

Solar Water Heaters in China:

a simple technology that makes a big difference (and yet only one part of the solution)

The Chinese, as we discovered, have incorporated solar water heating at every level of society. From a simple hot water pot heater to solar heaters for large commercial buildings.



Longquan, Lijiang, Yunnan Province 龙泉丽江云南



Solar Water Heaters in Rural China

This remote Village building in Yunnan shows that this technology has become a norm in China



Solar Water Heaters in Chinese Cities

Can you count the solar water heaters?



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AtisSun July 24, 2009 by Matthew Bartlett

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California and Vermont follow China's Lead in Solar Water Heater Adoption (2010)

- **Today, China is the world leader in solar water heater (SWH) production and installation, but SWH are now catching on in the U.S.**
- The California Public Utilities Commission **in January 2010** launched the California Solar Initiative Thermal (CSI-Thermal), a \$350 million incentive program for solar water heaters. The goal of CSI-Thermal, which begins in May and runs through 2017, is to install 300,000 additional solar water heater systems by 2018. It is expected to eliminate 100,000 tons of greenhouse gas emissions each year.
- U.S. Sen. Bernie Sanders (I-Vt.) followed California's lead in February by introducing the 10 Million Solar Roofs and 10 Million Gallons of Solar Hot Water Act. Modeled after CSI-Thermal, the bill would provide rebates to cover up to half the cost of 10 million new solar power systems and 200,000 solar water heater systems.
- The U.S. Department of Energy estimates that installing a solar water heater can reduce a home's water heating bill between 50-80 percent, while reducing CO2 emissions by 4,000 pounds each year. (hot water = 10-20% of total energy bill)

Tax incentives, Rebates and Financing Plans Pique U.S. Interest by Renee Cho – March 14, 2010 www.solveclimate.com/blog/20100314





US companies help Model Eco-City in South Korea to develop

MASTER PLAN



Songdo IBD is being developed on 1,500 acres of reclaimed land in South Korea along Incheon's waterfront, 40 miles from Seoul and just 7 miles from Incheon International Airport. Developed by Gale International and Korea's POSCO E&C, this master-planned metropolis is a model of sustainable, city-scale development and innovation. The first phase of the new international city is scheduled to open in August 2009.

Designed by [Kohn Pedersen Fox](#), an international architectural practice recognized for design excellence and innovation in their buildings throughout the world, the 100 million square foot master plan includes commercial office space, residences, retail shops, hotels as well as civic and cultural facilities.

INTERACTIVE MAP



[View Songdo Interactive Map](#)



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Cisco Smart + Connected City : Incheon, Korea

Network-enabled Services and Solutions in Incheon (Songdo suburb)

- *INCHEON, Korea – March 29, 2010 – Incheon Metropolitan City and Cisco today announced that they will collaborate closely in building Incheon Free Economic Zone (IFEZ) into a high-tech, globally competitive and environmentally sustainable smart connected city, ...i*
- *The strategic collaboration also aims to create a video-enabled city platform, placing energy efficiency at the heart of a green living environment in the city by using networked ICT solutions*

http://newsroom.cisco.com/dlls/global/asiapac/news/2010/pr_03-29b.html

*Cisco is in contract to help develop similar projects in **Changsha and Chongqing China**, in the U.S. State of Colorado, and several other locations around the world.*

In these projects, Cisco demonstrates how shared standards and the “Coopetition” model for business development is more beneficial for participating organizations and cities than simplistic competition.



