



# OVERVIEW

- **ComEd and Our Roots in Smart Grid**
- **Integrating DER: A Platform-Based Business Model View**
- **The Next Steps:**
  - **Next Generation Energy Plan and Rate Design**
  - **Community of the Future Project**
  - **Smart Cities Projects**



# ComEd At A Glance

## **Our Customers:**

- 3.85 million customers in northern Illinois, including the City of Chicago

## **Our Company:**

- One of six utilities owned by Exelon
- 6,800 Employees
- Service Territory: 11,428 square miles

## **Our Grid:**

- Peak Load: 23,753 MW
- 526,000 distribution transformers
- 5,502 circuit miles of transmission
- Including 2nd largest underground network in the U.S
- Over 2 million smart meters installed with completion targeted 2018



# Illinois' Smart Grid Law: The Foundation

*On October 27, 2011, the Illinois General Assembly enacted the Energy Infrastructure Modernization Act (EIMA), setting in motion a \$2.6 billion investment by ComEd to strengthen and modernize the state's electric grid.*

- The Investment Plan has two primary components:

Reliability-Related  
Investments—  
5 year program,  
\$1.3B

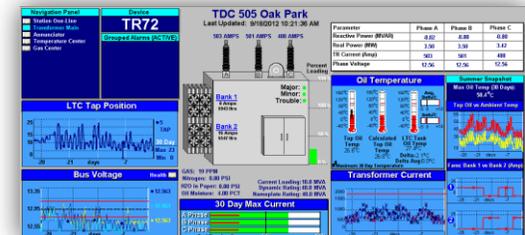
- Underground cable – mainline, URD, manholes
- Ridgeland 69kV cable replacement
- Training centers
- Wood pole inspection, reinforcement/replacement
- Storm hardening – undergrounding, spacer cable

Smart Grid-Related  
Investments –  
10 year program,  
\$1.3B

- Distribution Automation
- Smart Substations
- Smart Meters

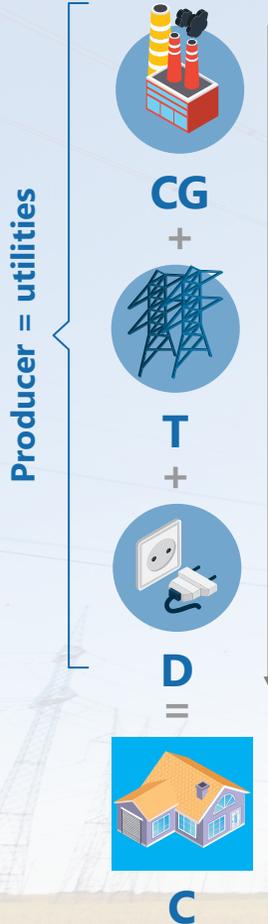
The legislation also established:

- Energy Foundry
- Test Bed

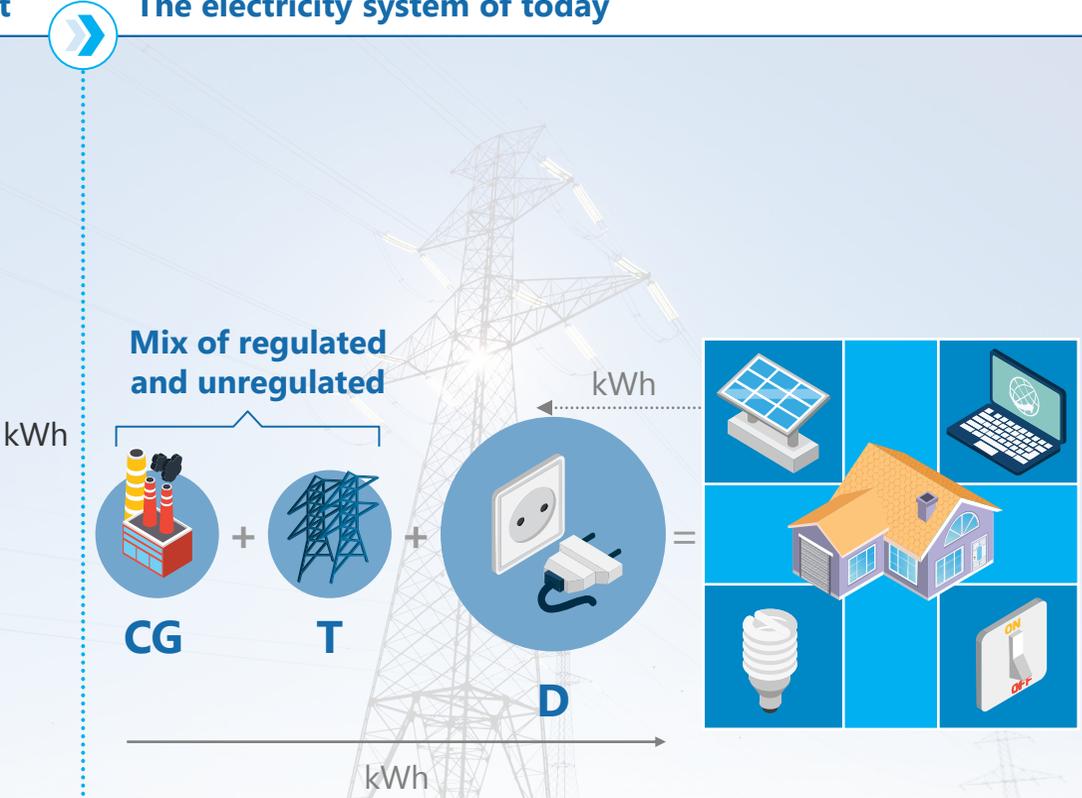


# The utility value chain is already beginning to evolve... but what will the future look like?

## The electricity system of the past



## The electricity system of today

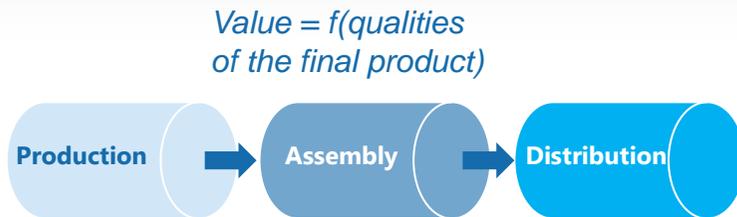


## The electricity system of the future



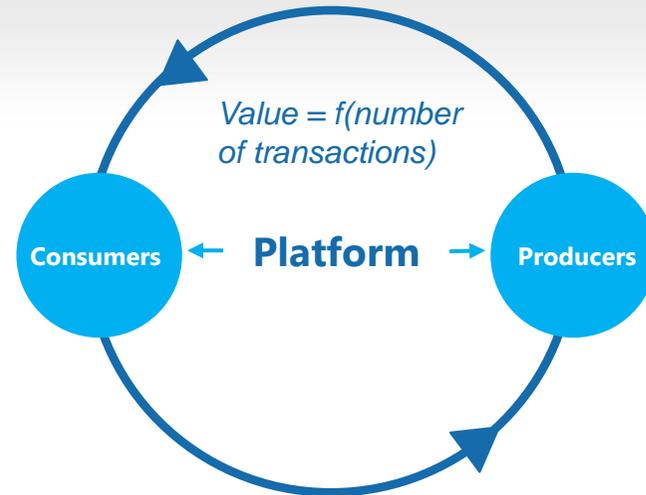
# Other industries have evolved by turning to the “platform business model”

## Pipe Model – focus on the product



- Companies **produce, assemble, and distribute goods** and services to end customers through a process
- Value is created through the **optimization of this process**

## Platform Model – focus on the interaction



- Companies **enable interactions** between both producers and consumers, with parties potentially shifting between roles
- **Value is generated** through creation, curation, and consumption of content
- 3 types of exchanges: **information, goods/services, currency**

# Platform for Utility of the Future



# Next Generation Energy Plan



Nearly doubling energy efficiency programs, yielding \$4 billion in energy savings



Enhance grid security and reliability



Provide \$1 billion of low-income assistance



Support at risk nuclear plants through a Zero Emission Standard



Jumpstart solar with more than \$140 million annually for new solar development



Reduce fixed charges by 50%, giving customers more control



Strengthen and expand Renewable Portfolio Standard



Create new clean energy jobs through new programs

# The Community of the Future

- ✓ A place where ComEd and a local community collaborate to create a “smart community”
- ✓ We envision a community where the energy system – and the many uses of its digital network – is localized and human-centered, with power that is ultra-reliable and can be generated and controlled at the community level.
- ✓ The Community of the Future promotes piloting customer-focused initiatives that:
  - Create a smarter, more secure, more reliable, more resilient and affordable grid by protecting and reducing outage duration for critical infrastructure in the event of catastrophic incidents.
  - Connect residents to smarter technology that enable them to make an impact on their energy usage, cost, and footprint.
  - Enhance livability, workability and sustainability.

