



An End-to-End ecosystem solution for a Smarter Utility Network

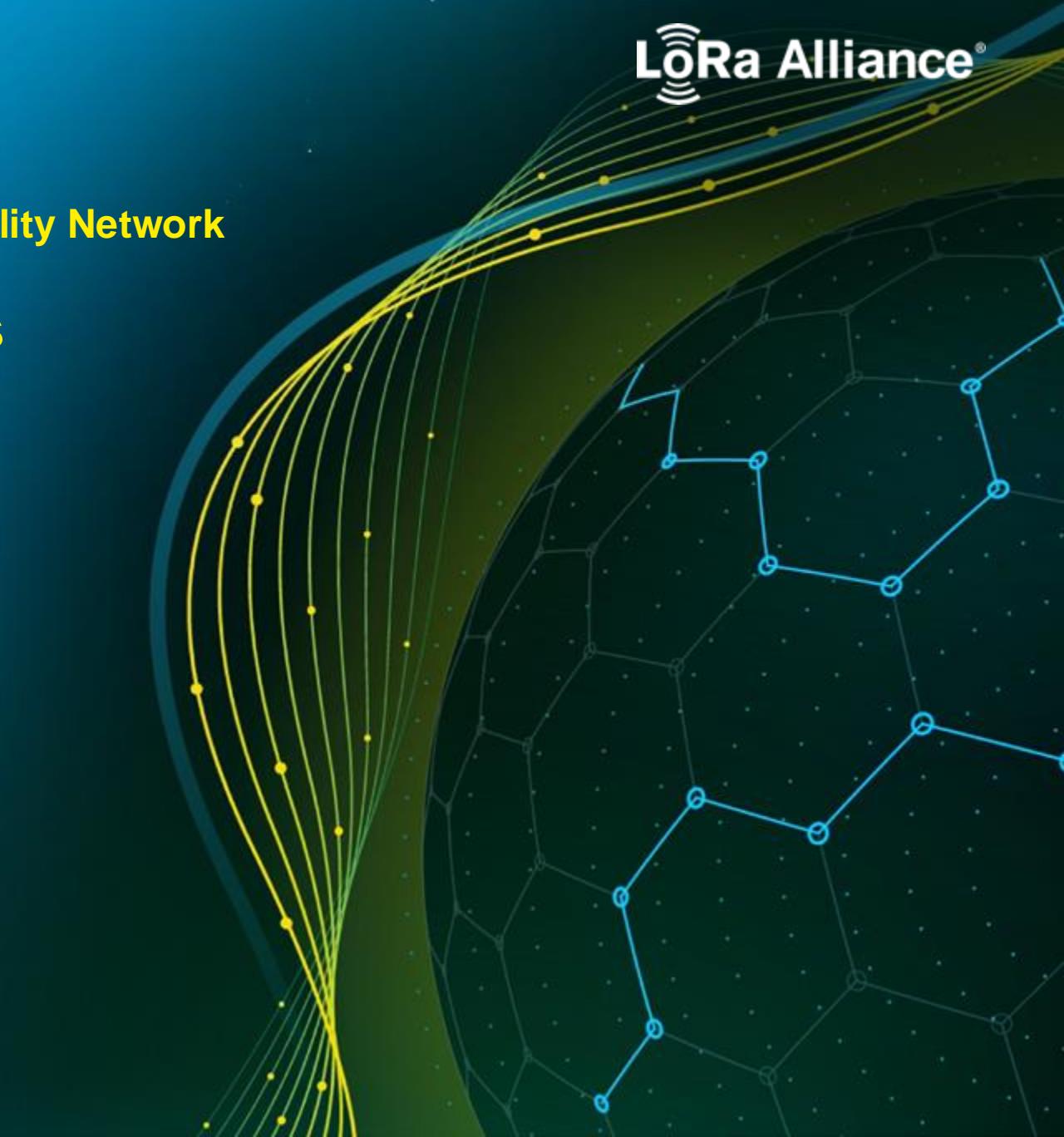
## Using LoRaWAN Smart Meters



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# Demand & Growth of Gated Communities in INDIA



Over the past decade, India has experienced a significant rise in the development and demand for gated communities, reflecting evolving preferences for secure and amenity-rich residential environments.



