POLICY FRAMEWORK FOR MINI-GRID DEVELOPMENT IN THE PHILIPPINES

4th International Off-Grid Renewable Energy Conference and Exhibition

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Presentation Outline

- I. Enabling Laws
- **II. Status of Electrification**
- **III. Policy Framework**
- IV. Private Sector Participation in Off-Grid Electrification
- v. Challenges

Enabling Laws

RA No. 9136: The Electric Power Industry Reform Act of 2001

- Restructured the Philippine Electric Power Industry
- Encouraged Greater
 Private Sector
 Participation in the
 Generation,
 Transmission,
 Distribution and Supply
 Sectors
- Ensure and accelerate the country's total electrification

Passed into law on 08 June 2001

RA No. 9513: The Renewable Energy Act of 2008

- Accelerate the exploration and development of RE resources
 - Achieve energy selfreliance
 - Adoption of clean energy to mitigate climate change

Passed into law on 16 December 2008

Major Players in Missionary Areas

DOE



- Supervise the restructuring of the industry
- Set policies
- Oevelop MEDP
- Oversight on Total Electrification

NPC



- Perform Missionary Electrification
- OCOR Administers subsidies to NPPs and QTPs



NEA

- Prepare ECs to operate in a competitive market;
- Review and upgrade regulatory policies to enhance viability of electric cooperatives

Distribution Utilities (DUs)

- Provide Universal Service to its franchise areas;
- Ensure reliability and adequacy of electric services;
- Facilitate entry of QTPs

Major Players in Missionary Areas



Creation of PSALM

- Management of NPC assets and liabilities and transmission company pending privatization
- Manage NPC Privatization process
- Assume NPC debt and IPP Contracts
- Administer Universal Charge

Creation of ERC



- Approve rates and charges
- Approve PSAs
- Promote competition
- Penalize abuse of market
- Determines UC-ME



New
Private
Power
Providers

Qualified Third Parties

Private Players (NPPs and QTPs)

- NPPs: Assume the generation function of NPC
- QTPs: Assume the provision of electricity to Missionary/Unviable Areas
- Entitled to subsidies from the Universal Charge-Missionary Electfn

Status of Household Electrification

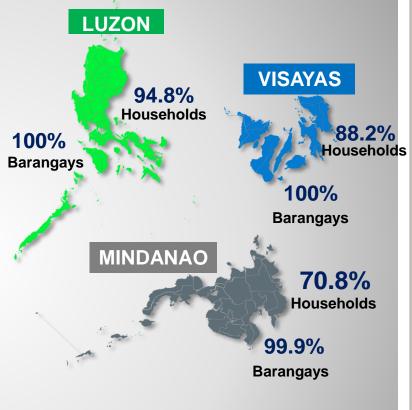
As of 31 December 2017



20.94 M HHs out of23.70 M HHs haveelectricity in the country

(Based on DDP 2018-2027 by DUs)

Distribution Utilities (in Millions HH)	HH Population	Served HH	Unserved HH	HH Electrificati on Level (%)
119 Electric Cooperatives	14.59	12.19	2.4	83.6%
MERALCO	6.98	6.82	0.16	97.7%
Other Distribution Utilities	2.14	1.92	0.22	89.07%
Philippines	23.72	20.94	2.78	88.3%



DC2018-05-0010 issued on 24 May 2018 created a "Task Force E-Power Mo!" to ensure access to electricity for unserved and underserved areas.

