



# Energy Market Insights

.... Webinar Series [1<sup>st</sup> Edition]



12<sup>th</sup> November 2020



1. The State of Play in NESI
2. Generation levels and projections
3. Power Supply Performance Sept'20
4. Merit Order Dispatch Compliance (Sept '20)
5. Energy Allocation vs Vesting Contracts
6. Industry Key Performance Indicators
7. Recent Developments in NESI

# The State of Play in NESI

## Generation Constraints

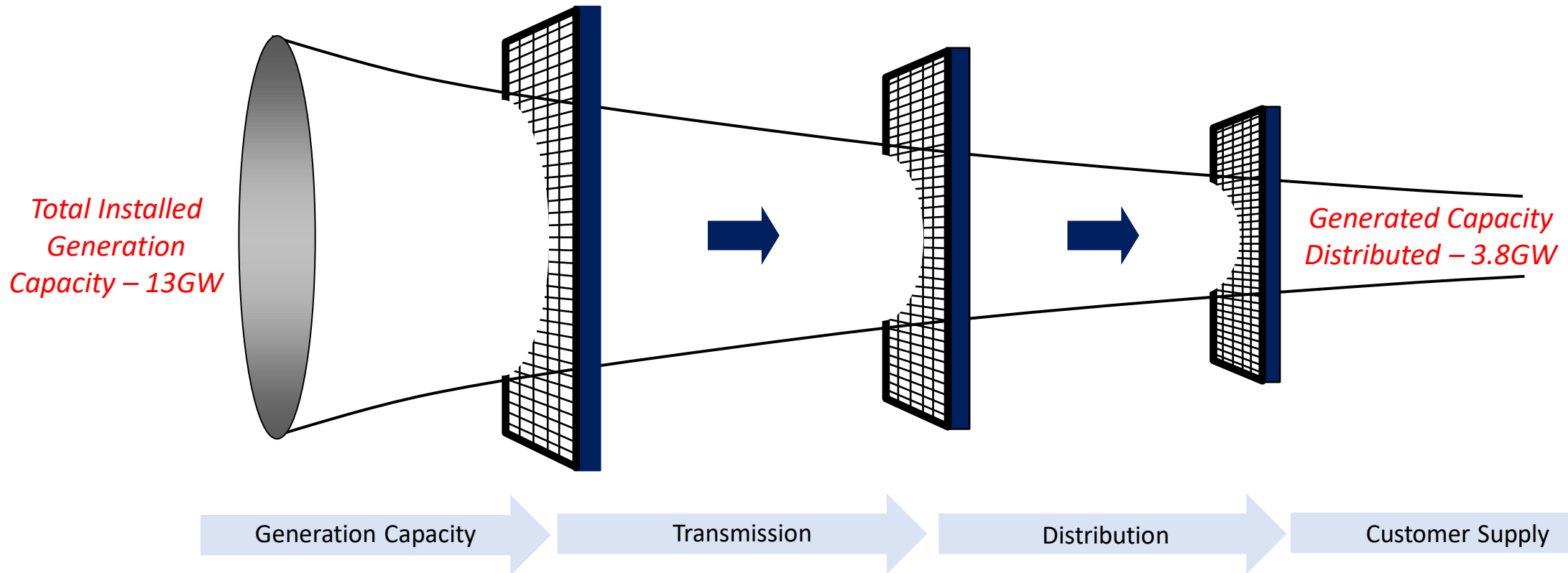
- Gas Constraints
- Frequency Constraints
- Low Grid Demand
- Hydro level challenges

