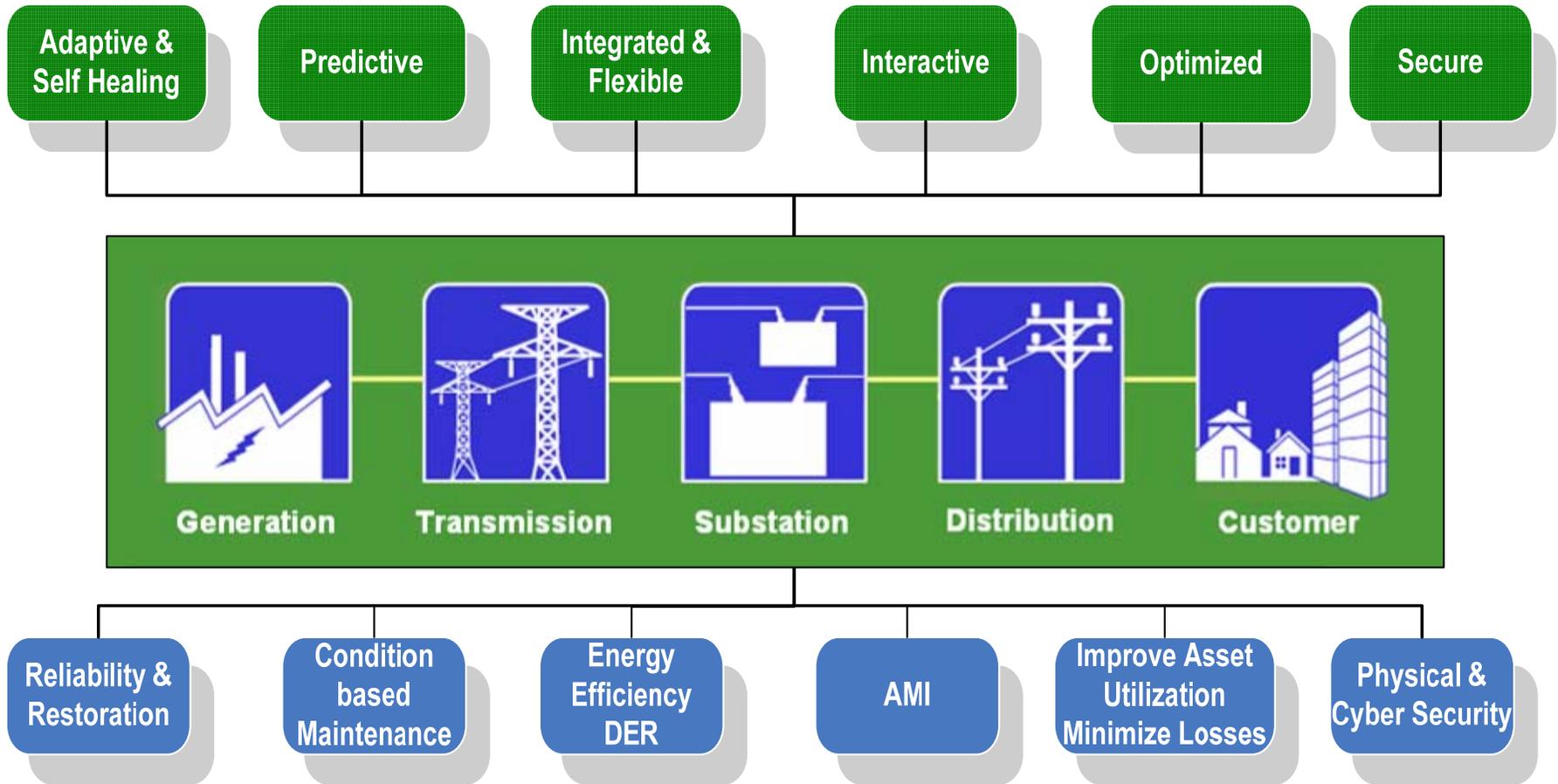




Con Edison Smart Grid Strategy

Smart Grid



Bulk Power System

(Generation, Transmission, Substation)



