Background
Just south of Atlanta, the award-winning community of Serenbe is focused on creating an easy-living sustainable lifestyle that stretches from locally grown produce to energy efficient home design. To highlight its approach, Serenbe has created a unique partnership with Bosch Thermotechnology Corp. to build energy efficient housing, including Net Zero home solutions, using an affordable whole-systems approach.

What is Net Zero?
The Bosch Net Zero home is a systems approach to creating a house that is not an energy drain on the planet’s finite resources. It’s technology helps homeowners to reduce their monthly utility bills and protect the environment.

Bosch Net Zero Home At Serenbe
Case Study

Net Zero Home Energy Solution
in Eco-Friendly Community

Project Goals:
- Combine products for a whole system approach
- Energy efficient housing
- Create a home that makes as much energy as it uses

Whole System Approach
Bosch has assembled a comprehensive suite of heating, cooling, water heating, electricity generating technologies and energy-efficient appliances that, when installed in a home, reduce the homes energy usage due to intelligent product designs and higher efficiencies. In addition, this approach enables the home owner to generate enough power to offset the already reduced energy demand. To demonstrate how it works, Bosch has worked with its partners to build the 1,650-square-foot Bosch Net Zero Home in Serenbe.
A Bosch electric heat pump water heater uses the heat and humidity from the surrounding air to heat the water, cooling and dehumidifying the home at the same time. The heat pump water heater is twice as effective compared to a traditional tank water heater, providing up to 60% savings in water heating costs.

A host of Bosch appliances, including an Axxis washer and dryer; a 24-inch DLX Bar Handle dishwasher; a 30-inch, single-wall oven; a built-in microwave oven; and a five burner cooking surface, ensure that the family can cook and wash using minimal energy.

The Bosch home generates electricity with a Bosch Solar Photovoltaic System. Over a year under ideal conditions, the home’s energy usage is forecasted to net out at zero, meaning that the home will supply as much energy as it uses.

“We’ve built a suite of smart products that work together as an integrated system and provide a complete solution for those who want the best in energy efficiency, combined with a sustainable, reliable alternative energy source. This powerful portfolio is designed for reliability – meaning precision engineering and design ensuring years of clean, efficient operation for everyday home comfort needs.”

- Jim French, Vice President/Wholesale Sales, Bosch Thermotechnology North America.