The demand for these communities is projected to increase 2.5 times, reaching an estimated market value of \$500 billion by 2026.

Within the next five years, it is anticipated that at least 24 million households will reside in gated communities across the country.

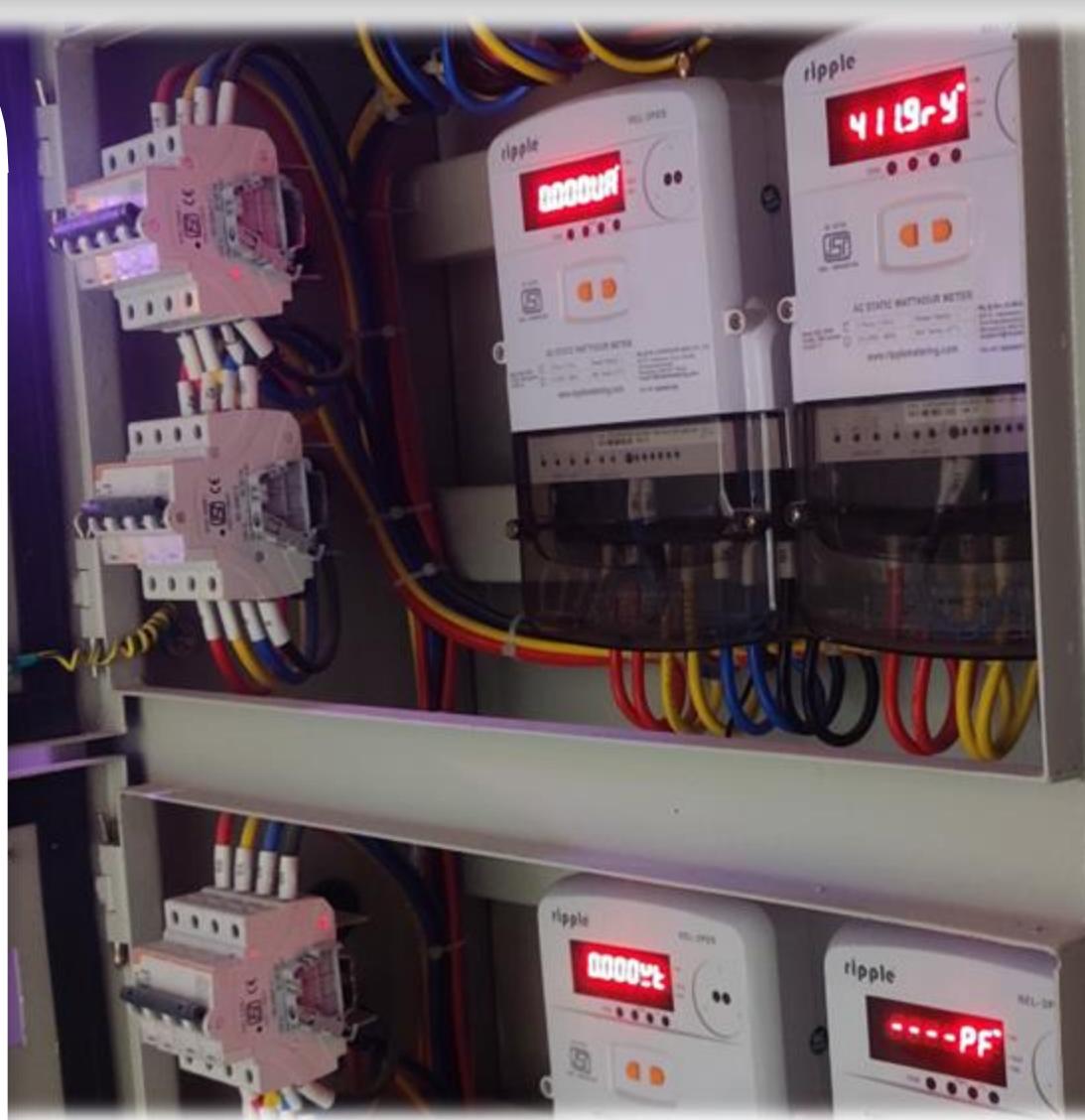
# Gas Meter Installation – Type 1



# Gas Meter Installation – Type 2



# Typical Installation of Electricity Meters int the Shaft



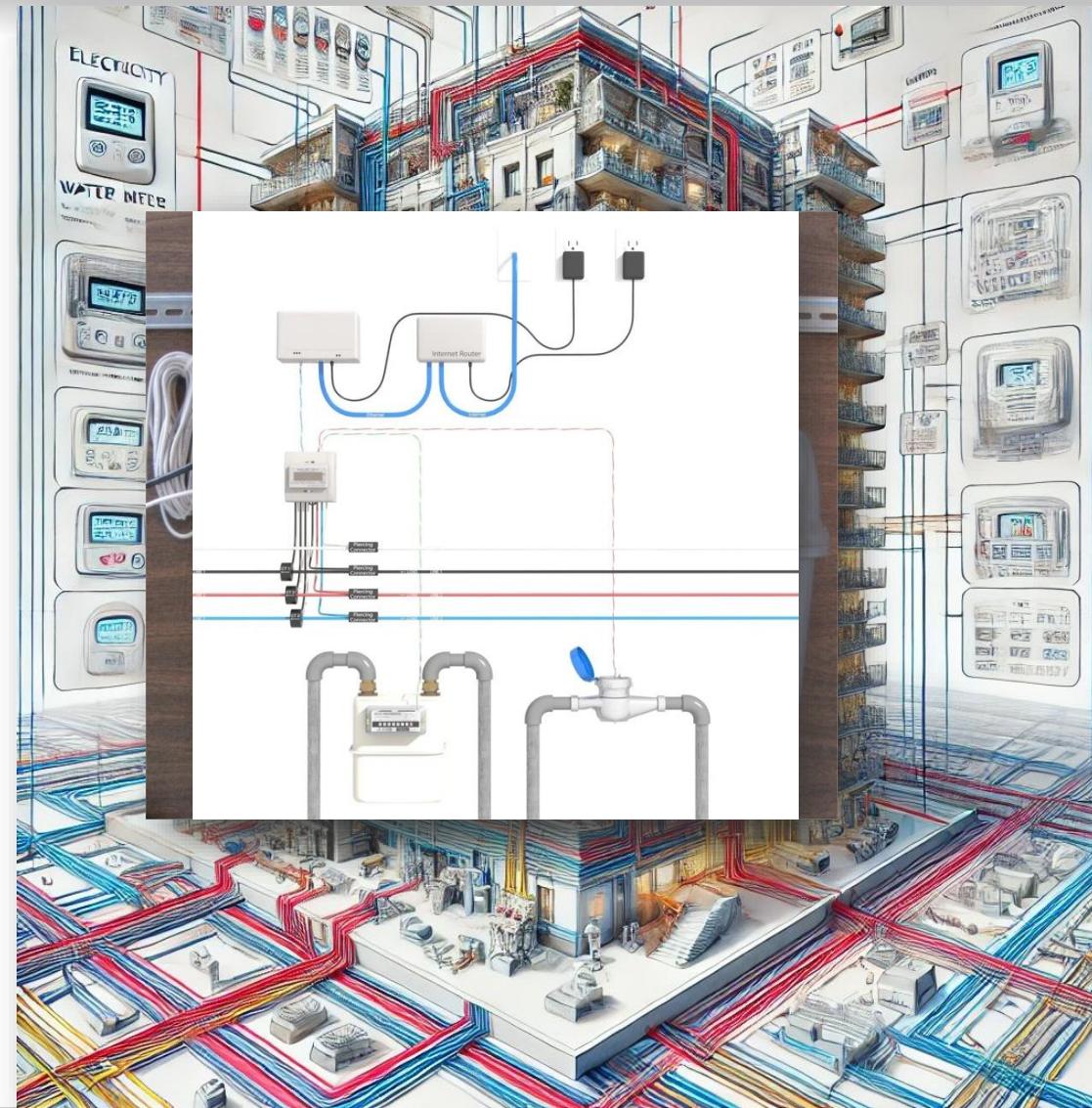
# Installation of Electricity Meters – at a single location



