

The Power of Information:

Using energy information to engage consumers in energy saving

Harry Wingo
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"If you cannot measure it,
you cannot improve it."

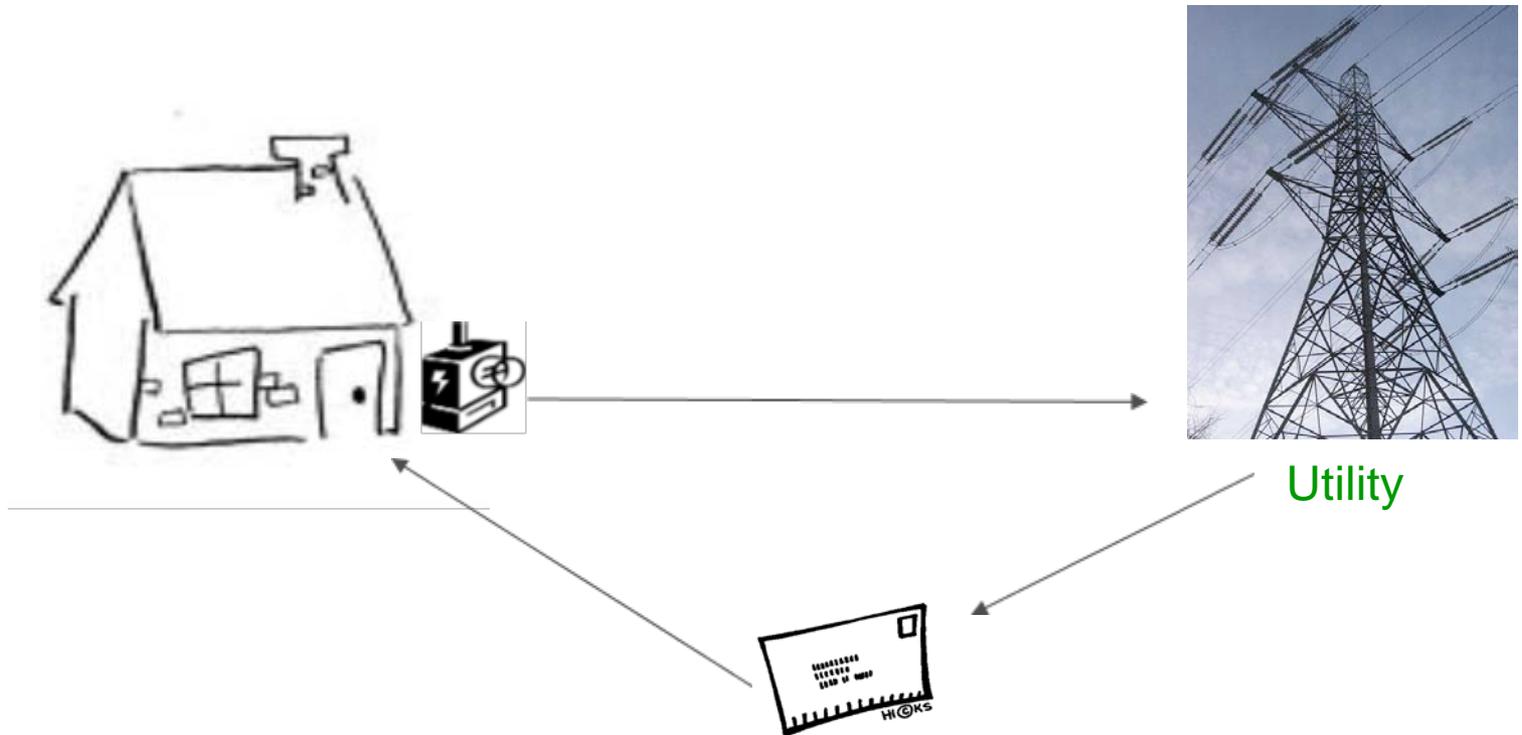
— Lord Kelvin



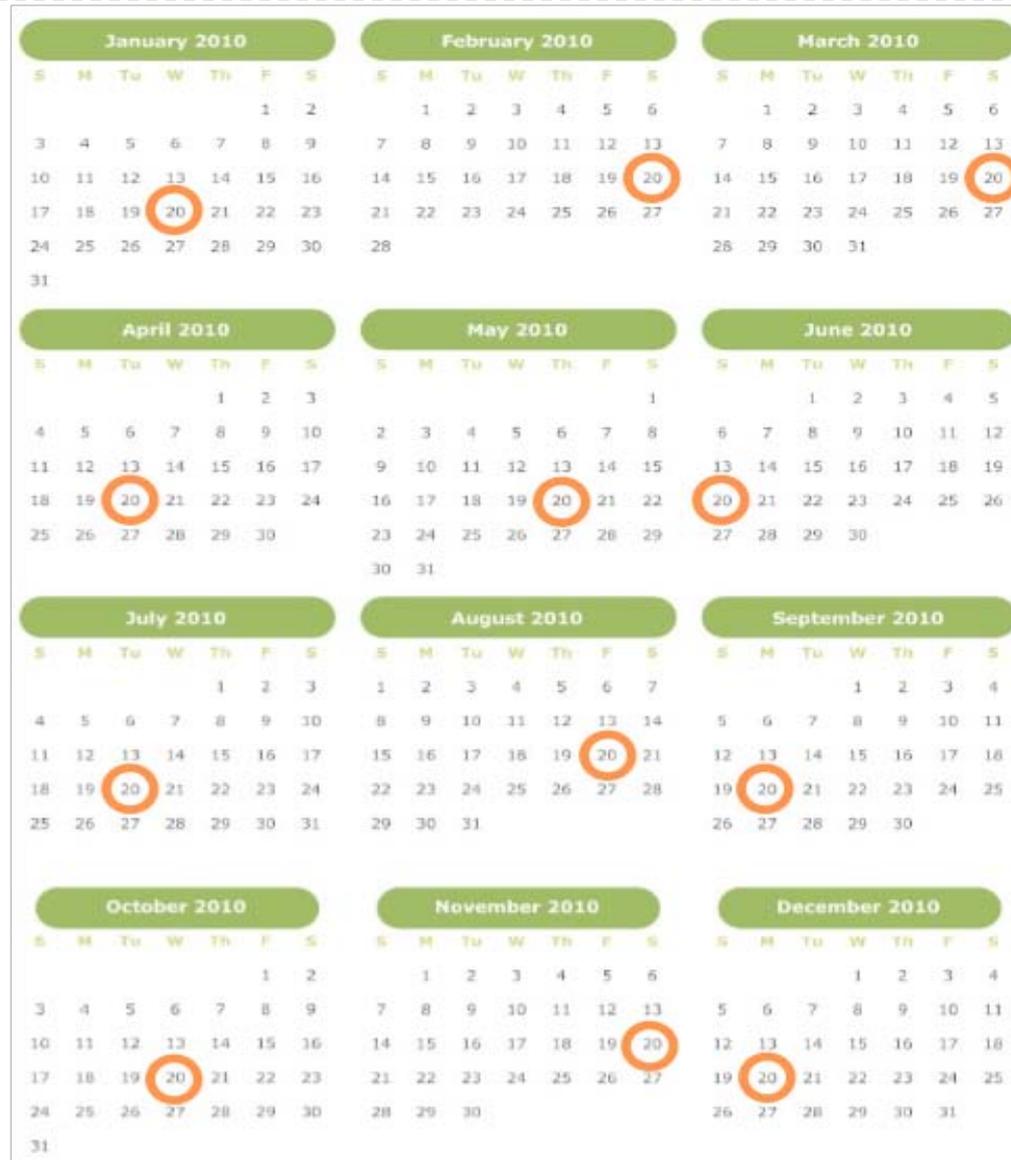
What's the problem?