## Transmission Constraints

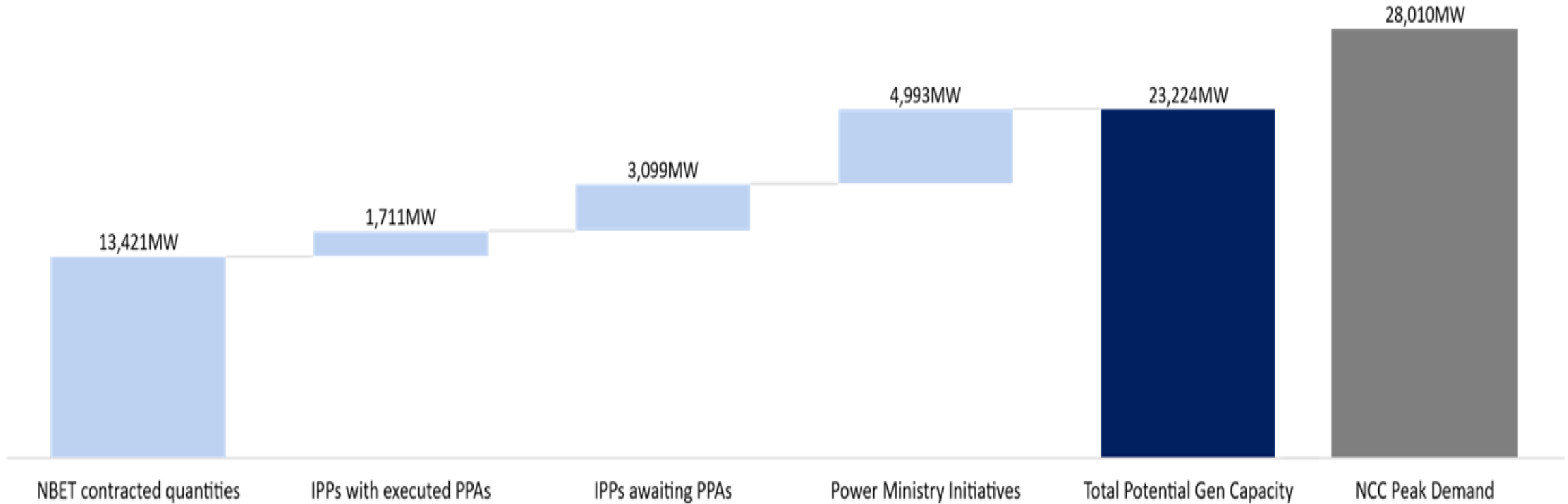
- Inadequate Infrastructure
- Grid Demand Misalignment
- Inadequate Ancillary Services