The US is Developing Greener Cities as Well

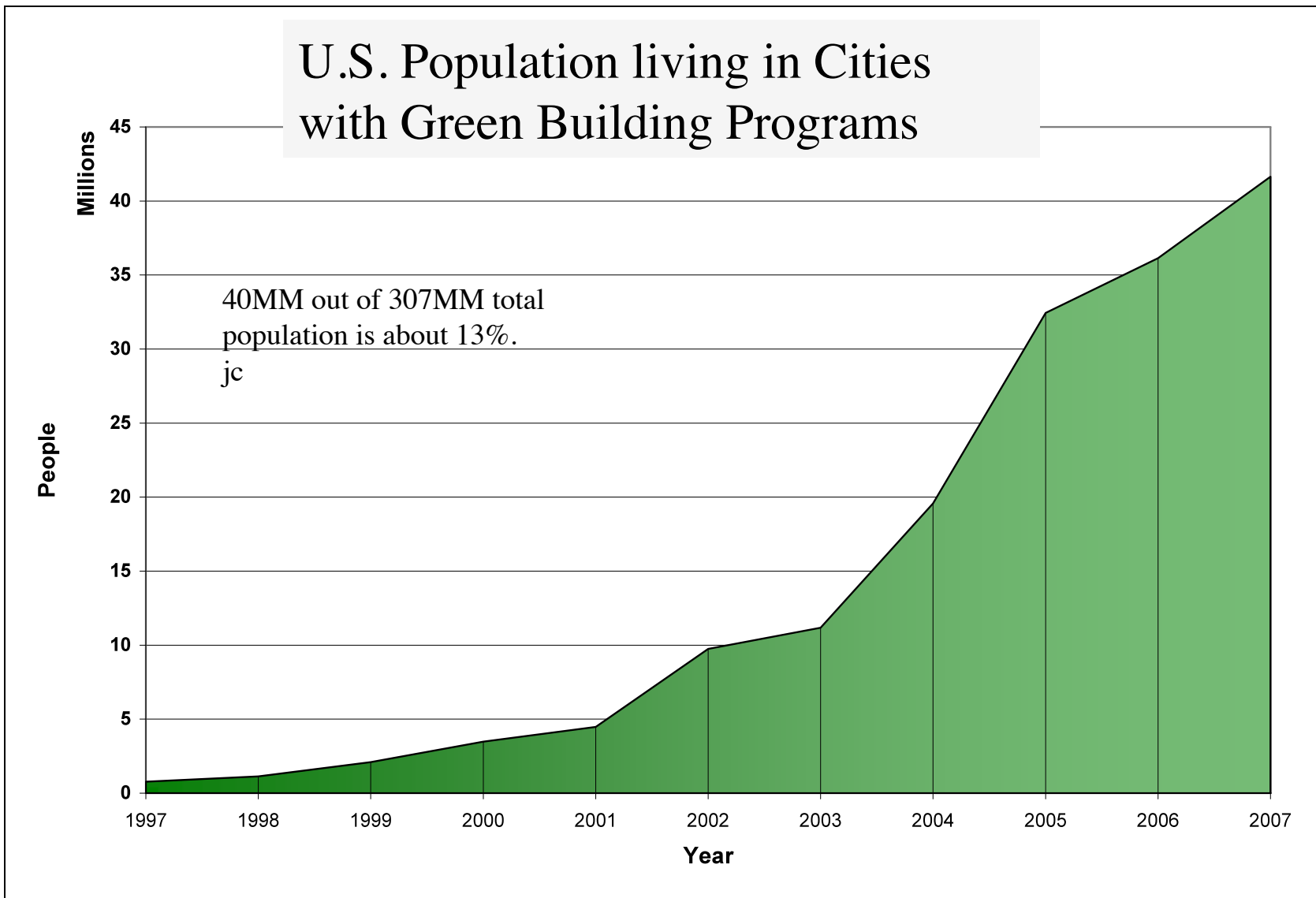
Green Building Programs in Cities with a Population Over 50,000



<https://docs.google.com/viewer?url=http://www.nxthorizon.com/green/greenbuilding.pdf>



U.S. Population living in Cities with Green Building Programs



<https://docs.google.com/viewer?url=http://www.nxthorizon.com/green/greenbuilding.pdf>



Questions?



The Yin-Yang expresses the dynamic balance of Nature. The unity of opposites in constant flux.

- What still needs clarification?
- Why should we work with China?
- What is the most productive way forward?
- Where shall we begin?
- When shall we start?
- Who will be our best partners?
- How can you help?
- Shall we work together?
- Shall we stop blaming others and partner to do this exciting work?

James T. Caldwell, Ph.D., CEO, E³ Regenesi s Solutions, Inc.
Director and Chair, Green Building Task Force, US-China Green Energy Council
www.e3regenesi s.com www.ucgef.org



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