



GREENVILLE LNG

Promoting Innovation in the Natural Sector

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CONFERENCE**



GREENVILLE LIQUEFIED NATURAL GAS CO. LTD

Innovation 1:

Greenville 1st Company to run Entire Fleet of Trucks 100% on LNG



Greenville is the 1st Company to run an entire fleet of trucks 100% on LNG in SSA



LNG Fueled Trucks are Going Far in Nigeria

From Rumuji near Port Harcourt to:

Kano



Kaduna



Nasarawa



Ilorin, Kwara



Lekki, Lagos



Agbara, Ogun



Greenville LNG Strategically Located Filling Stations Currently

Greenville LNG Refueling Stations (Page 1)



Rumuji, Rivers



Koton Karfe, Kogi



Greenville LNG Refueling Stations (Page 2)



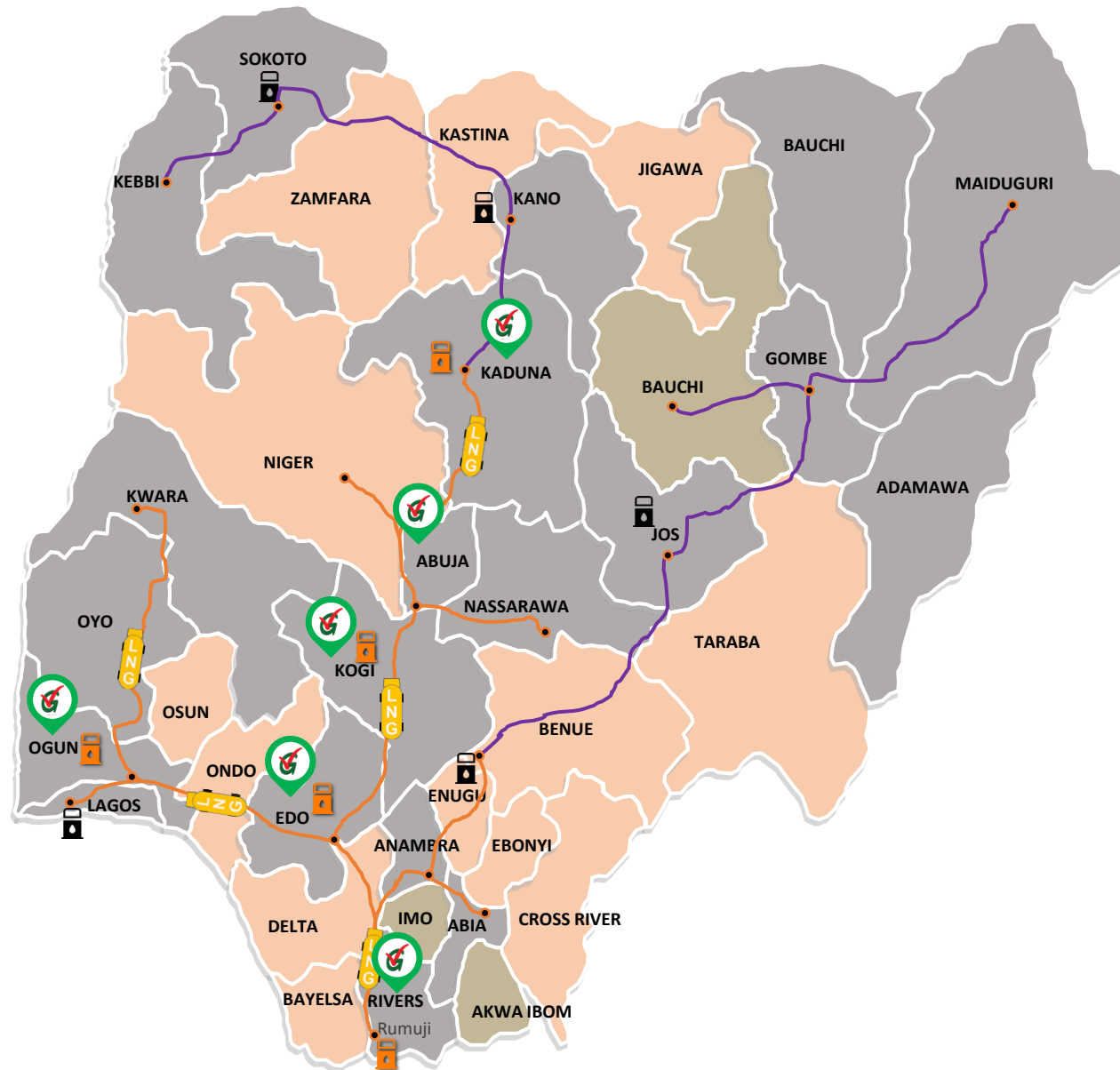
Sagamu, Ogun



Kakau, Kaduna



NETWORK OF LNG FILLING STATIONS



LNG STATION NETWORK

Phase 1:

- ✓ Rumuji - River State
- ✓ Kakau – Kaduna
- ✓ Shagamu –Ogun State
- ✓ Koton Karfe – Kogi State



Phase 2:

1. Lagos
2. Abuja
3. Kano
4. Yola
5. Jos
6. Enugu
7. Benin City
8. Sokoto





Innovation 2:

