

## The Jade Dragon: 10 Smart Ways China is “Going Green”

I recently returned from my first trip to China. The trip was designed to show business leaders from the Chamber of Commerce the rich cultural heritage of China, and the joint venture opportunities that abound in China’s burgeoning economy. Environmental initiatives were not mentioned as part of the tour, but since I am an environmental consultant and founder of the Go Green Initiative ([www.gogreeninitiative.org](http://www.gogreeninitiative.org)), I couldn’t help noticing that Chinese businesses, government and private citizens are eagerly striving to protect their beautiful homeland.



In my capacity as the Executive Director of the Go Green Initiative, I have been working for several months with a Beijing-based think tank comprised of some of the largest Chinese businesses and most successful entrepreneurs, the Downons Enterprise Institute (DEI). DEI is globally peerless in its aggressive and thorough program to set rigorous criteria for rewarding China-based companies that take a panoramic, “all hands” approach to environmental protection. Through the Go Green Initiative, I’ve worked in 10 countries on 4 continents, and I have never seen a self-regulation program in the business sector as inspiring and well-designed as the one DEI implemented in 2007. DEI is not a government organization, but rather a consortium of business leaders who will no doubt help China become a world class leader in sustainable business practices. While in Beijing, I had the good fortune of meeting the man who recruited me to DEI, Xingan Ge, and I was so impressed by how sharp and enthusiastic he is. If China can replicate the skills and talent of Xingan Ge among its young business people, I have every confidence China will lead the world in environmental protection in a generation or less. He is precisely the type of young leader the Go Green Initiative hopes to inspire through our schools program.

As an American, I often wonder...if the U.S. was put on trial for being environmentally responsible, and the jurists were tourists, would there be enough evidence to convict us? In the absence of hearing our elected officials grandstand about their efforts to mandate, regulate and legislate Americans into being “green”, would international tourists see evidence of sustainable behavior at our landmarks, hotels, and alongside our roadways while riding a tour bus?



That is precisely what I saw during my travels in China. The evidence of environmentally responsible efforts were literally everywhere I looked. Some were large and expensive efforts, and some were simple and inexpensive, but what I saw convinced me that these strides to “go green” are being woven into the daily lives of the Chinese culture like the finest silk threads.

Below are my top ten favorite “pieces of evidence” that China is creating a culture of conservation:

**Energy conservation and Air Pollution Reduction** – around the globe, we know that the majority of our energy and electricity comes from fossil fuel fired plants. Efforts to conserve energy and promote cost-effective, low emissions energy (like nuclear and hydrogen power), helps to reduce air pollution that is caused when we consume energy from fossil fuel energy plants.

1. **Electricity:** While I saw many remaining coal-fired electricity plants, I saw numerous nuclear power plants as I peered out the tour bus window. Coal is abundant and inexpensive in China, but contributes to poor air quality.



More nuclear power plants will create a clean energy source that will fuel China's growing economy without depleting natural resources, or creating air pollution.



According to Chinese sources, in Nov. 2007, the State Council approved the National Medium- and Long-term Nuclear Development Plan (2005-2020) submitted by National Development and Reform Commission (NDRC). The plan sets clear goals for nuclear power development as follows: by 2020, the installed capacity of nuclear power will reach 40 million kilowatts and the capacity under construction in 2020 will reach 18 million kilowatts. The percentage of electricity generated by nuclear power will increase from less than 2% today to 4% in 2020, with the annual amount of electricity reaching 260-280 billion kilowatts.

2. **Lighting:** While riding through the countryside between Shanghai, Hangzhou and Suzhou, I saw numerous billboards encouraging consumers to use compact fluorescent light bulbs to conserve electricity. This is similar to ad campaigns funded by U.S. utility companies encouraging energy conservation, but from my understanding, the billboards I observed in China were messages from local government asking residents to use CFL's to conserve electricity for the good of the country.
3. **Solar:** Throughout southern China, there were solar panels on nearly every residential roof, even on homes that were not modern or new. According to data released by the NDRC on Dec. 11, 2007, China was the largest producer and user of solar water heaters in the world by the end of 2006. The production capacity of solar water heaters in 2006 was 15 million M<sup>2</sup> and the installed solar collector's area had reached 100 million M<sup>2</sup> by the end of 2006. Both ranked No.1 in the world.

4. **Mass Transit:** Though there are many traffic jams in China, there is clear evidence that investment in mass transit infrastructure is a top priority. In Shanghai, there is a subway, monorail, a variety of mass transit ground options, and my personal favorite: the Maglev – magnetic levitation train. It is the fastest train in the world, and it uses zero fuel, therefore creating zero emissions.

Projects like the Maglev are only possible by committing a sizable portion of the government's budget to infrastructure – similar to the way the U.S. federal government and states like California did in the mid 20<sup>th</sup> century, when political leaders from both parties allocated 10-11% of the general fund to infrastructure.

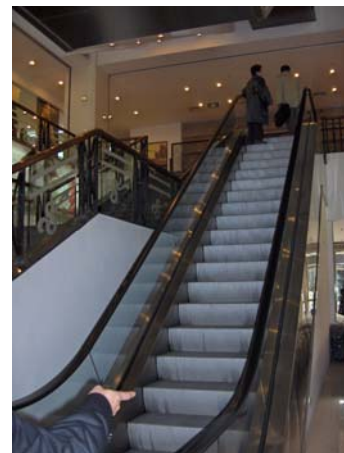


The Chinese urban planning process, as showcased in Shanghai, includes realistic and eco-friendly infrastructure expenditures for anticipated growth.



