

Technooil Cooksafe Initiative



Our **Vision**

To ensure a clean safe and healthy Nigeria in harmony with our environment.

Our **Mission**

To switch every household from unhealthy biomass / fuels to LPG.

Our Core Objectives

- To be a solution provider in the LPG value chain.
- To be a major player in the drive by government to deepen LPG adoption in Nigeria.

TechnoOil #COOKSAFE initiative

Do you know

- That Nigeria with the largest reserve of gas in Africa at about 187tcf has the lowest per capital usage of 1.1kg compared to Ghana at 3.0, South Africa at 5.5 or morocco at 44kg?
- That Nigeria with a population of about 170 million people has less than 1 million cylinders in use?
- That Nigeria government spends about N300 billion annually on kerosene subsidy?
- That Nigeria spends billions of Naira yearly to import LPG cylinders, which is an avoidable capital flight?



HOW SAFE IS
YOUR COOKING

Our understanding of World Bank Clean Cookstove Strategy in Nigeria

Major Achievements of World Bank LPG adoption strategy

Measures undertaken by the World Bank to enhance LPG adoption in Nigeria:

- Commitment of \$105 Million over the past 5 years through the US Government
- World Bank through GACC project to switch 10 Million Nigerian homes to clean cookstoves by the year 2020
- Partnering with NGOs to create awareness on the impact of cooking with kerosene/firewood on the health and environment of Nigerians
- Partnering with Government and its agencies to ensure switch to LPG is completed within a specified time frame
- Encouraging young entrepreneurs to venture into the business of clean cookstoves by giving grants to develop their capacity

World Bank



World Bank+ #CookSafe = Switch to Gas
(a clean source of energy)

Collaboration between the World Bank + Technoil Cooksafe Initiatives will:

- Stop the decimation of our women
- Eliminate health challenges associated with cooking with biomass fuel
- Reduce and subsequently eliminate cooking with firewood/kerosene
- Save government huge sum paid in form of kerosene subsidy
- Create Jobs
- Preserve our environment
- Take LPG nearer to consumers



A cursory look at Biomass Fuel for Domestic Cooking



Firewood & Kerosene Consumption in Nigeria

Over 97% of Nigerians use kerosene/firewood for domestic cooking

- Firewood remains the most often used means for domestic cooking in Nigeria leading to high level decimation of our women due to firewood smoke which is more dangerous than cigarette smoke
- High cost of subsidy yearly in the neighborhood of over N300 Billion has been a subject of debate and a challenge that the government is bent on resolving year-on-year.



Hazard Posed by Kerosene & Firewood

- From the 30 million Nigeria households, 96% uses firewood/kerosene as the prime means of cooking despite the hazard and side effect the of these biomass fuel
- People with heart or lung diseases, children and older adults are the most likely to be affected by particle pollution exposure. However, even healthy people may experience temporary symptoms from exposure to elevated levels of particle pollution as a result of firewood and kerosene
- Aggravated asthma
- Premature death especially those that are highly exposed to this fume
- Greenhouse Emission leading to climate change



Long hours on queue resulting in loss of productive time

Although the subsidized price of kerosene is N50, it is sold at a minimum of 150 per liter and rarely available

Huge economic loss to the government

Govt is supportive, but we still find ourselves in these positions where the preferred kerosene is not available and we switch to falling of trees, endanger everything about human existence

N300bn

kerosene subsidy annually



N1Tn

2010 - 2013

Iya Risi thought it was subsidized, why **N150** per bottle? she ends up spending **N3,400** per month



Firewood becomes her support, with kerosene as a catalyst. Thus, a total of **N4,000** & **N3,400** is spent on firewood & kerosene every month respectively. This amounts to **N222 billion** spent on firewood and kerosene monthly, considering that there are **30 million** households in Nigeria





Should We Continue Like This?

Can we afford to turn a blind eye to the decimation of Nigerian women – Our mothers, wives and sisters?

