



Green buildings for developing, manufacturing and marketing green products

A complete Green Life Cycle

Plantronics, Inc. (NYSE: PLT)



- Founded in 1961. Corporate Offices in Santa Cruz, CA
- World Leader on Hands-Free Communication.
- Call Center, Home-Office, Mobile, Gaming, Hearing Impaired and Music applications → **Sound Innovation**
- Clarity and Altec-Lansing are part of Plantronics, Inc.
- First Headset on the Moon – “One small step..”
- Employs >6,400 people worldwide.
- Offices in 20 countries
- Factories in Tijuana, Mexico and Suzhou, PRC
- 9 Distribution Centers spread around the world
- 4 Design Centers (US, UK, Mexico and China)
- Worldwide Suppliers (> 90% in Greater Asia Region).

Where is Suzhou?



- Property secured is 53,600 square meters (~ 576,000 square feet) in three adjacent lots.
- Site is at the Northeastern portion of the Loufeng Sub-District of Suzhou Industrial Park
- The Northern portion of the lot faces the Yang Cheng Lake (200 meters away)

Suzhou

Shanghai

The Project – Basic Data



Manufacturing Building

LEED Certified: Gold

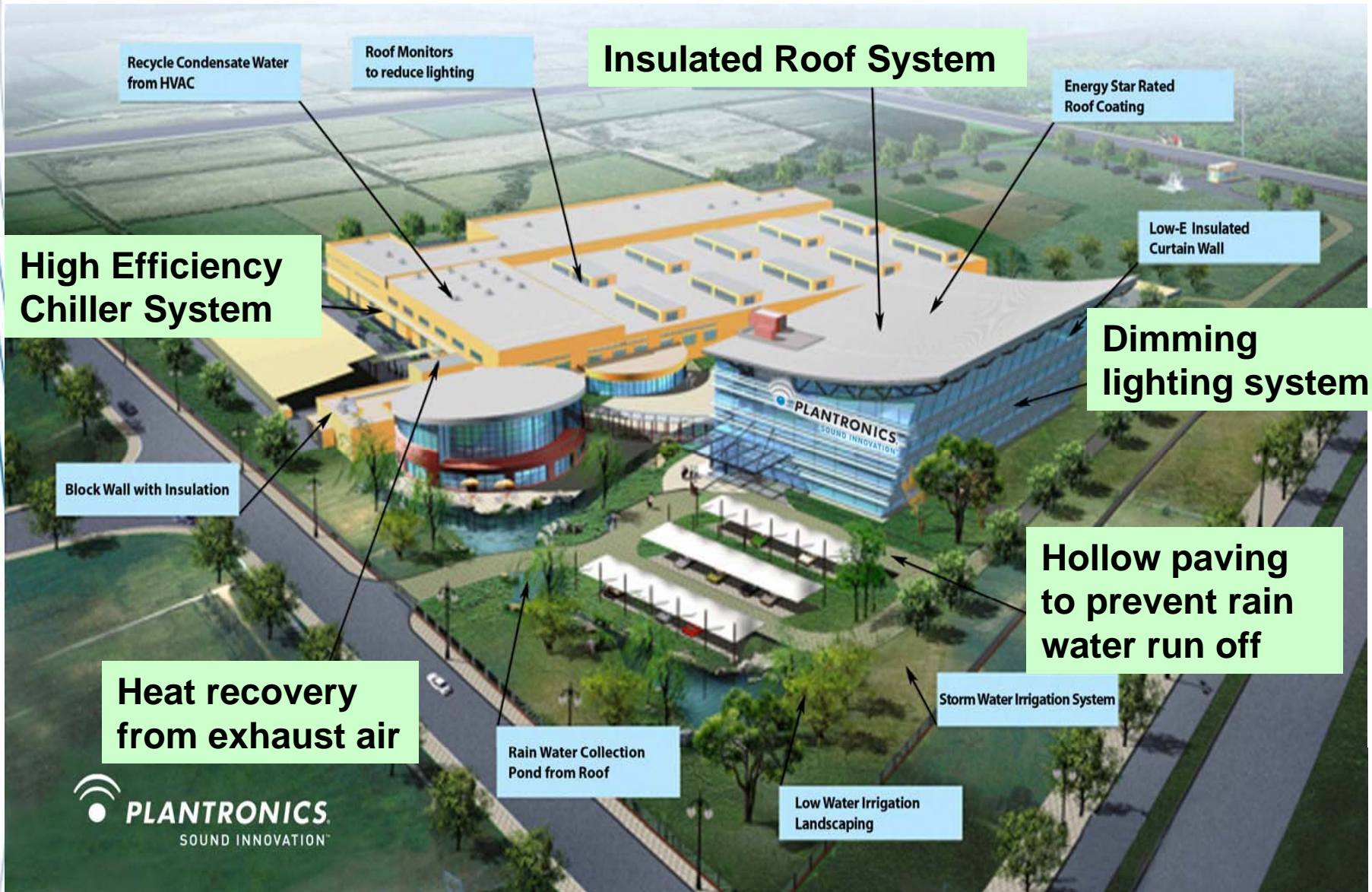
13,800 square meters

Office Building

LEED Certified: Silver

6,800 square meters

The Project: Basic Data



The Project: Basic Data

Recycle condensate water from HVAC

Roof Monitors to reduce natural lighting

Energy Star Rated Roof Coating

Insulated Roofing System

High Efficiency Chiller System

Low-E Insulated Curtain Wall

Dimming System to Save Energy

Block Wall with Insulation

Hollow Core Paving to Reduce Rain Water run off

Heat Recovery from Exhaust Air

Rain water collection pond from Roof

Water pumping system as fire suppression approved by insurance carrier in US

Low water irrigation landscaping

The Team

- **Owner:** Plantronics, Inc.
- **Architect:** Gary Seshagiri – Bechtel, San Francisco
- **Engineers:** June Jiang, Maggie Ma, Eric Ma and Catherine Li from Bechtel, Shanghai
- **Contractor:** Bechtel
- **LEED Consulting:** EMSI, Shanghai
- **Landscape Architect:** Jiangsu Classic
- **Interior Design:** EDG (Environetics) Shanghai

Strategic & Creative Aspects

- **Water-less urinals.**
- Storm water collection system used as a fire suppression system.
- Natural light – Over 75% of space.
- Light dimming controls
- Saving the local environment. Trees that were at the property before construction were saved and re-planted
- Usage of locally procured and developed materials.
- Low-Emitting Materials – Paints, Carpets, Composite woods.
- Recycled Material Areas
- Direct line of sight to perimeter in > 90% of the areas.
- Bike storage for > 1000 bikes.
- Tobacco Smoking banned inside the facilities.
