

Business Models for Smart Metering

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What do we hear from various stakeholders?

Utility

- Timing for smart metering is correct
- Zero capex model is more promising
- Impact driven model
- Cost /node is high
- For EA, entire feeder

Regulator

- Smart metering will not reduce all losses
- Need prior approval for revenue sharing model
- EMI-based service model requires no

Industry

- Esco to be deemed saving model
- Extension of smart meters to smart grid
- Leverage this platform for other services

Guiding Principles for Business Models

Key Decision Points

- ▶ Business driver- Loss or else
- ▶ Total number of consumers
- ▶ KPI selection & Baselineing
- ▶ Mechanism to monitor
- ▶ Functionality- Phased
- ▶ Procurement Strategy

Critical Success Factor

- ▶ Regulatory buy-in
- ▶ Customer engagement
- ▶ Industry skin into the game
- ▶ Leverage Platform for VAS
- ▶ Invoke VGF

Financial Modelling

- ▶ Meter cost, project duration
- ▶ Funding: NSGM, Esco, SI
- ▶ Characteristics of revenue sharing (if applicable)
- ▶ Revenue flow
- ▶ D/E ratio, Depreciation

Rollout Strategy

- ▶ Selection of towns and feeders
- ▶ Prioritization of functionalities
- ▶ Phased approach till stabilization then big bang
- ▶ Availability of skilled resources for timely execution

DISCOM and AIA to achieve consensus on the guiding principles and take approval from Regulator prior to award of project.

Various Business Models for Smart Metering in India

S. No.	Model Name	DISCOM		AIA	
		Outflow	Inflow	Outflow	Inflow
1.	EPC Model (Traditional, Capex)	100% in first two years (milestone based)	0 or increased revenue	0	100% (completion of milestones)
2.	Leasing & Services Model	EMI fees-10 yrs (SM + services cost)	0 or increased revenue	100% in first 2 years	EMI for 10 years
3.	Leasing & Services Model with Revenue Sharing	25% in first 2 yrs; EMI for 10 yrs; X % of revenue increase	Monthly inflow @ X++% of revenue increase	75% in first 2 years	EMI- 10 yrs; X% of revenue share
4.	Revenue Sharing Model	25% in first 2 yrs; monthly fee for 10 yrs @ 1.2X % of revenue increase	Monthly inflow @ Y% of revenue increase	75% in first 2 years	Monthly fee for 10 yrs @ 1.2X % of revenue increase
5.	Procure. & Services Model	55% in first 2 yrs; EMI for 10 yrs (Only services)	0 or increased revenue	45% in first 2 years	Monthly fee for 10 yrs (meter services cost)

Comparison of the Proposed Business Models

Characteristics Business Model	DISCOM Ease in implementation	Req. of Capex from DISCOM	Probability of Revenue Increase	Ease in Baselineing & Auditing of Benefits
EPC Model	Low	High	Low	Low
Leasing & Services Model (EMI)	High	Low	Moderate	Low
Leasing & Services Model- Rev Sharing	High	Moderate*	High	Moderate
Revenue Sharing Model	High	Moderate*	Moderate	Moderate
Procurement & Services Model	Medium	High	Moderate	Low

DISCOM to decide the most appropriate business model depending on the above mentioned characteristics.

Options for Revenue Sharing Model

Characteristic Rev. sharing based on	Ease of Baselining and Auditing of Benefits	Acceptability to Industry	Acceptability to DISCOM	Acceptability to Regulator
Billing efficiency improvement	High	High	Moderate	High
AT&C loss reduction	Low	Low	High	Low
Improved PLM	High	Moderate	High	High
Outage reduction	Moderate	High	Low	Moderate
Manpower cost reduction	High	Low	High	High

Selected model should be a win-win for all the stakeholders- utility, AIA, Regulator, Customer

Thank you for listening!

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