

West African Clean Energy Mini-Grid Market: Current Situation and Perspectives

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Wednesday, 16 September 2015

SESSION 12: Triggering Investment in Clean-Energy Mini-Grids

ECOWAS Sustainable Energy Policy & Investment High Level Forum



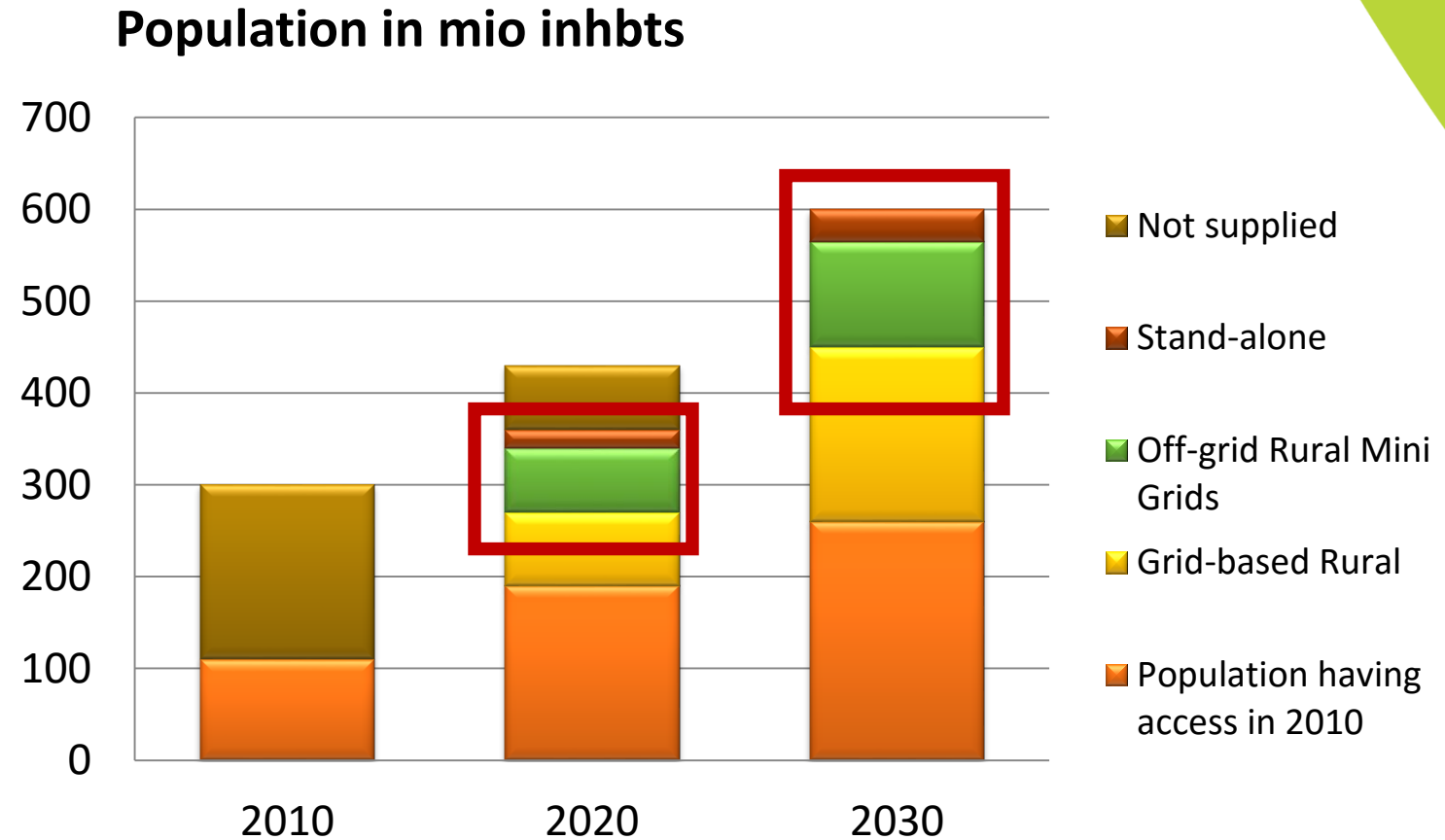
Is there interest to integrate mini-grids as an option for rural electrification in the ECOWAS region?

