

China's Next Revolution

ELIZABETH ECONOMY

There is little mystery today as to the nature of China's environmental crisis and its impact on the global environment. China's air, water, and land are among the most polluted and degraded in the world. The country contains 20 of the world's 30 most polluted cities; an estimated 750,000 Chinese die prematurely every year as a result of poor air quality. Half the population drinks water contaminated with animal or human fecal matter, and nowhere in the country is potable water available simply by turning on the tap. China also faces rapid desertification: Already, one-quarter of the country is classified as desert, and the desert is advancing at a rate of 1,300 to 1,900 square miles per year.

Globally, China now ranks as the leading producer of the greenhouse gas carbon dioxide, and is the largest importer of illegally logged timber. It has become the most significant source of pollution in the Pacific Ocean.

China's leaders, recognizing the magnitude of the challenge they face, routinely cite the environment as one of the country's most pressing issues. They clearly link the problem of pollution with other key domestic concerns such as public health, continued economic growth, social stability, and the country's international reputation.

But as China forges ahead with its extraordinary economic growth, future environmental challenges appear daunting. Topping the list is a projected water deficit in 2050 equivalent to the amount of water China consumes today. Following close behind are, by 2030, an automobile population projected to exceed that of the United States, and 400 million new urban residents (who can be expected to consume 3.5 times as much energy per capita as rural Chinese).

Climate change, in particular, is believed by many within China to pose a unique and potentially devastating challenge to the country. Chinese officials are most concerned that climate change

will strain the country's overworked disaster relief capacity, heighten the already severe problem of water scarcity, and engender growing food insecurity. The Chinese people in a recent Pew survey ranked the environment, and in particular water pollution, as one of the most significant problems the country must address.

Beijing's awareness of its profound environmental challenge has translated into a top-down drive to transform the way China does business. The country has passed hundreds of environmental laws and regulations and launched scores of impressive policy initiatives. In its 11th Five Year Plan (2006–2010), the government has set a number of ambitious targets for pollution reduction and improvements in energy practices: reducing emissions of sulfur dioxide by 10 percent, reducing energy intensity (energy consumed in relation to GDP) by 20 percent, expanding the amount of land covered by forests from 18.2 percent to 20 percent, and increasing to 15 percent by 2020 the portion of China's energy mix derived from renewable energy sources.

Government agencies are considering and in some cases launching a number of innovative initiatives. China's central bank is studying the possibility of a cap and trade system for greenhouse gas emissions. The Ministry of Construction is trying to adopt and enforce tough new energy-efficient building codes. And the government has proposed financial rewards for consumers who purchase small cars, along with equivalent penalties for those who insist on buying gas-guzzling vehicles.

The international community has also stepped up to the plate to provide extensive technological, financial, and policy support; arguably, more environmental assistance has gone to China than to any other country in the world. The European Union, Japan, and the United States are all engaged in ongoing dialogue with China on energy and environmental issues. Government agencies and nongovernmental organizations are deeply involved in environmental capacity

ELIZABETH ECONOMY is a senior fellow and director of Asia studies at the Council on Foreign Relations.

building through the training of officials and drafting of regulations. And governments and multinational companies have both joined with Chinese partners to develop cutting-edge environmental technologies.

Yet, in many respects, such efforts are transformative only at the margins. Despite all of China's environmental awareness, its raft of impressive policy initiatives, and its access to advanced environmental technologies, the country's leaders have not managed to turn the environmental situation around.

REMOVING OBSTACLES

What is needed for success in China's environmental protection effort is far more fundamental: an environmental revolution of a magnitude equal to the sweeping economic reforms launched by Deng Xiaoping almost three decades ago. Deng's economic reforms succeeded because they removed the political and economic obstacles standing in the way of the entrepreneurial interests of the Chinese people.

President Hu Jintao similarly must remove the political and economic impediments preventing the Chinese people from attaining a cleaner environment.

An environmental revolution would by necessity require the transformation of China's political economy. Local officials, cognizant of market forces, would have to price resources such as water and energy so as to encourage conservation and efficiency. In many regions of China, water prices are as low as 20 percent of replacement cost, creating little incentive for businesses and municipalities either to conserve water or to treat wastewater. Instead, many Chinese factories simply dump their waste untreated into the nearest body of water. At the same time, the financial penalties for factories that pollute or for officials who ignore the country's environmental protection laws and regulations should far outweigh the financial costs associated with doing the right thing.

An environmental revolution, however, would go well beyond transforming the system of environmental economics. It would also have to embrace political change. Environmental protec-

tion thrives in systems where information is transparent and where those who make and implement decisions are held accountable. This means transforming the Chinese political system in order to ensure transparency, official accountability, and the rule of law. It means greater freedom for the courts from political interference, and more collection and distribution of independently verifiable information. It also means that independent agents of enforcement—whether separate government entities, the media, NGOs, or preferably all of the above—must be empowered to investigate, publicize, and hold accountable wrongdoers. In the same way that Deng removed the Communist Party from significant, albeit not all, realms of economic decision making, Hu has the opportunity to remove the party from significant areas of environmental enforcement.

As with Deng's economic revolution, there will be tough up-front economic and political costs. Factories will close, workers will be laid off, and some manufacturing industries will relocate

to other countries where environmental standards remain lower. The party's role initially will be somewhat diminished as external sources of information, verification, and enforcement are permitted to flourish.

Over the long term, how-

ever, China's early involvement in global clean and alternative energy industries will increase both the efficiency of the country's economy and the likelihood of China's becoming a global technology leader. And the party's stature might well be burnished by its environmental successes.

The role of the international community in this revolution is also much the same as it was during Deng's time—to provide various models for China to consider, to support the process of change through capacity building, and to enable the transfer of appropriate policy approaches or technologies to help China meet its environmental challenge. Fundamentally, though, China's environmental revolution is its own to launch and shape as it sees fit. Such a revolution offers Beijing perhaps its most important opportunity not only to sustain but also to enhance its role as a global power through the twenty-first century. ■

What is needed is an environmental revolution of a magnitude equal to the sweeping economic reforms launched by Deng Xiaoping.