- CO2 monitoring systems.
- Heat reflection roof.

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- Savings and Awards

- :: Water consumption: 10,000 cubic meters.
- :: Power/electricity: 70,000 KWh
- :: 100,000 RMB Award from by the SIP Planning and Construction Bureau as Green Building Gold Award.
- :: Recognized by the Foreign Invested Enterprise Association among 2900 companies.

- Awards Received

- :: Free electricity worth 300,000 RMB granted by Economy and Trade Commission.
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- :: Outstanding Contribution to Building Recycle Economy Society.
- When in full operation the annual savings will reach 700,000 RMB/year.

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The real thing: The outside...



Some of the localized details...



Inside Environment

- Dining Room



General and VIP Areas

Lobby



Customer Demo Area

Inside Environment..

- Is not just a place to work.
- Is not just a factory.



The Starting Point



The First Challenges

- **Poor work execution:**
 - :: Property had to be filled with > 1 meter of dirt to bring it to street level.
- **Un-happy neighbors**
 - :: Access roads were blocked.



Second Challenge



Other Challenges

- Growth in the area.
- Maintaining the local aspect of the site.
- Being the first in the area.
- Relaying the vision.
- Schedule
- Conformance
- Quality
- Workmanship
- Cost

Construction Project Summary

- Investment Agreement – March, 2004
- Groundbreaking Ceremony – Dec 2004
- First Chinese New Year Celebration – January 2005
 - :: 12 Employees
- First Pile Installed – Mar 2005
- Temporary Facility Occupied - Apr 2005
 - :: Shipped First Product – Jun 2005
- Permanent Building Completion – Jan 20, 2006
 - :: Four days ahead of schedule.
 - :: Over \$ 500k US under budget.

Project Summary - 2

- Move in to new building – Jan 26, 2006
 - :: Start Operation – February 6, 2006
 - :: Celebrated Second Chinese New Year with over 200 Employees
- Received LEED Certification – April, 2006
- Grand Opening – April 2006
 - :: Over 500 Employees
- Shipped our first Bluetooth Headset – July 2006.
- Third Chinese New Year Celebration – February 2007
 - :: Over 700 Employees
- Shipment of first product Developed and Manufactured in China
 - :: August 2007

Final Thoughts

- Plan up front as much as possible.
- Anticipate and plan contingencies.
- Face to face negotiation and problem solving.
- Plan for 3-4 additional points for LEED certification over your target.
- Bring in your Sr. Management team on the overall plans and objectives as early as possible and have them remove internal road-blocks.