

# 2018 Executive Forum on Electricity Supply in Uganda

**Topic: Strategic Direction for enhanced Demand Management** 

> Eng. Serwadda Isaac (Ag. Head Capital Projects -Umeme)

> > Find us on UmemeLimited @UmemeLtd

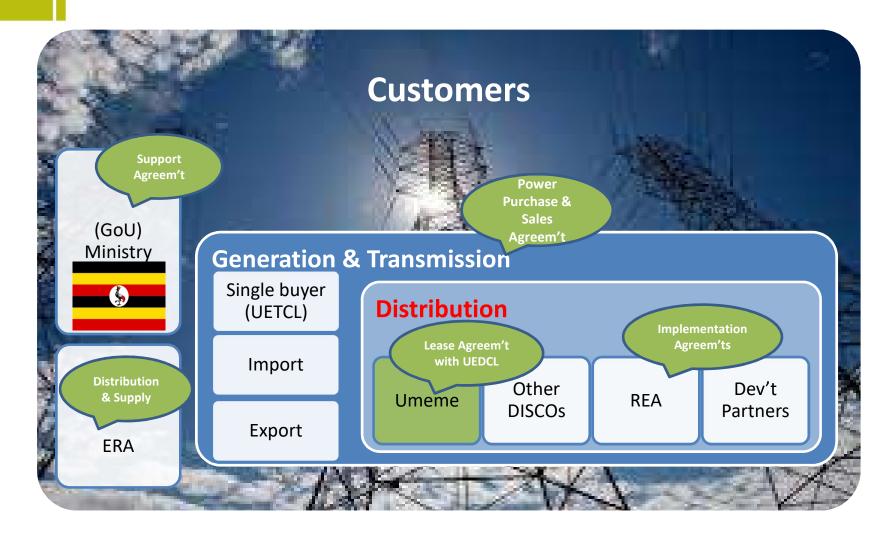


### **Presentation format**



- Sector structural setup
- Umeme demand perspective
- Strategic Direction for enhanced Demand Management
  - Initiatives done to match the increasing demand so far
  - Challenges faced
  - Recommendations

### **Sector Structural Setup**



<sup>\*</sup>Project Implementation managed via concession term agreements



<sup>\*\*</sup>Umeme- Build, Operate & Transfer distribution assets

<sup>\*\*\*</sup>GoU oversight via regulatory body (ERA)

# Strategic Direction for enhanced Demand Management!!!

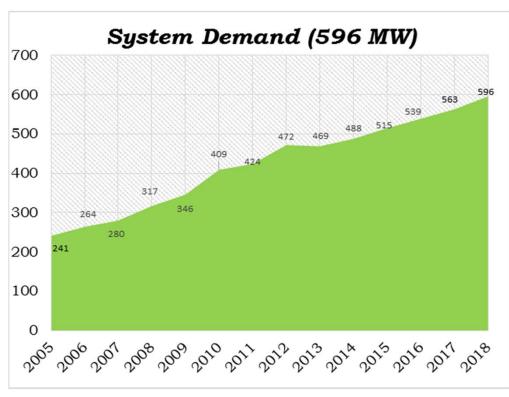


- 1. Matching Demand with Supply?
- 2. Where is this Demand?
- 3. How should Demand be stimulated and sustained?
- Any Customer incentives ( Demand Response)?
- 5. Maintaining the Demand-Supply equation in synch with strategic Tariff management!!