5. **Energy Conservation in Hotels:** I stayed in multiple hotels in northern and southern China, and each required insertion of my key card into a special holder in order to access electricity in my room. When I left for the day, and removed my key card, all the lights went out. That must save millions of kilowatt hours that would otherwise be wasted by harried travelers who forget to turn off all the lights before leaving their hotel rooms.

6. **Energy Conservation in Shopping Areas:** I witnessed numerous escalators in a variety of buildings and shopping centers that were motion-sensor activated. In other words, the escalators did not continuously run, but only turned on when a person stepped onto them. I found this to be an ingenious way to save electricity, and couldn't help recalling how many times I have seen escalators in America continuously running, even in the absence of riders.



**Natural Resources Conservation and Solid Waste Management** – The size of China’s land and population are mind boggling to the typical Westerner. Their population is reportedly 1.3 billion. There are numerous Chinese cities with populations of 10-20 million, yet 80% of the population resides in rural, farm areas. Providing water, food, shelter, fuel and energy to the Chinese people in both urban and rural locales is an incredible feat of coordination, cooperation and conservation. The Chinese culture is one that wastes very little, but with recent population shifts to urban centers and a strong economy that has allowed increased consumption, there are new challenges for China with regard to conserving natural resources and managing solid waste. However, in both government-owned and private enterprises, I saw convincing evidence that conservation is a front-burner issue in China.

1. **Water Conservation in Public Areas and Hotels:** Throughout my time in China, I was introduced to a wide variety of public restroom facilities. Regardless of whether I was at a landmark, at a restaurant, or at a gas station on the side of the road, all the toilets were low flush, and the faucets were configured to automatically shut off when not in use. I stayed in four different hotels in northern and southern China (only one was a Western franchise), and each had the same voluntary water conservation program for guests we have in the U.S., e.g. reusing towels, not having bedding washed everyday, etc. *However, there was one important difference...*the notes to guests regarding the water conservation program was in no fewer than 4-5 languages. In the U.S., I have never seen a hotel with conservation notices in so many languages. Obviously, the Chinese hotels are very eager to communicate the conservation message to as many guests as possible, no matter what their native language may be.

2. **Recycling Containers:** Everywhere I visited in China had some sort of recycling program. In one of the hotels, there was a battery recycling container in the lobby. In



some areas, the recycling bins allowed organics to be separated from non-organics. And still other locations encouraged plastic and paper recycling.



I visited many places that were off the beaten tourist path, where most of the people present were Chinese. I noticed that the recycling containers were very well-utilized, and there was virtually zero litter on the ground. It was clear that there was a great deal of pride in keeping things neat and clean. In fact, in Shanghai – a city of 20 million people, even the park benches were marked with a message to preserve “natural beauty.”

3. **Access to Recycling Markets:** One of the ways we encourage recycling in the U.S. is through “bottle bills”, i.e. creating a market in which recyclables have value, so that people do not treat them as waste. From what I could see, there must be similar access to recycling markets in some parts of China, because our tour bus was approached by kindly Chinese people who asked for our used plastic water bottles. In the same way that many of our U.S. school communities use recyclables as fundraisers, similar opportunities seem to exist in China.



4. **Oil conservation:** It is no secret that there is a substantial amount of air pollution in parts of China that is the result of rapid industrialization and increased numbers of cars commuting to job centers. But the Chinese have a proverb that describes their current status well: *You can only go halfway into the darkest forest; then you are coming out the other side.* From what I could see in Beijing, Shanghai, Suzhou and Hangzhou, the Chinese are coming out on the other side of the dark forest of air pollution. Mass transit systems that will use clean energy are being built everywhere. Despite temperatures in the 30's Fahrenheit, commuters used bikes and scooters everywhere. And the size and fuel efficiency of new cars in China was remarkable. The personal vehicle products I saw all over China are not available in the U.S. There were luxury vehicles and minivans all around, but they were smaller and more fuel efficient than commiserate products in America. As the Chinese economy and public policy continues to eagerly embrace utilization of cleaner technologies for industry and convenient mass transit opportunities for commuters, the worst days of China's air pollution problems and oil consumption increase could be behind them, if their economic growth is used to fuel smart, sustainable urban growth.

Even as I write this report, I know there will be Western cynics who will say that everything I witnessed was a dog and pony show, because Beijing needs a green facelift before the 2008 Olympics.

I disagree.

Olympic tourists are unlikely to see billboards in the countryside two hours out of Shanghai, encouraging farmers to use CFL light bulbs in their homes. Olympics tourists are unlikely to see the carbon-free nuclear power plants in Suzhou. And only if they are very lucky, will Olympic tourists have time to meander the luscious gardens of Tiger Hill and notice all the recycling bins blended beautifully into the landscape.



I believe that “going green” is becoming woven into the fabric of Chinese life, as a natural expression of love for their homeland. There are many environmentalists worldwide who seek to save the planet *from* human beings, but like the underlying foundation of the Go Green Initiative, the Chinese seem much more intent on saving the planet *for* human beings.



And that one word difference is making *all* the difference, and is engaging all sectors of the Chinese population. China has an inspiring level of national pride, and appreciation for its own rich, ancient culture. New generations receive that tradition like a gift to be treasured and protected. I believe that attitude serves as a positive and strong motivator to preserve China’s natural treasures and resources.

I also believe that the Chinese business community is keenly aware that in order to keep their economy strong now, and in the future, China will need a healthy workforce, ample natural resources, and reliable/sustainable energy sources. This realization serves as the onus for the business community to demonstrate leadership in environmental protection, just as the Downons Enterprise Institute has done in 2007.

I feel so fortunate and honored to have visited China, and to have discovered its “Jade Dragon.” I hope to return again soon, and see more and more evidence that China is indeed going green.