Landis+Gyr
manage energy better

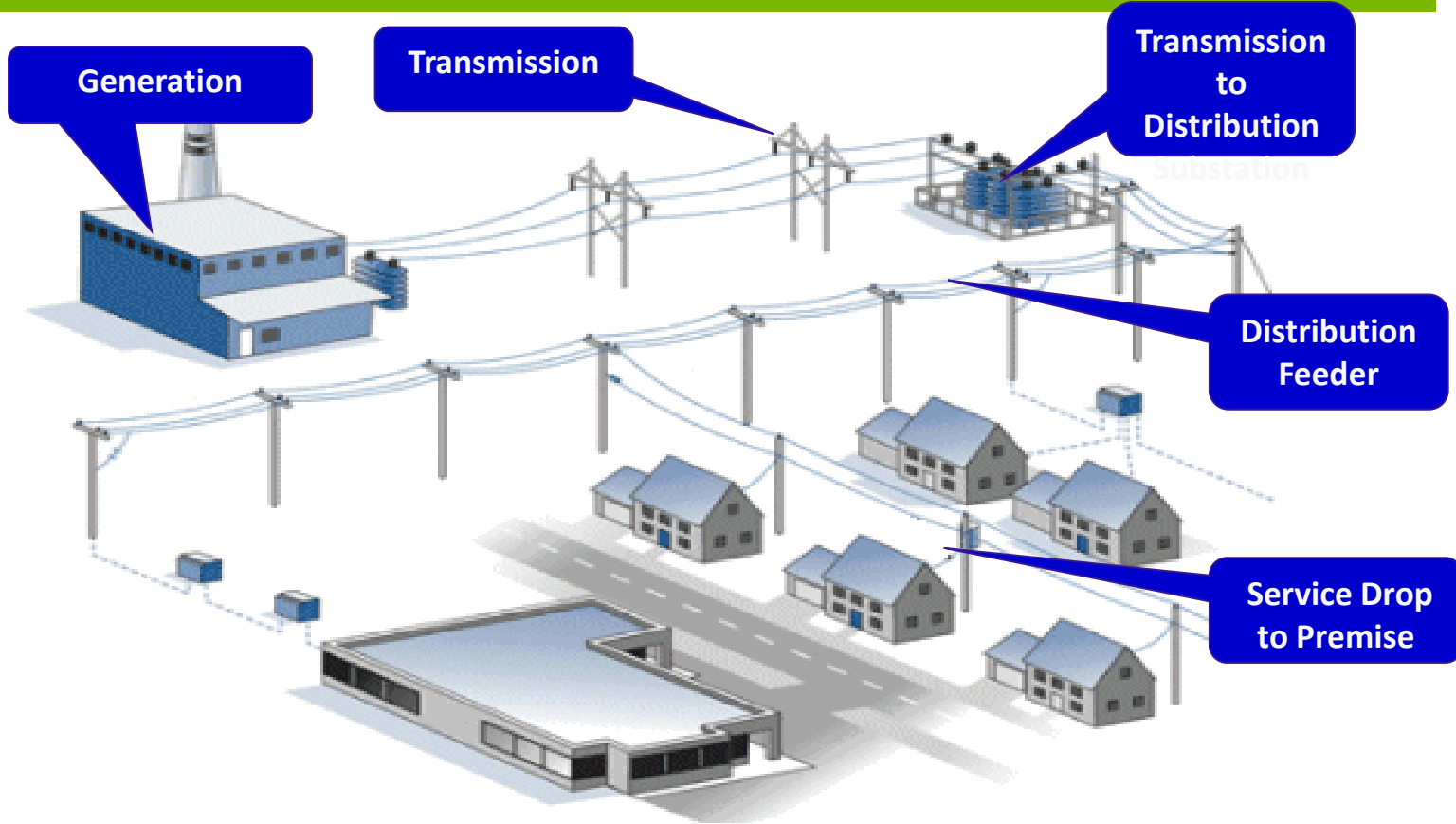