



Modernizing the electric grid

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For more information:

www.fpl.com/EnergySmart



Energy Smart Florida is part of FPL's ongoing commitment to build a smarter, more reliable and more efficient electrical infrastructure for customers

Overview

- Energy Smart Florida will deliver immediate, near-term and long-term benefits for FPL and our customers
- The project will help FPL continue to deliver strong service reliability over the long term – reducing outages and improving restoration
- It will help customers take more control over their energy use and monthly bills—if they choose to

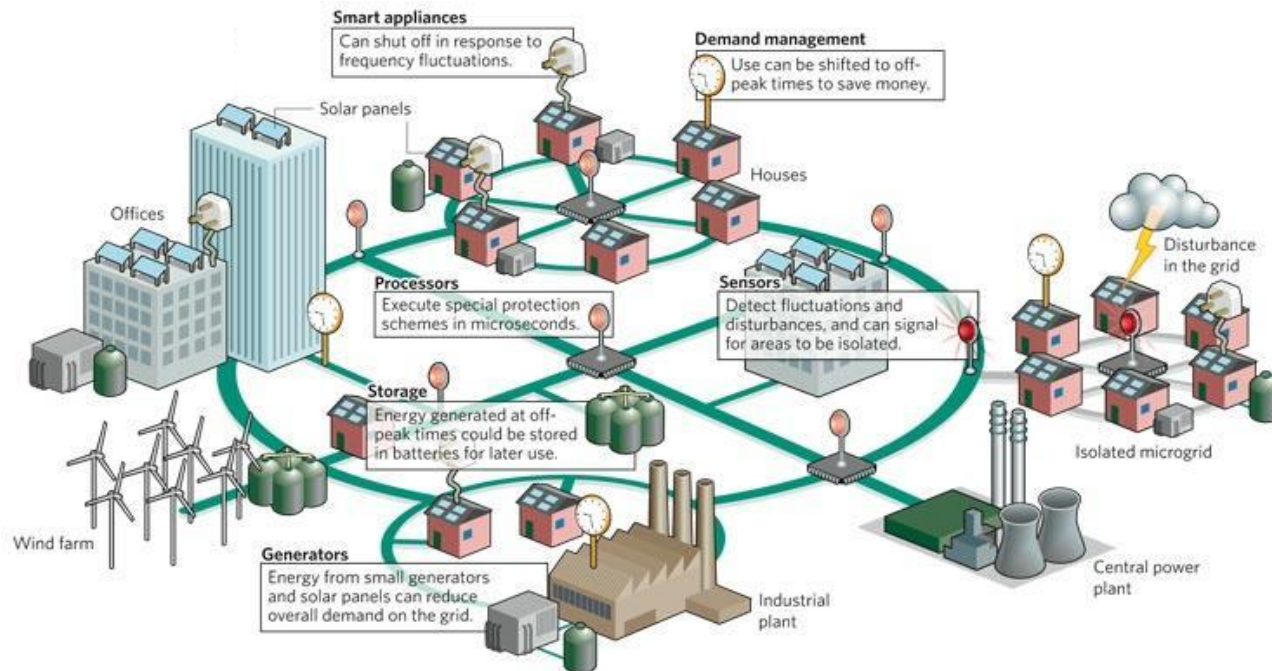


The customer benefits of this investment are lasting – the long-term possibilities for further enhancements are exciting

To truly realize the benefits of smart grid technology, we have to improve the grid from end to end – from the power plant to the customer's meter

Overview

- **Energy Smart Florida will build a smarter grid for FPL customers through several key components:**
 - Installation of 9,000+ intelligent devices throughout the infrastructure
 - Cutting-edge enhancements to performance-monitoring centers
 - Deployment of 4.5 million smart meters for customers

