

Smart Water Distribution

Setting up of Water Meters at all points
across the distribution network

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Resource
Recovery

Bioremediation Treatment

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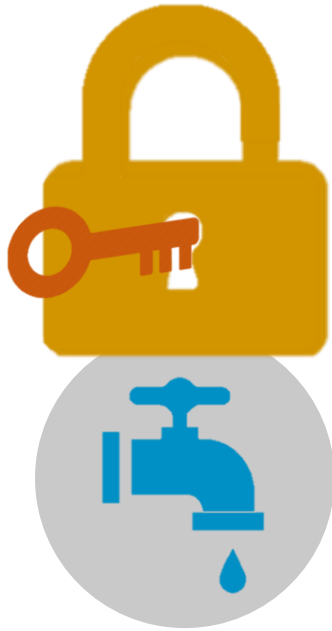
arvind.sharma@bioxgreen.com www.bioxgreen.com

CLEAN INDIA, my GREEN INDIA

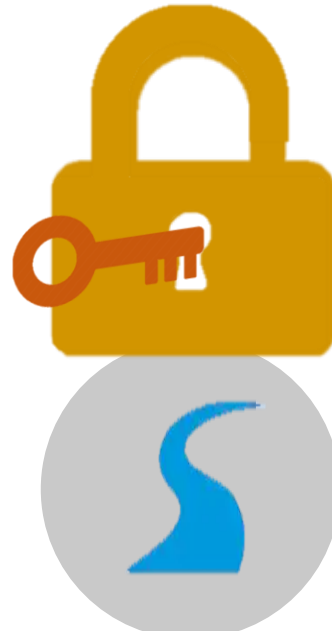


Smart Water Management

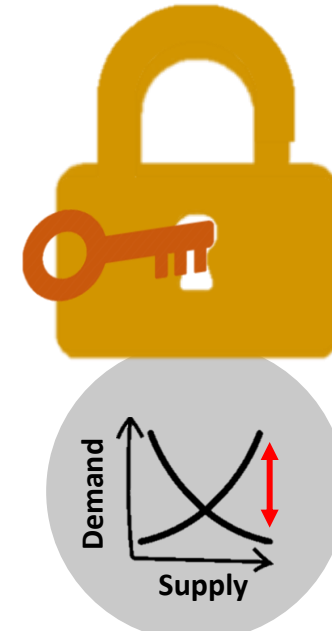
Need of the hour



Limited Water Availability



Depleting Water Sources

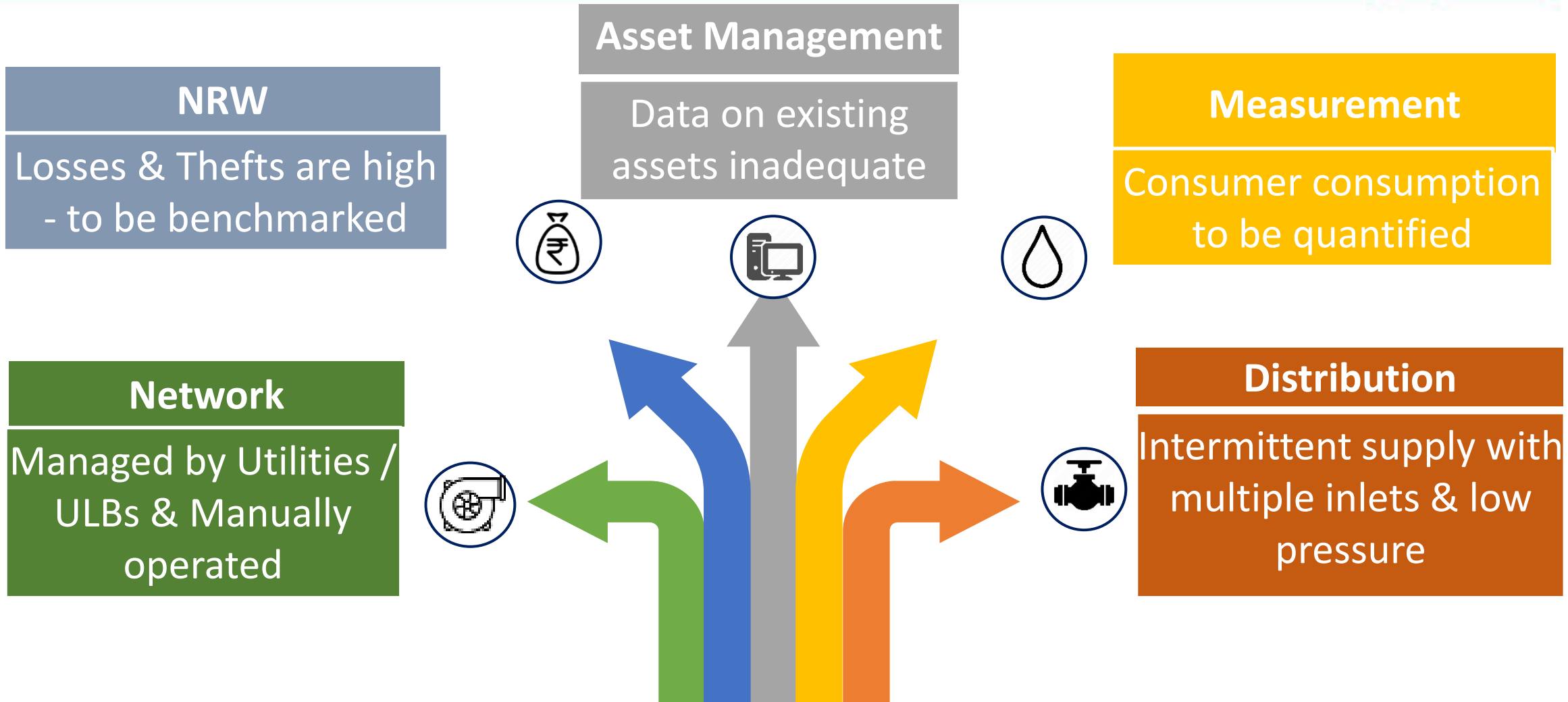


Increasing Supply-Demand Gap

If you can't **measure** it
you can't **manage** it



Relevance



Smart Water Distribution

Components of Smart Water

Pressure Management

- Pressure Regulating Valves
- Pressure transmitters
- Sub-DMA approach

Leakage Management

- Active Leakage Control
- Leak Detection Equipment

Command & Control

- Asset Management - GIS
- CRM, SCADA & IMIS

Metering & Billing

- MultiJet, AMR & AMI
- Billing and Revenue Management

EMFM

- Full Bore Electromagnetic flow meter, with no movable parts
- Reading display through LCD Display
- Can be Integrated with PLC / Any microcontroller Live reading, datalogging and SCADA Integration