YES / OUI / SI

In the SE4ALL Action Agendas, all the countries are considering clean-energy mini-grids as instrument to complement grid-extension and achieve their access goals

The ECOWAS goal: universal access for all the citizens by 2030

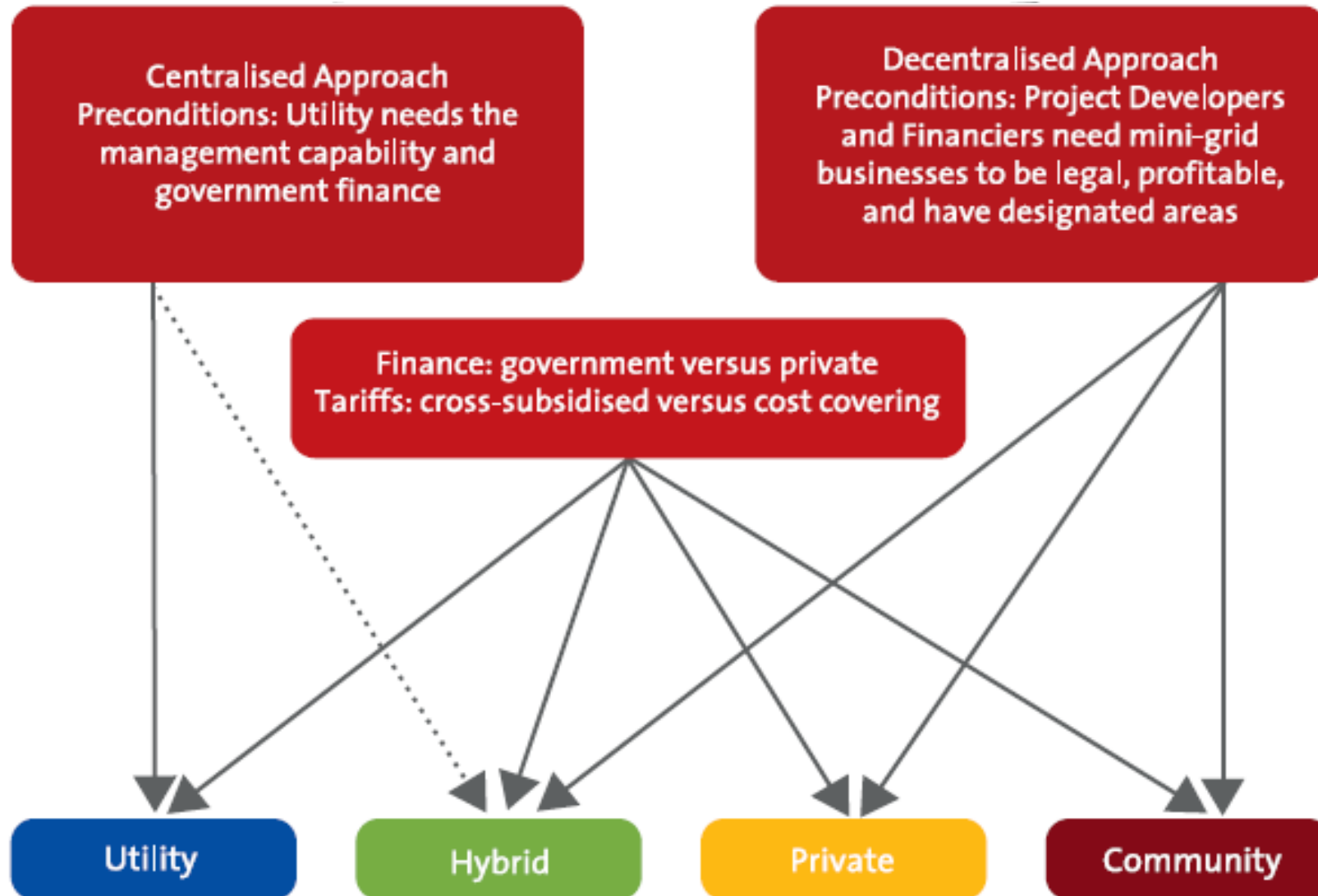
	2020	2030
Share of rural population supplied by mini-grids and stand-alone systems in %	22%	25%
Mini-Grids to be installed	60,000 3,600 MW	128,000 7,680 MW
Stand-alone systems	210,000	262,000
Investment (b€)		32,3