# Horizontal & Vertical Installation of Water Meters



# Data Acquisition through Wired System – Wired BMS

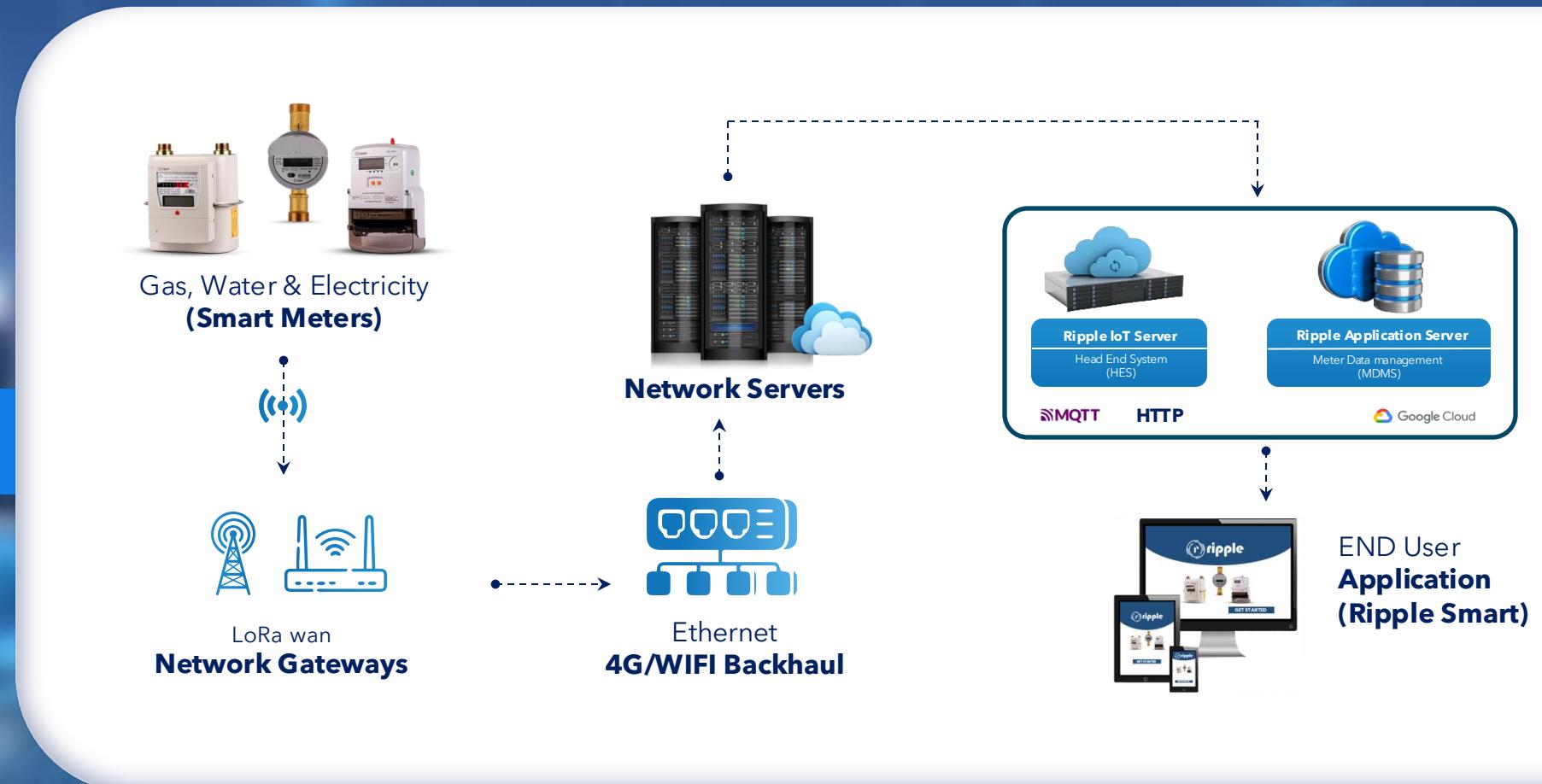


# Wireless BMS – Gas Water & Electricity



# Smart Meter Architecture - LoRaWAN

## Ripple IoT Eco System



# Wireless Utility Management - LoRaWAN



Smart Gas Meter



Smart Water Meter



Smart Energy Meter



# Meter Readings at HES



IOT Readings      Archived Readings      RAW Data

Projects Created on  
Select Date      Apply      Reset

Note: All water readings are in Liters, gas readings are in cubic meters (m³), and electricity readings are in kilowatt-hours (kWh).      Export to Excel

