaceful place to stay.” (M, Abuja, 18-29)

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
PHYSICALLY THREATENED ON MULTIPLE FRONTS

Major economic recession
- Oil prices have fallen significantly over the past year, and Nigeria has entered a major economic recession after almost a decade of significant economic prosperity.
- Around 4.6 Million People have lost their jobs in the past year
- Inflation is at an 11 year high of 17%

Security concerns
Boko Haram has been terrorizing North East Nigeria for the past 7 years. Abuja has experienced multiple attacks; the worst was a bombing in April 2014 that resulted in 88 deaths.

Niger Delta Conflict: Since the mid 90’s a variety of local militant groups have been targeting major foreign oil companies.

Government crippled by corruption
94% and 92% feel that political parties and the police, respectively, are corrupt.

Source: MGH 5C Landscape Analysis
CULTURAL ROOTS

- **Ethnicity:** Nigerians strongly identify with their ethnic backgrounds.

- **Faith:** Nigeria has been noted as a leading religious nation with about 91% of the population attending religious services and 95% praying regularly.

- **Family:** “Children are very important to Nigerian families because parents believe that their children will provide support for them in their old age.”

- **Tradition:** In terms of cooking, many women remain stuck to the age-old tradition of cooking with firewood because they believe that firewood cooks their food faster and makes it taste better.

*Source: MGH 5C Landscape Analysis*
CONSUMER TRUTHS
Lower middle class (C2), women 26-35 years
Penetration of LPG in this group is low, and there’s a general lack of positive peer to peer feedback (“My neighbor doesn’t use it, so why should I?”)

Audience size:
Lagos: 979,978 women
Abuja: 66,693 women

Survivor/poor class (D), women 26-40 years
Very little knowledge about LPG

Audience size:
Lagos: 1,442,518 women
Abuja: 298,556 women

Source: Berkeley Air Monitoring Group, BCC Evaluation Plan
Women play traditional roles in terms of being home makers and head chefs, but they are also commonly economic contributors.

At the time of the DHS 2013 survey, 73% of women in Lagos were employed, and in Abuja it was 66%.

Saving some money for the future is important to most. However, if people are able to save at all, it’s at lower levels that previously: In 2015, consumers saved only 4.3% of their disposable income compared to 5.7% in 2000. (Euromonitor Consumer Lifestyles Report)

“I use to save N1000 but now I’m saving N500.” (F, Lagos, 18-29)

Saving is often expressed in terms of making money go further than putting it aside for the future. Her saving power may be limited but a solution may be to educate her on how much money she needs to keep aside for gas every week/month.

Source: MGH 5C Landscape Analysis
A World Bank study found that rural-to-urban migration accounts for 97% of migrant flows in Lagos State and 85.1% in Abuja. For women the most commonly cited reasons for migrating were to join a spouse or marry (40%), to further education (11%) and to seek employment (11%). Generally, those who are migrating to the city are younger and more educated.

“To make it big now.” (F, Lagos, 18-29)
“This is what I do start from small business before I go big.” (F, Lagos, 18-29)
“I should have enlarge in a very big way.” (F, Lagos, 18-29)
“I have grow up with, to my business self are going up.” (F, Lagos, 18-29)
“...build a house, have a larger company.” (M, Lagos, 18-29)
“*I get a big contract.*” (M, Lagos, 30-49)

Low-income respondents living in rented and rooming-house types of accommodation 73% of them expressed an intention to move to another residence. 56% of this category of respondents intend to move into self-contained flats.

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographies IDI’s in Abuja and Lagos, January 2017
PUTTING FAMILY FIRST

Getting married and having children are regarded as musts in Nigerian culture.

Children are very important to families because parents believe that their children will provide support for them in their old age. (Euromonitor)

“(My children’s) well being is my comfort.” Mother, Abuja, 30 - 45

Millennials are either newly-weds or getting ready for marriage. However, while marriage is an important aspect of the Nigerian culture, poverty, unemployment and high bride price (the amount of money, property or other forms of wealth paid by a groom or his family to the parents of the woman he has just married or is just about to marry) are preventing couples in this group from marrying early.

