



Nigerian Energy Support Programme (NESP)

SUPPORTING THE DEVELOPMENT OF A PRIVATELY LED MINI-GRID MARKET IN NIGERIA

UNF EAPN WEBINAR - Promoting Clean Mini-Grid PPPs for Rural Electrification in Nigeria

Abuja, 15 November 2016

Implemented by

Introduction to NESP

- **Technical cooperation** programme
- Aim: Enabling framework for Renewable Energy, Energy Efficiency and **Rural Electrification** (focus on renewable energy mini-grids).
- Funded by **European Union and Germany**
- Implemented by Federal Min. of Power, Works and Housing, **5 partner states** (Niger, Ogun, Cross River, Plateau, Sokoto) and **GIZ**
- Duration: **5 years** (03/2013 – 02/2018)
- Funding: **24.5M EUR** – 15.5M EUR (EU) and 9M EUR (Germany)

NESP supporting enabling framework for private mini-grids

- **Good understanding** and **political commitment** from authorities regarding mini-grids and private participation
- **Policy** (e.g. NREEEP, 2015) and **legislation** (EPSRA, 2005) are in place
- **Draft support mechanisms** (e.g. Rural Electrification Fund)
- **Draft Mini-grid PPP framework** under which Government can support private sector with subsidies and the acquisition of regulatory approvals
- **Draft light-handed Mini-grid Regulations** protecting private investors from main-grid encroachment and political interference in tariff setting

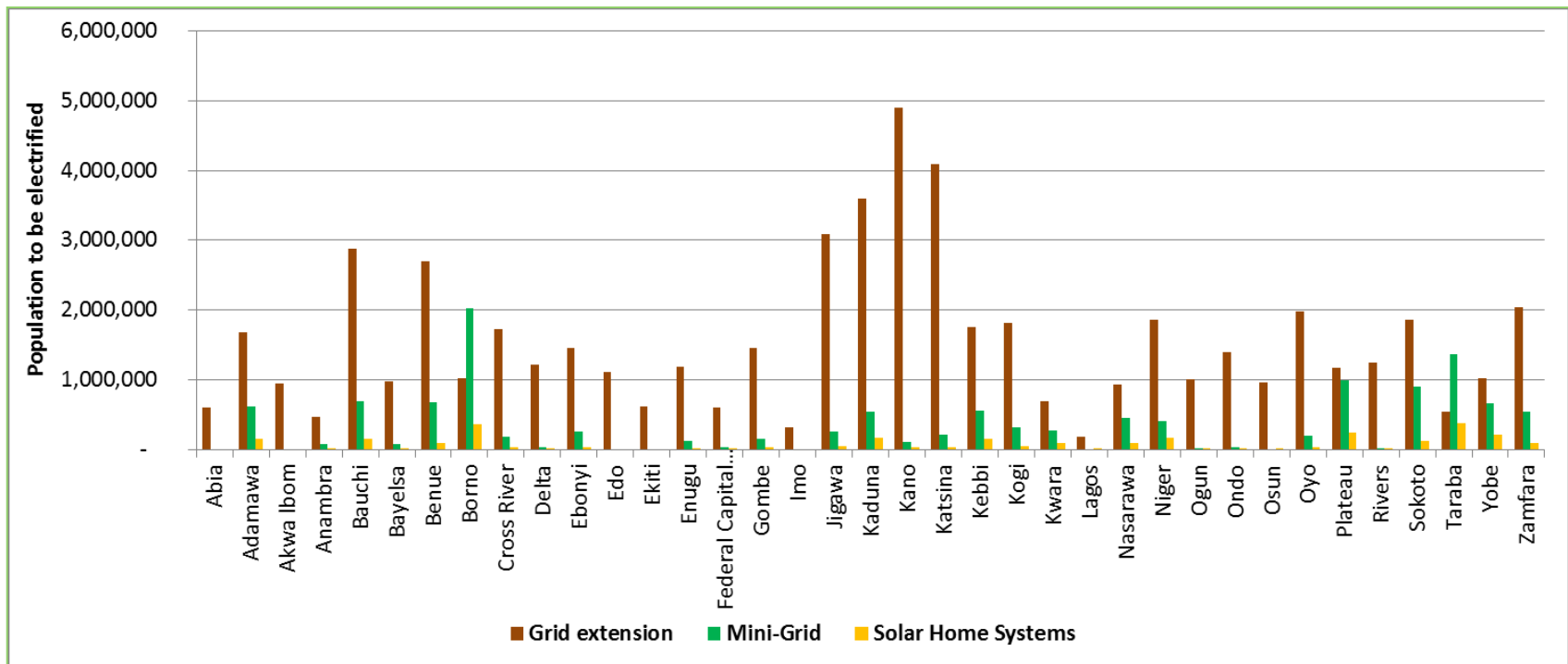
Supporting electrification planning

- Nigeria has got **great potential for isolated** (large villages with a lot of economic activities), **but also interconnected mini-grids** due to the insufficient generation and evacuation capacity of the central grid.
- Federal entities, various states and the Electricity Distribution Companies are working on **data collection, electrification modelling and planning**.
- Once published, this information will provide a vital source of **market intelligence** to the private sector.