#	Utility Type	Device Sr. No.	Mac Address	Date & Time	Meter reading	Meter Readings	Meter Readings	Project name	Action
1	Gas	ECFAF40030001...	ECFAF40030001...	14 Mar 2025 04:00:00	21.8	-	-	Godrej 24	<a href="#">i</a>
2	Gas	ECFAF40030002...	ECFAF40030002...	14 Mar 2025 04:00:00	35.68	-	-	PIONEER KRS PA...	<a href="#">i</a>
3	Gas	ECFAF40030003...	ECFAF40030003...	14 Mar 2025 04:00:00	7.25	-	-	Bollineni Astra	<a href="#">i</a>
4	Electricity	3747942	A5003E3F4BDA...	14 Mar 2025 04:00:00	-	1512.22	-	Navya Uvera h...	<a href="#">i</a>
5	Electricity	3746223	0080E11505C6...	14 Mar 2025 04:00:00	-	1305.67	5.09	Ambience Cou...	<a href="#">i</a>
6	Water	38852492	009569060000...	14 Mar 2025 04:00:00	2389	-	-	Muppa Melody	<a href="#">i</a>
7	Electricity	3752209	A5003E6F292B...	14 Mar 2025 04:00:00	-	2341.69	0.03	Navya Uvera h...	<a href="#">i</a>
8	Water	10855702	009569060000...	14 Mar 2025 04:00:00	22215	-	-	Bricks Skywoods	<a href="#">i</a>
9	Water	27754702	009569060000...	14 Mar 2025 04:00:00	69203	-	-	Sri Aditya Athene...	<a href="#">i</a>
10	Gas	70726D7423110...	70726D7423110...	14 Mar 2025 04:00:00	0.17	-	-	EIPL Corner Sto...	<a href="#">i</a>

1 2 3 4 5 ... 10 items per page 1 - 10 of 5500000 items

# Ripple MDMS

Welcome To Ripple Dashboard!

**Wallet Balance**  
₹37,23,146.18  
\*Across all projects

**Total Projects**  
69

**Active Projects**  
61

**Inactive Projects**  
8

**Communication Status**  
Total Meters: 30853

All

Status	Count
Communicating	27229
Non Communicating - Active	188
Inactive	3431
MCB Off	5

**Gateway Information**  
Total Gateways : 23

**Residential Units**  
Total Units : 14746

**Consumers**  
Total Consumers : 10841

**Revenue for last 6 months**  
All Projects

Total Revenue: ₹1.56.09.938.45

**Top 5 projects**  
Current Month



Simple. Affordable. Transformative.