Euromonitor

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
Nigeria has been noted as a leading religious nation with about 91% of the population attending religious services and 95% praying regularly.

“By 10 years what I’m praying, like now I’m a tenant, I’m praying that we have our own, I will be a landlady, and I will not be a tenant again and this my business will grow up.” (F, LAGOS, 18-29)

“Yeah by the grace of God, I see myself going higher in my business, in my career, in my life, my family expanding...” (M, Lagos, 30-45)

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
MATERIALISTS ON A BUDGET

Many are living hand-to-mouth, with their daily budget meeting immediate needs. However, depending on the ability to spread out their expenses, cooking fuel can be a daily, weekly or monthly expense (more likely to be daily or weekly in the case of firewood and charcoal users).

Notorious bargain hunters. Haggling at open markets for small and “big-ticket’ items, including electronics, appliances, cars and furniture is common. The preference for open markets over stores was heard in the focus group discussions regularly.

“And you can even price it, but in shop you can’t price.” (F, LAGOS, 18-29)

Looking to make their money stretch further.

“Even the money he gave me, I have to gain from it. Because I will do daily contribution from it.” (F, Lagos, 18-29)

“I save money everyday because I can’t be waiting for my husband.” (F, Abuja, 30-45)

“I would call us the ambitious class, we’re hardly middle class but we strive hard to live the life we want. We can’t afford most of the things we have, but we buy them anyway because we aspire for the lifestyle they bring.” (Euromonitor)

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
Joint decision-making is impacted by relationship dynamics.

“Even if you are making such a decision, it will still come from him, it will be like you are belittle him, because he does not have that.” (F, Lagos, 18-29)

In both Lagos and Abuja, 80% of women decide how their cash earns are spent, but have little say in how their husbands money is spent.

While each family varies, generally speaking items such as food, “cooking utensils and items like pots”, “things for the children” (school uniforms, socks, clothes etc.) are bought by women. Bigger ticket items like appliances, furniture and electronics are bought by men.

Given the price of cookstoves/LPG (and wage disparities) men will likely help finance the purchase.

“I make the decision, if the money is quite plenty, it can give me 70% out of it, and put the remaining 30%.” (F, Lagos, 18-29)

However women are resourceful in convincing their husbands that a bigger ticket item is needed.

“Like for example when I wants to get freezer, I know that am the one that need it most, so I have to go, you know we ladies if we wants to get something, we know how we are going to get it, I don’t have N80,000 to buy freezer, I have to go and talk to him, persuade him, so he agreed to have it.” (F, Lagos, 18-29)

Source: Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
Status can be demonstrated by your family background, what you wear, what you own, how your neighbor sees you, your level of neatness and cleanliness, your competence in certain areas (e.g. financial management), how you speak and “who you move around with”.

“How you are dressed, is how you will be addressed.” F, Abuja, 30-45

“The person has, may be in the house they have flat screen TV, they have AC, they have may be gas cooker, and when they come out and cook, their pot is shining, there is no stain you understand, they have freezer, when they come out they put food in the bowl to defreeze, you are imagine; ‘haa!’” (F, LAGOS, 18-29)

“You yourself, the people you move around with, then your opinion when you talk well, when you are with people and they see point (reason) from what you said, it gives you that and they will respect you, even if you want to say rubbish, since you have build that image, it will not matter again.” (F, Lagos, 18-29)

“The personal characteristics of someone with “levels” include determination, self-control and trust.” (F, Lagos, 18-29)

Source: Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
Health arose as an important, if not the most important, concern for both women and men in FGD. It’s defined as a “total state of well being”, as being “spiritually and physically sound” or as being “fit”.

Health is a measurement of her success as a wife and mother.

“Health, my family health are very very important to me because health is wealth, when you are healthy you are wealthy, so I have to take care of my family, my husband and my children and to give them good food, at the right time, so I mean health is very very important to me.” (F, LAGOS, 18-29)

The association between health and cleanliness is often made spontaneously.