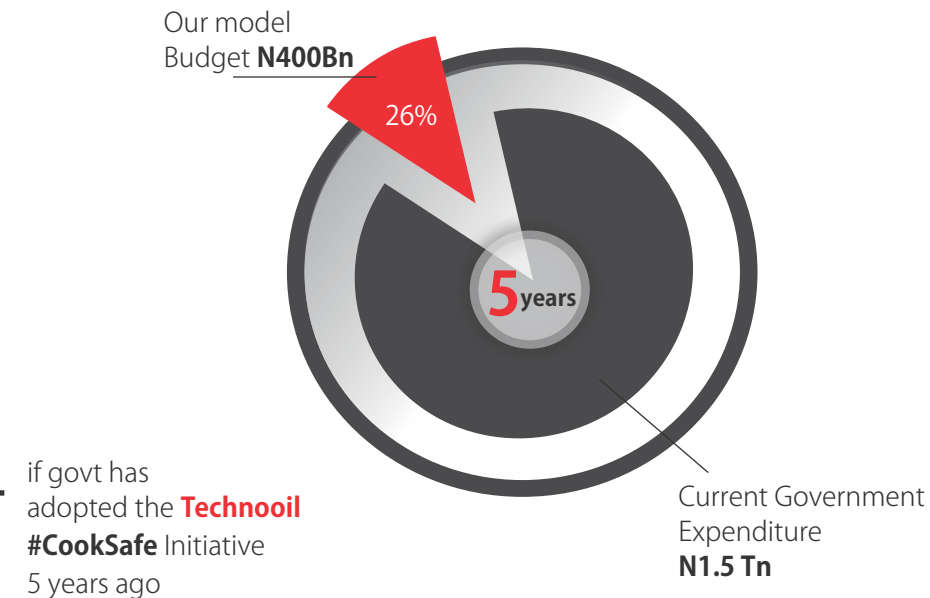
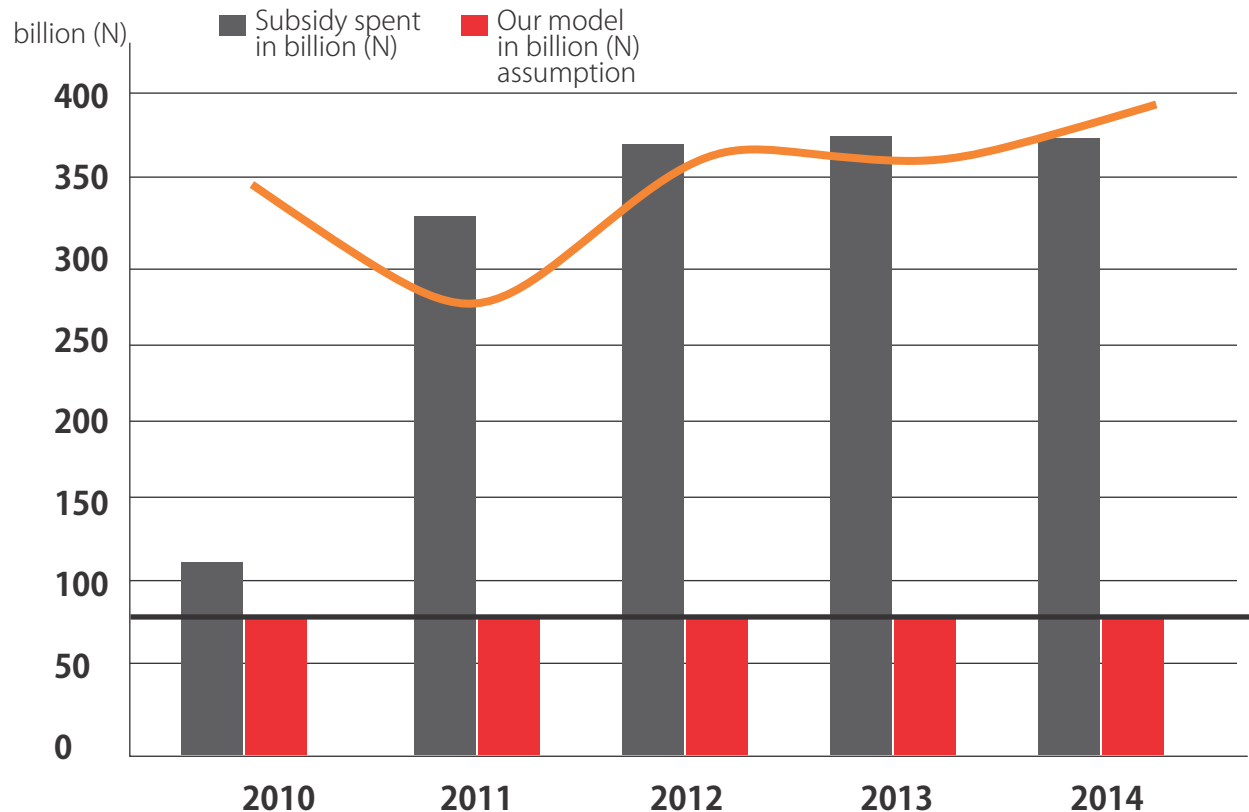


In the light of falling oil prices, can we reduce the depletion of our foreign reserve?



