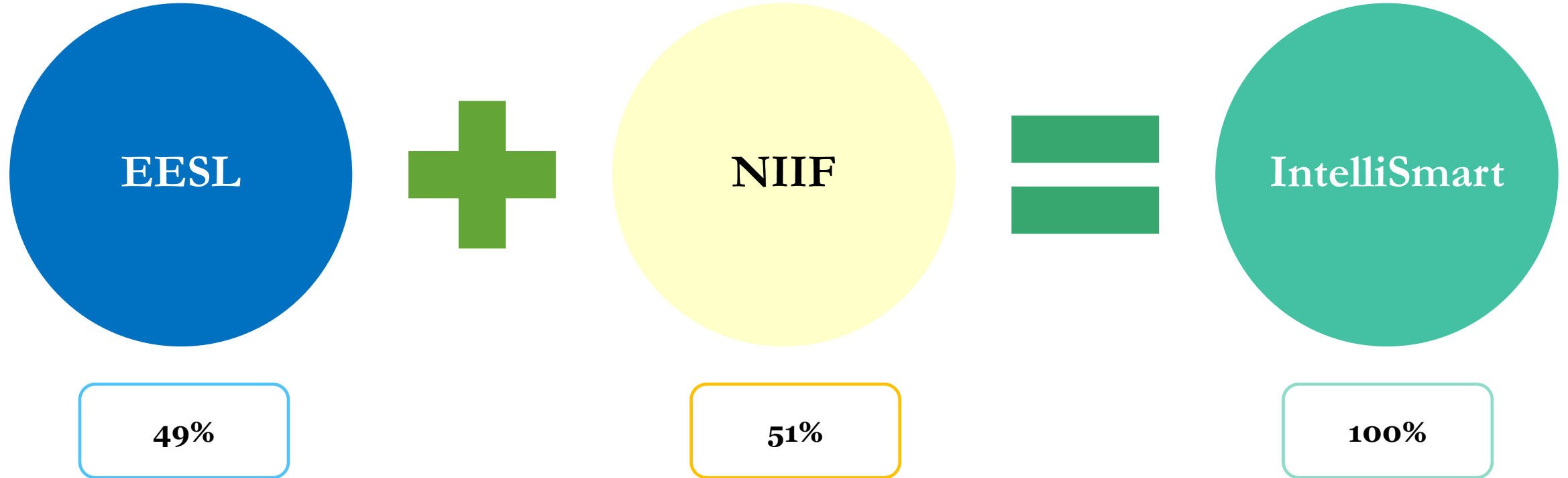


ROLE OF ADVANCED METERING INFRASTRUCTURE IN DISCOM MODERNIZATION

3rd March 2022



ABOUT INTELLISMART



EESL: promoted by Ministry of Power, Government of India (GoI) as a JV of four reputed PSUs viz. NTPC, PFC, REC and PGCIL.

