



Nigeria's Experience in Collecting, Analysing, and Disseminating LPG Data

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Introduction



Nigeria with a population above 200 million, It refers to as OPEC Nation that has the biggest populace. Nigeria as a country work towards achieving Sustainable Development Goal 7 which aims to ensure access to clean and affordable energy, Liquefied Petroleum Gas (LPG) has emerged globally as a pivotal energy source for transition to cleaner cooking methods. LPG has been recognized as an efficient and cleaner alternative to traditional biomass fuels such as fuelwood and charcoal.

The Nigerian LPG (Liquefied Petroleum Gas) industry has witnessed significant growth in recent years, driven by increasing domestic demand and efforts to promote clean energy alternatives. As the country strives to meet its energy needs and reduce reliance on traditional fuels, exploring the international market for LPG presents both opportunities and challenges.



Importance of LPG Data Collection in Nigeria



- ❑ Encourage investment in LPG infrastructure, improve accessibility and affordability, particularly in rural areas.
- ❑ To implement policies and incentives, promote the use of LPG as a cleaner alternative to traditional fuels, thereby reducing environmental pollution and improving public health.
- ▶ Foster international cooperation and knowledge sharing, leverage best practices in LPG usage and distribution, ensuring sustainable energy transitions worldwide.
- ▶ Clean Energy Transition: LPG offers a cleaner-burning fuel alternative compared to traditional solid fuels such as firewood or charcoal



Key Institutions Involved in LPG Data collection in Nigeria



- ❑ Energy Commission of Nigeria (ECN) – energy policy coordination
- ❑ Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) & Nigerian Upstream Petroleum Regulatory Commission (NUPRC) – licensing, infrastructure, & supply data
- ❑ National Bureau of Statistics (NBS) – household consumption on LPG data
- ❑ Federal Ministry of Petroleum Resources – sector development
- ❑ Private sector & NGOs – retail data and behavior surveys
- ❑ etc



Data Collection Sources



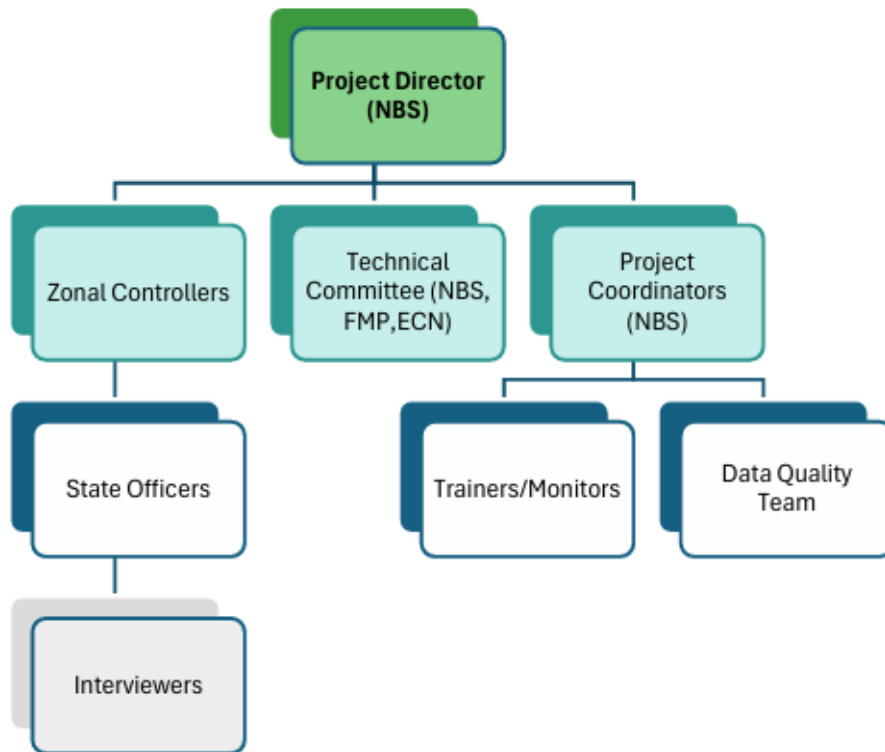
- ❑ **Consultative Committee on petroleum statistics (CCPS):** meets on quarterly bases to presents primary energy data for harmonization. (Production, Import and Export of LGP Data in Nigeria).





Data Collection Sources contd...