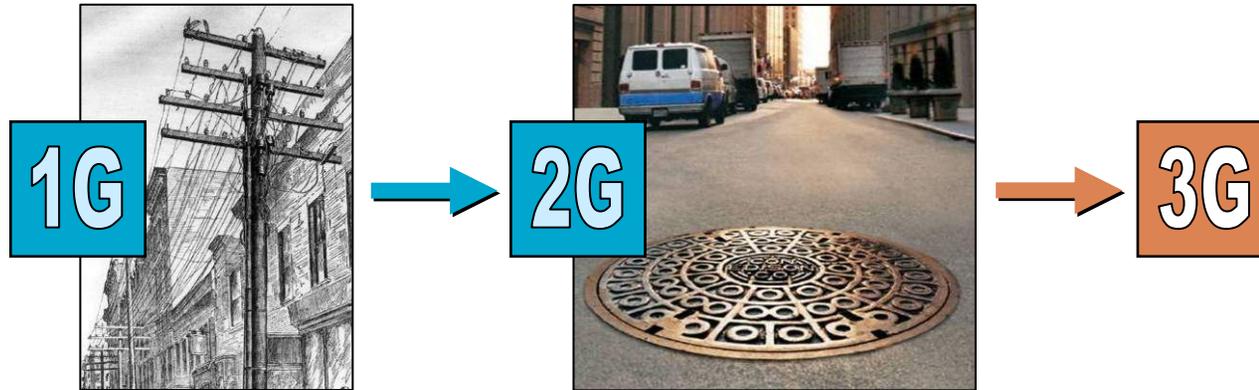
- Modernization of the EMS System
- Substation Automation
- Substation Asset Sharing
- Online Transformer Condition Monitoring

Distribution



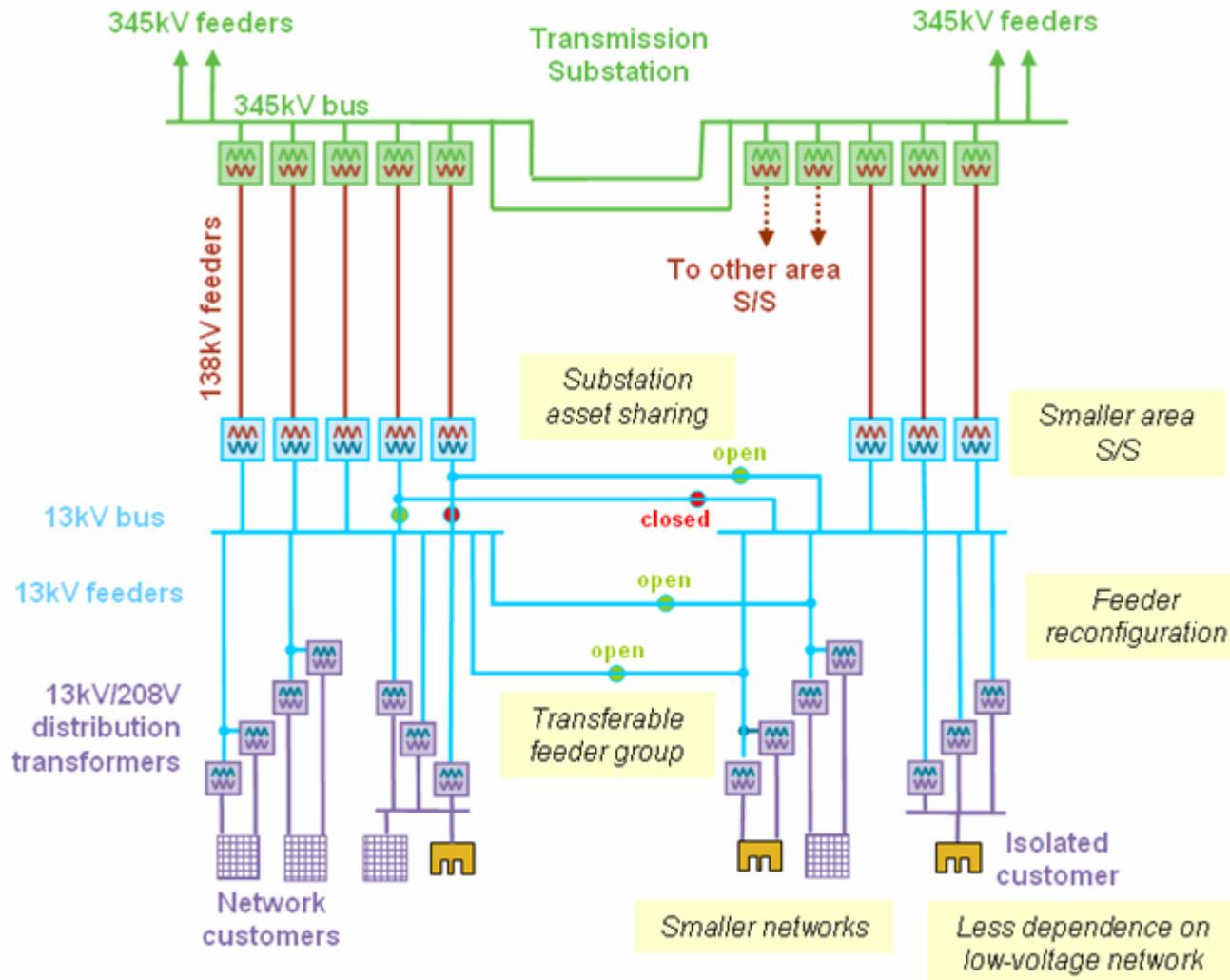
- Distribution equipment monitoring & automation
- Distribution network secondary grid modeling
- Operator decision tools & failure prediction
- Dynamic network visualization
- Overhead auto-loop automation