Source: EREP

- Currently we have almost 200 clean-energy mini-grids in the ECOWAS region
- All the member states have already or are promoting CEMG

Which strategic approach (centralized or decentralized) to take? How to finance mini-grids?



In the SE4ALL Action Agendas:

- Both centralised and decentralised approaches are considered
- 100 % of the countries are foreseeing to promote the private investment

Which electricity tariff to apply? Who pays for it?

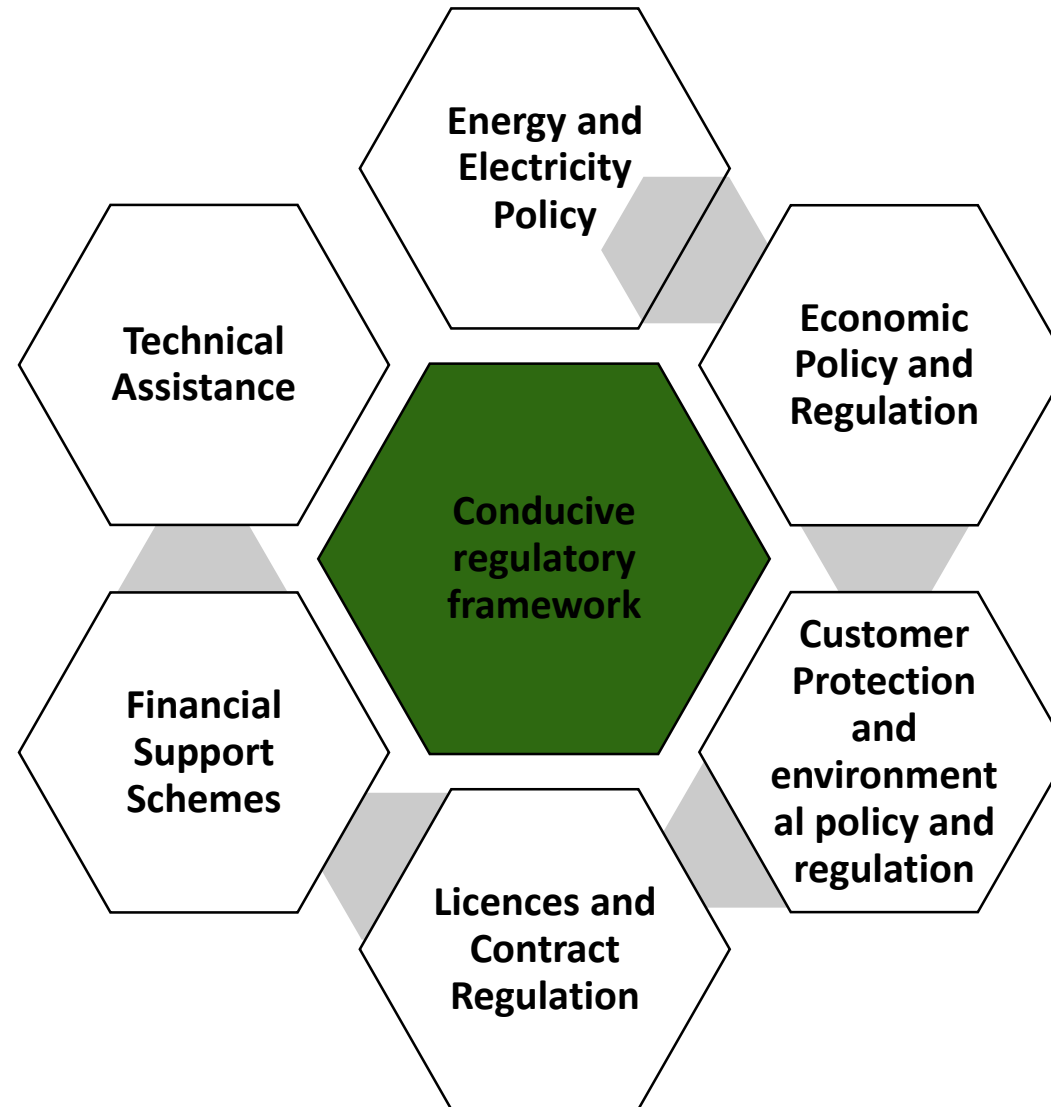
Uniform national electricity tariff

- Equal tariffs through the country
- Normally politically more acceptable