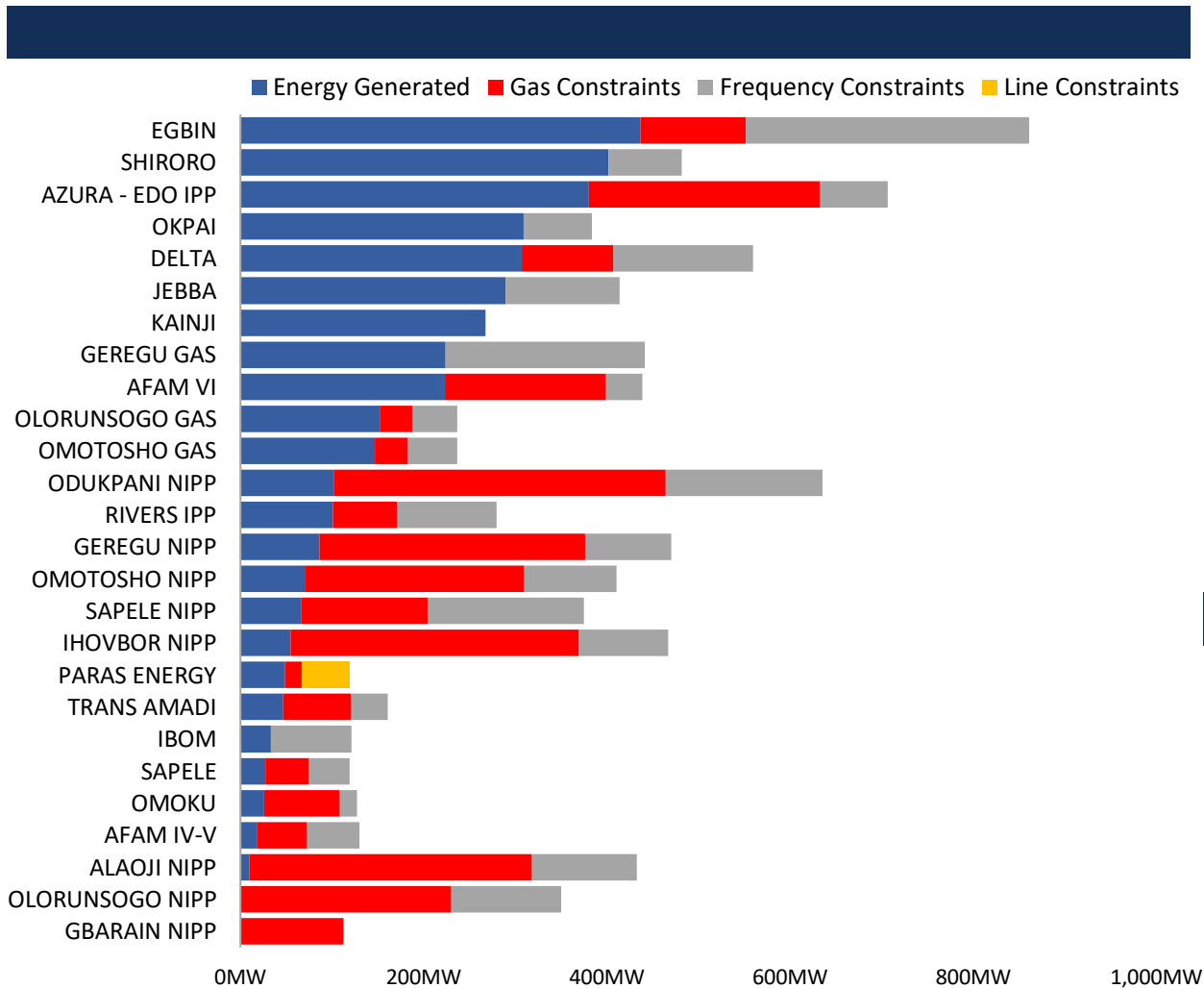
## Distribution Constraints

- ATC&C Losses
- Inadequate Infrastructure
- TCN Supply Misalignment

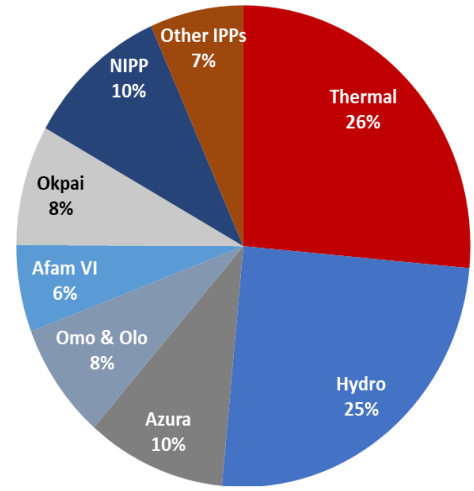


# Where we are with Generation today

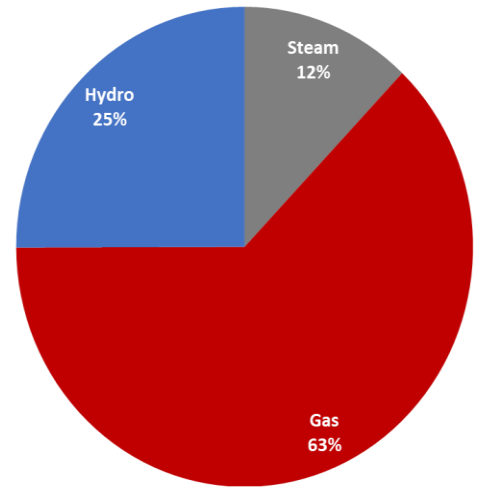




## Contribution by Generation Type



Merit Order Contribution



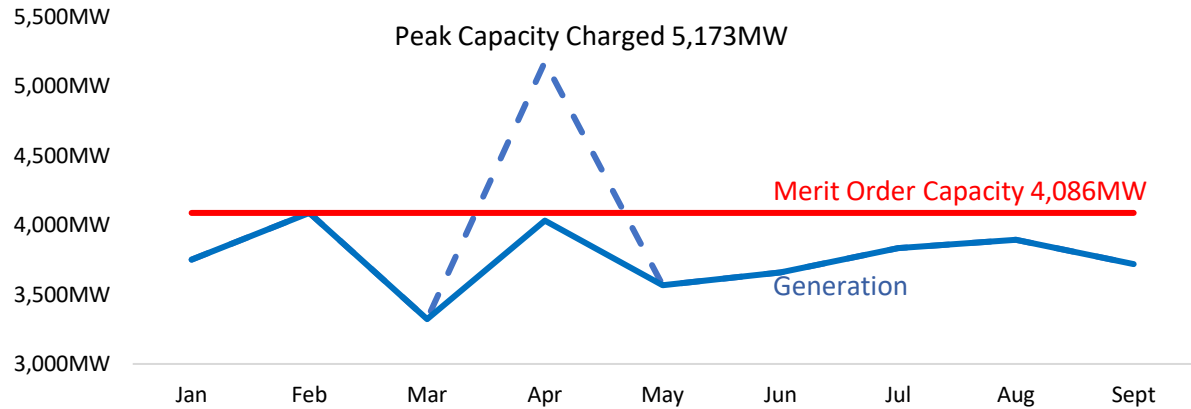