“Keep environment clean.” (F, Lagos, 18-29)

“Take care of yourself at the proper time and if your environment is not dirty, the house you sleep in shouldn’t be dirty and if there is no dirt around one won’t get sick. And the things we eat too, we have been told to take proper care of them, close food properly and we will be healthy, to keep our food away from flies and all.” (F, Lagos, 30-45)

Source: Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
This is due partly to the way they define their environment: In terms of what they can see (the walls, the floor etc.) and not in terms of what they can’t (the air).

If women are making the connection between smoke and health issues at all (which is not always the case), their solution to staying healthy can be to avoid standing too near the fire for too long, if possible:

“I don’t always stay by the fire when I am cooking. However, if I am cooking something like tuwo masara (meal made from corn flour), I have to stay there to make it.” (TIME)

Or to rationalize (1) that their who mother/grandmother cooked with firewood their entire lives “is fine” or (2) that smoke only bothers people who are already ailing in some way:

“For example, it is not good for someone who is asthmatic or who has related ailments; but if you are normal, there is no problem.” (TIME)

Smoke is very rarely mentioned as a health concern in the context of kerosene.

Source: Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
Health is not the reason one woman used to convince her husband to switch from biomass to kerosene.

“...because the smoke it affects me, I don’t like the smoke, it affects my breath.” (for why she switched from firewood to kerosene) (F, Lagos, 30-45)

In this case her husband wanted her to use charcoal but she told him that kerosene helps her keep everything cleaner, including the environment and the pots etc. and that this presented a better view of them to others.
SHE COOKS WITH WHAT’S AFFORDABLE, AVAILABLE, ALLOWED...AND WHAT SHE’S COMFORTABLE WITH (“THE DEVIL SHE KNOWS”).
# PERCEPTIONS OF FIREWOOD: CHEAP AND AVAILABLE BUT INCONVENIENT

<table>
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<tr>
<th>LIKES</th>
<th>DISLIKES</th>
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<tbody>
<tr>
<td>Use is influenced by low cost, availability and previous experience as a child (tradition).</td>
<td>Requires preparation and work before she even starts cooking (gathering; breaking into smaller pieces).</td>
</tr>
<tr>
<td>“I have been using firewood since when I was small and that is what I was brought up with and I'm okay with it.” (M, Lagos, 18-29)</td>
<td>Cannot be used inside (cannot be used if wet/raining).</td>
</tr>
<tr>
<td>Perception that firewood makes the food taste better, or “sweeter”.</td>
<td>“Now when I'm cooking with firewood, the smoke they will be complaining, blow the firewood the smoke is affecting us, so I normally cooked outside.” (F, LAGOS, 18-29)</td>
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<td>Requires constant supervision.</td>
<td>Blackens walls and pots.</td>
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<td>It’s old.</td>
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<tr>
<td>It’s old.</td>
<td>“…we are still using the olding days system…that is firewood.” (M, Abuja, 30-45)</td>
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Source: Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
### Perceptions of Charcoal: More Convenient Than Wood

<table>
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<tr>
<th>Likes</th>
<th>Dislikes</th>
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<tbody>
<tr>
<td>Like firewood, use is influenced by low cost, availability and previous experience as a child (tradition).</td>
<td>Can be used inside but not without some bother.</td>
</tr>
<tr>
<td>Perception that charcoal makes the food taste better and cooks the food faster.</td>
<td>“You cannot put it inside the kitchen, because...the whole of the kitchen will be too much hot.” (F, Abuja, 30-45)</td>
</tr>
<tr>
<td>“I think there are some foods (e.g. beans) that take longer time to prepare than the other, so when you use the coal it will be faster than the stove.” (M, Lagos, 18-29)</td>
<td>Cannot be used if wet.</td>
</tr>
<tr>
<td>Considered multi-functional (roasting, grilling, boiling, etc.)</td>
<td>“So stressful if the charcoal is not well dry.” (M, Lagos, 18-29)</td>
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<tr>
<td>Causes less smoke.</td>
<td>Needs cleaning up afterwards.</td>
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<td>Doesn’t blacken pots if used in a certain way.</td>
<td>“It makes the environment dirty that is what I noticed.” (M, Lagos, 18-29)</td>
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<tr>
<td>Easier to prepare than wood. And catches easily.</td>
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<tr>
<td>“Charcoal is more faster and it is a lot easier for me because to light it up is easy, you don’t need to be arranging all the sticks one after the other but the charcoal it’s faster.” (M, Lagos, 18-29)</td>
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Source: Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
PERCEPTIONS OF KEROSENE: CONVENIENT BUT EXPENSIVE AND IN SHORT SUPPLY