3G System of the Future Objectives

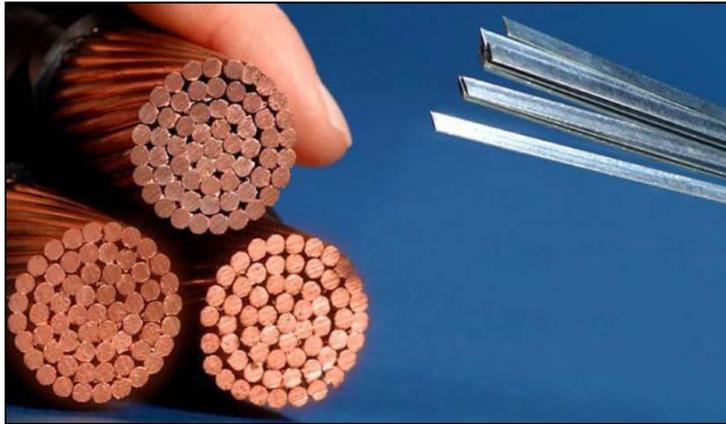


- Maintain reliability and customer service
- Increase asset utilization
- Reduce street congestion
- Increase operating flexibility
- Utilize new technologies
- Cost reduction, avoidance, and deferral

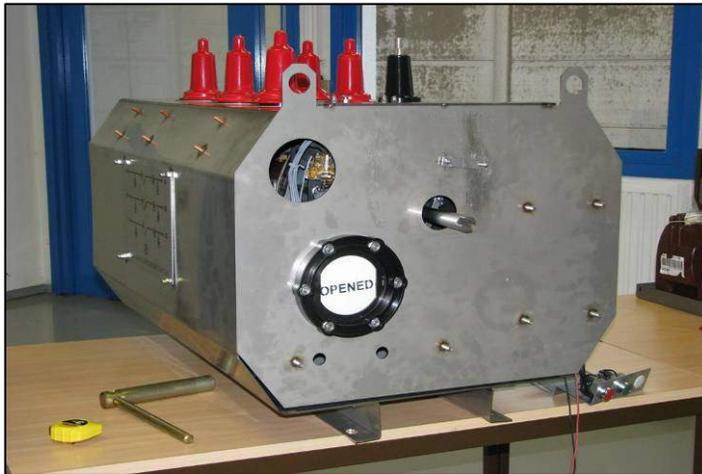
3G System of the Future Concepts



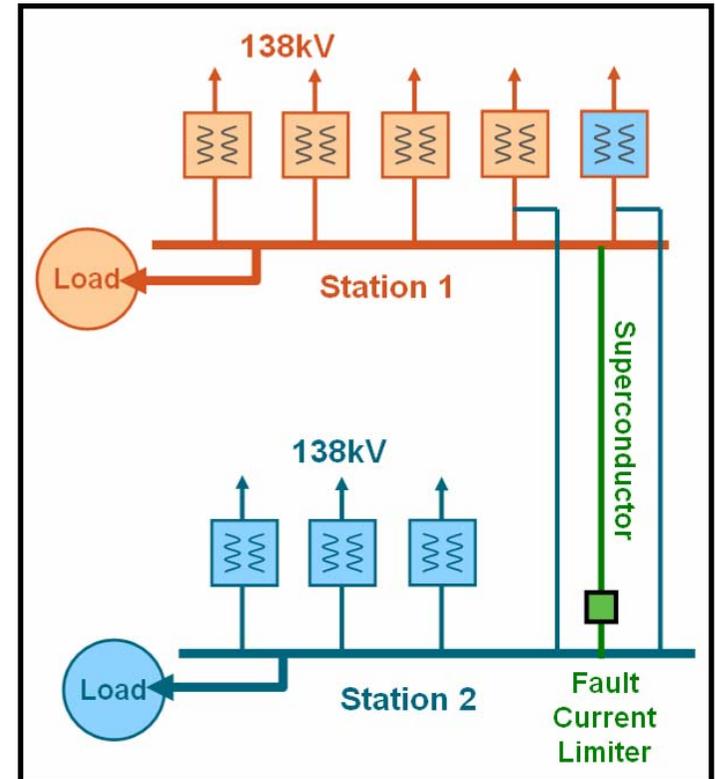
Implementing New Technology



Superconducting cable for inter-substation ties



Medium voltage fast switch to transfer distribution load



