Only 50 days to the Expo 2010: First green world exhibition builds on Siemens technology

Siemens supplies infrastructure worth more than one billion euros for Shanghai

The countdown is on: In about 50 days, the Expo 2010 in Shanghai will open its doors to the world. About 70 million visitors are expected in the Chinese metropolis. It is supposed to be the first green world exhibition in Expo history. Siemens supplied most of the necessary infrastructure to ensure that the stream of visitors can be accommodated in an environmentally friendly manner. Siemens was awarded contracts in connection with the Expo with a total value of more than one billion euros. About 90 percent of this amount is related to environmentally friendly products and solutions. "Once again, we have proven that our environmental portfolio has exactly what cities need to hold events of worldwide importance like the Expo 2010 in accordance with the principles of environmental protection," said Richard Hausmann, CEO Siemens Northeast Asia and President and CEO of Siemens Ltd., China. As a global Expo partner, Siemens has supplied technology used in more than 40 projects on the Expo ground. In addition, Siemens supplied infrastructure that will make this event memorable for all its visitors, including technology for rapid mass transit, clean air, cleaner water and ultra-modern health care in Shanghai. "Our green technology will continue to upgrade the city's infrastructure well after the Expo. Thus, it is a triple win for Expo visitors, for the host city of Shanghai and for Siemens," Hausmann said.

On the Expo ground, preparations have reached in their final stage. Workers are toiling around the clock to drive in the last nails and screws, clean the floors and mount the lights in order to be ready for the anticipated throng of visitors when the doors open on the first green world exhibition in Expo history on May 1, 2010. In total, about 60 pavilions are being built on the exhibition ground. Five of those pavilions will remain open to visitors after the exhibition: the China Pavilion, as the landmark of the Expo, the Expo Boulevard, which is about 1,000 meters long, the Theme Pavilion, the Expo Center and the Performance Center which has about 18,000 seats for events.

The hundreds of workers installing the latest green technology in these buildings give a face to the slogan of this year's world exhibition, "Better City, Better Life." Solutions for sustainable urban de-
Development will be exhibited in the pavilions. But even the Expo grounds itself are a perfect example of green urban infrastructure: More than 50,000 energy-saving light-emitting diodes (LEDs) produced by Siemens' lighting subsidiary Osram will illuminate the pavilions and boulevards. LEDs consume 80 percent less electricity than conventional incandescent bulbs. Also, the five permanent pavilions feature the latest in Siemens building technology, thereby reducing energy consumption by 25 percent compared to conventional buildings. To assure reliable electricity power and a safe experience at the Expo, Siemens has installed electricity-saving power distribution and fire protection systems on the grounds.

The China Pavilion, with a total surface area of 160,000 square meters, is one of the largest Siemens projects at the Expo. Built entirely with energy-saving building technology from Siemens, it is destined to be remembered as the Expo's green landmark. Another prime example of the energy efficiency provided by Siemens technology is the Hamburg House, a so-called "passive house" that consumes less energy than nearly any other building in the world. In fact, it will generate nearly all the energy it needs from the warmth of appliances used in the house and the people who will visit the house during the Expo. Hardly any greenhouse gases are generated.

In addition to solutions for reduced energy consumption, Siemens also supplied infrastructure in advance of the Expo that will assure adequate power supplies to the city of Shanghai both during and after the event. This summer, when energy consumption peaks in Shanghai anyway as it does every year, the anticipated millions of visitor to the Expo will pose a severe test for the city's energy supply. The demand will be met by the world's most efficient coal-fired power plant in Waigaoqiao. Built by Siemens, this plant alone covers 30 percent of Shanghai's energy demand, but compared to conventional coal-fired power plants in China, it uses more than a million tons less coal per year. The higher efficiency reduces the power plant's CO2 emissions by almost three million tons per year. Just outside Shanghai, moreover, Siemens will open its first wind energy production site this year. The facility will meet the demand for wind blades for the Chinese market and beyond. Through that China can accommodate a larger portion of its growing demand for power with electricity from renewable sources.

Also in preparation for the Expo, Siemens has modernized a large number of office buildings in Yangpu, the knowledge and innovation district of Shanghai. These measures have reduced the CO2 emissions of these buildings by 16 percent. To supply people with clean drinking water, Siemens has installed ultra-modern filter technology in the water treatment facilities not far from the city. Other benefits to people's health have been assured by the installation of the latest technology for the treatment of cancer, which Siemens supplied to the Shanghai International Tumor Hospital.
in the amount of roughly 150 million euros. The biggest order that Siemens was awarded in connection with the Expo preparations in Shanghai was for the Industry Sector, which supplied key components for 100 environmentally friendly, high-speed trains that will ultimately transport passengers from Beijing to Shanghai in less than five hours. The terminal of the high-speed line in Shanghai serves as part of the Hongqiao Transportation Hub, where Siemens installed China’s largest parking management system, and will be launched right before the Expo.

"Large-scale events like the Expo 2010 and the Olympic Games are a catalyst for sustainable urban development," Hausmann said. A good example of this effect is represented by the 1972 Olympics in Munich. At that time, Siemens supplied subway trains to accommodate the large number of visitors and relieve traffic congestion. From then until now, these trains have transported many hundreds of millions of passengers, reducing the city’s CO₂ emissions by several million tons. By the year 2018, Siemens will supply infrastructure to more than 20 other host cities of major events, including infrastructure for stable power grids, public mass transit and healthcare. More than 2,000 Siemens employees are working on infrastructure projects for such events. Besides preserving jobs, those projects will also improve the experience of those events and the quality of life of the cities in which they take place.

Additional information and photos can be found at www.siemens.com/press/expo.

Siemens AG (Berlin and Munich) is a global powerhouse in electronics and electrical engineering, operating in the industry, energy and healthcare sectors. For over 160 years, Siemens has stood for technological excellence, innovation, quality, reliability and internationality. The company is the world’s largest provider of environmental technologies, generating €23 billion – nearly one-third of its total revenue – from green products and solutions. In fiscal 2009, which ended on September 30, 2009, revenue totaled €76.7 billion and net income €2.5 billion. At the end of September 2009, Siemens had around 405,000 employees worldwide. Further information is available on the Internet at: www.siemens.com.