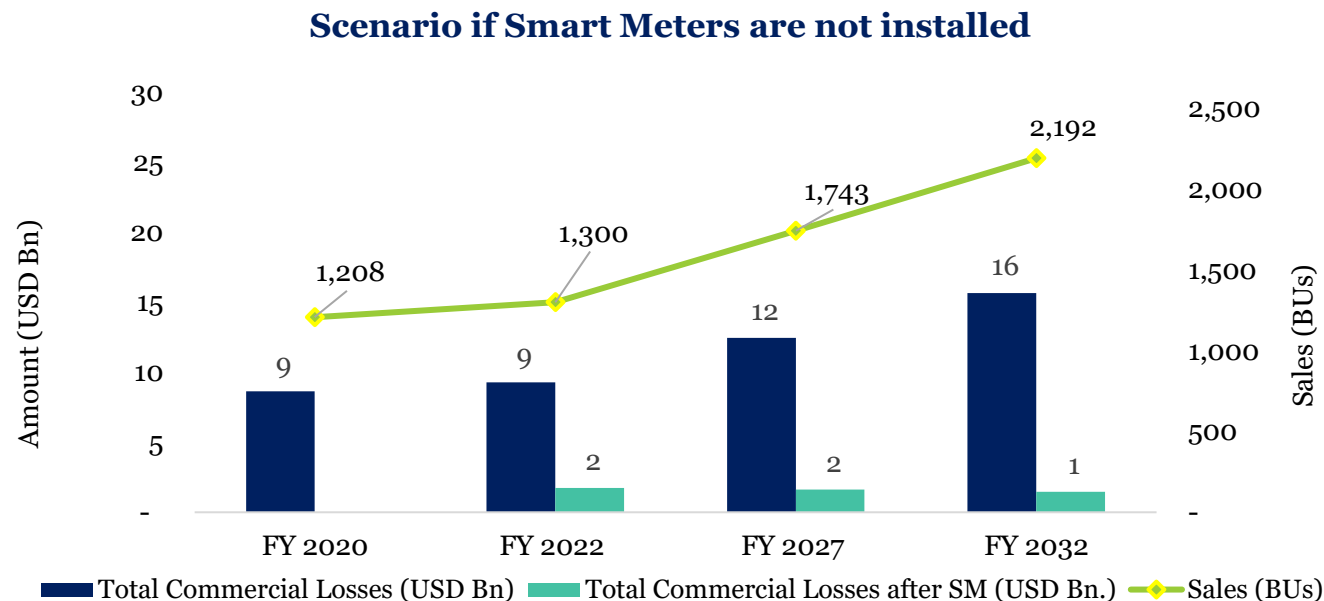
NIIF (National Investment & Infrastructure Fund): a GoI backed fund directed by Governing Council chaired by Finance Minister, GoI and Secretary – DEA, Secretary as other member.

IntelliSmart: Enabling implementation of Smart meters through BOOT (Build, Own, Operate & Transfer) model. Vision to create digitalized and resilient power sector.

HUGE SUPPORT TO DISCOMS FOR ENHANCING EFFICIENCY

Smart Meters poised to potentially save USD 8.4 Bn per annum through loss reduction, advanced data analytics and other futuristic digital interventions.

- National AT&C losses stand at 22% as of FY 2019-20 but the actual losses including agricultural losses may lie b/w 30-35%.
- Gross energy sold by Discoms was ~1208 BU in FY 2019-20.
- Smart Meters provide an excellent solution to increase efficiencies.
- Therefore, SMNP has targeted to implement 250 million Smart Meters in the Country.