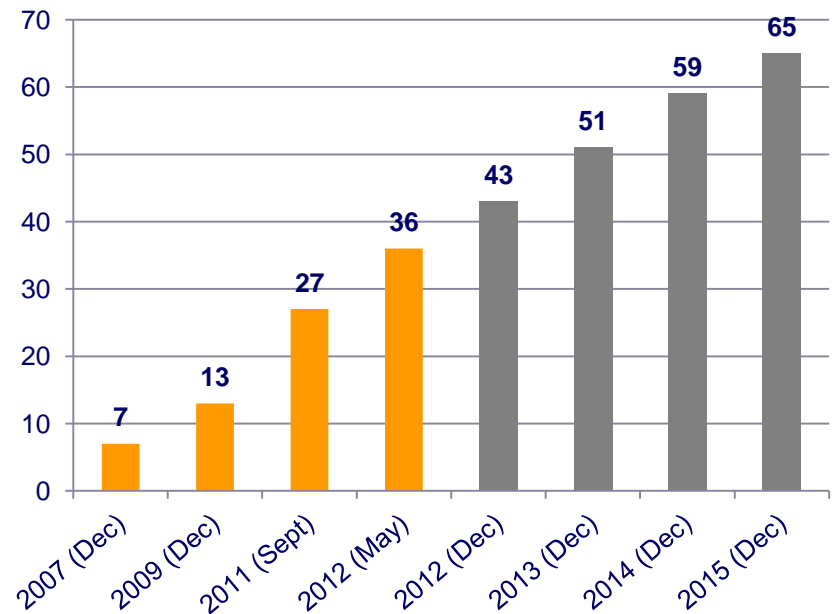


FPL's Energy Smart Florida: Exploring the Benefits of the Smart Grid

Across the country, utilities are upgrading their meter technology: 36 million homes in the U.S. now have a smart meter – and this figure is growing

- According to the Institute for Electric Efficiency , 36 million homes, almost one-third of U.S. households, now have a smart meter
- In the next three years, it is expected that 65 million households will have a smart meter

Smart Meter Installations in the US: 2007-2015 (millions)



