# Consumer Energy Information: A Call to Action

**December 15, 2009**
**Copenhagen, Denmark**

"If you cannot measure it, you cannot improve it."
-- Lord Kelvin


**Summary**

Google, GE, The Climate Group, and NRDC, supported by a broad group of companies and organizations, call on governments across the world to provide citizens access to real-time information on home energy use. Studies show that simply giving people this information can result in energy savings of up to 15%. And with straightforward additional steps we can capture even greater savings. The bottom line: We can't solve climate change if people are in the dark about how they use energy in their own homes.


**Call to Action**

Citizens need better access to information about how they use energy – and they need the tools to use less. Studies show that when people have access to direct feedback on their home energy use, they save up to 15% based on simple behavioral changes such as turning off lights and switching off devices that are always on even when they're "off."[1] Changing light bulbs, replacing inefficient appliances, and weatherizing homes lead to even greater savings. And as we add computer chips to everything from thermostats to washing machines, we increasingly enable consumers to better manage their energy use.

By empowering citizens with information and tools for managing energy, governments and businesses around the world can harness the power of hundreds of millions of people to fight climate change – and save consumers hundreds of billions of dollars in the process. Specifically, countries should ensure their citizens have access to basic information such as:

- Real-time or near real-time home energy consumption
- Pricing and pricing plans
- Carbon intensity, including source and carbon content of electricity

This information can be delivered to citizens with technologies that exist today and can be rapidly deployed. To get there, countries can provide incentives for energy monitoring equipment and set rules for consumer access to information. They can also enact stronger energy efficiency standards, as well as provide financial incentives and smarter energy pricing plans.

If all households in developed countries achieved a 15% energy savings by 2020, it would mean about a 470 $MtCO_2$ equiv. reduction in greenhouse gas emissions. This is equivalent to:

- About 10 Denmarks or 100 Copenhagens;[2]
- Taking more than 200 million cars off the road in the EU;[3]
- Shutting down 124 large coal power plants;[4] or
- 2 to 4 times more than the total estimated reductions in $CO_2$ emissions from the first phase of the EU Emissions Trading System between 2005 and 2007.[5]

By providing people with real-time home energy information we can make a major down payment on tackling climate change while saving money and creating exciting new industries -- and jobs.

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[1] See e.g., Sarah Darby, Univ. of Oxford, The Effectiveness of Feedback on Energy Consumption (Apr 2006)
[2] Based on IEA data and Denmark and Copenhagen population statistics
[3] Based on European Commission estimates at http://ec.europa.eu/environment/air/transport/co2/co2_home.htm
[4] Based on EIA data
[5] Ellerman, D. and Buchner, B. (2008). "Over- Allocation Or Abatement? A Preliminary Analysis of the EU ETS Based on the 2005–06 Emissions Data." *Environmental and Resource Economics*, 41, 2

**Signed:**

Google Inc.
GE
The Climate Group
NRDC
Alliance to Save Energy
Center for American Progress
Digital Energy Solutions Campaign
Dow
Energy Future Coalition
Intel
Kleiner Perkins Caufield & Byers
Smart Green Grid Initiative
US Green Building Council
Whirlpool