Potential savings
from 2022 to 2031-
32 with AMI

~USD
137 Bn

Cumulative
commercial
losses without
Smart Meters

~USD
35 Bn

Investment
required for
Smart Meters

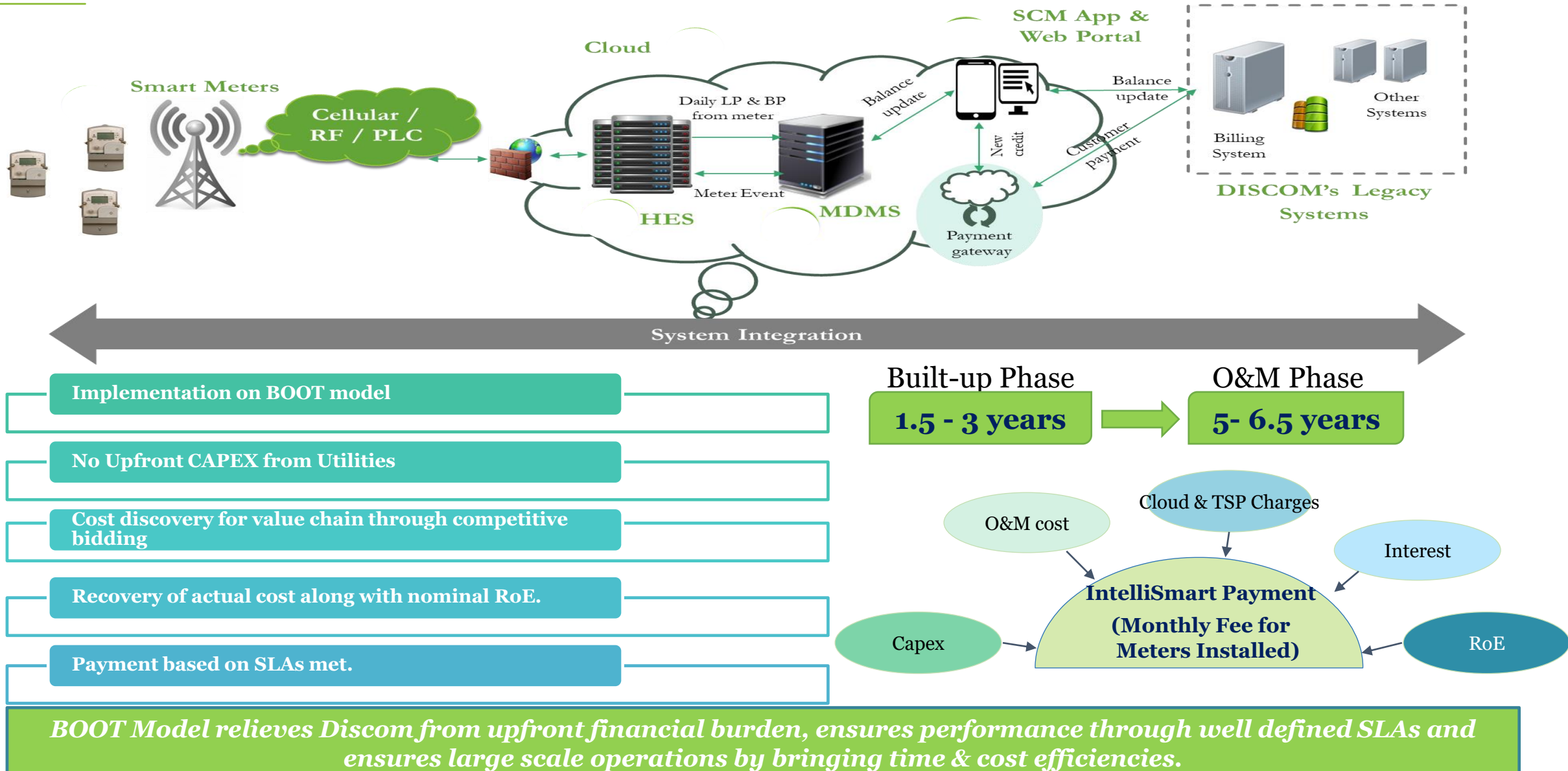
USD
~18 Bn

Cumulative
commercial
losses with
Smart Meters

USD
~84 Bn

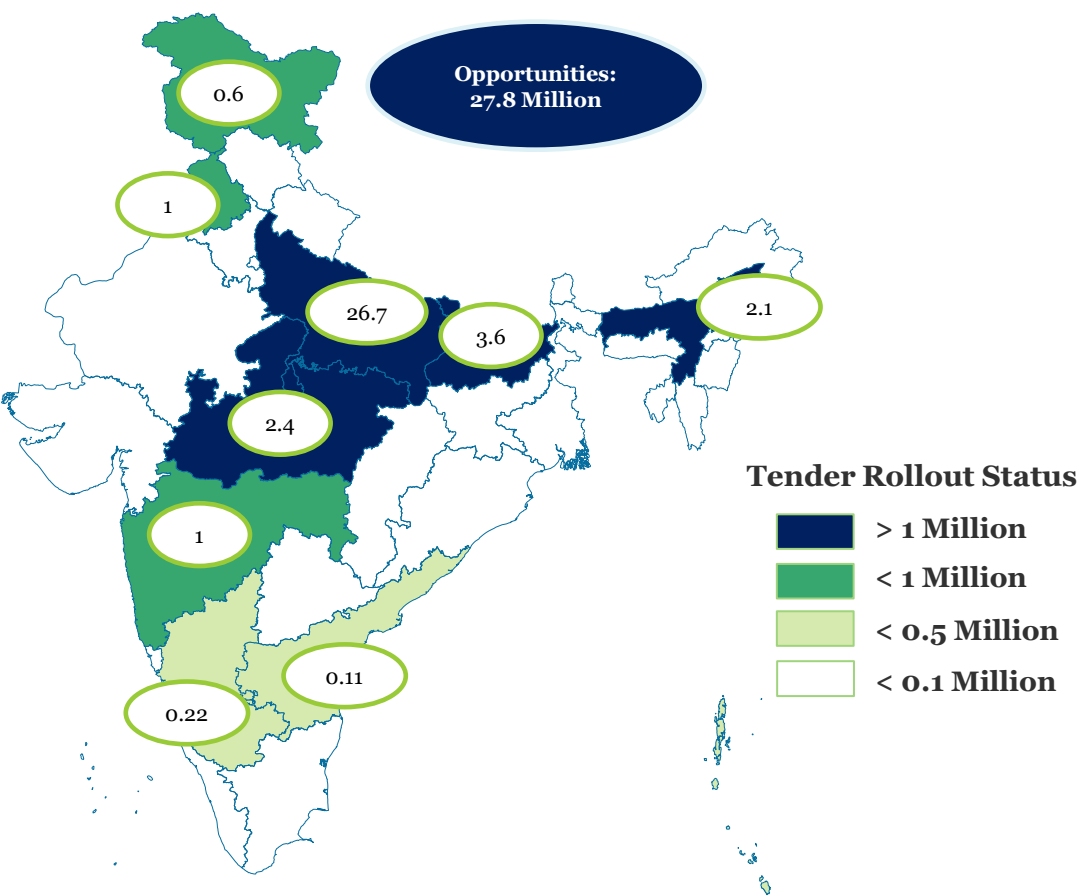