Fuel Type Contribution

## Generation Highlights

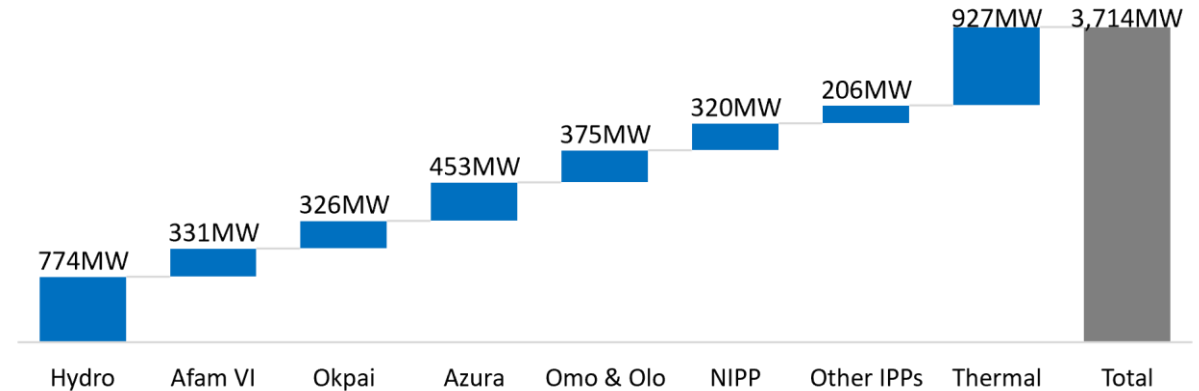
- **Production:** Average generated capacity of **3.8GW**. Highest production from Egbin (437MW), Shiroro (402MW), and Azura (380MW).
- **Constraints:** Gas (**3.0GW**) and frequency (**2.4GW**) constraints were the major constraints to generation.