**LIKES**

- Can be used inside which enables a level of privacy.
  “I was using charcoal before but I am not using it anymore but since I got married I am using stove. (Her husband) now said he does not like that I will be cooking outside, anyone will see what I am doing and that is the reason why.” (F, Lagos, 30-45)

- Doesn’t require constant supervision.

- Cooks food faster.

- More convenient to use, “less stressful”.

- Symbolizes progress. It’s “neat” and “clean”.

  “You know before we are using this stick, ehm firewood sorry, so with the civilization we found our self now we are using Kero.” - M, Abuja, 30-45

**DISLIKES**

- Expensive and often in scarce supply.

- Can’t cook large amounts of food.

- Uneconomical.

  “The kerosene that one buys for #300, immediately you pour it in that small container it is finished, even when you boil water it’s finished.” (F, Lagos, 30-45)

- Can still blacken pots over time and if adulterated with diesel.

- Gives off smoke when ignited and turned off.

  “The reason why I stopped is because if you light up your stove now when you are cooking before you know it will start giving you smoke and by the time you put off that stove, you still have another different kind of smoke.” (F, Lagos, 18-29)

  “The stove is giving me headache.” (F, Lagos, 18-29)

Source: Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
**CHOICE OF ENERGY FUEL: OTHER INFLUENCERS**

Landlords: Some don’t allow firewood/charcoal and some don’t allow LPG.

“In some house you can’t use firewood or charcoal inside passage but you can use stove.” (M, Lagos, 18-29)

The dish that she is cooking.

“Sometime when I wants to cook beans I will use charcoal.” (F, Lagos, 18-29)

The occasion that she is cooking for: The larger amount of people, the more likely she is to choose firewood (if possible).

Some switched from biomass to kerosene on moving to the city (relates to the need to upgrade their status to align with the “city lifestyle”).

How do I get introduce to kerosene, em when I came to Lagos, am like let me go back to my charcoal level, so my husband was like why don’t we buy stove, let try it and see. I said ok let see, so he bought it and I tried it, and I see that is ok. (F, Lagos, 18-29)

Source: Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
COMPANY TRUTHS
LPG BENEFITS

**SHORT-TERM BENEFITS**

*Cleaner*

*Time saver* (more convenient in terms of less prep. time, faster cooking time, less clean up)

Zero smoke: “No smoke in my kitchen, lingering in my clothes, my hair”

*Social status upgrade* (don’t have to cook outside, pots and walls aren’t stained black)

*Food tastes just as good* as if cooked on a firewood/charcoal stove (it’s how you cooked food, not the cooking fuel used)

**LONG-TERM BENEFITS**

*More economical:* Saves money in the long run (not only in terms of cooking fuel but in terms of medical costs)

*Healthier:* Women and children breathing in less smoke benefits their health in the long run

*More environmentally friendly:* Deforestation, erosion etc.

*Good for Nigeri(ans):* Investment in the domestic economy

Source: MGH 5C Landscape Analysis
With short supplies, the locations to buy non-biomass fuels are few and far between. Unsurprisingly, studies exploring predictors of LPG uptake found that the greater the physical distance, the less likely someone would choose and consume LPG.

In addition, the supply is unreliable. Some awareness of local retailers exists (FGD) but this manner of selling LPG appears to be low/non-existent in semi-urban Abuja.

