Sustainable Architecture in China:
Is There Enough to Matter?

Peter Kempson
Connections: Boomtowns of the Yangtze River, Summer 2009
Development in China

• “Modern” Architecture in China
• Open Door Policy truly opened for Architecture in the 1990’s
• Severe rapid development has slowed down
Chinese Pollution Problems

- Shanghai is Sinking
- Car population grew from 100k to 72 mill
- Heat island effect
- Air pollution increase
- Increase in water treatment to 42% municipal and 25.8% in households
China’s Efforts to Go Green

- China’s “Agenda 21”
- State Environmental Protection Administration
- National Green Building standard introduced May 2008
- Ban on logging natural forests
Not Reaching the Mark

- Concentration of Quantity over Quality
- Hard for foreign companies to operate in China
- Contracts are not seen as binding
- Rapid retroactive law changes
Potential of China

• Fastest market adoption rate of green or sustainable building in all of Asia
• Solar Water Heaters in China
Benefits of Developments

- Increase in Urban Green space in Shanghai
- Reduce heat island effect
- Improve energy consumption rate
Urban Design Goes Green?

- Kaixian City
  - Three Gorges Dam Relocation City
  - Vegetated Walls and Roofs
- International Streetscape Design Competition
  - Winner was “The Urban Forest”
  - Vegetated, photo cells on roof
- Sending Message to designers
Pearl River Tower

- Aims to be a “zero energy building”
- Solar panels
- Turbines
- Internal Radiant Water cooling

- Cuts energy costs 58%
Split House

- Local Timber
- Rammed earth walls
- Easy to translate to different areas
What’s the point?

- A promise is only a promise unless fulfilled

Gene Chen, Talk at Far East Hotel to Trinity College’s Connections Program, July 13, 2009

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Professor Wu, Presentation at Chongqing University to Trinity College’s Connections Program, June 27, 2009.
Shanghai, China’s Great Urban Center By Jay Pridmore. Abrams, NY

StreetScape in a new World, International Competition of Urban Streetscape Design Chief Editor Adrian Cheng Chi-Kong 2008

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