

## EMPIRE STATE BUILDING



### HOW DO YOU BUILD GREEN CITIES?



**By developing integrated solutions that enable buildings to use energy more efficiently, lower their greenhouse gas emissions, and offer safety and security to their occupants.**

For Otis, it is both a homecoming and the largest modernization project in the company's 158-year history: refurbishing the elevators in the iconic Empire State Building in New York City. Otis installed the original elevator system in the 1930s and now has been awarded a contract and 10-year maintenance agreement to upgrade the building's 68 elevators and related equipment. The modernization is expected to deliver improved speed, energy efficiency and passenger experience.

#### TAKING THE LEED

We help customers find energy-efficient building solutions, and we look for similar opportunities in our own operations. During the year, we opened a new manufacturing facility in Mirabel, Canada, which was built to rigorous standards set by the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED)—the benchmark for energy and environmental performance in buildings. Another manufacturing facility in Monterrey, Mexico, was LEED Gold certified in 2011. It is our policy to incorporate sustainable practices into all new UTC facilities and target a rating of LEED Gold. To date, 11 of our facilities have earned LEED certification, with seven of them achieving Gold or Platinum levels.





### 3 WORLD TRADE CENTER— A LANDMARK PROJECT

Automated Logic has been chosen to provide the building automation system for the landmark 3 World Trade Center, now under construction in New York City. At 80 stories, it will be the third tallest building in the World Trade Center master plan and has been designed to meet LEED Gold criteria. Automated Logic is part of UTC Climate, Controls & Security.

The building automation system will control and monitor heating, cooling and fire protection equipment as well as provide a direct interface with an innovative fuel cell system designed by UTC Power. The system is designed to provide a comfortable environment for the building's occupants and to help tenants save energy and promote more sustainable operations.

Automated Logic also is providing building systems to 2 World Trade Center and 4 World Trade Center.



Equipped with building controls by Automated Logic, 3 World Trade Center will be one of New York City's greenest skyscrapers.



#### GREEN NOTES



Demand continues to grow for Carrier's sustainable and energy-efficient CO<sub>2</sub>OLtec refrigeration systems. The company has an agreement with major German food retailer "tegut..." gute Lebensmittel to install 50 systems in its stores through 2012. CO<sub>2</sub>OLtec uses carbon dioxide, a natural and environmentally neutral refrigerant that is especially suited for cool climates such as in northern Europe.



Employees at our Kidde plant in North Yorkshire, United Kingdom, have found a way to recycle filter cake, a byproduct in the manufacture of fire-fighting foams. Filter cake contains organic nitrogen and calcium compounds and is now being used in compost, an essential material for gardeners and growers.



In 2011, Sikorsky commissioned a combined heat and power cogeneration facility that produces enough energy to power 84 percent of its 2-million-square-foot Stratford, Conn., site. The new system also provides 85 percent of the site's heating needs, while reducing greenhouse gas emissions by more than 8,900 metric tons annually. Carrier and its NORESKO business served as strategic partners on the project, providing design and construction consultation.