



PRESENTATION

EFFECTS OF ELECTRICITY ACCESS ON NEDCo's STRATEGIC OBJECTIVES

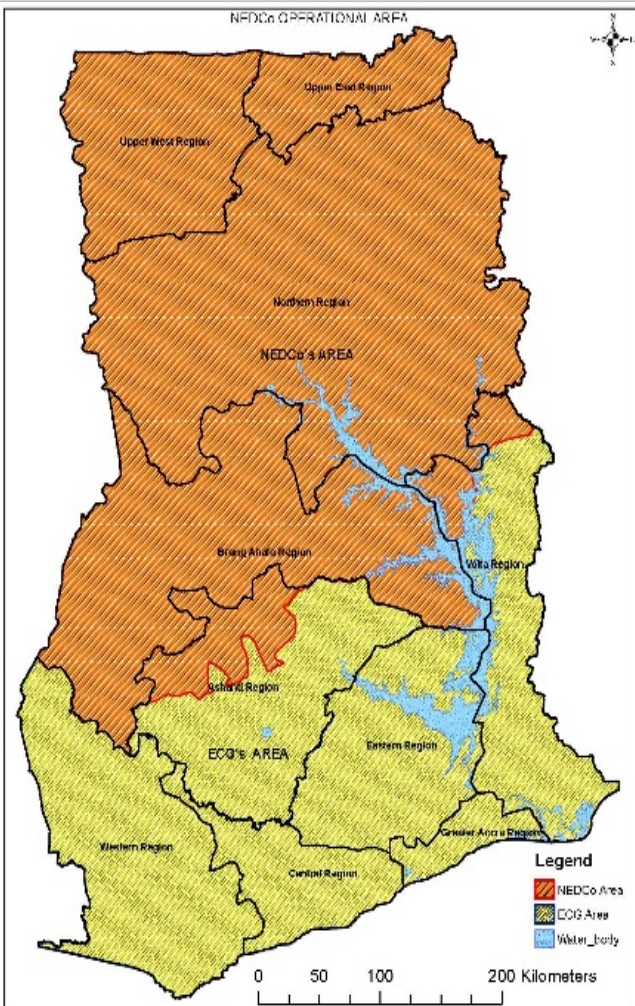
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Presentation Outline

- Overview of NEDCo
- Strategic Objectives of NEDCo
- Performance of NEDCo (2010-2018)
- Impact of Electricity Access on NEDCo's Objectives
- Way Forward/Recommendations
- Conclusion

Overview of NEDCo



- NEDCo supplies power in Brong Ahafo, Bono, North East, Northern, Savannah, UE & UW Regions
- NEDCo also supplies power to the northern parts of the Ashanti, Oti, and Western North Regions
- NEDCo, furthermore, supplies electricity to some border towns of Burkina Faso, Cote d'Ivoire and Togo
- NEDCo's operations cover about 64% of the geographical area of Ghana
- NEDCo distributes about 9% of total energy consumed in Ghana
- NEDCo's Customer Population was 882,595 as at end of December 2018 growing from




Strategic Objectives of NEDCo

- **Improve financial performance**
 - **Improve Revenue Collection**
 - **Reduce Receivables and Operating Costs**
 - **Reduce Distribution Losses**
- **Improve Assets Management**
- **Increase Distribution System Capacity and Access**
- **Improve Power Supply Quality & Reliability (LI 1816)**
- **Improve Safety of Equipment, Personnel and Public**
- **Improve Customer satisfaction**

Performance of NEDCo (2010-2018)

Item	Description	2018	2017	2016	2015	2014	2013	2012	2011	2010
1	Total Energy Purchased (MWh)	1,328.5	1,253.2	1,136.4	992.0	990.8	936.1	821.6	728.6	643.8
2	Total Energy Accounted For (MWh)	919	854.8	816.4	763.0	772.3	774.0	655.7	580.5	517.7
3	System Losses	30.0%	30.16%	27.4%	23.1%	22.0%	23.1%	20.2%	20.2%	19.6%
4	Collection Rate + MDAs	75.7%	69.0%	61.0%	71.29%	66.0%	71.29%	68.0%	77.0%	79.0%
5	Collection Rate - MDAs	87.3%	81.0%	73.0%	85.78%	89.0%	85.78%	85.0%	87.0%	NA
6	Customer Population	882,595	841,967	744,230	698,353	576,599	517,711	447,407	380,046	342,056



Positive Impact of Electricity Access on NEDCo's Objectives

- 1. Former UN Secretary General Ban Ki-Moon described energy as the “golden thread that connects economic growth, social equity and environmental sustainability”. Providing access to electricity is an opportunity for socio-economic development.**
- 2. Increased Customer Population from about 20,000 in 1987 when NED started operations to 882,595 as at December 2018.**
- 3. Increased access to electricity in Operational Area. Access in various regions as at December 2018: *National 84%, Brong Ahafo 90%, Northern 67%, Upper East 60%, Upper West 74%, Bono East 72%, North East 57%, and Savannah 48%.***
- 4. Increase in NEDCo's assets and revenue base due to the above**



Negative Impact of Electricity Access on NEDCo's Objectives

- 1. Large operational area/Increasing assets base with low customer density resulting in high operational costs**
- 2. Relatively high technical losses due to excessively long distribution networks (12% as at December 2018)**
- 3. Undesirable low voltages, numerous unplanned outages etc. due to the long lengths of networks sometimes extended beyond technical limits**
- 4. Relatively high commercial losses due to the challenge of monitoring activities of customers in such a vast area (18% as at December 2018)**
- 5. Inadequate Commercial and SLT Customers:**
 - Residential Customers 83.8% (New additions mostly residential)**
 - Commercial Customers 16.1%**
 - SLT Customers 0.01%**
- 6. Inadequate revenue generation and unhealthy financial position of NEDCo due to above**
- 7. Inadequate investment into the existing networks, modern technologies, enhanced business processes and capacity building**



Way Forward/Recommendations

- 1. NEDCo needs support to improve upon its financial and operational performance:**
 - GoG to consider instituting a rural electrification fund to cushion NEDCo
 - GoG to ensure that MDA Bills are paid promptly to NEDCo
 - PURC to provide cost reflective tariffs to NEDCo
- 2. GoG/VRA to invest in NEDCo to revamp the distribution infrastructure and improve upon power supply quality and reliability**
- 3. GoG to consider Mini-grids as alternative solutions for the remotest areas that require excessively long lines from the grid**
- 4. GRIDCo should inject HV substations in some sections of the distribution network to reduce the lengths of NEDCo's distribution lines**
- 5. NEDCo should be assisted to continue investments in enhanced technologies such as AMRs, SCADA, split prepayment meters, e-billing and e-payment systems, enterprise business suites etc.**
- 6. NEDCo should be assisted to continue its capacity building programs**



Conclusion

From the historical performance of NEDCo, it is clear that for the company to meet its strategic objectives going into the future:

1. PURC should consider approving cost-reflective tariffs for NEDCo
2. Innovative targeted subsidy schemes are required to bring on board bottom-of-the-pyramid people
3. A specialized fund is required to cushion NEDCo against the negative environmental factors militating against it, particularly as projects leading to the Universal Access Programme continue to be rolled out to electrify the remotest communities in the company's operational area.



Thank You