FPL's Energy Smart Florida project includes the deployment of more than 4.5 million smart meters

Deployment of smart meters is an essential smart grid component that customers will see firsthand

Smart Meters

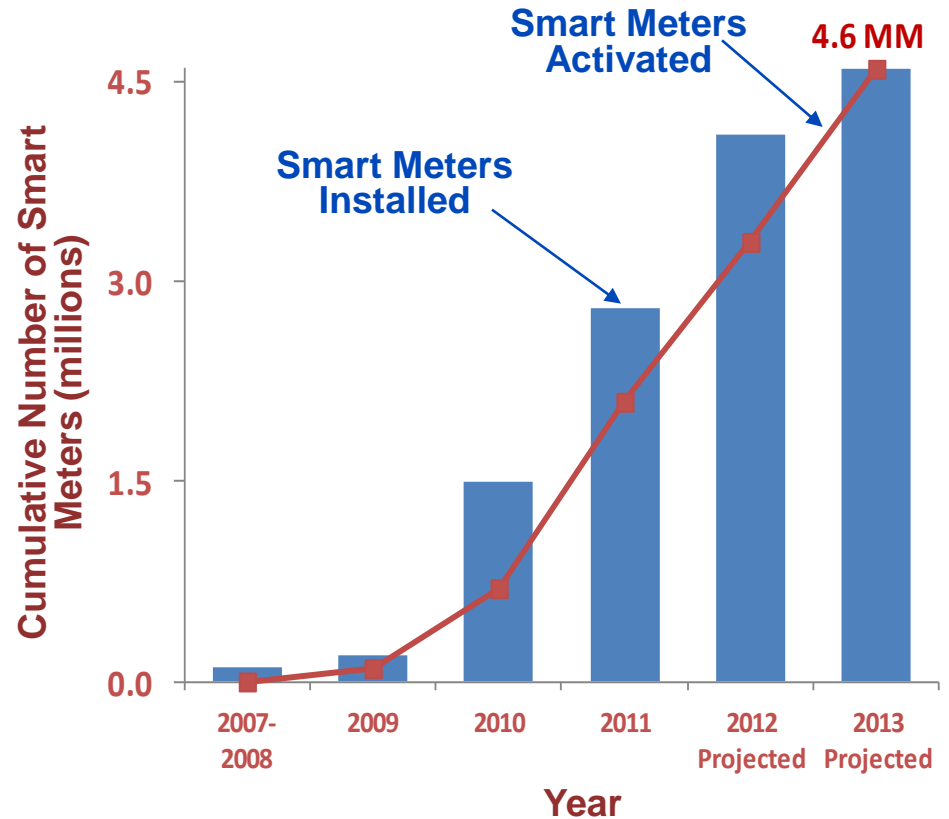
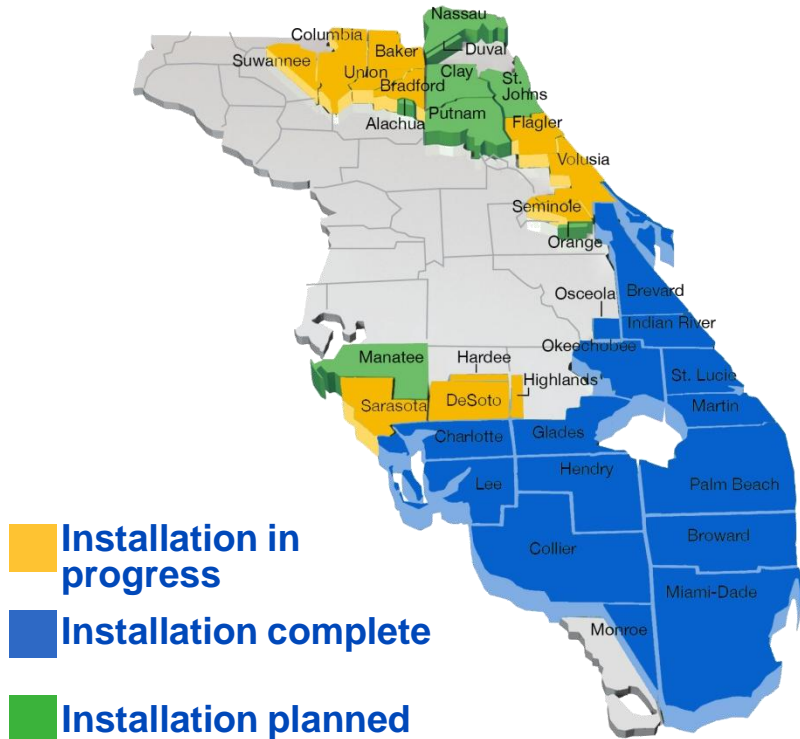
- FPL is following a methodical approach to deployment, using proven, adaptable and flexible technology
- Advanced meters assembled in Bradenton, Fla.
- Extensive meter and technology testing to help ensure accuracy / functionality



