



# Smart Grid: The Power of Information

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“Think of the Smart Grid as the internet brought to our electric system.”

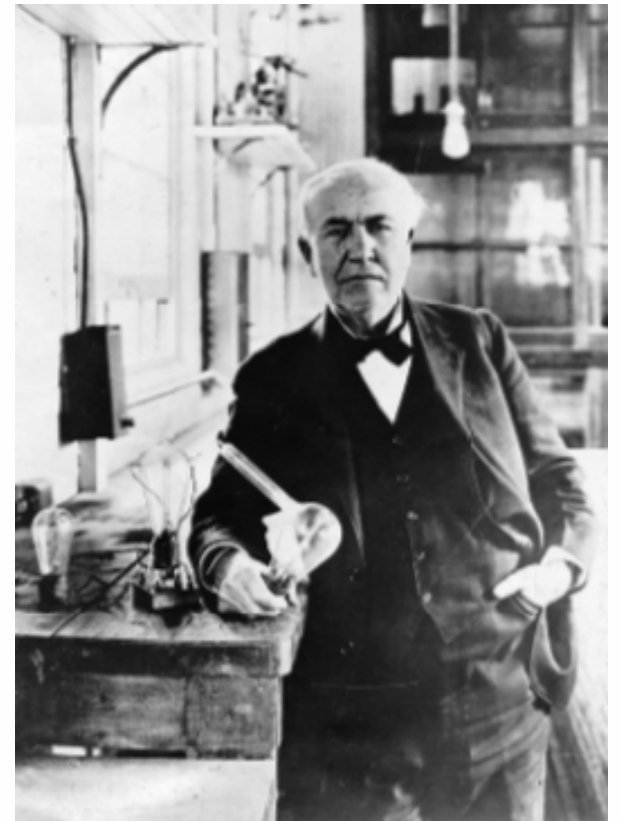
- U.S. Department of Energy, *The Smart Grid: An Introduction*

$C + S + S = SG$

Communications

Sensors

Software



# Smart Grid: Empowering Consumers



As defined by Congress, smart grid capabilities should include the following:

- Provision to consumers of timely information and control options.
- Deployment of `smart' technologies (real-time, automated, interactive technologies that optimize the physical operation of appliances and consumer devices) for metering, communications concerning grid operations and status, and distribution automation.
- Integration of `smart' appliances and consumer devices.
- Development and incorporation of demand response, demand-side resources, and energy-efficiency resources.

(Section 1301, Energy Independence and Security Act of 2007, P.L. 110-140)

# Building a smarter grid



## Drive adoption

Support incentives and mandates to **accelerate the deployment of smart meters** and in-home devices

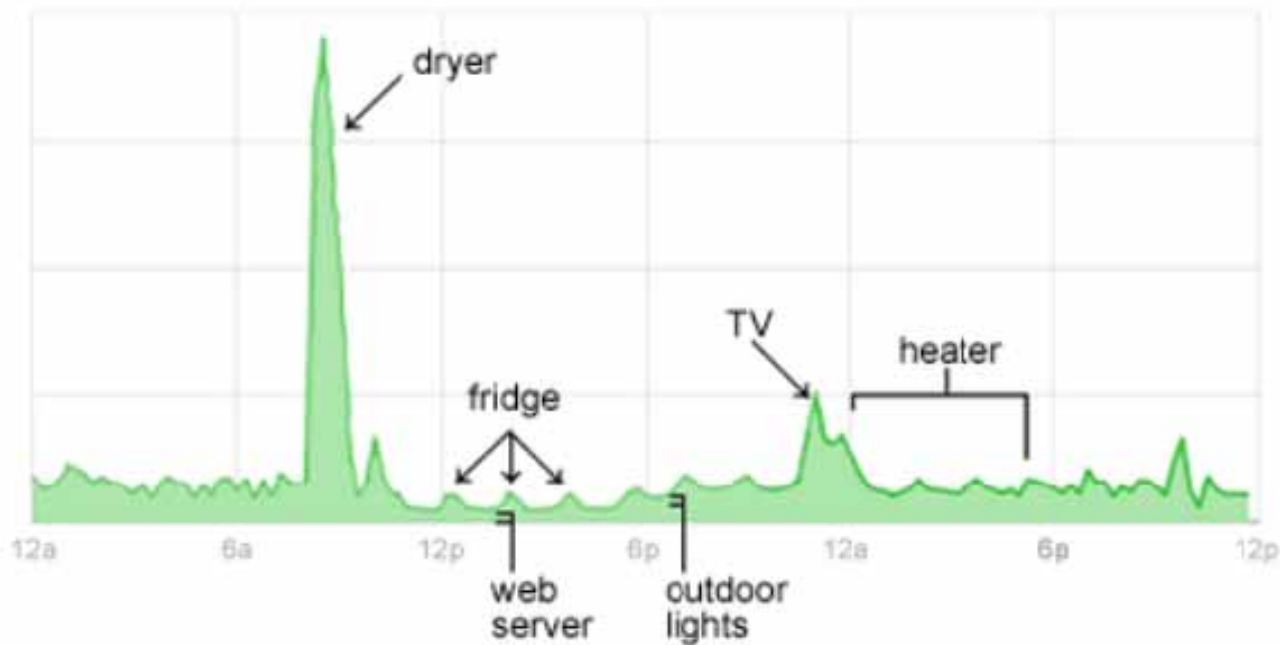
## Put users first

Ensure consumers have **real-time access** to their energy data

## Promote open standards

Support **open protocols and standards** that encourage innovation and access to information

## Home Electricity Use



### Analyze:

Get better information about how you use energy and what you can do to be more efficient.



### Save:

Reduce your energy bills and carbon footprint by making smart decisions about your energy use.



### Share:

Strike up a little friendly competition to see how your energy consumption compares to your friends and neighbors.

# A path to energy saving

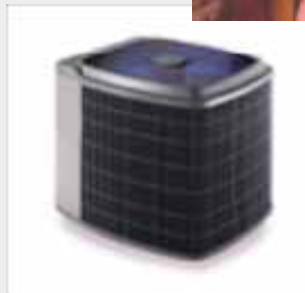


## Energy Information



5-15% Savings

## Efficiency Investments



20-40% Savings

## Demand Response



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