

Landis+Gyr

Smart Meters Go Beyond AMI

Minnesota Power Systems Conference

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The Evolution of Metering

1920



2000



2020 and beyond



Smart Metering is at the heart of the energy industry revolution.

The Evolution of Metering



NEW YORK - SMART METER DEPLOYMENT



POLICY COMPONENTS QUESTIONS

- 1. Does state policy exist? YES >
- 2. Is there a statewide policy requiring smart meters? NO >
- 3. In 2016, was smart meter deployment above the national average? (39% of all installed meters) NO >
- 4. In 2016, was deployment of smart meters greater than 75%? NO >

DESCRIPTION

Advanced metering technologies (AMI) or "smart meters" are meters or a system of meters that transmit energy use information from residential or commercial customers in various time increments, or resolutions, from minutes to hours. More data transmission is a higher resolution. The higher the resolution of the data the more valuable the information is to the customer or the utility. High resolution data from AMI meters enable utilities and third party providers to gather energy usage trends, identify outages, and implement and track energy efficiency practices all without having physically go to a site to read a meter thereby increasing efficiency and decreasing cost. The dynamic nature of the data allows for dynamic rate structures that can send pricing signals to customers to promote particular energy practices that are desirable to the utility or the public. It also allows third parties to market energy information and management services to customers if policies are in place to support



Data in increments of hours to minutes



The higher the resolution of the data the more valuable to the customer & utility



Allows third parties to market energy information & management services to customers if policy supports

STANDARDS

Defining the Path



Embracing the Changing *Consumer*

The background of the slide features a blurred image of a person's hands holding a smartphone. Below the phone, a futuristic digital interface is visible, consisting of a grid of colorful, semi-transparent icons. These icons include a shopping cart, a power button, a person silhouette, a document, a magnifying glass, and a gear. The overall aesthetic is modern and tech-oriented, with a blue and teal color palette.

Embracing the Changing Consumer

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No action is required of customers who want to stay on their current pricing plan.

Residential pricing plans:



Shift a majority of your usage to off-peak hours and reduce your monthly bill.



Pay lower energy rates plus a charge for your highest hourly on-peak usage.



Combines demand and time-of-use components to maximize your savings opportunities.



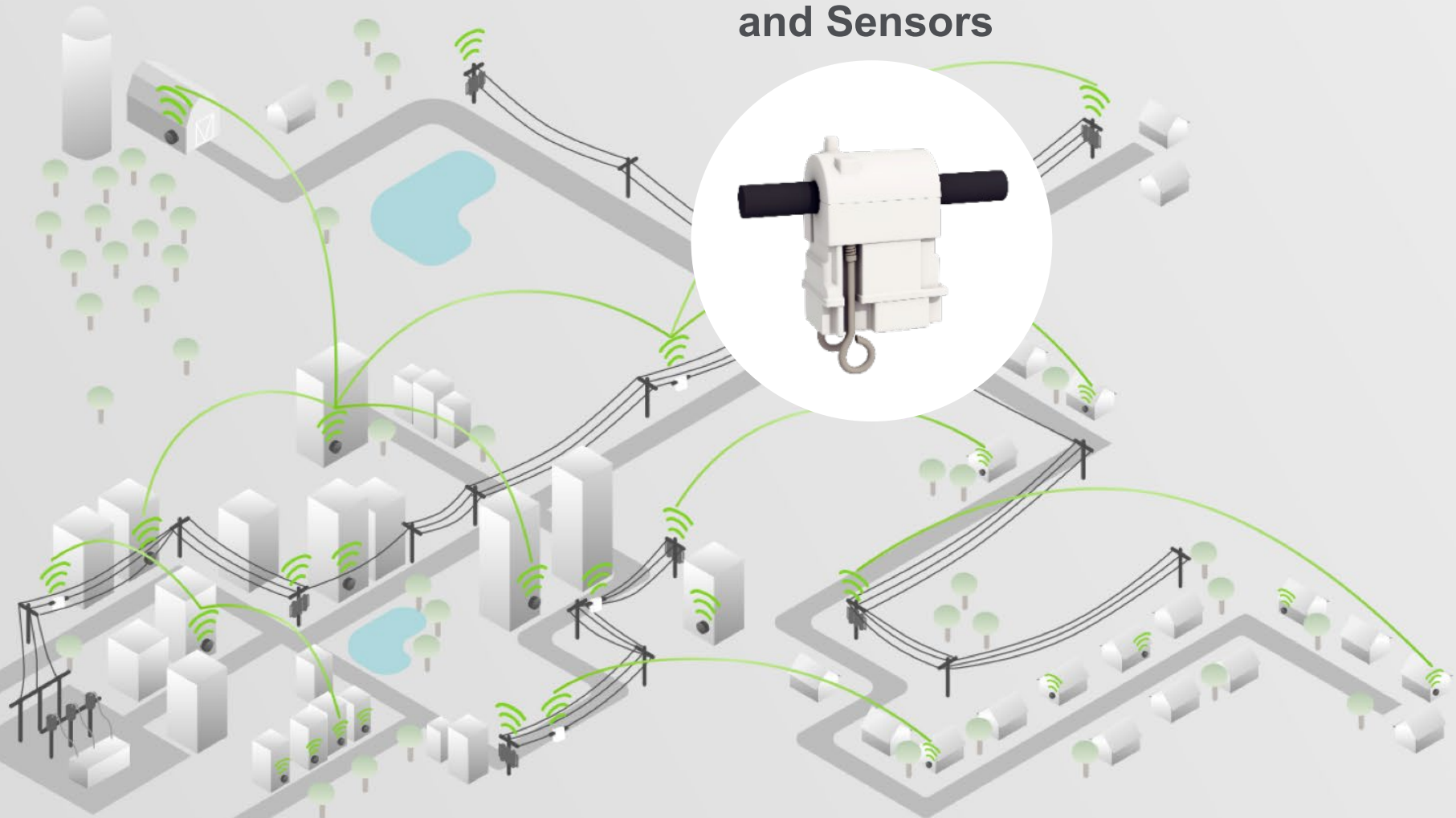
Pay bills based on your total monthly electric use, regardless of when it occurs.

Managing the Grid



Managing the Grid

Fault Indicators and Sensors





The Meter of the **Future**

Meter of the Future



The International Energy Agency predicts that through 2030, off-grid energy systems are the cheapest option for 70 percent of rural users who will gain electricity access.



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Questions?

A green background with a network diagram of interconnected nodes and lines.

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Thank You

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