# Merit Order Dispatch Compliance (Sept '20)

Merit Order Monthly Compliance



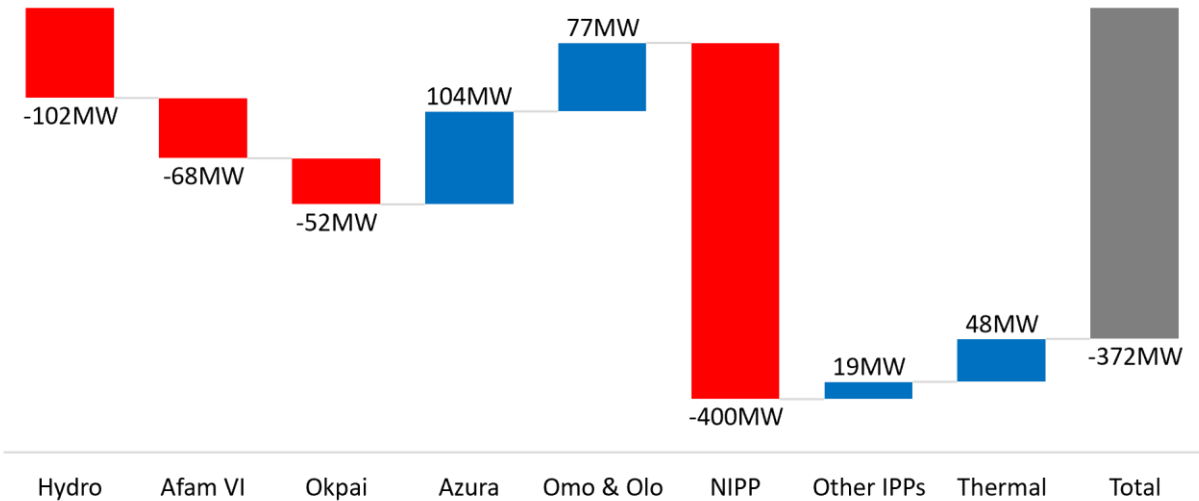
Contribution to Merit Order Dispatch



Analysis

- Industry Performance:** Merit Order commitment achieved only in February and unmet in the other months.
- Generation:** Merit Order deviation for September is **-372MW**. Significant under dispatch from NIPP (-400MW) and Hydro Generators (-102MW), with exceedance of 104MW from Azura.