Overall
potential
savings

BUSINESS MODEL



AMI ROLLOUT & FUTURE INVESTMENT OPPORTUNITIES IN INDIA

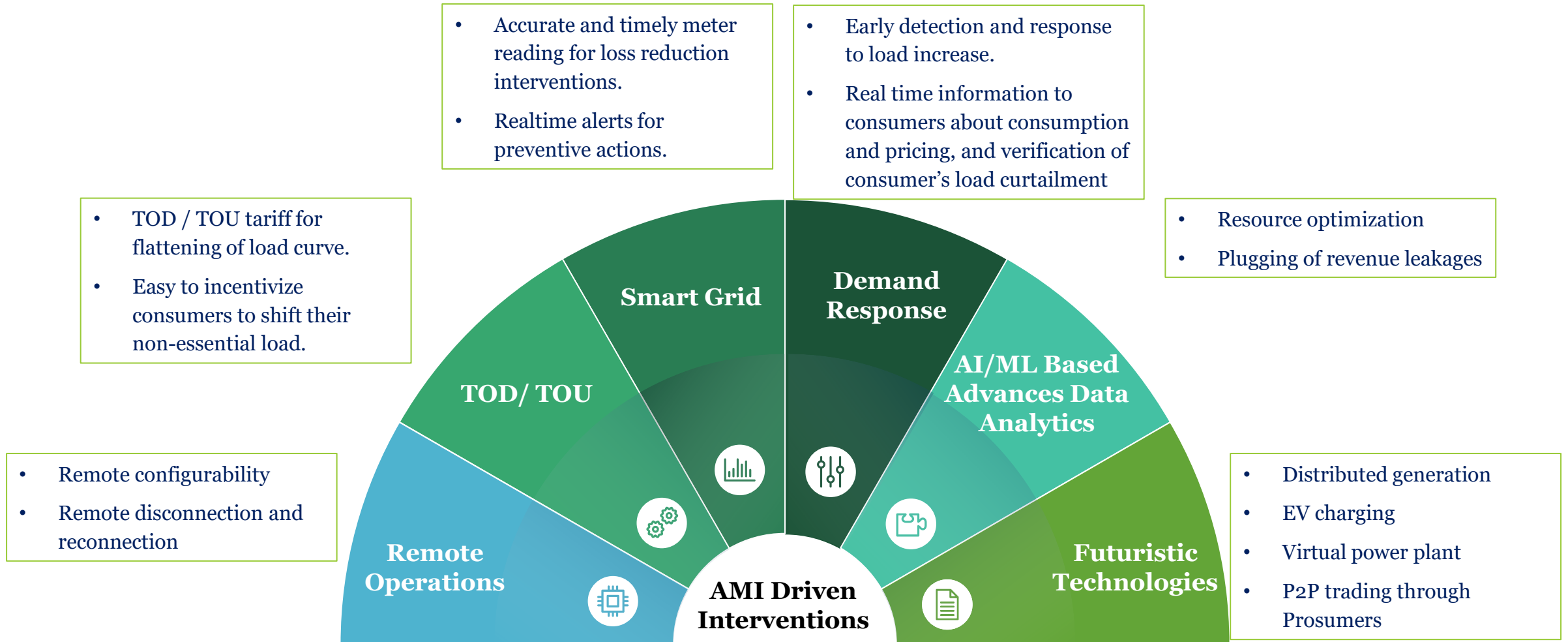
*India is on a mission to achieve 100 Mn Smart Meters by 2023 and 250 Mn by 2025
Business opportunity of the size of USD 35 Billion*