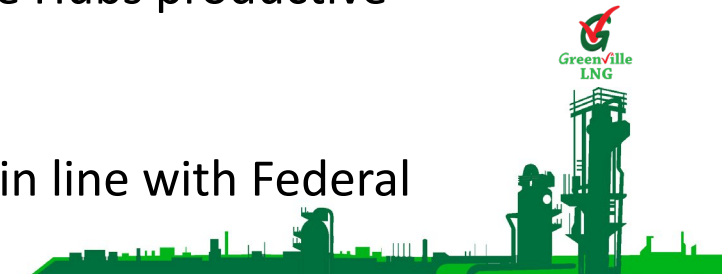
DISTRIBUTION HUB FOR SMEs





PREAMBLE OF A DISTRIBUTION HUB THROUGH GREENVILLE FOR SMEs

- Supply and installation of 30 essential refueling stations consisting of pressurized cryogenic LNG tanks, pumps and dispensers for its distribution; these 30 stations will be located to cover the entire road network of the country. These stations will later be referred to as "Hubs".
- A unit will also be installed at each Hub for the transformation of LNG into CNG and its distribution to future potential customers.
- Supply and installation at customer sites of units formed by cryogenic tanks of adequate capacity and regasifiers in order to feed gas to 200 kW to 1000 kW gas generators (1 or more units) installed at the end users.
- In this way Greenville would make the investment for the installation of the Hubs productive in the short term (6 to 10 months) and generate an adequate revenue.
- LNG will be used for long haulage trucks and CNG will be used for the cars in line with Federal Government Gas Policy.





Direct & Indirect Advantage of Greenville Hubs

- ✓ 24 x 7 uninterrupted & efficient Power Supply to Businesses and small-scale Industries.
- ✓ Provides regular and competitive power lower than the grid price.
- ✓ Will stop the shortages of power to Industrial customers.
- ✓ Will reduce the huge import of diesel and PMS.
- ✓ Reduce considerable amount of forex for importation of diesel and PMS (As envisaged by the FG Gas Policy).
- ✓ Will accelerate the revival of the obsolete industries.
- ✓ Will also help in developing new small-scale industries around the hub. They will be creation of new skills and thousands of job opportunities.
- ✓ Environment wise LNG is the most environment friendly compared to other fuels (safe carbons)
- ✓ This project will encourage and strengthen the much-needed middle class strata in Nigeria.





COMPONENTS OF A DISTRIBUTION HUB

1 Hub made up of:

- 2 LNG pressurized vertical tanks of 150 m³ each for a total capacity of 300 m³ or 135 t,
- 1 integrated LNG refilling skid with 2 dispensers,
- 1 integrated L-CNG refilling skid with 3 dispensers,
- 1 generator 60 KW,
- 3 containers for office, workshop, store.
- Trucking
- Customer Installation





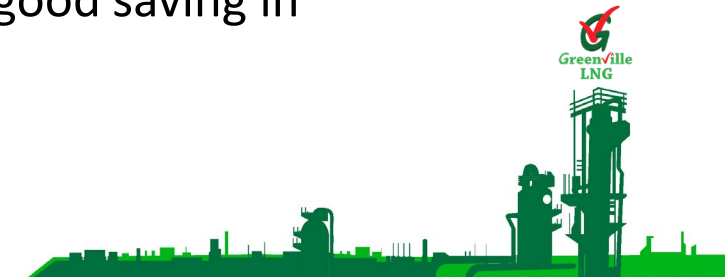
COMPONENTS OF AN END USER INSTALLATION

■ Customer Installation

1. Greenville will install mobile skids which consist of LNG storage and Regasification unit.
2. These LNG storage and regasification units are easy to install and require less space.
3. Greenville is also installing gas to power solutions by installing Gas generators at customer / end user with capacity from 200 kW to 1000 kW.
4. Customer not required to make any major investment on civil work.

■ Trucking

1. Greenville intends to sell LNG fueled trucks and dual fuel kits for Haulage companies to change over from fossil fuel to clean fuel which is LNG.
2. This would change the transport sector less carbon emission and give good saving in fuel compared to Diesel fuel trucks.





PHASE I OF THE HUB PROJECT

The supply of Gas & Power Solution to SME's across Nigeria

With the contract for the supply of energy through gas-fired generators, Greenville would offer:

- ✓ A price per kWh lower than that of the grid,
 - ✓ Continuity of supply of LNG & Power,
 - ✓ Quality assurance with stable voltage and frequency.
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- ✓ In addition, Greenville / Customer would like to offer customers a BOT contract (Build Operate and Transfer).
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- ✓ This proposal could also extend to those customers who will be supplied with LNG for heat generation.



INTEGRATED GAS-TO-POWER SOLUTION FOR SMES BY GREENVILLE LNG

New Compact Solution by Greenville LNG for Clean & Economical Energy



Compact energy solution

- ❖ This is a compact energy solution which is especially suited for small and medium industries.
- ❖ It comprises of mobile skid unit with storage and regas mounted on a flat bed.
- ❖ Small size gas generator with a capacity starting from 200 kW to 1000 kW.

SMEs WHICH CAN TAKE ADVANTAGE OF THIS HUB SCHEME

- ✓ Rice Mills
- ✓ Fertilizers
- ✓ Oil Mills
- ✓ Blending units
- ✓ Hospitals
- ✓ State Government facilities
- ✓ Shopping Malls
- ✓ TV Stations
- ✓ Radio Stations
- ✓ Supermarkets
- ✓ Residential Estates
- ✓ Schools / University
- ✓ Telecom towers
- ✓ Telecom hubs
- ✓ Plastic Industries
- ✓ Cosmetic industries
- ✓ Shoe factory
- ✓ Mineral water factory
- ✓ Chemical factory
- ✓ Food Processing Industry
- ✓ Other manufacturers

Currently we are in discussion with Rice Mills association, Oil Mill association, FEPSAN and directly hundreds of other customers from the above industries