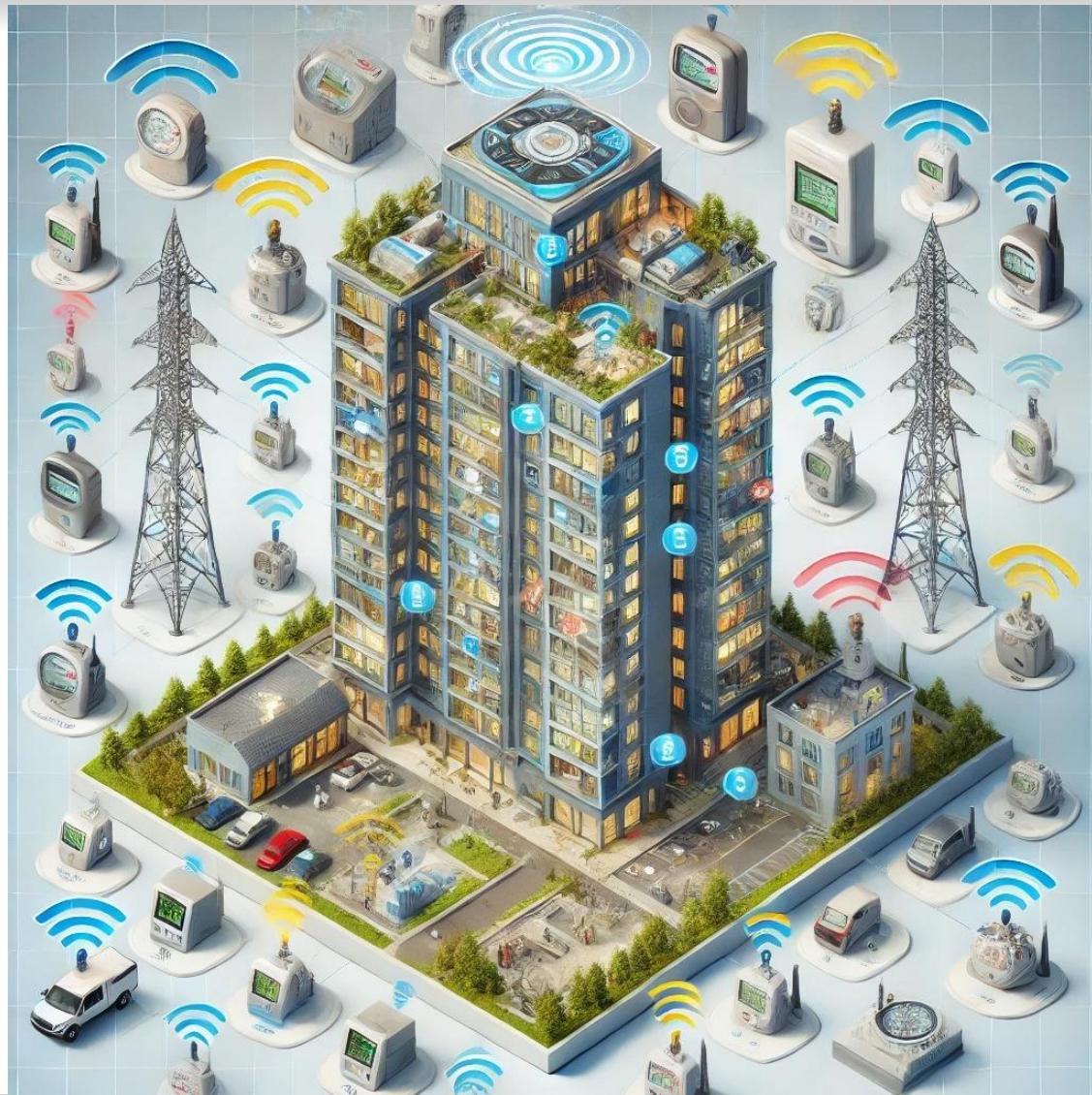
Consumers

Admin

Users



# Benefits : Wired to Wireless



A Wireless smart meter ecosystem improves

- **Cost Efficiency :**

- Reduced Infrastructure Costs from 15 – 20%

- Lower Installation Costs

- **Scalability**

- **Security & Reliability**

and paves the way for smarter more sustainable utility management.

# Benefits of using LoRaWAN

Creating your own private network



# Benefits of using LoRaWAN

Schedule your device uplinks to reduce Gateways and to avoid Packet Collision resulting no Data Loss



# Benefits of using LoRaWAN

## Interoperability & Sustainability in LoRaWAN



# Benefits of using LoRaWAN

## LoRa Ecosystem - Silicon to Solutions



Chipsets



Modules



Devices



Gateways



Servers



Network  
Operators



Cloud  
Platforms/  
Data  
Management



Solutions



System  
Integrators

# Why LoRaWAN for Gated Communities

LoRaWAN (Long Range Wide Area Network) is ideal for smart metering in gated communities because of its:

- **Long Range:** Can cover large residential areas with a few gateways.
- **Low Power Consumption:** Battery-operated meters last for years (5-10 years).
- **Low Cost:** Minimal infrastructure investment compared to cellular networks.
- **High Scalability:** Supports thousands of meters in one network.
- **Deep Indoor Penetration** – Works well even in basements or enclosed areas where traditional networks struggle.
- **Secure & Reliable** – End-to-end encryption ensures data integrity and security.
- **Bidirectional Communication** – Allows remote meter reading, firmware updates, and real-time alerts.
- **Interoperability** – Can integrate with other smart home or community management systems.

# Questions

Simple. Affordable. Transformative.