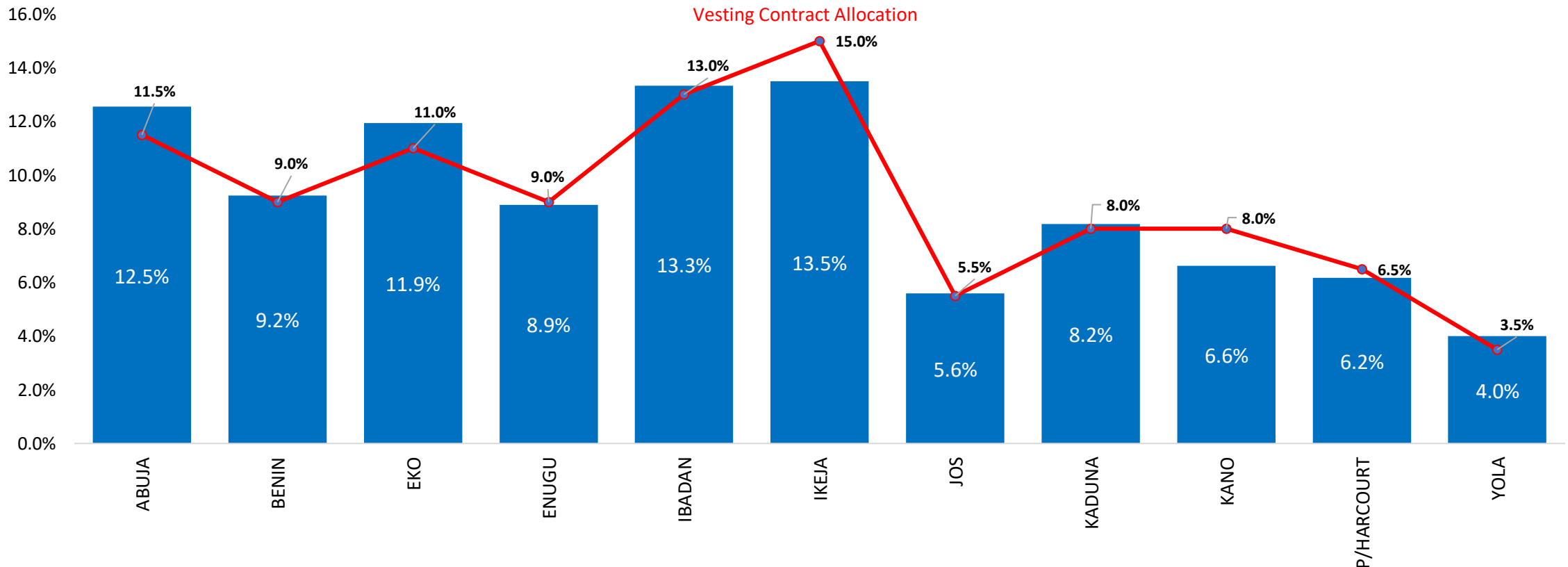
Deviations from Merit Order Dispatch



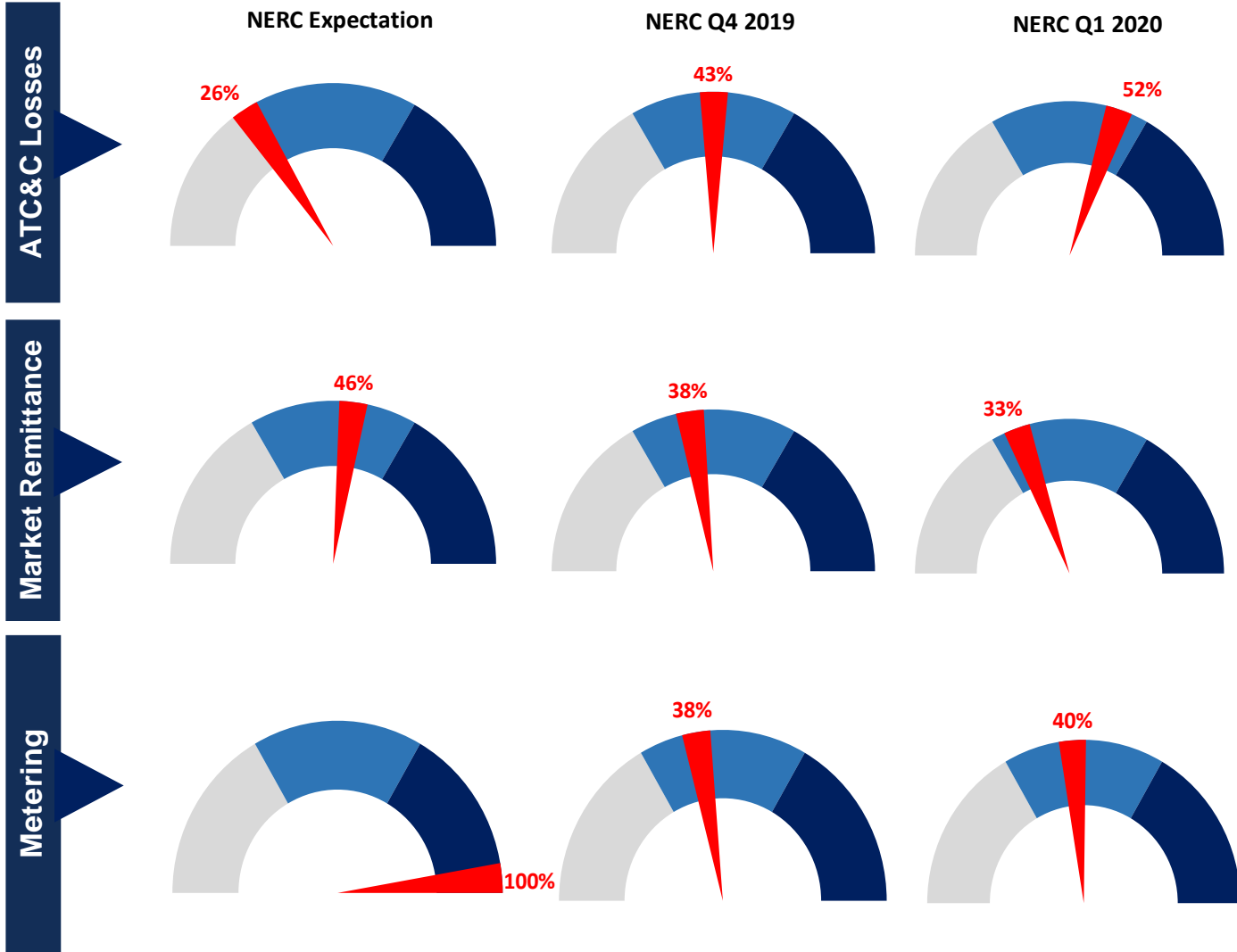
Month	Unit Cost (N/KWh)	Capacity (MW)	Energy (GWh)
February	20.94	4,085	2,337
April	26.35	4,031	2,466
September	27.36	3,713	2,277

## Energy Consumption by Distribution Companies vs Vesting Contract Allocation

- Highest exceedance versus vesting contract allocations recorded for Abuja (+1%), Eko (+1%) and Yola (+0.5%) Discos.
- Underperformance against vesting contract significant for Ikeja (-1.5%), Kano (-1.4%) and Port Harcourt Discos
- NERC's Guideline on Minimum Remittance Order issued in December 2019 penalizes Disco that takes lower energy than its vesting contract allocation.







### AT&C Losses

- AT&C efficiency experienced an **absolute decrease** of 9.3% from Q4 2019 (57%) to Q1 2020 (48%)
- AT&C driven by increase in collection losses, even as amount billed by Industry increased.
- Increase in collection losses driven by COVID 19 impact; energy reallocation from maximum demand to residential customers and lockdown restrictions slowed billing activities.

