Smart Green Building Standards in China

The Art and Science of Sustainable Growth in the Built Environment

US-China Green Energy Council

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Facilitating collaborative solutions for mutual benefit

Who We Are

Since 2004, E^{3}Regenesis has helped companies and communities in the US and China to collaborate and design profitable systems to clean up pollution, kick fossil fuel addiction, stop wasteful habits, and regenerate healthy sustainable processes. We work with leaders of innovation to put waste to work, deploy efficient lighting, produce green building materials, develop renewable energy and cleaner fuels plus architects and developers of eco-city projects. E3R seeks more clients in the US and China, who are participants in green building, energy efficiency and eco-city projects who can benefit from real-time measurement and eco-tourism components.

UCGEC (the US-China Green Energy Council), beginning in 2008, has organized seminars and annual conferences in California and China to bridge the silos among disciplines and create realistic collaborative projects. We work with top Government leaders in the US and China, green business leaders and NGOs. We demonstrate the power of holistically integrating diverse perspectives to solve problems by learning from each other and creating breakthrough innovations. We have several projects in development and continue to uncover new opportunities. The green building and eco-city projects described herein have laid the foundations for currently evolving projects.

And the global population will reach 9 billion by 2050 as projected by the World Business Council. In order for the planet to support this many people, we have to avoid the mistakes that will come from not sharing perspectives. Let's find solutions that will work for all. We have no time to waste by blaming each other or competing to waste more energy and resources. (JC)

See the Challenges and Opportunities

Slide from Khee Poh Lam, Carnegie Mellon University, Suzhou presentation

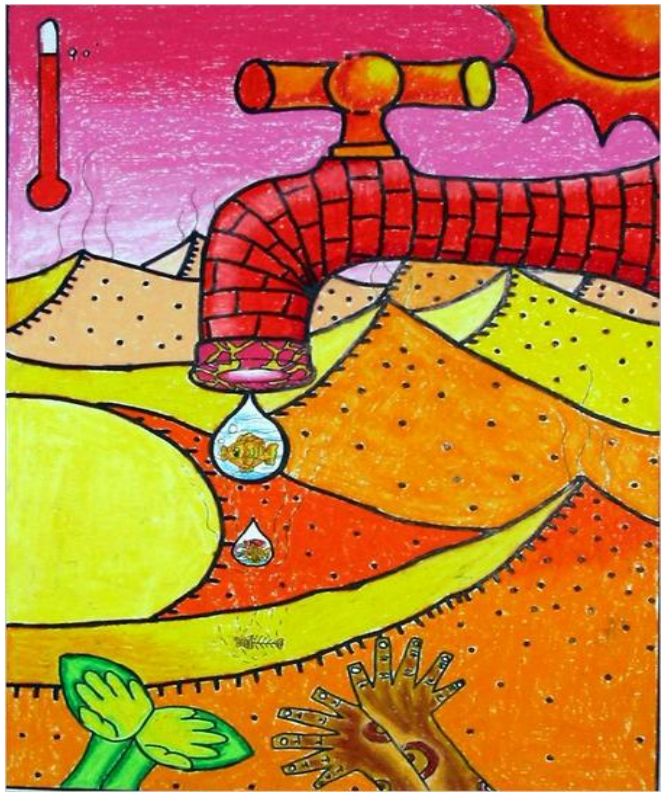
Do we Want to Continue in this Direction?
我们要继续走这个方向吗

In Chinese,
three trees 森 = forest;
two trees 林 = woods;
one tree 木 = tree or wood.
The Christian cross is borrowed to symbolize a grave marker.

Changes 变化
by Zeng Fei 曾斐 (age 15岁)
Jiangxi 江西, PRC 2002

This art is from a contest among 1 million Chinese children to paint about their environment sponsored by the Children and the Environment Project of the 1990 Institute, the China National Children's Center, Beijing and SEPA, China's State Environmental Protection Agency beginning in 2000. E-planet; Flying the Children's Hope 给孩子一篇蓝天. http://www.e-planet.org

Do We Want to Create This Kind of Results?
我们要创造这样的成果吗



Saharan Water: 撒哈拉的水
by Zhu Siying 朱思颖 (Age 6岁),
Hubei 湖北, PRC 2002

Gauze Masks are in Fashion 街上流行戴口罩
Li Xiaoxiang 李小翔 (age 10岁)
Hubei 湖北, PRC 2002

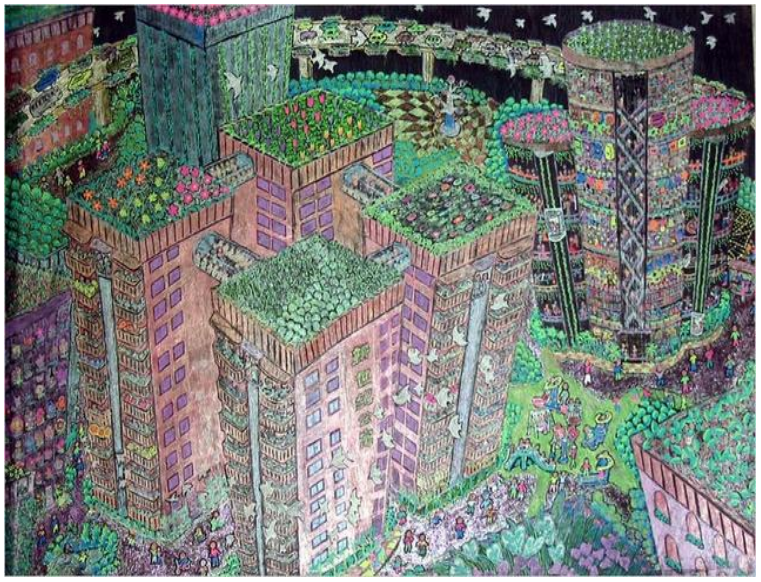
A Vision for the Future; What is our Goal?
展望未来; 有什么目标

Chinese children envision a future they would like to create
中国孩子们给我们看看他们要创造的未来

How can they get there?