“Many people don’t even know what a skid looks like. I just learned that there’s a gas refilling station quite near to where I live. I just assumed there was nowhere to buy gas near me.” - Oge Madubunyi, Africare

Only 3.8% of Respondents cited “unavailability” as a dislike of LPG*

* Interim Nielsen quant data; subject to change

Source: Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017; MGH 5C Landscape Analysis, October 2016
PEOPLE WANT TO TRY/USE LPG

The good news is that of the Respondents surveyed in the Nielsen quantitative research, 77% of people were “likely” or “very likely” to buy a LPG stove in the near future.*

Reasons include:

1. It’s considered fast and clean.
   “Gas is more faster, I think (than firewood and charcoal).”
   “Your pot will not be black it will be neat.”
   “You can use it indoor.”

2. It’s economical.
   “Is very cheap, I said that because I have a friend that is using it, every time I carry keg (gallon to buy kerosene) up and down, she will say “what is your won can’t you tell your husband? ,gas is very fine at home, see the one I filled since three months I’m still using it, but now you are carrying keg”, is very cheap.”
   (F, Lagos, 18-29)

3. It’s a symbol of progress that elevates a person’s status in the community.
   “Like me, I went to visit my senior sister, this December, when I went to put on the gas cooker, I was scared and she said: “see this bush woman”, she came to insult me that I will first of all put what I want to cook in the fire before I put it on it, so I am praying to have gas.”
   (F, Lagos, 18-29)

   “It makes you look unique.”
   (F, Lagos, 18-29)

* Interim Nielsen quant data; subject to change

Source: Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017

More so in Lagos than Abuja:
- 84% of Respondents in Lagos are “likely” or “very likely” to buy a LPG stove in the near future (likely the result of the higher number of kerosene users in Lagos)*
- Only 58% of Respondents in Abuja answered the same*

* Interim Nielsen quant data; subject to change
MAJOR PAIN POINT: “RICH MAN’S FUEL”

The initial cost of the stove, and the perceived high cost of fuel often deters low-income families.

In the Nielsen quantitative research being conducted 3 in 4 people describe LPG as “expensive”. 48.5% of Respondents cited “expensive” as the main reason for not having tried gas. Similarly for those that have slipped back down the energy ladder, 58% of Respondents think LPG is too expensive.*

For Respondents who do intend to purchase a LPG cookstove in the near future, 57% defined “near future” as within “a year” or “more than a year”, and only 17.5% defined it as within a “month” potentially indicating that the majority don’t feel they currently have the financial means to purchase a LPG stove.*

Note: Affordability does not only refer to the perceived cost of gas but also the unit size in which it’s sold:

“Have to buy it in large quantities which makes it too expensive: We wants to buy gas per litre.” (M, Abuja, 18 – 29)

* Interim data; subject to change

Source: Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017; MGH 5C Landscape Analysis, October 2016

Cost of LPG: Approx. 500N/kg in Abuja and approx. $350N/kg in Lagos
FOR SOMEONE OF A HIGHER SOCIO-ECONOMIC CLASS

“She can’t afford it. She uses firewood and charcoal.”

“She uses Kerosene.”

“She can afford (LPG).”

“She knows how to use gas. She will have a cook.”

Source: Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017

Q: What cooking fuel do you think this woman uses?
FEARS ASSOCIATED WITH GAS ARE REAL

Words Respondents associated with gas:

“Fear”

“Explosion”

“Mistake”

“Be careful”

“Be extra careful”

It’s “dangerous/unsafe” was the 2\textsuperscript{nd} most cited reason (16.25\%), after high cost, for Respondents not using gas. In terms of dislikes, 52\% of Respondents cited “unsafe”. *

* Interim Nielsen Quant Data; subject to change

Source: Nielsen Focus Group Discussions and Ethnographic IDI’s in Abuja and Lagos, January 2017
AND CAN’T BE IGNORED

Without another frame of reference (i.e. poor/complete lack of knowledge of LPG in general), if someone has heard a story about a gas explosion, it’s understandably considered “very dangerous”.

