### Sustainability in China: More than Winning a Cleantech War

carnegiecouncil.org

CARNEGIE for Ethics in International Affairs Richard Carnegie Council for Ethics in International Affairs

**Brubaker** 

September 29, 2011



Chinese Electric Car. CREDIT Michael Arent

This article is part of the Council Council's third annual SEPTEMBER SUSTAINABILITY MONTH.

Rarely a day goes by without an article that focuses on the progress that China is making in sustainability. Such stories are often tied to how Beijing's policies are driving China's green investments forward past those of other countries. They frequently detail the explosion of China into an area of cleantech, an investment or partnership between a Chinese firm and a western investor, or the inability of foreign producers to compete. However, sustainability in China is a complex problem and encompasses

more than solar panels, hybrid cars, and green buildings. There are many darker stories as well. A steady stream of reports attest to the deteriorating environment and the problems this causes, from air pollution, to "cancer villages" near dirty factories, to the devastation caused by partially manmade droughts and floods.

How China defines Sustainability

For generations, the notion of "sustainability" for most Chinese meant simply having enough to eat. For many, life is much improved. Since China started adopting free enterprise in the early 1980s, an estimated 400 million have been lifted out of absolute poverty and China now has a prosperous middle class. But unrestrained growth has brought problems of its own. These include rampant corruption, growing social unrest because of the widening gap between rich and poor, and a wide array of environmental problems. In response, Chinese leaders rolled out a campaign a few years ago to build what they call a "Harmonious Society"-a balance between the economy, society, and the environment. This campaign was not all that different from the calls for action before the Copenhagen Climate Change Conference, as it was top down, largely intangible to those who were being asked to act, and it failed to gain much traction.

Looking at the issues of sustainability in the context of China today, it is of primary importance for outsiders to understand the following:

- China's issues of sustainability are not historically linked mainly to private consumption as they are in the United States or Western Europe; they are linked to the industrial processes that are supporting China's economic development model.
- China does not see emissions as a "problem" that must be dealt with immediately. With millions remaining in poverty, economic growth is still the priority.
- The largest pressure China faces to solve sustainability issues comes from within. External pressures or concerns about the planet as a whole are secondary.

Therefore China will look to deploy various solutions to these problems, at times without consideration for externals.

Simply put, the issues that China faces are largely tied to economic development, the problems themselves are growing in size and frequency, and China will do what it takes to fix those problems in a way that considers the

## http://www.carnegiecouncil.org/publications/ethics\_online/0061.html#.UUtZEG5KGaM.cleanprint

needs of its people first.

#### Catalysts for Change

As we have seen in recent years, China's ability to manage stable growth and create a balance between economy, environment, and society has proven limited; nearly every day there are reports of another problem. This has the effect of creating a wider public awareness.

The environmental failures, melamine milk scandals, labor safety issues, and high-speed train crashes featured in recent headlines are just the tip of the iceberg. But as these problems come to light they have begun to create a new source of pressure to address the changes. And this pressure is coming from the bottom up versus the top down.

The catalysts for change are often very different than those found in the west, where the most effective messages are typically visual images of global events and impacts. In China, it is more personal, more tangible. Environmental and safety disasters are occurring in individuals' own backyards, and this is moving people to demand more from their leaders. Economic development is bringing financial stability to many, and with this financial stability fewer citizens are willing to overlook the imbalances in their society.

#### Barriers to Change: Finding Balance Will Take Time

While the issues that China faces are growing in size and the pressure to change may be greater than ever, for China, as for many nations, barriers to acceptance and action still exist.

For some, it is a strong central government that provides hope that China will make changes. Yet at times it is the system itself that hinders the process of identifying and solving problems. Take, for example, the recent high-speed train accident in July 2011, where a strong central government plan of attack to improve the efficiency of its rail network ultimately created a process whereby a number of safety procedures were overlooked in the name of getting the project done quickly.

Economically speaking, the arguments against sustainability are often the same as those found in other countries. But unlike in the West where populations are settled and inflation is in check, the pressure on Beijing to reduce costs and maintain growth continues to take precedence over investments that could inflate pricing of food, housing, or manufactured goods. For this very reason, although a number of strong regulations related to the environment and labor have been passed, ultimately they have not been enforced.

The elephant in the room is the fact that China has yet to fully urbanize its people. Over the next 15-20 years it is expected that another 400 million rural residents will move to one of China's over 200 cities with a population of one million or more residents. This presents a particularly acute issue as China will be forced to continue adding energy, buildings, and infrastructure to support this relocation, and once settled, this newly urbanized population will consume large amounts of resources (energy, water, and food) through their improved lifestyle.