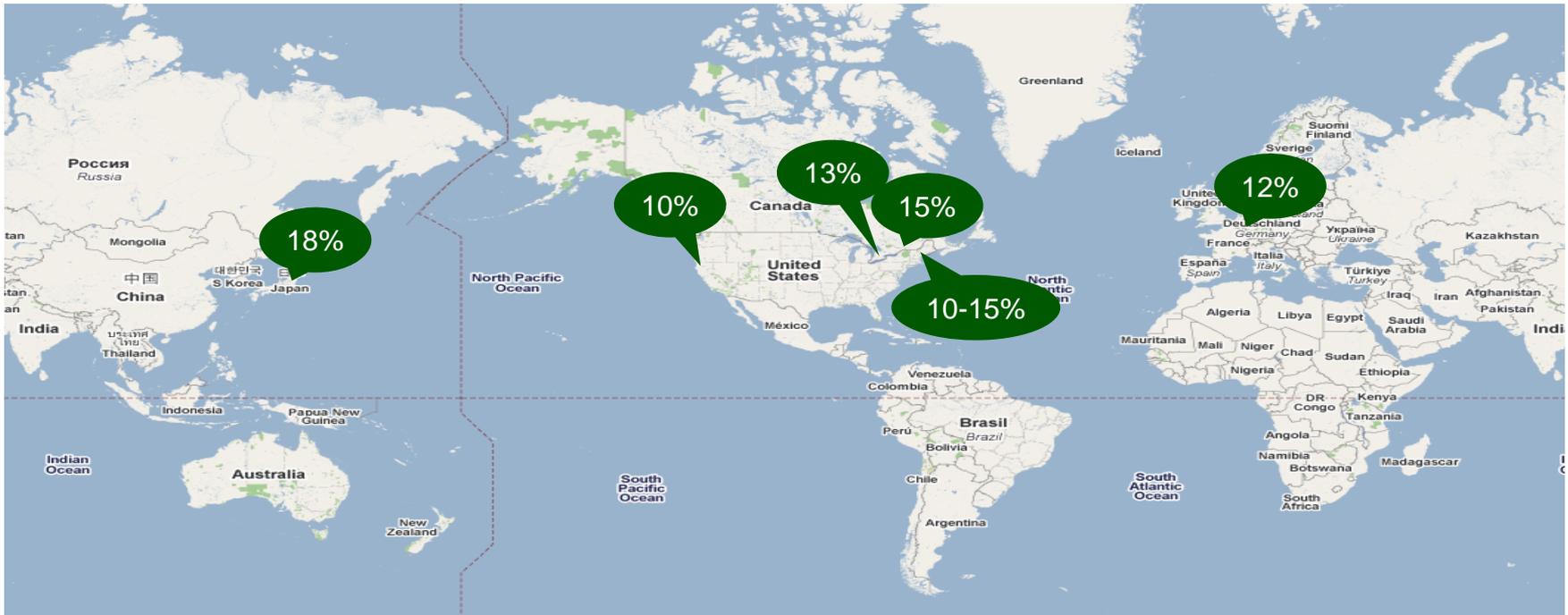
Consumers receive home energy information via monthly bill – data is inaccessible, offline and not very useful



One data point per month

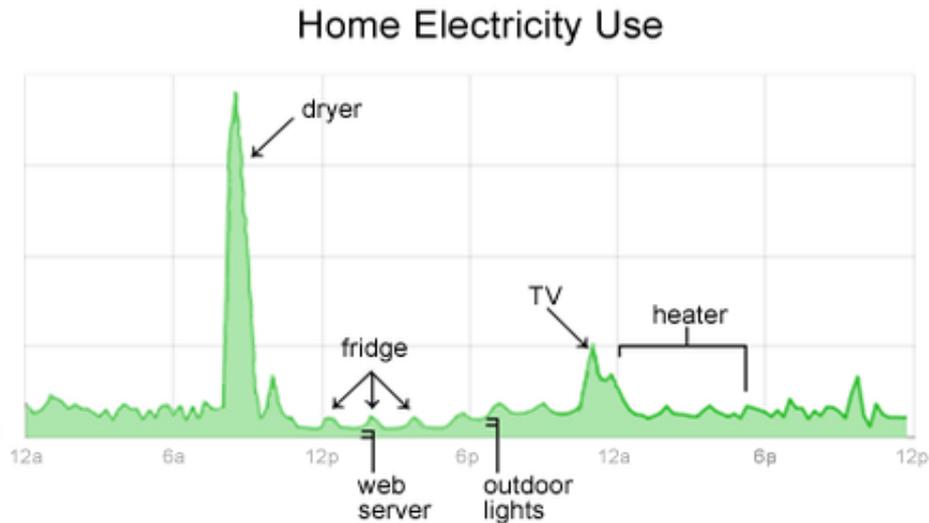


Direct feedback leads to energy savings



- On average, people reduce their energy by 5-15% just by having direct feedback on their energy consumption
- A 10% reduction in home energy use in 2015 could lead to roughly \$30 billion in annual energy bill savings across the U.S., or roughly \$240 per customer per year.

Vision: Every household should have access to timely, useful and actionable information on their energy use to empower people to make smarter energy choices.



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.