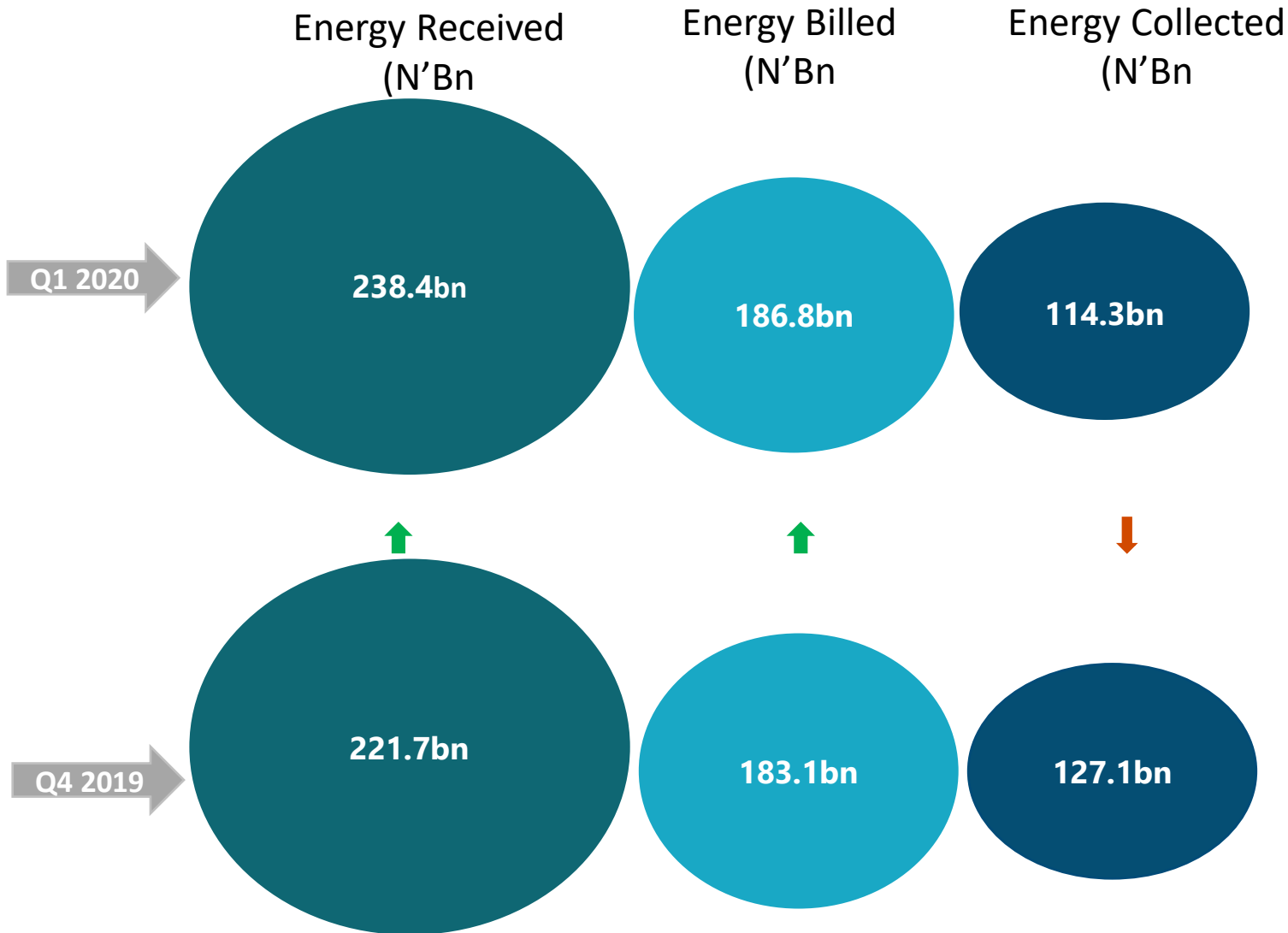
### Market Remittance

- Market Remittance experienced an **absolute decrease** of 5.8% from Q4 2019 (38%) to Q1 2020 (33%)
- Remittance to the Market Operator reduced to 93% from 100% in Q4 2019
- Remittance to NBET reduced to 22% from 28% in Q4 2019
- Expected downturn in distribution activities might explain the reduction in quarter-on-quarter remittance