Combined with other smart grid technologies, smart meters lay the foundation for a host of current and future benefits

FPL's base smart meter deployment is on schedule for being essentially complete by March of 2013

Smart Meter Deployment Schedule



To date, FPL has installed about 4.2 million smart meters and activated (1) more than 3.4 million smart meters

(1) Smart meter activation occurs approximately six months after installation following systems testing in local areas



Activation is designed to lag behind installation to assure minimal customer impact

Activation

Network Deployment

- Initial deployment of network communication devices to build out area network design
- Average duration of ~four months per district

Meter Deployment

- Installation of Smart Meters under network initiated ~two to three weeks after network deployment started
- Average duration of ~six to eight weeks depending on area characteristics

Area Optimization

- Performance assessment, remediation, and redundancy testing of installed network and meter mesh
- Average duration of ~three months per sub-area (limit of five concurrent areas; can delay start after meter saturation achieved)

Area Activation

- Verification of targeted acceptance read rates, rerouting of non-deployed meters into manual meter reading routes, and certification of remaining routes into remote billing
- Average duration of ~one month per sub-area

Enhanced two-way communications between the smart meter and FPL will help us provide customers with more information to help manage their energy use.



Electro-mechanical meters

Smart meters

Communication

- None

- Two-way communication

Meter Reading/KWh Data Collection

- Manual process
- Performed monthly

- Automated
- Hourly and on request

Theft Protection

- Visual inspection

- Automated/network reported

Power Outages

- Customer Reported

- Automated/network reported

Usage Data Provided to Customers

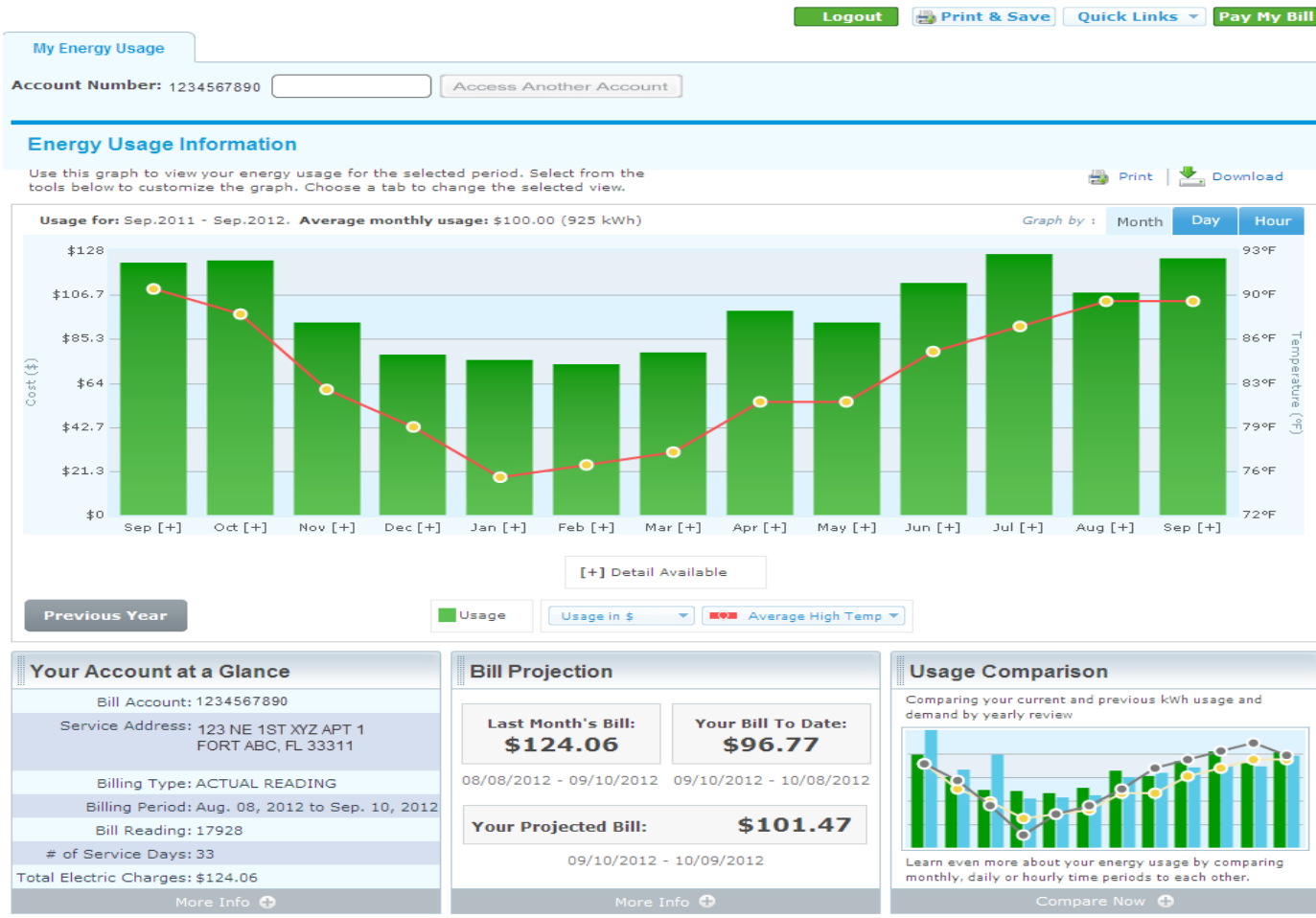
- Once per month, on the bill statement

- Available 24/7 through multiple channels



Customers get access to an online energy dashboard that shows them, by the hour, how much power they're using

Immediate Impact: Customers in Control



Customers who use the Energy Dashboard are enthusiastic about their experience



“I’ve actually been able to save \$25 a month compared to this same time last year.”

Frank Roberts



“If you choose to use it, you’ll definitely see benefits.”

The Linn Family



“I think the online portal is the greatest tool FPL has to offer.”

Susan Albaz



“FPL’s online portal is the best tool yet!”