“Me I will say that one, they should, the exposure they should try and if there is a way they can bring it down, something that will not allow any small trigger that can take fire, I mean small mistake.” (F, Lagos, 18-29)

“Highly inflammable, a little mistake can bring down the whole building, what we are talking about is that stove before it will explode, people have come to your rescue, but that of cooking gas people don’t easily get to your request before the time. So it is too fast in causing hazard in the danger in that place where you are living.” (M, Lagos, 30-49)

Risks are often considered to be too high when children live in the household.

“Ma, I have kids, I have a child, children can be careless, what if I am not there? so I need to be very careful, and not put on gas.” (F, LAGOS, 18-29)

Gas that is prone to exploding may be labeled as “bad gas” (due to the connection made between gas and terrorism?) by consumers (Africare), highlighting a need to educate our audience on the fact that there is no such thing as good/bad gas and how easy it is to use gas safely.

Source: Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
FEARS ARE POTENTIALLY PERPETUATED BY CURRENT SAFETY COMMUNICATION

Too busy, multiple burner cooker and the high end kitchen potentially reinforce the ‘rich man’s fuel’ perception.” - Africare

Imagery of flames and red crosses could be reinforcing safety fears.

Source: Banner Gas Safety Brochure
<table>
<thead>
<tr>
<th>Consumer Perception</th>
<th>Firewood</th>
<th>Charcoal</th>
<th>Kerosene</th>
<th>LPG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AFFORDABILITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affordable</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(&quot;I can buy a small enough amount to suit my budget for the day/week/month&quot;; &quot;lower start-up cost&quot;)</td>
<td></td>
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<td></td>
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<tr>
<td>Economical</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(&quot;Makes my money stretch further&quot;)</td>
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<tr>
<td><strong>CONVENIENCE</strong></td>
<td></td>
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</tr>
<tr>
<td>Available</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(&quot;I can buy it everywhere&quot;)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(&quot;Easy to use&quot;; &quot;Less stress&quot;; &quot;Doesn’t need my constant attention&quot;)</td>
<td></td>
<td></td>
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<tr>
<td>Fast</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>(&quot;Cooks faster&quot;)</td>
<td></td>
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<td></td>
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<tr>
<td>Can be used inside</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>(&quot;Can cook when it’s wet outside&quot;; Doesn’t make the room too hot&quot;)</td>
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<tr>
<td>Cleaner way of cooking</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
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<tr>
<td>&quot;Doesn’t stain my pots and cooking utensils&quot;</td>
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<tr>
<td>(&quot;No ash on the ground&quot;; &quot;Doesn’t darken the walls&quot;)</td>
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<tr>
<td>Customizable</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(&quot;I can buy the amount that I need and want&quot;)</td>
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</tbody>
</table>

Source: Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
## SUMMARY: LIKES & DISLIKES (FGD)

<table>
<thead>
<tr>
<th>Consumer Perception</th>
<th>Firewood</th>
<th>Charcoal</th>
<th>Kerosene</th>
<th>LPG</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEETS COOKING NEEDS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td>✔</td>
<td>✔</td>
<td></td>
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<tr>
<td>Makes the food taste better</td>
<td></td>
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<tr>
<td>Suitable for any cooking occasion</td>
<td>✔</td>
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<tr>
<td>(“Can be used to cook for on a daily basis or for a special occasion/large group of people”)</td>
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<tr>
<td>Better for cooking specific dishes</td>
<td>✔</td>
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<tr>
<td>(“Beans, yam, rice, cassava flour can take a longer time to prepare...we use big cast iron cooking pots that require much heating before cooking can be done...firewood would be faster.”)</td>
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<tr>
<td>Enables more control in the cooking process</td>
<td>✔</td>
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<tr>
<td>(“Uncontrolled heat can result in my email being burnt/undercooked”)</td>
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<tr>
<td><strong>SAFETY</strong></td>
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<tr>
<td>Burns cleanly</td>
<td>✔</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(“No smoke”)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Has high risks associated with use/misuse</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>(“Very dangerous”)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Nielsen Focus Group Discussions and Ethnographic IDI's in Abuja and Lagos, January 2017*
CONNECTIONS TRUTHS
MEDIA
MEDIA PENETRATION