# **Electricity Demand**

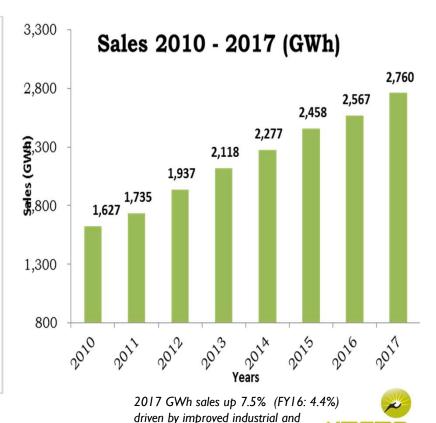
#### System demand 596 MW

### Sales Vol. growth – 7.5%



Effective generation estimated at 700MW

Maximum Demand CAGR at 3.6% due to reduced losses over the period



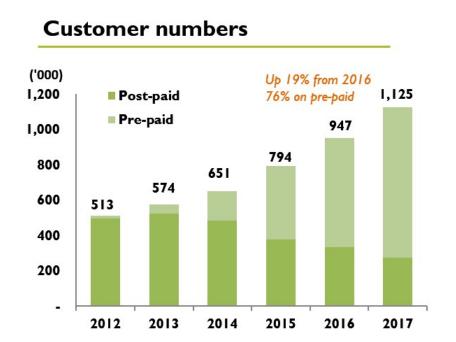
domestic demand, lower grid losses

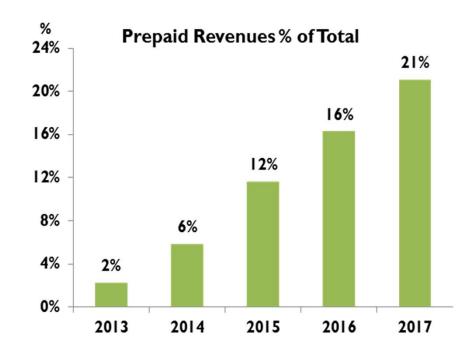
(19.0 % to 17.2 %)

### Growth in Customer Nos: +18%

*Customer Connections +174,000* 

76% of customers on Pre-Paid







## **Increasing Demand & Energy sales trend**

#### So far used strategies:

- Continuous metering installation Audits
- GoU smart metering conversions for large consumers (327 out of 469 completed)
- Community awareness mobilization efforts at districts

#### Other running access projects:

- OBA No pole (102k customers connected to date); 9.8k added in April to June 2018
- **ESDP Peri Urban** up to 2-poles (3.1k customers connected to date ends in Jan 2019)

#### **Up-coming access projects:** [under ECP \$1300 acceptability]

- ERT3 Intensification <= 5km (20k beneficiaries); <u>IA level</u>
- KfW Densification <= 2km ( 10k beneficiaries); <u>IA level</u>



# Initiatives done to match the increasing demand so far



- <u>Utilization of Code 40 for Industrialists</u> [ encouraging Investors]
- <u>Utilization of the Rebate policy implementation</u> [ more sensitization and mobilization required]
- Embracing the Accelerated Connection policy initiatives
  thru REA and MEMD [ OBA, ESDP, Intensification (WB)
  and Densification projects]

Find us on UmemeLimited (UmemeLtd (S) +256 772 285285

### **Challenges:**

Reliability issues on added long rural networks



- Quality of Supply issues due to deferred Capital Investment in the Network & Systems
- <u>Lack of Customer mix policy</u> for Industries and domestic consumers
- Inadequate/delayed UETCL backbone infrastructure leading to suppressed Demand (eg Bombo, Tororo & Namanve areas)
- Uncertainty of connected Access-agenda rural poor to sustainably meet their bills

Find us on UmemeLimited W@UmemeLtd \$\infty\$ +256 772 285285

# Recommendations to enhance demand



- REA projects should be <u>aligned with strong economic zones</u> while meeting social connections obligations
- Funding of last mile must be clear to enable 100% rollout of connection policy (Determination of \$1300 criteria for Rural & Urban settlements)
- Network construction backbone is critical. (REA should consider smaller substations in their plans)
- Consideration of an agricultural tariff. (High loss area with potential demand)
- Provide incentives to distribution companies to grow demand, create marketing functions, ...

# Ctd: Recommendations to enhance demand



Scrapping of service charge for life line customer category

#### Economic Demand stimulation

- Need for a policy to pre-finance SME start ups
- Localize Agro-processing units into geo-electrification zones
- Different <u>incentivized tariffs</u> for Industrial and rural poor settlements
- Prioritization of least-cost off Grid solutions
- Gov't strategy <u>should provide for all basic Utility services</u> to designated parks to increase the Investor appetite



# Thank you