Agency Wise Smart Metering Status- India*

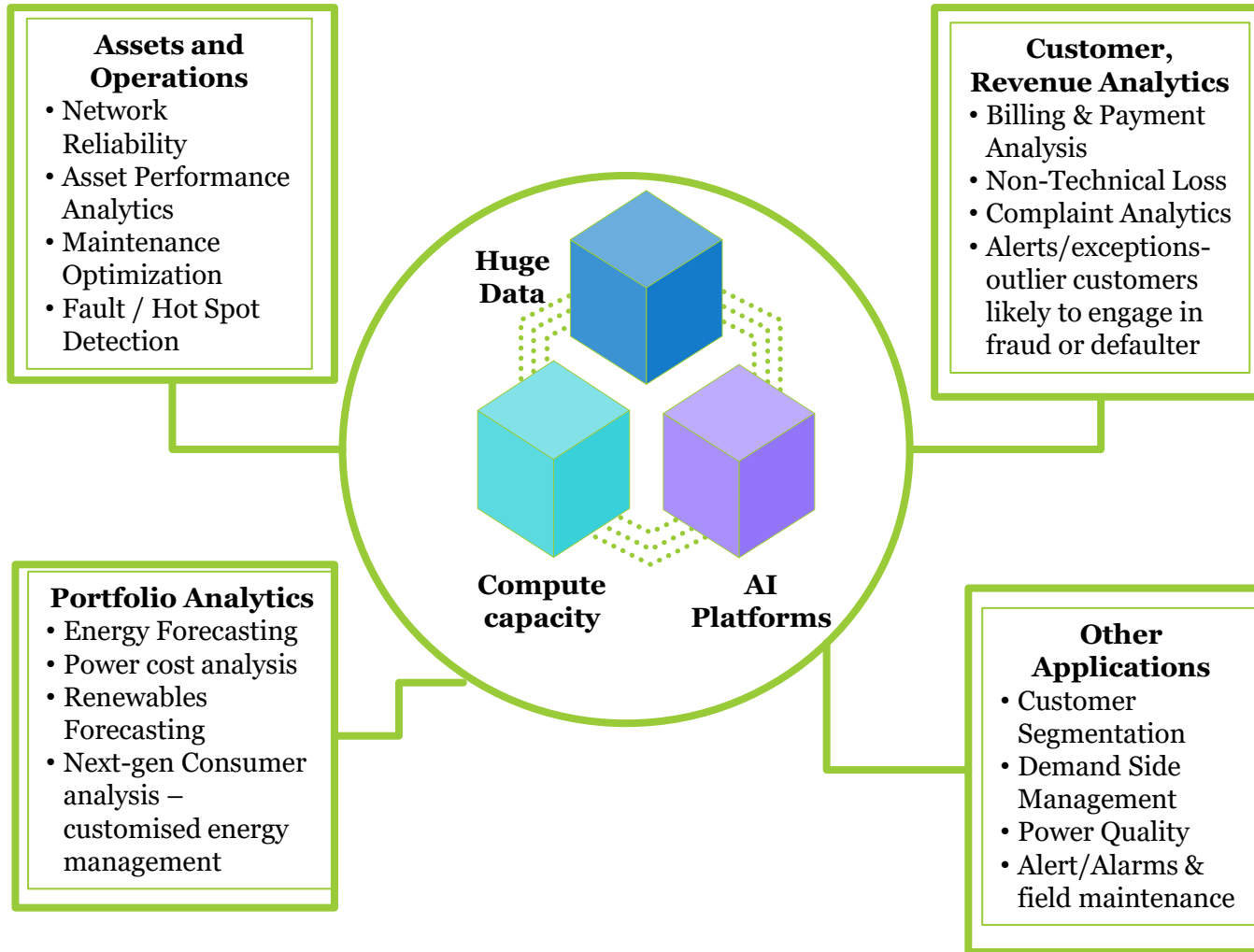
| Implementing Agency | Sanctioned | Installed Smart Meter | Installed Prepaid Smart Meter |
|---------------------|------------|-----------------------|-------------------------------|
| EESL/ IntelliSmart | 78 | 23 | 6 |
| Others | 34 | 16 | 0.5 |
| Grand Total | 112 | 39 | 6.5 |