- Household Energy Surveys:.
- ▶ Surveys in collaboration with other stakeholders: NBS, ECOWAS

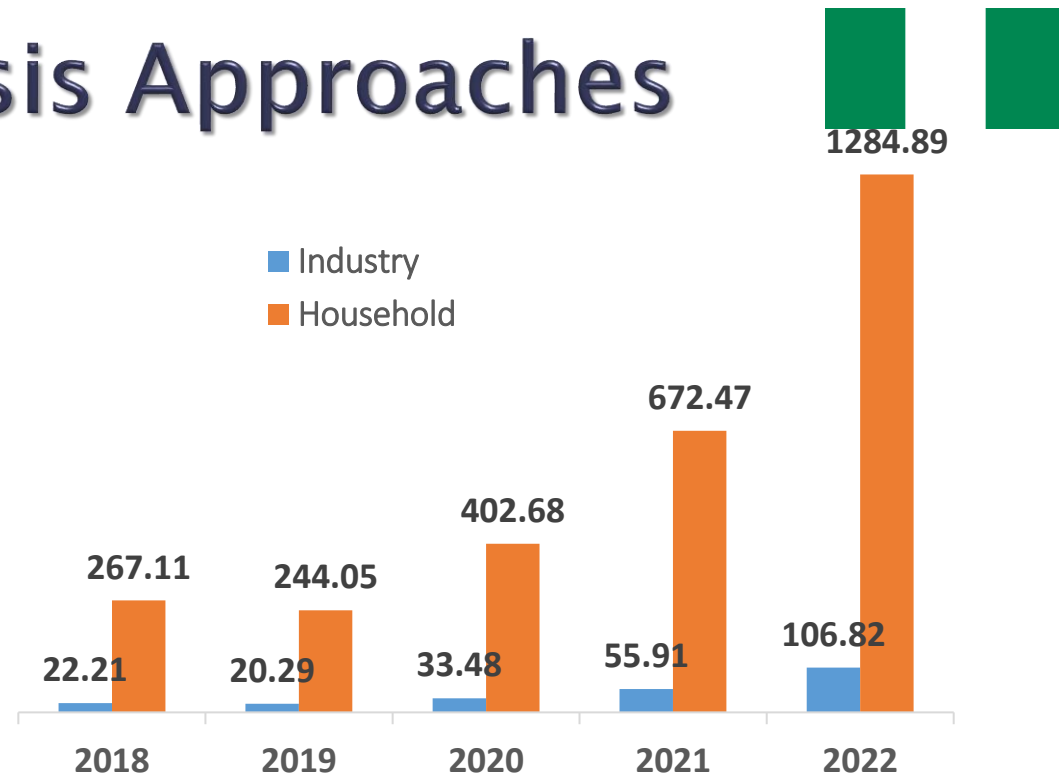


- ▶ 540 EAs across 9 states, with 15 households selected per EA.
- ▶ CAPI (Computer Assisted Personal Interview) tool.



Data Analysis Approaches

- Trend analysis for household and industry on LPG consumption (Ktoe)



LPG



96.29 kg

Average annual kilogram of LPG acquired



0.24 billion kg

Total annual kilogram of LPG acquired



₦122,876.99

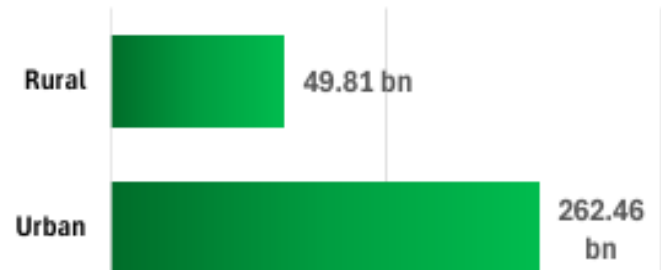
Average annual expenditure on LPG acquired



₦312.27 billion

Total annual expenditure on LPG acquired

Annual Expenditure on LPG Acquired (naira)

