

Energy Conservation and Efficiency: The Opportunity to Engage Citizens More Directly and Creatively

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Founder, Commons Link**

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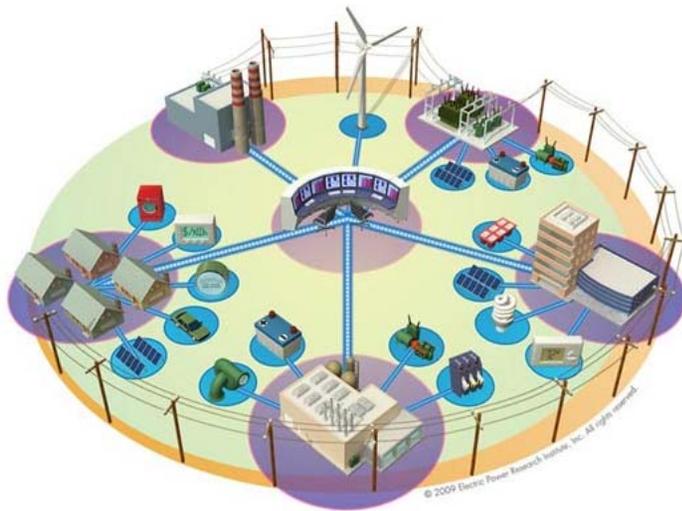
For the Energy and Telecommunications Interim Committee

Thursday, January 14th, 2010

Energy Policy: “Promoting Conservation” and
“Promoting Energy Efficiency Incentives”

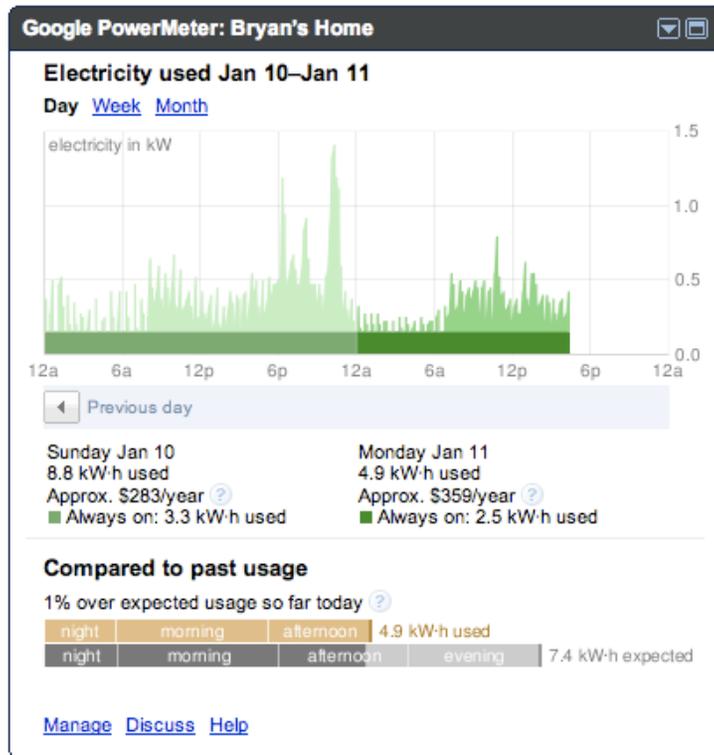
Smart Grid/Smart Home

- Smart grids and smart homes are an opportunity
- Utility grid + information technology \Rightarrow control
- Control can deliver conservation and efficiencies
- Outside the home by utility vs. inside by occupants



 ***Substantive conservation and efficiency opportunities exist on both sides of the meter.***

Energy Conservation and Efficiency Begin with Measurement



 **Resource use data must be available to home occupants to engage them and promote energy conscious behavior.**

Current Feedback Model

JANUARY						
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12	13	14	15	16	17	18
19	20	21	22	23	24	25
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31						

SEPTEMBER						
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DECEMBER						
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Current utility data accessibility limitations and billing practices limit the potential for engagement and behavioral change.

“Real time electricity monitoring works . . . 24 hours later doesn’t”

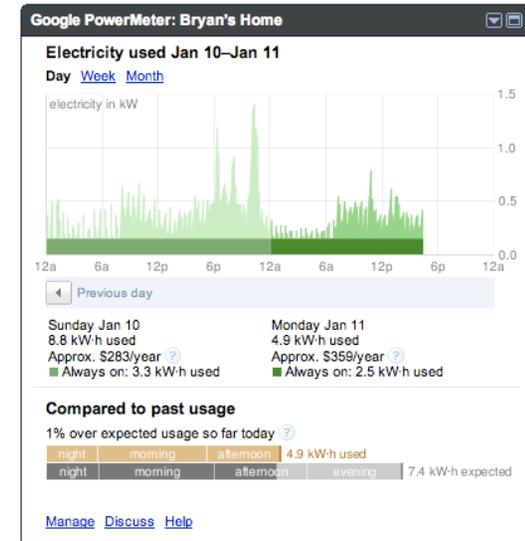
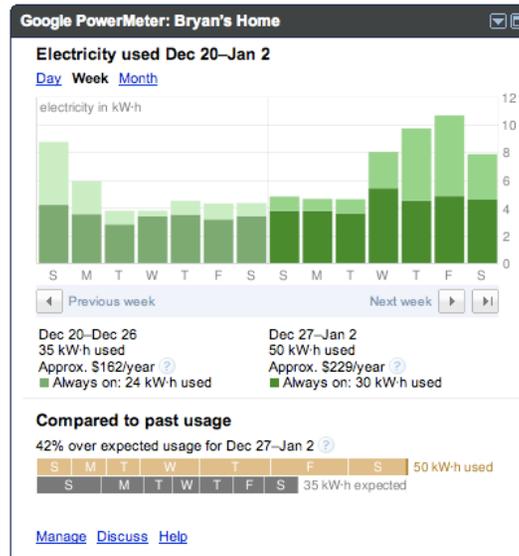
- “For a long time, we have known that people will change their habits if they are exposed to feedback in real time.” - Tom Igoe, NYU researcher



- “Real time energy monitoring is an energy efficiency breakthrough. Studies show (and we've proven in our own usage) that seeing electricity usage firsthand, in real time, leads to substantial reductions - 15% savings on electricity bills is not uncommon.” - energy circle.com

 ***Real time information actively engages people in their resource use via \$ savings, competition/games.***

Consumer Access to Data



 **Consumer access to real time electricity use data promotes energy conservation and efficiency.**

MCA 2009

- 15-32-109. Credit for energy-conserving expenditures. (1) Subject to the restrictions of subsection (2), a resident individual taxpayer may take a credit against the taxpayer's tax liability under chapter 30 for 25% of the taxpayer's expenditure for a capital investment in **the physical attributes of a building or the installation of a water, heating, or cooling system in the building, so long as either type of investment is for an energy conservation purpose**, in an amount not to exceed \$500.
 - (2) The credit under subsection (1):
 - (a) may not exceed the taxpayer's tax liability; and
 - (b) is subject to the provisions of 15-32-104.



Legislative opportunity: Ensure tax credit includes whole-home energy monitoring systems.