Policy Framework

- INDUSTRY REFORMER
- ➤ The Government has a goal of ensuring and accelerating the country's total electrification taking in consideration:
 - Sustainability
 - Economic efficiency (i.e., provision in a least-cost manner)
- ➤ The Government recognizes the significant roles of both the public and private sector thus innovative partnerships are aimed at
 - Ensuring quality, reliable, secured and affordable supply of electric power; and,
 - Attaining total electrification

Private Sector Participation in Missionary Areas

Missionary Generation

Distribution Utilities (DUs)

Unviable Areas

- Provide Universal Service to franchise areas
- Ensure reliability and adequacy of electricity services
- Facilitate entry of QTPs

New Power Providers (NPPs)

- Assume power generation function of NPC
- Maybe entitled to subsidies from the Universal Charge-Missionary Electrification (UC-ME)

Qualified Third Parties (QTPs)

- Assume the provision of electricity to Unviable Areas (Waived Areas)
- Maybe entitled to subsidies from the Universal Charge-Missionary Electrification (UC-ME)

Recent Developments

- DC2018-05-0010 created a "Task Force E-Power Mo!" to ensure access to electricity for unserved and underserved areas.
- TFEM to oversee the implementation of total electrification
- DUs to submit their respective
 Comprehensive Master Plan for Total Electrification.



DEPARTMENT ORDER NO. DO 2018.05-0010 4

CREATION OF A TASK FORCE TO ENSURE ACCESS TO ELECTRICITY FOR THE COMMUNITIES THAT REMAIN UNSERVED AND UNDERSERVED BY DISTRIBUTION LITH LITHS.

WHEREAS, Republic Act No. 7638 or the Department of Energy (DOE) Act of 1992 created the DOE to prepare, integrate, coordinate, supervise, and control all plans, programs, projects, and activities of the Government relative to energy exploration, development, utilization, distribution, and conservation;

WHEREAS, Section 2 or Republic Act (RA) No. 9136 or the Electric Power Industry Reform Act of 2001 states that it is the declared policy of the State to ensure and accelerate the total electrification of the country; to ensure the quality, reliability, security and affordability of the supply of electric power; and to assure socially and environmentally compatible energy sources and infrastructure.

WHEREAS. Republic Act No. 10531, also known as the "National Electrification Administration (NEA) Reform Act of 2013," declares the policy of the State to promote the sustainable development of the rural areas through rural electrification, and further mandates NEA to pursue total electrification of the country through the Electric Cooperatives (ECs) by way of enhancing distribution development and to ensure their economic and financial viability and operation, among others;

WHEREAS, there are various projects that have been and currently being implemented by both the DOE and the NEA relative to providing electricity access to all households nationwide:

WHEREAS, despite such efforts, there remains unviable and unserved areas in the country particularly those in remote areas and the lack of access to electricity in these areas are attributed to poverty and geographical barriers in integrating the country's main grids in reaching out isolated areas and remote islands;

WHEREAS, there is an urgent need to address the lack of access to electricity of the unserved and unviable areas in the country and it has become the priority of the government to streamline its processes to ensure timely implementation of projects to guarantee the immediate delivery of the required services to the people:

NOW, THEREFORE, in view of the foregoing premises, the DOE hereby creates the "Task Force E-Power Mo" (TFEM) for the purpose of ensuring access to electricity for the communities that remains unserved and underserved by distribution utilities and electric cooperatives as mandated by their respective franchises.

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Signed: 24 May 2018

Philippines Mini-Grid B2B Forum

Philippine DOE and Alliance for Rural Electrification (ARE) through the support of EU through the project Access for Sustainable Energy Program (ASEP) organized the forum

Brought together local and international players from more than 30 countries

 to share knowledge on the latest mini-grid industry developments and innovative technical solutions to bring down costs and link players to form mini-grid partnerships



Challenges/Issues in Mini-Grid Development

- Smaller cooperatives remain financially challenge
- Lack capacity to develop renewable energy solutions
- Lack capacity to access information about funding or partnership opportunities
- Bureaucratic process
 - application process for Qualifed Third Party (QTP) and New Power Producers (NPP)
- Mini-grid interconnection with the national grid
 - Subject to technical compatibility
- Financing and subsidies for hybrid/clean energy mini-grids
- Lack of coordination between private sector mini-grid developers, government and electric cooperatives
 - Unattractive from private sector point of view

MABUHAY and

THANK YOU!