5 years Trend on Kerosene Subsidy

In the last 5 years, Government has spent over N1.5 trillion on kerosene subsidy, but with a ~~N400~~ billion intervention budget spread over 5 years, Nigeria would be saved of the money spent on kerosene subsidy annually, save the foreign exchange on cylinder importation



Source: PPMC, NLPGA, PPPRA

Our Proposition

Switch kerosene users to LPG within 5 years



- Based on the estimated 30 million households in Nigeria, the **TechnoOil** #Cooksafe initiative will follow a process, giving out 6 million cylinders yearly for 5 years.
- Using a regional deployment process; government to give out the gas cylinders and withdraw kerosene subsidy from such region until the entire regions are adequately covered
- Save the government over 1 trillion naira from kerosene subsidy for the 5 year period.
- Create 45,000 jobs annually as we save the environment.
- Not only stop deforestation but encourage afforestation.

ZERO TAX

Our Prayers

- Partnership with the World Bank to achieve the Global Partnership Goal
- Ensure zero duty on imported LPG manufacturing machines and components
- Implement ban on the importation of gas cylinders into Nigeria

We cannot do this alone, we need government collaboration to ensure a safer and cleaner Nigeria



- We understand that this initiative can not achieve maximum success without the support of the government. No one private company can undertake this huge task alone. For countries that have succeeded in switching their citizens from biomass fuel (firewood, kerosene) to LPG, the government was at the forefront of the campaign.
- Countries like Indonesia, India, Thailand, Brazil and China have successfully made this switch from firewood/kerosene as primary cooking fuel to LPG. We believe Nigeria too can achieve this if we all jointly work together

Barriers, Solutions and Opportunities

to the **TechnoOil** #cooksafe initiative

Barriers

- Acceptability
- Accessibility
- Affordability
- Availability

Solutions

National Awareness Program

Adequate Supply Channels, Terminals
- NLNG, NNPC, MOMAN, DAPPMA

Free Entry Cost

Every LGA should have a refill plant
i.e. 774 station

Opportunities

- Job Creation
- Reducing Deforestation
- Earning Carbon tax

Scheme Projection to deepen LPG Adoption in Nigeria

PROJECTED COST OF INVESTING IN GAS CYLINDER MANUFACTURING PLANTS, SUPPLY VALUE CHAINS & DISTRIBUTE GAS CYLINDERS TO 30M HOUSEHOLDS IN NIGERIA

Description	Units	Cost Per Unit (=N=)	Total (B)	Remarks
Filling Stations (Skid Plants) per LGA	774	50M	38.7	
Gas Transportation (Bob Tail)	1548	30M	46.44	2 per LGA
Gas Terminal	2	6.6B	13.2	2 Plants
Gas Cylinder Manufacturing Plants	2	3.3B	6.6	2 Plants
Hose & Regulator Manufacturing Factories	2	1.5B	3	2 Factories
Nos. of Households	30M	10000	300	30m Households
TOTAL COST:			407.94	

PHASE BY PHASE DISTRIBUTION OF LPG CYLINDERS TO 30M HOUSEHOLDS WITHIN 5 YEARS

Description	Nos. of Household (Million)	Cost/Unit (=N=)	Total (Billion)
Year 1	6 Million	10,000	60
Year 2	6 Million	10,000	60
Year 3	6 Million	10,000	60
Year 4	6 Million	10,000	60
Year 5	6 Million	10,000	60
			300 Billion

Government Spend on Kerosene Subsidy

Year	Kerosene Subsidy
2012	357.7 B
2013	365.32 B

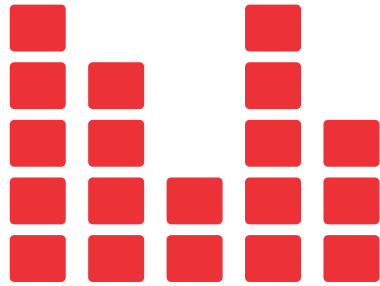
Techno Gas LPG Cylinder Manufacturing Plant



Techno Gas LPG Cylinder Manufacturing Plant



Located in Lagos Nigeria



Annual production capacity of the factory is 1 million capacity and can be grown to full capacity of about 5 million yearly.