Results of off-grid PV pre-modelling for Nigeria

RESULTS PREVIEW (CONSERVATIVE SCENARIO)

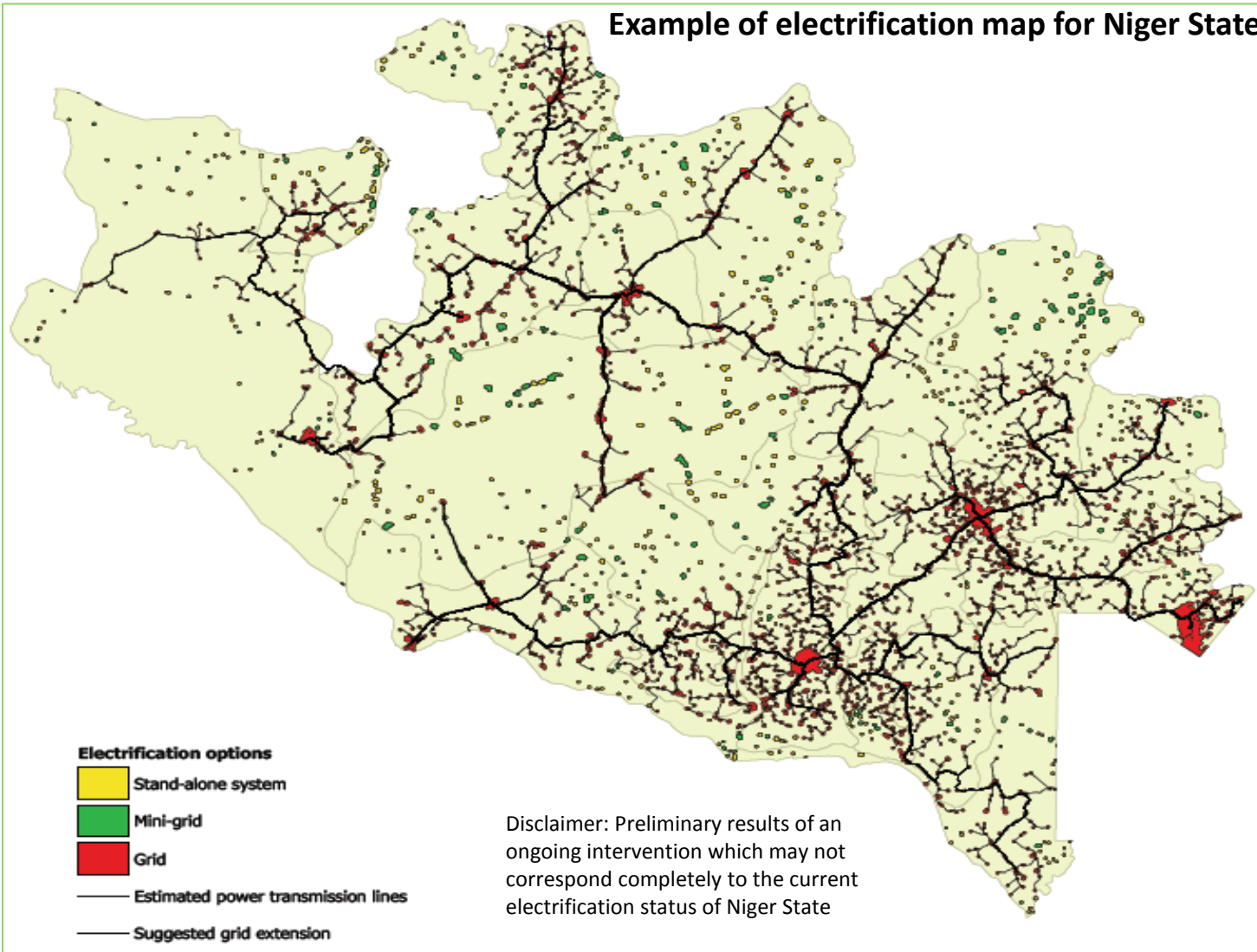
- Grid electrification: 34,446 cluster 57.1 million ppl
- **Mini-Grid electrification: 3,800 cluster 12.8 million ppl**
- SHS electrification: 7,210 cluster 2.8 million ppl



Source: NESP, "Preliminary analysis for off-grid PV capacities for the whole of Nigeria", 2015

Electrification maps

Example of electrification map for Niger State



NESP supporting local private mini-grid developers

In 2015, NESP launched an open competitive process which resulted in the selection of five mini-grid developers/operators:

WINNERS	PROJECT LOCATION
Gosolar Africa (SMEFUNDS)	Sokoto
Nayo Tropical Technology Ltd.	Niger
Rubitec Nigeria Ltd.	Ogun
Community Research and Development Centre	Cross River
GVE Projects Ltd.	Plateau

The five winners benefit from technical and financial assistance from NESP to develop a solar mini-grid pilot project (average of 100kWp) and develop a replication strategy.

NESP support to private mini-grid developers

- Preparing **bankable business plans** (incl. site identification, demand assessment, system design, financial modelling).
- Facilitating contact with the Federal and State Governments in order to ease the process of **acquisition of regulatory approvals**.
- Facilitating contacts with investors and financiers to access debt and equity to cover for part of the capital costs of the mini-grid project.
- Provision of grant (channelled through the state partners) to cover for remaining capital costs of the mini-grid project.
- Preparing replication strategies which will allow developers for fast expansion.

NESP supporting mini-grid investors

- Training on mini-grid finance (e.g. for local banks and investors)
- NESP to pilot crowdfunding for mini-grids in Nigeria in PPP with bettervest
- Under PPP with bettervest, NESP will provide advice on legal, technical and financial aspects of mini-grid development
- bettervest commits to finance one pilot project during the first round
- If successful same cooperation model will be used for additional projects



Thank you!

Do not hesitate to contact us for more information!!!

Nigerian Energy Support Programme (NESP)

Jannik Moller

Head, Rural Electrification

jannik.moller@giz.de

08054603084