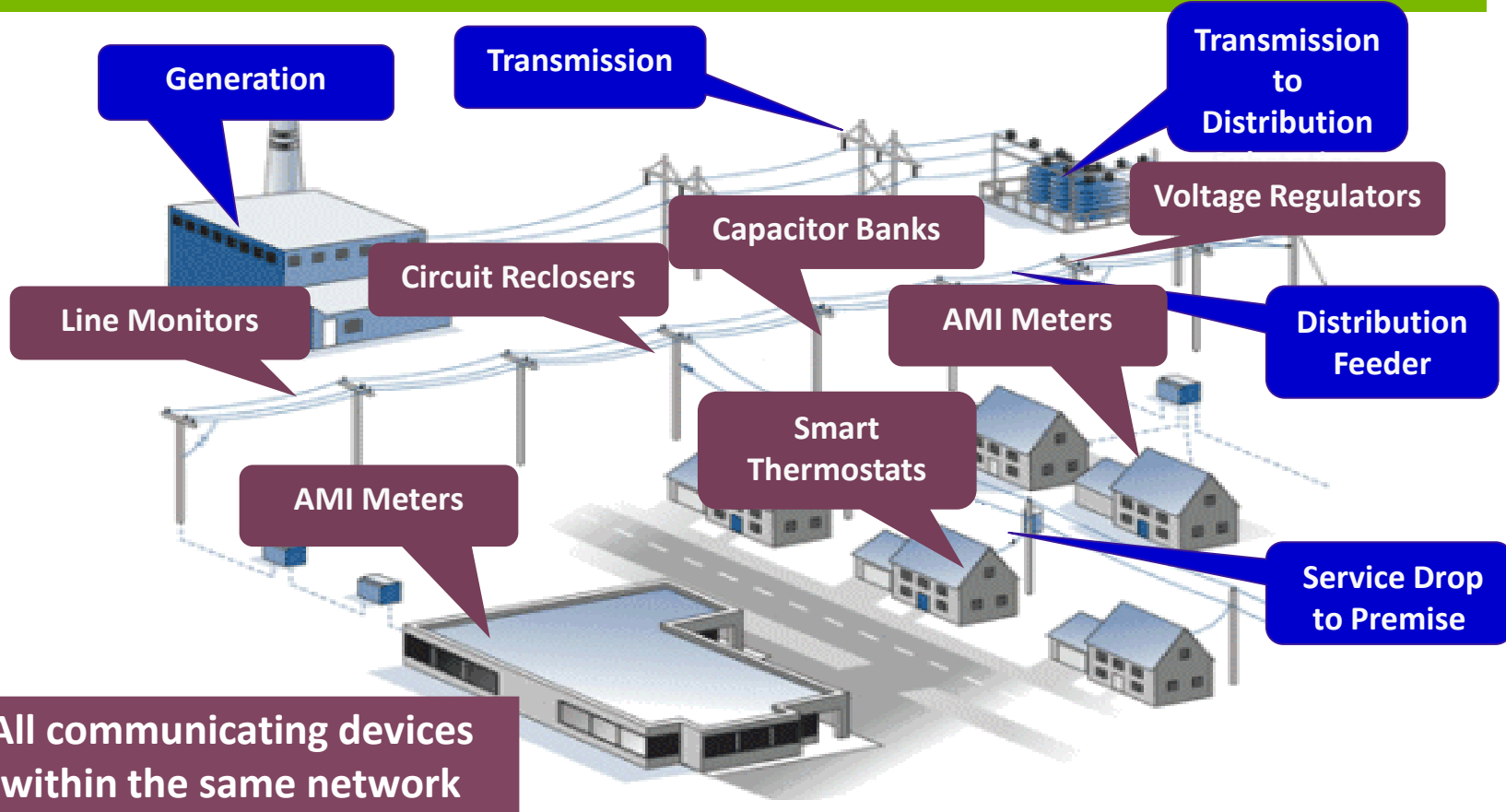# How Smart Grids enable consumers?
UT Energy Week – Feb 18th 2015