WOLTMAN

- Multijet , Turbine type Woltman Flow meter
- No power Supply
- Can be integrated to any datalogger/ PLC through pulse output
- Instantaneous flow reading cannot be obtained through SCADA



DMA Inlet Meters

Smart Water Distribution



Unmetered

- Flat rate tariffs
- Consumption not quantified
- Billing not justified
- Funding constraints



MultiJet Meters

- Manual Reading
- Time consuming
- Meter Inaccuracies
- Human error
- Can be tampered



AMR Meters

- Wireless transmission
- Handheld receiver
- Walk-by / Drive-by data collection



AMI Meters

- Real time data (daily/hourly)
- Two way communication, Fixed Network
- Customer friendly
- Quick response



UBARMS
Billing

CITY CORPORATION TUMKUR



Billing Accounting and Revenue

New Meter

Disconnection

Reconnection

admin



Record Is valid

Devices Information

New Device Information

Consumer ID *	1001		
Consumer Name	RUPALI W	IMIS ID	1230001
DMA ID	100001		
Device No *		Device Make *	--Select--
Sanction Date *	03/10/2019		
Purchase Date	03/10/2019	Connected Date *	03/10/2019
Device Ref No *			
Device type *	Select	Device IR *	0
Device Digit			
Device Location *	--Select--	Device Ownership	--Select--
Pipe Size *	1/2		
Device Warranty	12	Plumber Name *	--Select--
Plumber Id			