- Usually implies subsidies for rural electricity users

Cost- reflective tariff

- Mini-grids users pays the revenues for M&O&M costs and investments recovery
- This is normally higher than national tariff
- Equity issues / political acceptance
- Tariffs could also be reduced by providing subsidies to allow investors to have a “reasonable IRR”

Consistent improvements in the conducive regulatory frameworks are done all around the region



Consistent improvements in the conducive regulatory frameworks are done all around the region

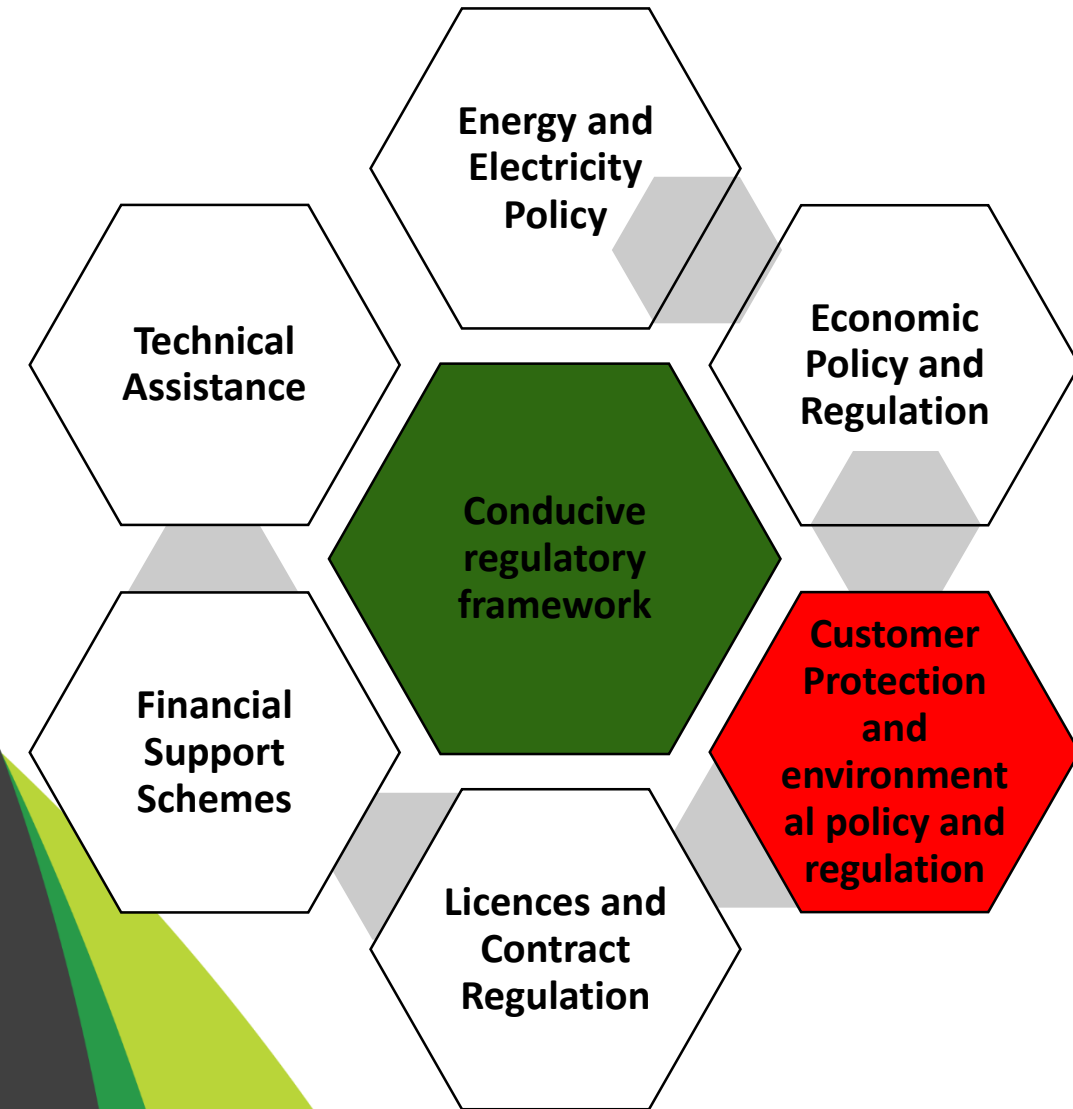
Example: ASER established minimum technical specifications and environmental regulations