Plant would create employment opportunity running into thousands through the value chain of the industry.



The LPG machines were designed and manufactured by an European firm which had built well over 20 similar factories in Africa and In Europe.



The LPG Cylinder factory which is expected to be commissioned before the end of 1st quarter of 2016 would be run by Nigerians for Nigerians.



The technical team that would be the back bone had been trained in Europe ahead of the commissioning.



The LPG project had gulped over N3Billion and we expect that much more would go into the project.

Techno Oil's contribution towards LPG Adoption in Nigeria



- Distribution of 50,000 gas stoves to market women and indigent households in the last 4 years
- Construction of 20 units of 10MT LPG plants in our retail outlets
- Ultra-modern LPG Bottling Plant
- Multi-billion Naira investment in a Cylinder Manufacturing Plant with installed capacity of 5 Million units of cylinders annually
- Construction of 15,000 MT LPG Terminal

The Firewood/kerosene-to-LPG switch Strategy

The switch process will fall under the 3 major agenda

1

ACCEPTABILITY

2

AVAILABILITY

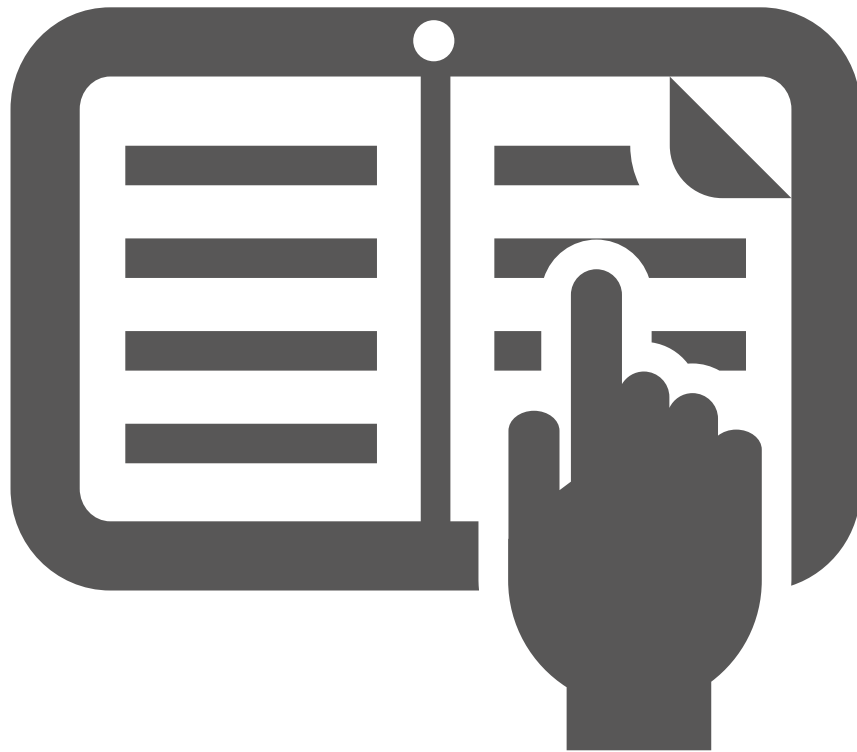
3

AFFORDABILITY

The kerosene-to-LPG switch Strategy

ACCEPTABILITY

Launch an awareness campaign to educate Nigerians on the benefits of using LPG for domestic cooking, preserving our environment and reducing cost to government



- At Techno gas, we are initiating an awareness campaign to sensitize the public of the danger of kerosene and firewood vis-à-vis the benefits of switching to cooking gas (LPG).
- We are calling on the Government to collaborate with us in the 'CookSafe' campaign to educate Nigerians of the benefit, safety and need to switch to LPG as against other biomass fuel such as kerosene or firewood
- We strongly believe that if government deploys its whole arsenal of orientation tools, through the **National Orientation Agency** give the people a reason-to-believe (i.e. just like the mass awareness and support gotten during the Ebola crisis), Nigerians will overcome their conservative attitude towards gas and support the switch campaign

The kerosene-to-LPG switch Strategy

AVAILABILITY

Accessibility and ease of gas refill



- Government to institute a policy for all Mega and petrol refill stations to have LPG refill facility.
- Government to institute a policy on appropriate pricing of LPG in Nigeria. A situation whereby imported LP gas is cheaper than the local is inimical to the program to deepen the LPG usage in Nigeria.
- Government to institute a policy that would discourage indiscriminate dumping of low quality cylinders from Asia, thereby encouraging local manufacture of LPG cylinders in Nigeria.