AMI INTERVENTIONS FOR DISCOM MODERNIZATION



AMI Driven Technologies paves the path for DISCOM Modernization through digital interventions

ADVANCED DATA ANALYTICS

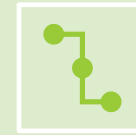


Pilot Conducted in One Discom in India

| Description | Baseline Sep 2021 | Pilot Output |
|--|-------------------|---|
| Anomaly/Theft Detection (No. of Accounts) | 120 | 252 High Risk Customers. Total 1027 Cases have been identified. |
| Billing Ratio | 1.068 | 14,047 consumers with total consumption of 2,22,779 Units have not been billed for September 2021. |
| Contracted Demand (kW) | 4,31,289 | <ul style="list-style-type: none"> 27.89 % of Total consumers Exceeded Sanctioned Demand in year 2021. 421 HT/LT Consumers exceeded Sanctioned Load |
| High bill generation Analysis (No. of Accounts) | 1,603 | 7,225 Consumers defaulted due to High Bill. |
| Complaint Defaults | 5,660 | 5,660 Customers who had raised complaint with Discom have defaulted on their payments |

AI & ML based pilots on advanced data analytics have potential to generate additional revenue of ~USD 10 Bn.

THANK YOU



LinkedIn

<https://www.linkedin.com/company/intellismart/>



Twitter

@Intelli_Smart



Email

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COMMUNICATION TECHNOLOGIES

| Parameters | Cellular | RF | PLC |
|-----------------|----------|---------------------------------|------------------------------------|
| Spectrum Type | 1-2 Mbps | Unlicensed/Licensed | Licensed |
| Latency | <1 sec | 1-60 sec | <1 sec |
| Scalability | High | Moderate | Low |
| Reliability | Moderate | Deployment and product specific | Dependent on underlying power line |
| Security | Highest | Low | Low |
| Life Cycle Cost | Low | High | High |
| Penetration | High | Moderate | Low |

Solution lies in selection of technology and hybrid solution (Cellular + RF) in the interest of mass scale rollout in India.