



## PRESS RELEASE

### GE Targets Net Zero Energy Homes by 2015

**LOUISVILLE, KY - July 14, 2009** – GE announced today that by 2015 it is developing a turn-key product portfolio that will empower consumers to build – both new home builders and existing homeowners – to efficiently consume, manage and generate electricity to enable an overall net zero annual energy cost. In addition to GE's current portfolio of energy-efficient lighting and appliances products and demand response technology that GE is currently developing, GE plans to develop residential power generation products like solar PV and residential wind products, well positioning GE to make the net zero energy home a reality.

"We have a long, trusted relationship with consumers, strong presence with home builders, demand response appliance technology and, the extremely critical, smart grid technology leadership of GE Energy that makes the GE net zero energy home an exciting prospect for our future growth," said GE Consumer & Industrial President and CEO James Campbell.

The GE net zero energy home offerings will be comprised of three major groups within the product portfolio: energy efficient products, energy management products and energy generation/storage products.

**Energy Efficiency Products:** GE's portfolio of energy- efficient appliance and lighting products will help enable the net zero energy home by reducing energy consumption in the home.

- In 2008, the number of GE ENERGY STAR® qualified appliance models totaled over 550 models. In fact, 54 percent of the GE appliance products are ENERGY STAR qualified. The number of ENERGY STAR qualified lighting models totaled over 271. The majority, 99.3 percent, of the 2008 GE Compact Fluorescent lamp sales were ENERGY STAR qualified models.
- The U.S. Department of Energy and the U.S. Environmental Protection Agency have awarded GE Consumer & Industrial the ENERGY STAR® Sustained Excellence award for the fourth straight year. Also, this marks the sixth year that GE has been acknowledged as an ENERGY STAR Partner of the Year.

**Energy Management/Demand Response Appliances:** GE demand response products will enable consumers to manage their costs and energy consumption while helping reduce utility demand peaks, thereby reducing the need for more power generation – depending on utility participation.

- GE plans to be the first manufacturer to offer a full suite of demand response appliances that will work with utility smart meters to help shed load from the grid,

while helping consumers save money during peak demand usage and pricing times. GE appliances and products will work with smart meters to delay or reduce energy use without major interruption to consumer's lifestyles by giving the consumer control over their energy use.

Residential housing consumes 37 percent of the electricity produced in the US. Appliances, Lighting and HVAC represent 82 percent of electricity consumed in the home. A recent Federal Energy Regulatory Commission report has identified that residential demand response programs represent the largest potential reduction in U.S. peak demand. The potential of residential demand reduction programs represents approximately a 7 percent reduction in total US peak demand, or 65 GW over the period 2009 -2019. This avoided demand is equivalent to the generation capacity of 108 coal plants, (600 MW typical coal plant)

- As the second single largest energy users in the home, incorporating highly efficient water heaters into the net zero energy homes is critical. GE will offer the its innovative GE Hybrid Electric Heat Pump Water Heater with demand response technology in late 2009. The new GE Hybrid Electric Heat Pump Water Heater is designed to use about 2300 kWh per year, which is less than half of the energy of a 50-gallon tank water heater that uses approximately 4800 kWh per year. The energy savings of approximately 2500 kWh per year represents a savings of about \$250 per year based on 10.65 cents per kWh. In addition to the highly efficient Hybrid, GE plans to develop additional innovative water heating options for the Net Zero Energy Home.

*Example:* There are about 60 Million U.S. homes with electric tank hot water heaters, if 10 percent installed a GE Hybrid Heat Pump Water Heater, this would save 15 Billion kWh annually of energy. In addition, the demand response capabilities of the GE Hybrid during peak demand time could reduce the energy consumption associated with the 6 Million units by as much as 22.8 Gigawatts or the equivalent of reducing the generating capacity of 40 coal plants during peak demand time.

- In 2010 GE will introduce the **Home Energy Manager** – the central nervous system for the net zero energy home that will work in conjunction with all the other enabling technologies in the home to help homeowners to optimize how they consume energy. In addition to the Home Energy Manager, GE will introduce a line of smart thermostats, also available in 2010. Together, the Home Energy Manager and smart thermostats will inform consumers when and how they are using energy and empower them to make decisions when they should use energy from the grid, use stored energy, and self generated energy or other sources since up to 31 percent of the homes energy use comes from HVAC, the smart thermostats can help consumers significantly save on their energy bills.

*Example:* Based on data from the Olympic Peninsula, Gridwise Test Bed demonstration project, consumer awareness created by Time of use pricing (TOU) & Real Time pricing (RTP) has shown significant consumer savings. Consumers under a TOU/RTP billing plan supported by enabling technologies, such as pricing

communication, a home energy display, smart thermostats, and smart demand response appliances saved as much as 27-30 percent of their monthly bill.

Brattle report– *The power of Experimentation – New Evidence on residential demand response*, May 11, 2008, Ahmad Faruqui, Sanem Sergici

### **Distributed Generation/Storage**

- Collaborating with GE Energy, products like solar PV, advanced energy storage, next generation thin film solar, small wind - and, in the coming years, incorporate other generation products being developed at Global Research Center will play an integral part in the Net Zero Energy Home.

### **About GE Consumer & Industrial**

GE Consumer & Industrial spans the globe as an industry leader in major appliances, lighting and integrated industrial equipment, systems and services. Providing solutions for commercial, industrial and residential use in more than 100 countries, GE Consumer & Industrial uses innovative technologies and ecomagination<sup>SM</sup>, a GE initiative to aggressively bring to market new technologies that help customers and consumers meet pressing environmental challenges, to deliver comfort, convenience and electrical protection and control. General Electric (NYSE: GE), imagination at work, sells products under the Monogram®, Profile™, GE®, Hotpoint®, SmartWater™, Reveal® and Energy Smart® consumer brands, and Entellisys®, Tetra®, Vio™ and Immersion® commercial brands. For more information, consumers may visit [www.ge.com](http://www.ge.com).

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### **GE Media Contact:**

Kim Freeman

502-452-7819

[Kim\\_Freeman@ge.com](mailto:Kim_Freeman@ge.com)