Emmanuel Monnerie – Landis+Gyr

What is a Smart Grid?

Generation

Transmission

Transmission to Distribution Substation

Distribution Feeder

Service Drop to Premise
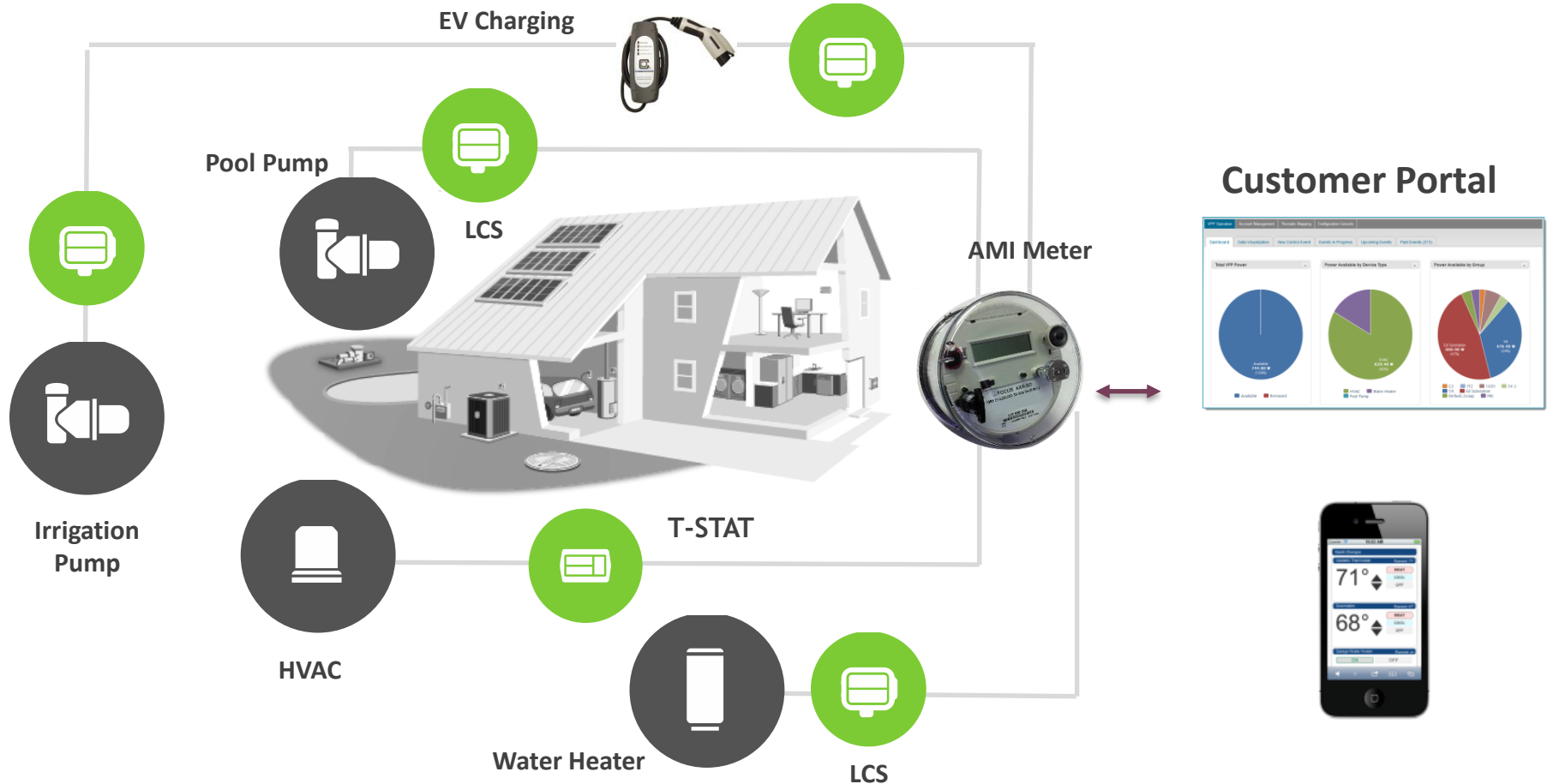
Landis+Gyr

What is a Smart Grid?

The AMI Electric Meter

Installed in over 70% of households in North America

- Dozens of metrics captured and reported each day

- Key metrics captured every 5 to 15 minutes

- Home Area Network communication module (Zigbee)

- Wide Area Network communication module

- Hundreds of events and alerts reported in real time

- Can act like an edge sensor to support DA/SCADA solutions

The Smart Grid enters the home

EV Charging

Pool Pump

LCS

Irrigation Pump

HVAC

T-STAT

Water Heater

LCS

AMI Meter

Customer Portal

Case Study: Austin Energy

Project Overview

+ **Multipurpose network for AMI and DA**

+ **Gridstream network deployed for AMI and DA**

+ **Landis+Gyr SCADA Center host system, integrated with existing DMS system**

+ **Gridstream radios pre-integrated and deployed with:**

  - 4 line monitors;   11 capacitor banks
  - 5 reclosers;   39 air switches

Reduced generation costs and improved outage restoration

About Austin Energy
Austin Energy is the nation's 9th largest community-owned electric utility, serving more than 400,000 customers and a population of almost 1 million. Austin Energy provides electric service within the City of Austin, Travis County, and a small portion of Williamson County.
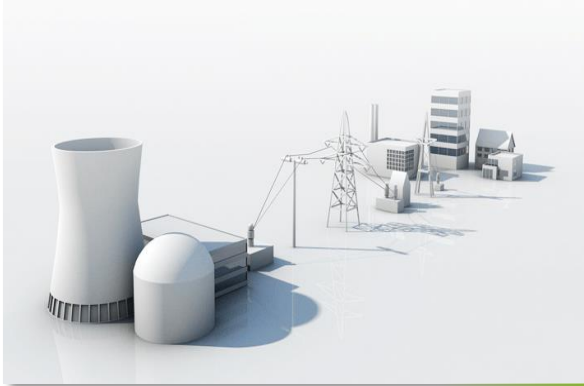
http://youtu.be/IehA7AZAFwk

Utilities need to adapt to consumer requirements

- Consumers are investing more in Energy Management and Renewable Energy Resources – Energy cost reduction and enhanced power quality/reliability

- With this consumer trend, utilities still maintain their obligation to serve these customers

- The utility impact is operational challenges and financial risk

- Utilities are responding by requesting creative solutions that allow them to provide flexible energy options to their customer

Addressing Energy Users Is Key To Smart Community

Landis Gyr +

Smart Grid

Smart Utility

Smart Community

Proven, scalable
Metering/AMI/DA platform
Smart Grid Services

Distribution Grid Management
Advanced Load Management
Smart Lighting | Analytics
Data Management
Advanced Services
Energy Storage

**Enhancing Consumer
Experience and Sustainable
Communities through
Balanced Energy
Management Solutions and
Services**

Thank You!