AGENCE SÉNÉGALAISE D'ELECTRIFICATION RURALE
(ASER)

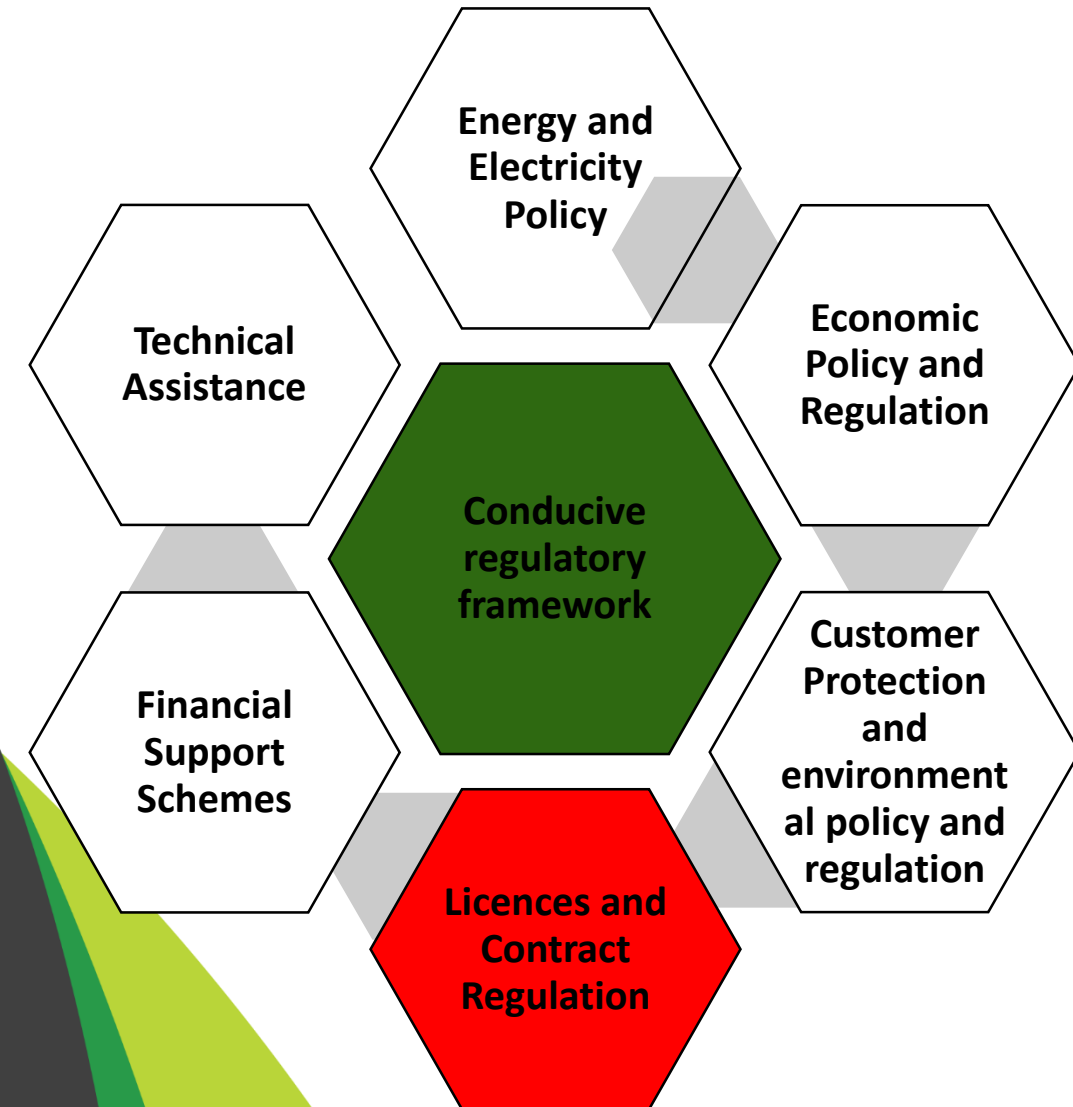
MANUEL DES PROCÉDURES

Minima techniques
Règles environnementales

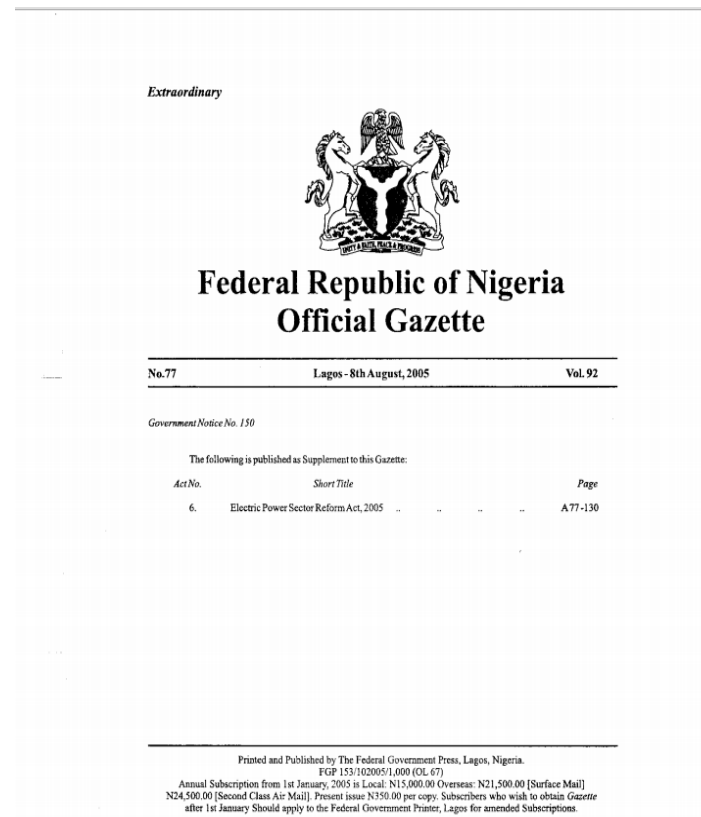
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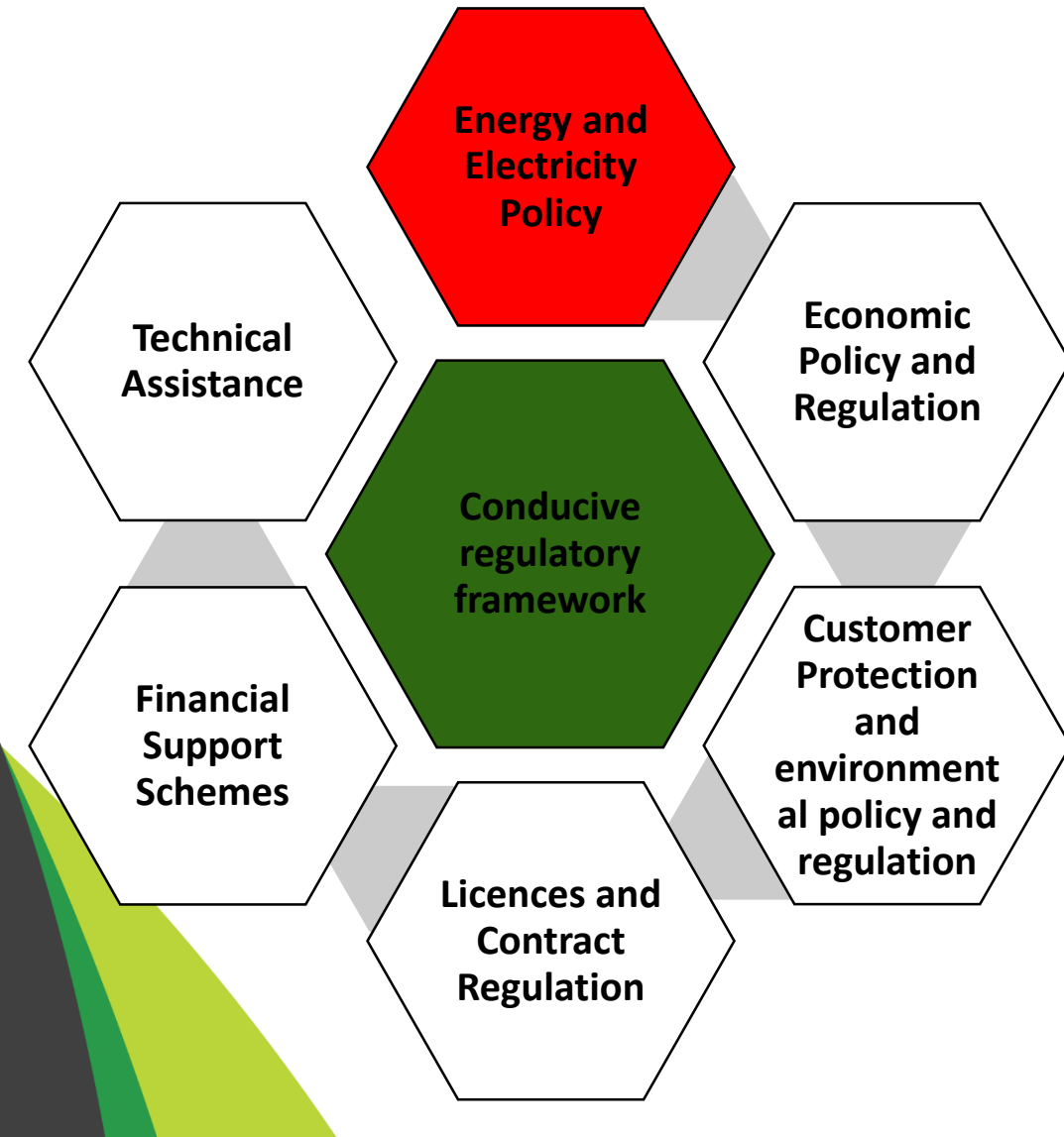
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Nigeria Electricity Power Sector Reform Act of 2005 eliminates the licensing for small scale electricity generation and distribution



Consistent improvements in the conducive regulatory frameworks are done all around the region



Example: in Senegal, the Electricity Sector Regulatory commission has established tariffs for the rural electrification concession, the Delegated Temporary Managers (GDT) and the Local Rural Electrification Initiative (ERIL) operators

Rubriques	Coût des Services électriques en milieu rural (en F CFA)				
	N1	N2	N3	N4 Réseau	N4 Solaire
Redevance Mensuelle H5	4.000	7.500	13.000	120 FCFA /KWh	71 FCFA/KWh
Taxe pour les Collectivités Locales (TCL)	50	100	170	2,5 % coût énergie consommée	2,5 % coût énergie consommée
Redevance FER (RFER)	50	100	170	0,7 FCFA/kWh	2,5 %
Cautionnement Mutuel Antivol	25	50	75	1,25 %	1,25 %
Participation de l'abonné à la mise en place du projet payable sur 36 mois	12.000	22.500	39.000	66.000	66.000