### Metering

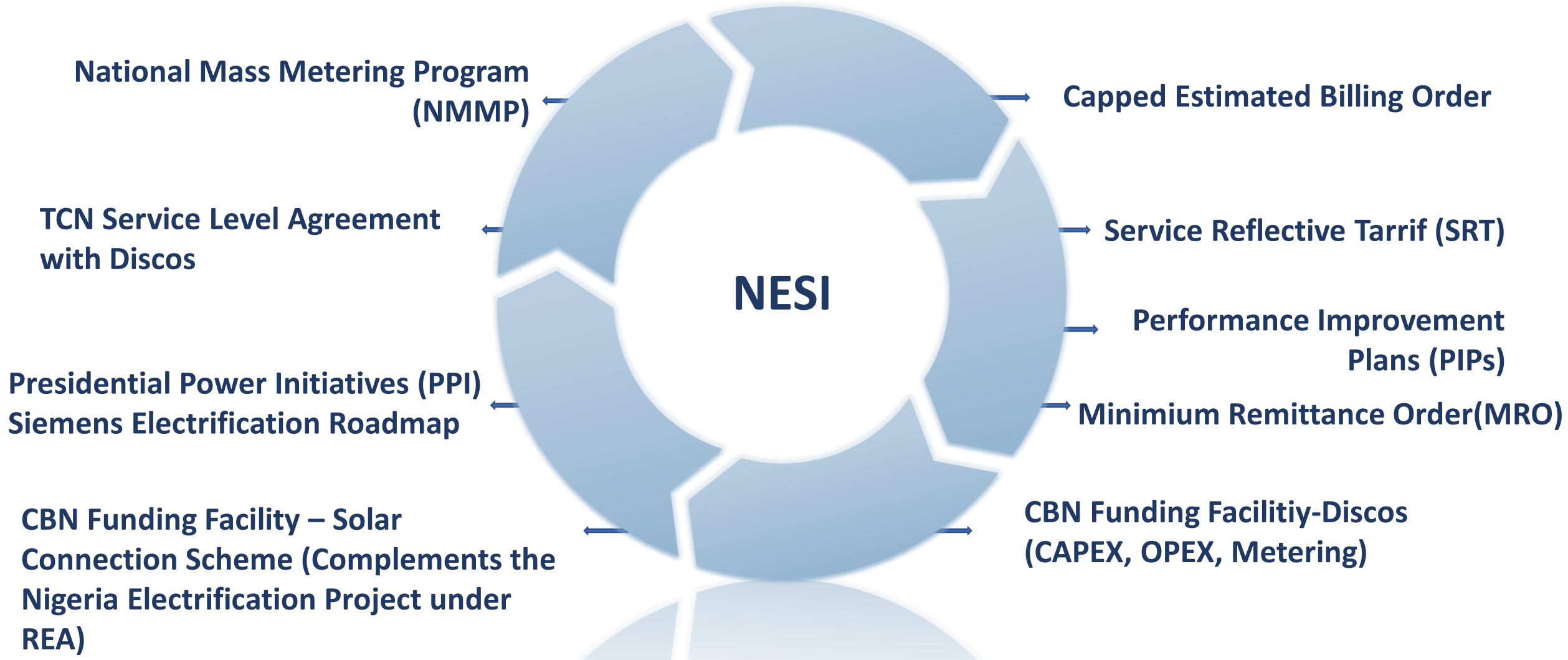
- Metering experienced a slight **absolute increase** of 2.6% from Q4 2019 (38%) to Q1 2020 (40%)
- 4.2 million of 10.4 million customers metered
- 29 MAPs registered in Q1 2020
- Metering constrained in Q1 2020 due to import duty imposed on meters, COVID 19 lockdown restrictions, and industry liquidity challenges.





- About **42.7%** of the total value energy received was not collected by the end of Q4 2019.
- At the end of Q1, 2020, about **52%** of the total value of energy received was not collected resulting to about **N124.1bn** loss of value, which is higher than the loss value **N94.6bn** by Q4 of 2019.
- Billing and Collection efficiency dropped to 78% and 61% respectively in Q1 of 2020 from 83% and 69% in Q4 of 2019

# Recent Developments



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