Remarks

Document Attachment

Choose File

No file chosen

Old Device Information

Old Device No	11111111	Device Make	Zencer	Sanction Date	10/07/2019
Purchase Date	10/07/2019	Connected Date	10/07/2019	Device Ref No	121212
Device IR	0	Device Digit	8	Device Constant	
Device Location	OUTSIDEHOUSE	Device Ownership	C	Pipe Size	1/2

- Dash Board**
- Consumer Management**
- Billing Management**
- Transaction Management**
- Revenue Management**
- Meter Management**
- Meter Reader**
- Debit Management**
- Reports**
- Cash Management**
- E-Billing Management**
- User Management**
- Analysis Management**
- Third Party Support**

f1

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Creative IEC & 4P initiatives

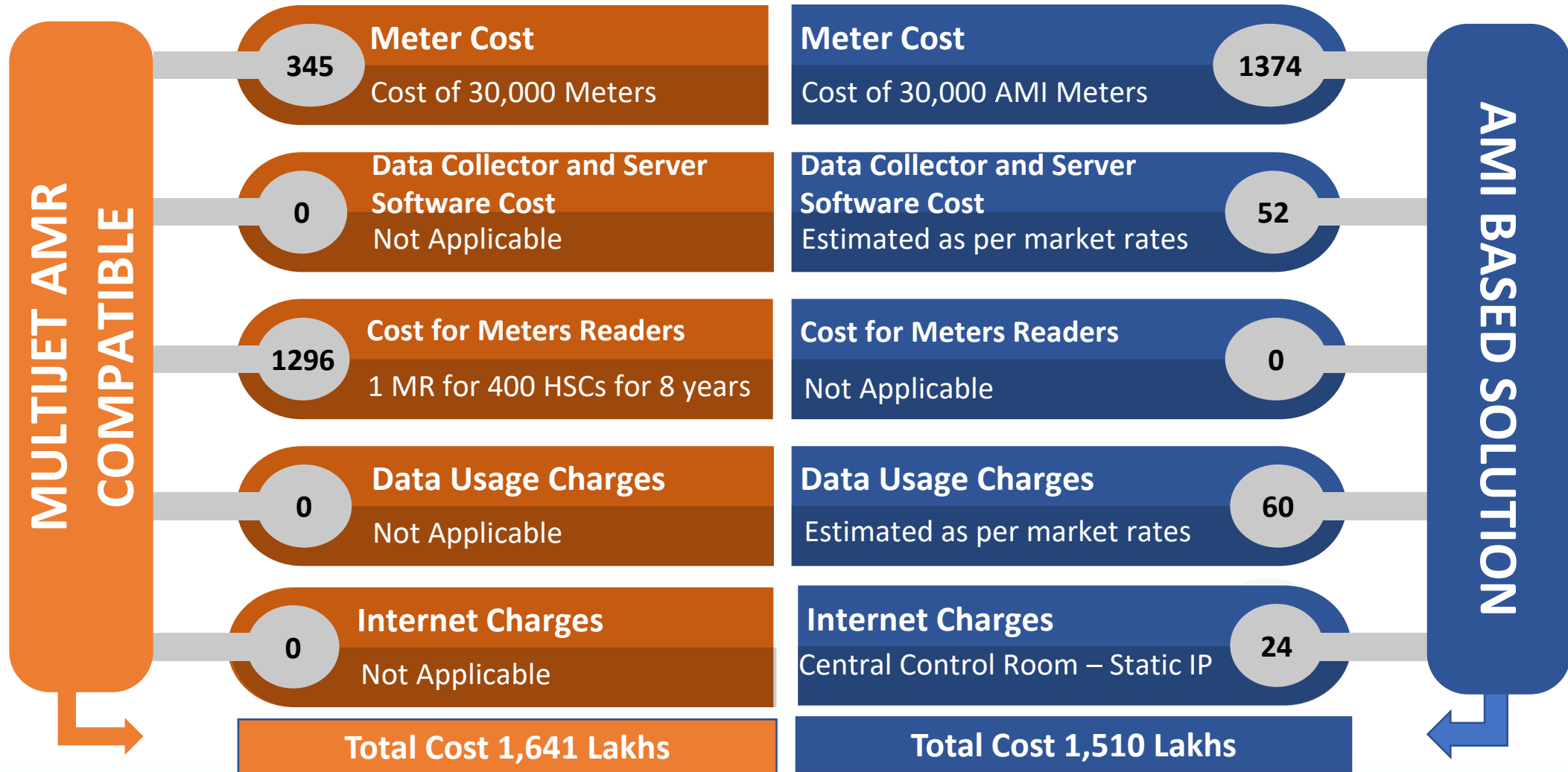


Street
PLAY

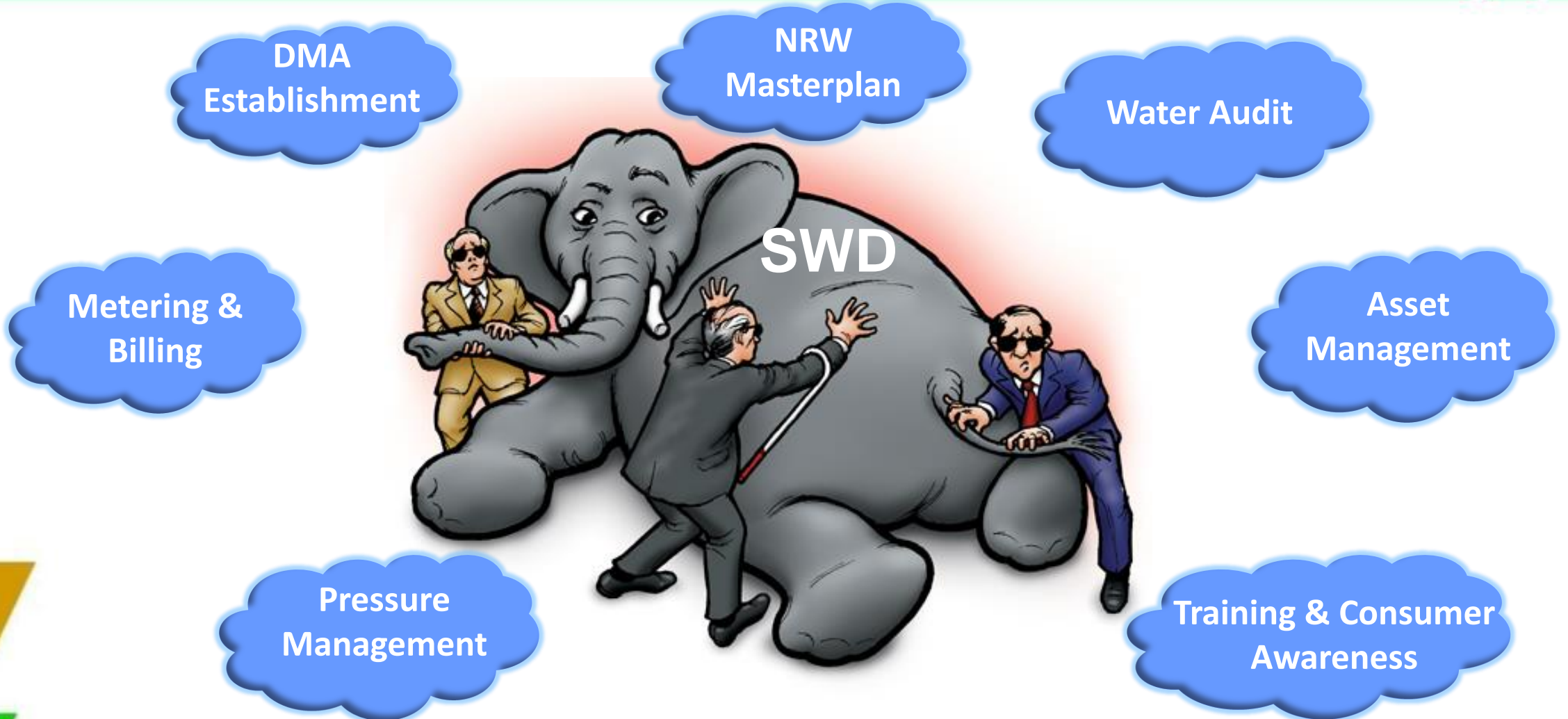


Use Case/Case Study

Comparison – Multijet vs AMI



Integrated & Holistic Approach



Thank You

*For discussions/suggestions/queries email: www.indiasmartgrid.org
www.isgw.in*

[Links/References \(If any\)](#)

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