Tom Eastwood

Smart meters & technologies will work in tandem, preventing outages and enabling faster restoration

Enhanced Reliability

- **Outage prevention**
 - Smart grid technologies will enable FPL to prevent some potential outages before they occur
- **Outage identification**
 - Advanced sensors and switches can help pinpoint problems quickly and reroute power around trouble spots, isolating the issue and reducing the impact to customers
- **Faster restoration**
 - Smart grid technologies will help us detect outages in the system so we can begin restoring power faster

Energy Smart Florida will lay the foundation for additional benefits and innovation in the future

Future Applications of Smart Grid Technologies

- **More customer options**

- Smart meters will make it possible for FPL to offer future products and services that customers can use to better manage their energy usage, such as home energy controllers

- **Operational efficiencies**

- Energy Smart Florida will help FPL achieve cost savings through greater operational efficiencies

- **Expanded use of renewable energy and energy-efficient vehicles**

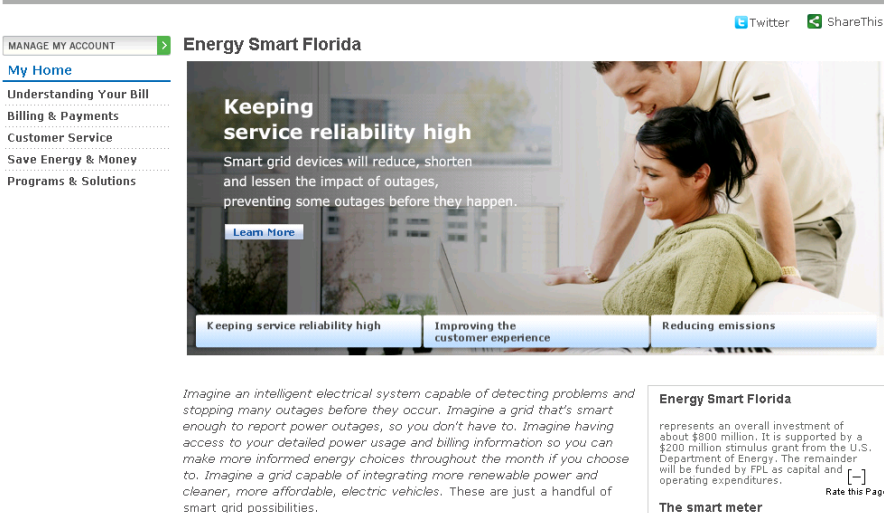
- Smart grid technologies will help FPL more reliably and efficiently integrate “variable” renewable power, such as solar, into the grid; and help to facilitate increased use of plug-in electric vehicles



FPL is keeping customers informed through a variety of activities

Importance of Customer Education

- Promote understanding of smart grid technologies
- Ensure customers understand how to derive the full benefits from smart meters
- Proactively address customers' need for information through multiple communication channels
 - Bill inserts, eNewsletters and other mass communication channels
 - New website explains the project and provides helpful hints and more



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Understanding Your Bill
Billing & Payments
Customer Service
Save Energy & Money
Programs & Solutions

Keeping service reliability high

Smart grid devices will reduce, shorten and lessen the impact of outages, preventing some outages before they happen.

[Learn More](#)

Keeping service reliability high Improving the customer experience Reducing emissions

Imagine an intelligent electrical system capable of detecting problems and stopping many outages before they occur. Imagine a grid that's smart enough to report power outages, so you don't have to. Imagine having access to your detailed power usage and billing information so you can make more informed energy choices throughout the month if you choose to. Imagine a grid capable of integrating more renewable power and cleaner, more affordable, electric vehicles. These are just a handful of smart grid possibilities.

Energy Smart Florida

represents an overall investment of about \$800 million. It is supported by a \$200 million stimulus grant from the U.S. Department of Energy. The remainder will be funded by FPL as capital and operating expenditures.

The smart meter

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Energy Smart Florida will lay the foundation for a stronger, smarter, and more efficient electrical infrastructure with lasting benefits for the future

Summary

- **FPL has a strong record of providing outstanding service and making smart investments on behalf of customers**
 - Cost: Lowest bills of all 55 utilities in the state
 - Reliability: 99.98 percent—among the best in the nation
 - Award winning Customer Service
- **Energy Smart Florida will help FPL continue to deliver a high level of service reliability over the long term and give customers more information to better manage their energy use and monthly bills**

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