The kerosene-to-LPG switch Strategy

AFFORDABILITY

Break the initial barrier; the initial cost of acquiring a gas cylinder



- Nigeria has an estimated household of 30 million. Report shows that less than 5% use LPG for domestic cooking. Although there has been increased awareness on the benefits of using LPG for domestic cooking, the initial cost of acquiring a gas cylinder deter many from using it thereby relying on kerosene which is not safe, clean, efficient and most times readily available.
- Our proposition is that the government acquires the cylinder (i.e. break entry challenge) and give it out to the masses so as to encourage continuous usage.
- If Government give-out 5 million cylinders yearly, in 6 years 30 million household would be supplied, thereby removing further cost of cylinder distribution, acquisition, kerosene subsidy and deforestation.
- One-off Subsidy on the LPG scheme would enhance the adoption program instead of the kerosene subsidy.

How it works

1

Purchase

Govt to commission Techno Gas to manufacture 5 million cylinder, which will be distributed to 5 million households yearly

2

Withdraw

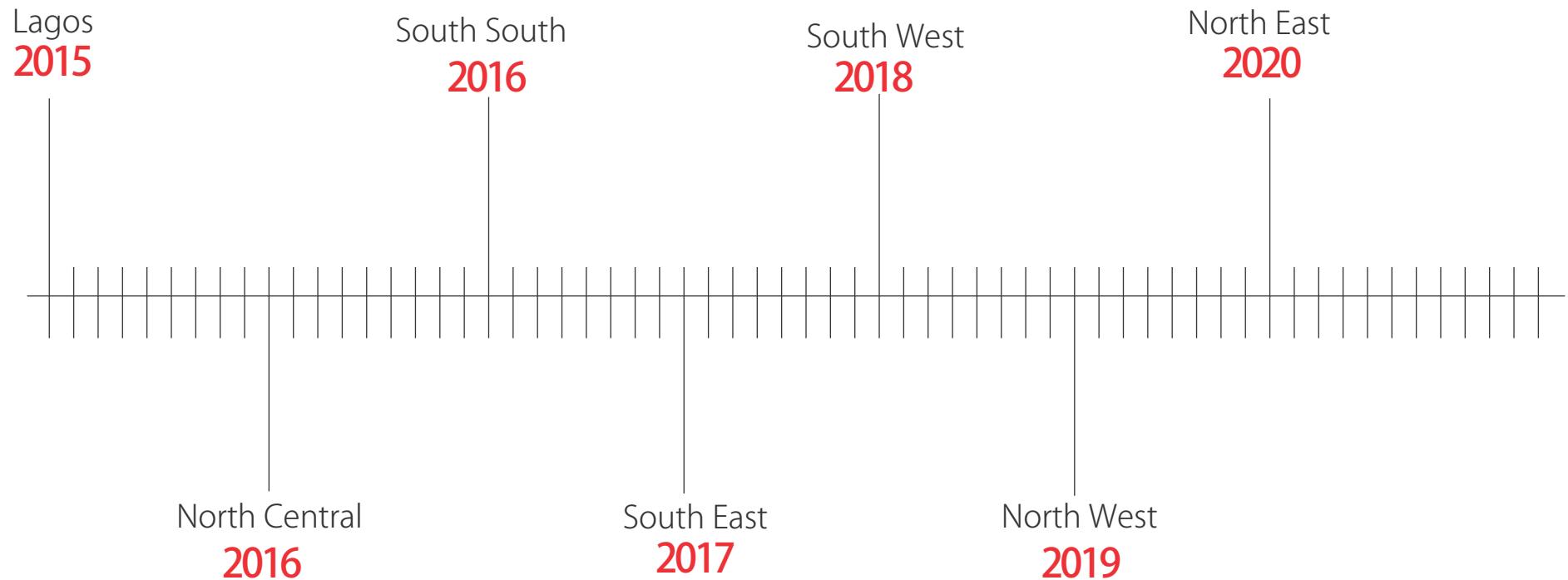
Govt will withdraw kerosene subsidy allocation to any region that gas cylinder has being distributed to, gradually.

3

Reduced

As more region is been covered yearly, the budget allocation on kerosene subsidy gradually decreases until the 30m households are covered

Phasing plan



**Let's join hands together to make wood
and other biomass fuel the past, and
LPG the future**

Thank you