Fault current limiter to maintain superconductor availability during a fault

Traditional Grid

Centralized Generation



**Limited
2-Way Communication**



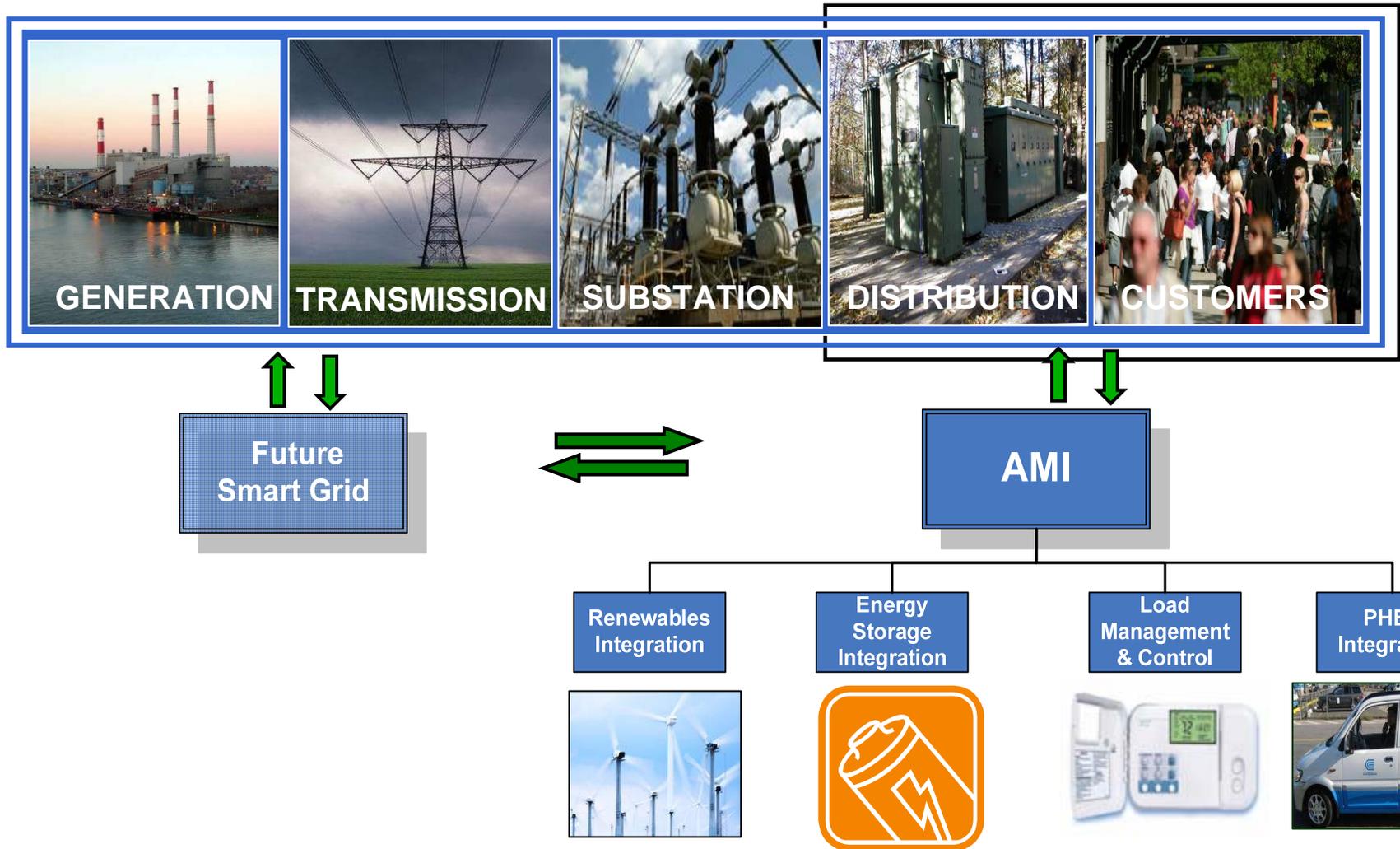
Partially Monitored



Limited Customer Choices



Empowering Customers



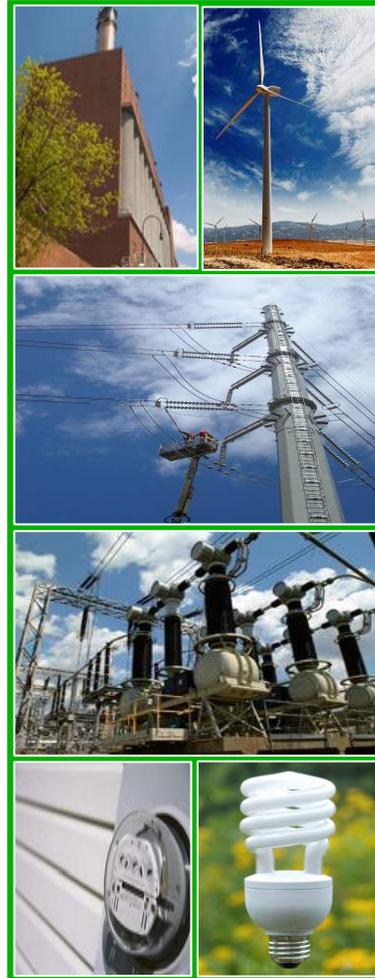
AMI enables Smart Grid

Centralized Generation

**Limited
2-Way Communication**

Partially Monitored

Limited Customer Choices



Distributed Energy Resources

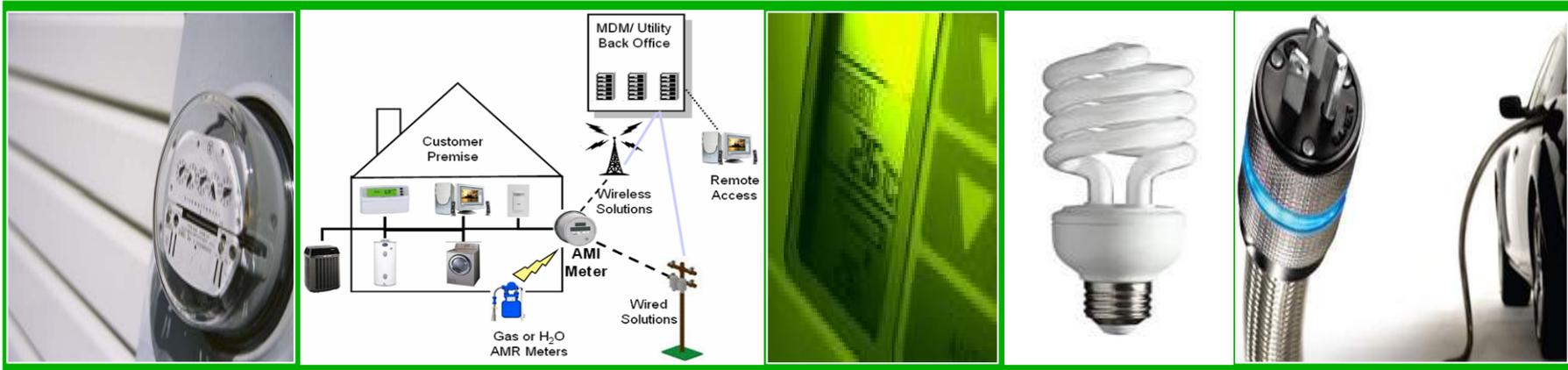
2-Way Communication

Fully Monitored

Customer Choices

Energy Efficient

Smart Grid - Customer Technologies



- Smart Meter
- Data Collection Network
- Enterprise Meter Data Management
- Distributed Generation
- Home Gateway
- Service Switch
- Smart Appliances
- Plug in Hybrid Electric Vehicles (PHEV)
- Energy Efficient Technologies

An aerial night view of a city skyline, likely New York City, with numerous skyscrapers illuminated against a dark blue twilight sky. The lights from the buildings create a vibrant contrast with the dark sky. The text 'Con Edison Smart Grid Strategy' is overlaid in the center of the image.

Con Edison Smart Grid Strategy