This leads us to the last barriers to change: citizen awareness and engagement. For the last 62 years of China's history, China's central leadership was seen as the responsible party for managing issues of civil society and the environment, and while there is a growing level of awareness and engagement in China, apathy and ignorance of the issues is still widespread among the Chinese. In particular, those who have yet to amass wealth are focused on building a better tomorrow for their families, and are not ready to engage in discussions of the environment or society.

#### Balancing Out: How China Will Move Forward

In addressing its sustainability challenges, China will employ a number of tools to help make the necessary adjustments. It is a process that has already begun, primarily in areas where economic development is the most advanced, and has involved policies, technological solutions, and awareness and engagement campaigns.

Policies: This is where many believe that the biggest changes will occur, as Beijing looks to tighten regulations and

#### http://www.carnegiecouncil.org/publications/ethics\_online/0061.html#.UUtZEG5KGaM.cleanprint

enforcement in critical areas of the economy to drive change. The most widely used tools to date have fallen into several categories:

(1) Bridging the wealth gap between the eastern and western parts of China;

(2) Moving the economy away from energy-intensive manufacturing towards innovation;

(3) Investing in large scale infrastructure projects that have economic and environmental sustainability in mind;

(4) Creating policies that put pressure on the most damaging practices and industries. Some successful campaigns include investments in clean water and high-speed rail networks, and rejecting the IPO applications for more than 100 firms with poor environmental records.

Technology: With the dynamics and complexity of the issues that China faces, the role of technology (or cleantech) will play two prominent roles as China balances out.

The first, typical of China, will be largely economic, as China leverages its core strengths as a manufacturing base to capture economic gains. These gains will not only help provide much-needed jobs for its working-age citizens, but will also act as a catalyst for innovation and moving its economy up the value chain. It is a process that is already underway as China has moved quickly in areas of clean energy (wind and solar), transportation (batteries for cars), and water equipment (municipal to household), and it is an opportunity that is open to foreign investors.

Second, and perhaps more importantly to those involved the cleantech industry, China will continue to be a large consumer of products and services. Beyond clean energy solutions, where China's markets for cleantech will get very interesting for those selling is in the breadth of the problems that China faces. Examples of foreign companies working on sustainability issues in China are firms like Nalco and Norit, who are focused on providing clean water solutions; GE and Rolls Royce, who are selling the latest in transportation technologies; and ARUP and IBM, who are helping cities to better understand how to design and build sustainable cities. This is a market that is tangible and viable.

Awareness and engagement campaigns: One of the big questions is what the role of NGOs will be, particularly as agents of awareness. Their track record so far is closely related to China's politics and history of centralized management of civil society. With a history of poor ties to central government, which often views NGOs with suspicion, only a few NGOs have been able to gain enough traction to stabilize their operations in more than one city, and fewer still have been able to do so with the full blessing of the government.

It's an environment that leaves the government as the primary source for awareness and engagement campaigns in China—campaigns that are usually lofty in goal and nationalistic in nature, and that often fail to engage with a particular issue or group of people in any tangible way.

#### Conclusions

Going forward, it is important to understand that the problems that China faces are complex and growing in size. As a result of economic hyper-expansion and ignoring the damage that was being done, China's economic, environmental, and social resilience has diminished. While historically the costs of fixing the problems may have been seen as too great, China is running out of options.

This dynamic will lead to China investing large sums of money and time into solutions—some of which will be successful and some not—that are ultimately seen as social investments. Private investments in cleantech will have their place, but the pressure on firms to deliver their products and services with a lower profit margin attached is likely to continue.

Finally, in understanding what is going to be done (and why), one must have a clear knowledge of the various stakeholders in China, what their interests are, and how they will look to benefit or be negatively impacted from any changes. Firms and policymakers who are able to grasp this will have a much deeper insight into the barriers to

#### http://www.carnegiecouncil.org/publications/ethics\_online/0061.html#.UUtZEG5KGaM.cleanprint

progress in the area of sustainability, and will be better able to identify which stakeholders are likely to lead the way forward.

For China, the next 25-50 years will be crucial. While the global discussions of sustainability are focused around carbon emissions and the need to save energy, for most Chinese these are intangible issues. The Chinese people will continue working on problems that are tangible for them, such as health and safety. It will be a process that is largely driven by pragmatism and will at times occur off-plan, but the goal of developing a harmonious society will continue to drive them forward.

Read More: Poverty, Business, Development, Environment/Sustainable Development, International Trade, Technology, Asia, China

Thank you for subscribing to Carnegie Council. You will receive an email shortly asking to confirm your subscription.





bright ideas for a sustainable future

# Ethics & International Affairs