他们怎么走到这样的未来

Welcome to Green Dragon City
绿色的龙城欢迎您
Zhang Jun 张君 (age 11岁) Guangxi 广西



The Garden City
我们的家园像花园
Zhu Wei 朱维 (age 13岁) Shanghai 上海

Properly Designed and Built Green Buildings
适当设计和建造的绿色建筑会

USE 24-50% less energy
节约 24% 到 50% 的能源

Do you believe this?
Why? Why not?

EMIT 33%－39% less carbon dioxide into the atmosphere
排放二氧化碳减少 33% 到 39% 在大气中

USE 40% less water
用水量节约 40%

SEND 70% less solid waste to landfills and incinerators
固体废物送到垃圾填埋场或焚烧炉能减少 70%

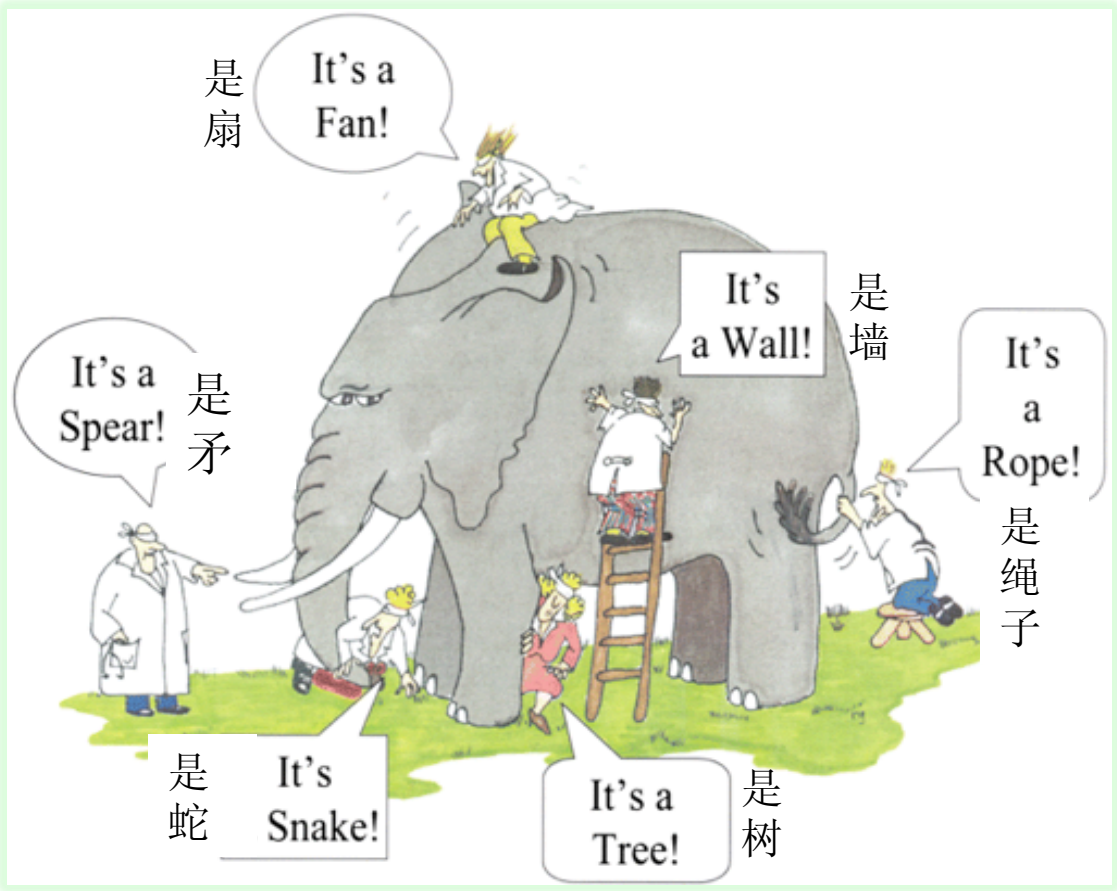
Cost less to build, retrofit, re-purpose and demolish
省钱在建设，改造，改变其用途和拆除

Why We Need Shared Green Standards

- **The Built Environment** (including buildings, cities, agriculture, transportation and communications systems) **is a set of tools** that enable people in communities to use energy and resources more effectively – when they know how to use them.
- **Green building standards** offer a **common frame of reference and a common terminology** enabling us to learn from each other, to *develop and use the built environment* to support healthy full circle ecosystems.
- **Energy and Resources defined:** not simply *fuel and raw materials*; they are sets of changing (often renewable) components of an ecosystem that give it life.
- **An ecosystem is a dynamic set of forces** that enable life development when dynamically balanced, but can threaten life when static or extremely unbalanced!
- **The opportunity and challenge before us**, as engineers, entrepreneurs, politicians and citizens, is to build systems and standards as tools to help us dynamically *optimize our fuel/energy/resource mix to create sustainable human development and a continually improving quality of life.*

James Caldwell, E^3 Regenesis Solutions

The Benefits of Integrated Green Standards
整合綠色標準的利益



把冲突改成合作 Convert Conflict into Collaboration