Make solutions easily accessible



Web [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Mail](#) [more](#) Classic Home | [My Account](#) | [Sign out](#)

iGoogle [Advanced Search](#) [Search Preferences](#) [Language Tools](#)

Home
Weather
Google Map Search
Google Calendar
Quotes of the Day
Updates
Friends
Chat
Search, add, or invite
Set status here

Quotes of the Day
If a cluttered desk is the sign of a cluttered mind, what is the significance of a clean desk?
- [Laurence J. Peter](#)
Americans detest all lies except lies spoken in public or printed lies.
- [Edgar Watson Howe](#)
I have often depended on the blindness of strangers.
- [Adrienne E. Gusoff](#)

Weather
San Francisco, CA
 55°F Current: Sunny
Wind: S at 5 mph
Humidity: 69%
Tue 63° | 49° Wed 60° | 46° Thu 62° | 50° Fri 56° | 47°

Google Powermeter: Energy user's home
New utility: Tomorrow is a Flex Alert Day! Please Conserve
Electricity used Nov 12–Nov 13
House, Real-time
Day [Week](#) [Month](#)
electricity in kW

Click here to enlarge
Thursday Nov 12: 7.4 kW-h used, Approx. \$458/year, Always on: 3.9 kW-h used
Friday Nov 13: 3.2 kW-h used, Approx. \$566/year, Always on: 1.8 kW-h used
Compared to others: This usage on Nov 12 is 3.2 kW-h
Compared to past usage: Might exceed today's energy budget
Manage Discuss links

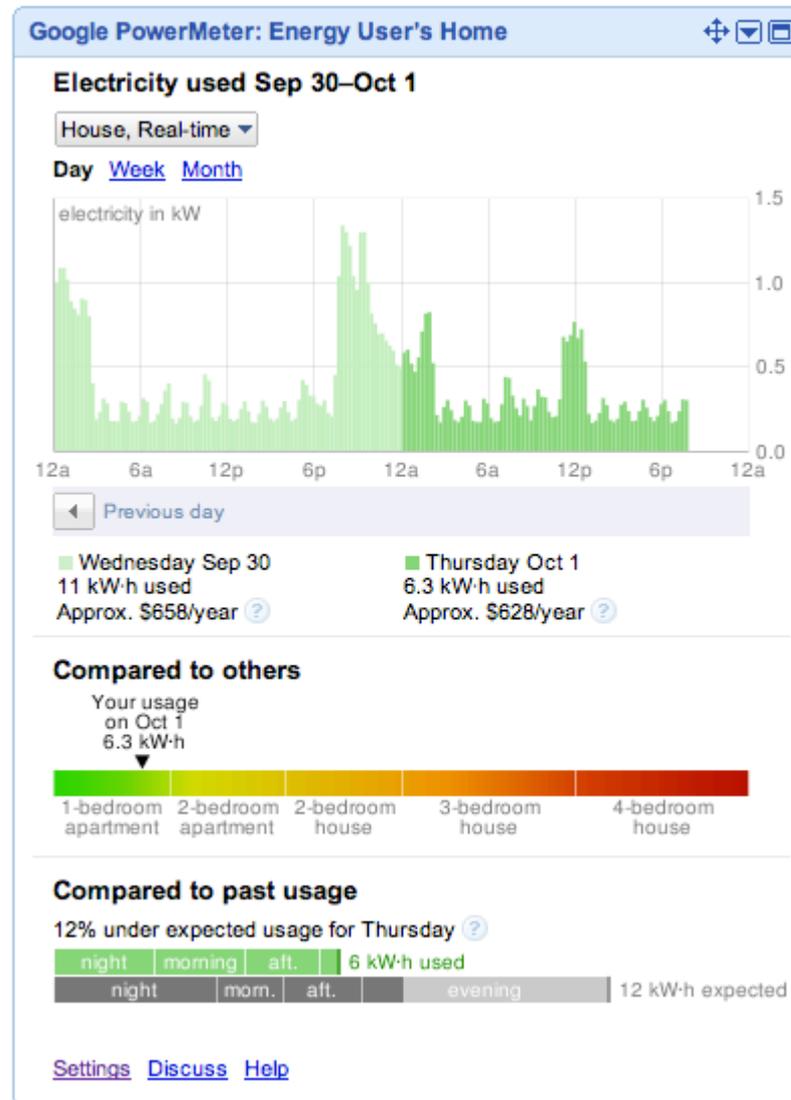
Google PowerMeter: Energy User's Home
Your Utility: Tomorrow is a Flex Alert Day! Please Conserve
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Compared to others
Your usage on Nov 13: 3.2 kW-h

Compared to past usage
Might exceed today's energy budget

Manage Discuss Help

Provide useful information



Google powermeter



Track energy over time

See how much energy you have used by the day, week or month.