PULL THIS ACTUAL SLIDE FROM THE ORIGINAL DECK

FINDINGS:
LAGOS: Radio, TV, OOH have the highest penetration
ABUJA: Radio, internet, OOH have the highest penetration with TV on the average

NOTE: TV, Radio, and Print is accessed at least once in the last one week, while others are accessed at least once in the last four weeks

Target Market: Male/Female, Age 25-40, sec C2DE
Source: AMPS 2015
AMPS Universe: 2,787,745
PREFERRED WAY OF RECEIVING INFORMATION IS TV FOR THOSE IN LAGOS AND RADIO FOR ABUJANS

Source: Universal McCann
MORE CONNECTED THAN EVER BEFORE

Mobile phones on the rise:
68 mobile phones per 100 people
89% of Nigerians own a cellphone, 27% own a smartphone

Access to the internet:
Of Nigerians who access the internet, 82% do so using a mobile phone

Many people seemingly access the radio via the internet on their phones (FGD)

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
INFLUENCERS
The family constitutes the most influential primary reference group shaping a buyer’s behavior.

People often rely heavily on recommendations from friends outside of their family.

Within communities attention is paid to trusted opinion leaders—i.e. community leaders, religious leaders, community doctors, senior family members, etc.

Many belong to groups at their place of worship. Benefits include receiving welfare and support in times of need, knowledge-sharing, capacity building and networking.

Other organizations/groups include: Local Community Development Associations, Youth groups, Youth carnival, Landlord associations etc.

“The youth association could be very active/vibrant and influential as they are capable of spearheading laudable community programmes. On the other hand, they help Corporate bodies create awareness of their products.”

- Nielsen Qualitative Topline Report

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographies IDIs in Abuja and Lagos, January 2017
A collaborative survey conducted and published by, however, debunked the myth that most Nigerians rely on private hospitals for healthcare.

According to the WeBelieve Health and NOIPolls Limited survey (DEC 2015), the majority (53%) of Nigerians used a public hospital, 34% used a private hospital for medical services while 50% visited a pharmacist or chemist for a healthcare issue.

Given the expense of accessing health care, many people also access healthcare information online.

Some focus group Respondents stated that having health benefits delivered by a health professional could help LPG carry extra weight, however this wasn’t the case across the board.

“But you know this medical practitioner some of then are just looking for where to sell there things , affected by the medical report if it is my wife , that is cooking and the doctor now said ok you should be using gas instead of stove , I will consider.” (M, Lagos, 30-49)
ROLE MODELS: PEOPLE THAT HAVE MADE SOMETHING OF THEMSELVES DESPITE THE ODDS

WOMEN

- Tope Alabi
- Sisi Whyners
- Mishea Obagun
- Dom Mowell
- Onyeka Nwenu
- Funke Akindele
- Linda Inkaeji
- Omotola
- Nniedo
- Nathaniel Bassey
- Tiwa Savage
- Cece Winnas

Q: Why are these people your role models?

“Successful, strong, supportive, provide guidance, made something of themselves, inspirational.”

MEN

- Obama
- Nelson Mandela
- Lionel Messi
- Aliko Dangote
- Tupac
- Paul Pogba
- Wole Soyinka
- 2Face
- Adam oshiomole
- KWankwaso
- Buhari
- Yasahara of Falastin
- Sheikh Abdullahi
- Yahaya Sisak

Q: Why are these people your role models?

“Hard-working, focused, humble, entrepreneurial, people who believe in themselves despite the odds, independent, provide guidance.”

Source: MGH 5C Landscape Analysis; Nielsen Focus Group Discussions and Ethnographics IDI’s in Abuja and Lagos, January 2017
THANK YOU