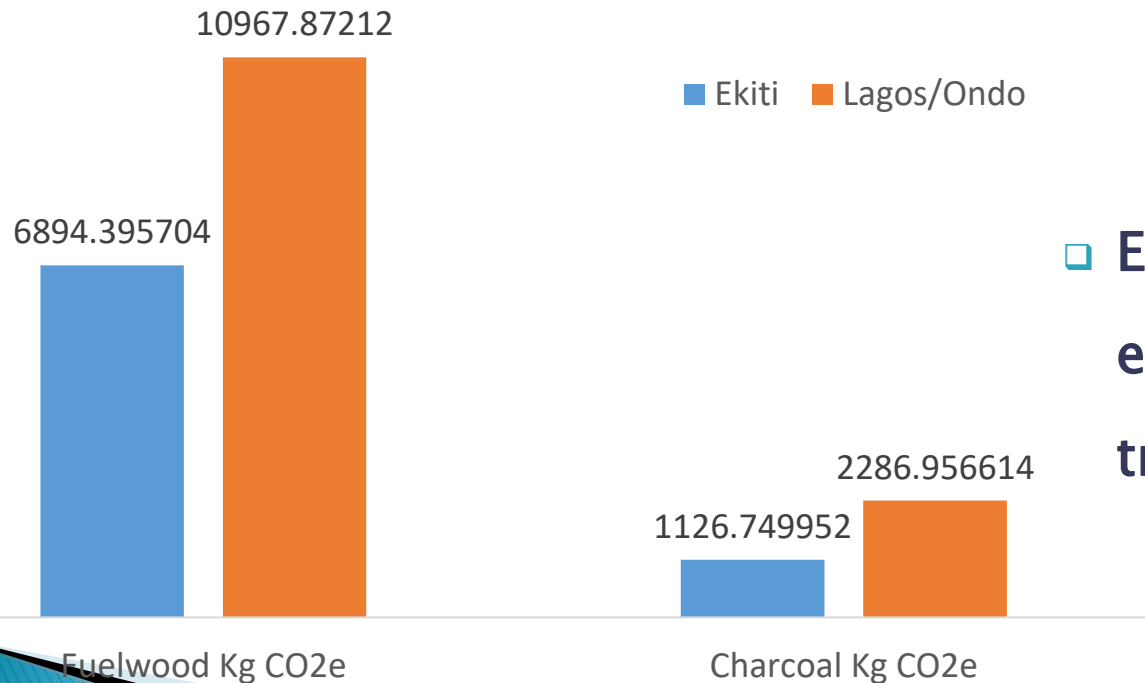




Data Analysis Approaches contd ...



- Scenario modelling using tools like Model Analysis of Energy Demand (MAED).



- Estimation of emissions from traditional energy use



Challenges

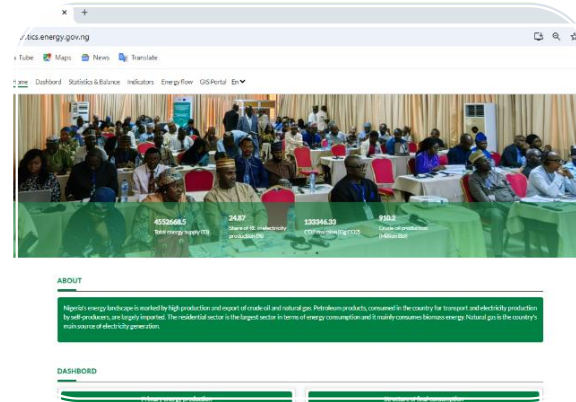
- ❑ Low level of cooperation, especially in the urban areas
- ❑ Limited budget for regular surveys
- ❑ Limited digital infrastructure
- ❑ Infrastructure Deficit: The Nigerian LPG industry faces significant challenges related to infrastructure, including inadequate storage and distribution facilities.
- ❑ Despite the growing domestic demand, Nigeria's LPG industry still lags behind its full potential



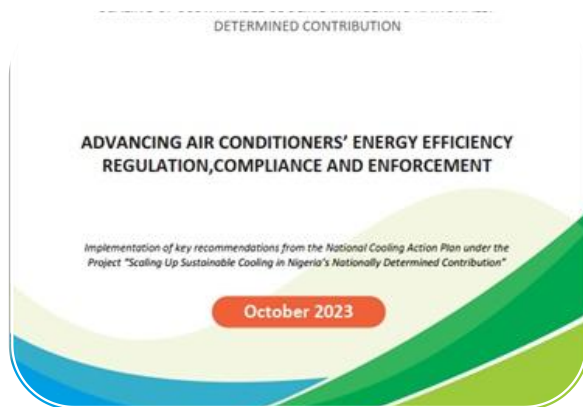
Dissemination Mechanisms



Collaboration with international partners (ECOWAS, AFREC, IEA)



Online Portals (NEIS, NBS, NMDPRA websites)



Annual Energy Reports by FCN



Workshops and stakeholder forums



Opportunities for Improvement

- ❑ Strengthening data coordination across MDAs
- ❑ Adopting digital/mobile data collection tools
- ❑ Increasing funding for national household energy surveys
- ❑ Capacity building for data analysis and visualization
- ❑ Public-private partnerships for real-time LPG data collection.



Regional and Global Collaboration



- ❑ Peer learning/Experiences with other African countries
- ❑ Support from the EU, UNDP, IEA, etc.
- ❑ Participation in initiatives like CLEAN Cooking Alliance, SDG 7 tracking etc



Conclusion



- ❑ Reliable LPG data is vital for achieving energy access and climate goals.
- ❑ Nigeria has made progress, but gaps still remain.
- ❑ Collaboration and innovation are key in Data collection going forward.



THANK YOU