Always on power

The darker shaded portion of the graph shows power that is always on, such as any appliance that goes on standby mode. Many appliances are always on; you just don't know it. Discovering these is one of the easiest and fastest ways to reduce energy use and save money.

Customize your experience

Add your estimated cost per kWh, sign up for weekly emails, and share your usage with family and friends.

Google PowerMeter: Energy User's Home

Electricity used Sep 30-Oct 1

Day [Week](#) [Month](#)



Previous day

Wednesday Sep 30

7.4 kWh used

Approx. \$485/year

Always on: 3.9 kWh used

Thursday Oct 1

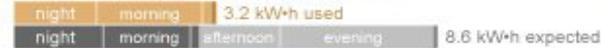
3.2 kWh used

Approx. \$223/year

Always on: 1.8 kWh used

Compared to past usage

6% under Thursday's energy budget



[Manage](#) [Discuss](#) [Help](#)

Predict your costs

Google PowerMeter helps you to predict your annual energy bill so that you can start making changes and saving early.

Budget Tracker

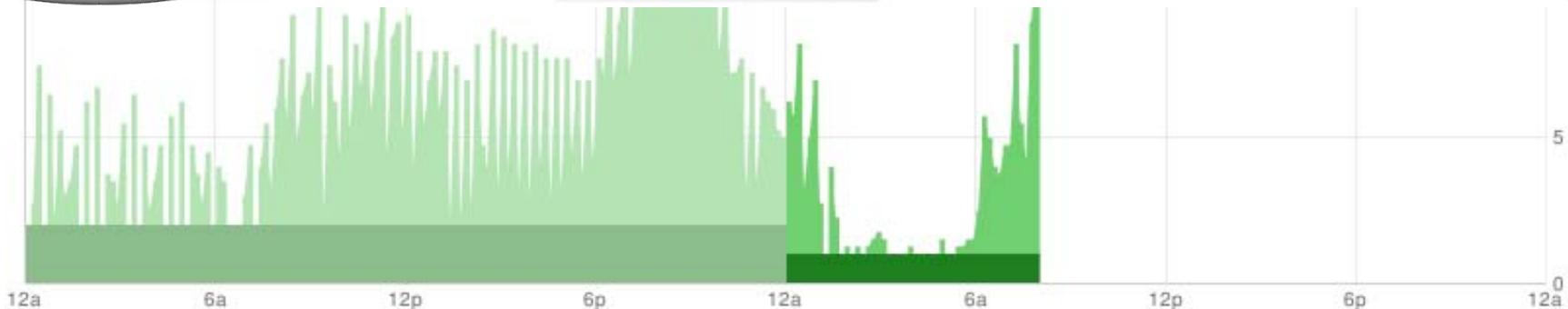
Set an energy savings goal for yourself and track your progress.

Join the community

Get tips on how to save from other Google PowerMeter users and share what has worked for you.

Have a question?

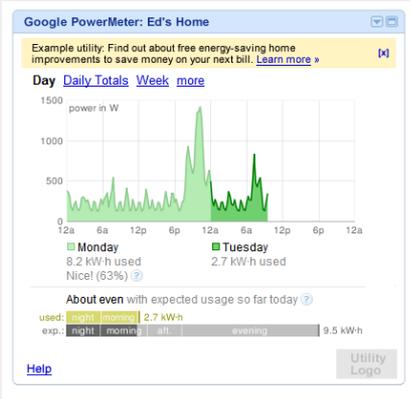
Learn more about Google PowerMeter from our online help center.



Maximize consumer choice



Energy Information



5-15% Savings

Efficiency Investments



>15% Savings

Demand Response, Dynamic Pricing, Smart Devices



???

Consumer energy information policies

Provide consumers access to energy information

- Access to usage data generated from AMI
- Strive for near real-time feedback
- Encourage multiple pathways



Ensure openness and interoperability

- Open standards to encourage innovation and consumer choice



Maintain privacy and security

- All consumer data kept private unless consumer grants others access



Thank you!

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