



## China's citizens must act to save their environment

The country's air-pollution crisis offers a lesson in the power of civil society, says Qiang Wang.

Beijing's air pollution is sometimes so bad that citizens walk the streets wearing masks, and new arrivals immediately feel their throats rasping. With record levels of smog enveloping major Chinese cities, air pollution — especially the fine particles with diameters of less than 2.5 micrometres, known as PM<sub>2.5</sub>, which penetrate deep into the lungs — is replacing food safety and clean drinking water as a key theme for Chinese lawmakers, and the nation has finally laid out a plan to tackle air pollution. By 2015, the government aims to reduce the concentration of PM<sub>2.5</sub> by 5%, of PM<sub>10</sub> by 10% and of other pollutants by up to 10%, in 117 cities in 13 key regions of the country.

But such initiatives, although timely and right, will not make a fundamental difference if practical steps are not taken: China needs to set a national cap on coal use and find a way to limit emissions from cars. So far, Beijing has been the only city to put plans in place to cap coal consumption, at 15 million tonnes a year by 2015. However, even if the other 116 cities named in the government's plan restrict their use of coal, the effects on air quality will be limited — coal-intensive industries will simply move to other areas in China. China should therefore adopt a national plan to cap coal use, and this should be based on the national total energy-use plan it issued in January, which aims to keep total energy use to 4 billion tonnes of coal equivalent per year by 2015.

Even though coal provides 70% of China's energy, a cap need not come at the expense of economic development. For years, inefficient and redundant investments in infrastructure have made China the world's biggest construction site, requiring a vast energy expenditure for steel, cement-making and machinery. In 2011, China consumed 21% of the world's energy and accounted for roughly 10% of the global gross domestic product (GDP). This suggests that China could reach the world average and almost double its GDP without using any more energy by shifting towards a service-oriented model.

Harder to rein in is China's surge in vehicle emissions. With sales that surpassed those of the United States in 2009 and of Europe in 2012, motor vehicles have emerged as the second-largest source of air pollution. As China's economy continues to grow, its car ownership is burgeoning, and top-down measures to limit driving are making little difference. Beijing, for example, requires half of registered vehicles to stay off the roads on any given workday. But the regulation, which states that licence-plate numbers ending in even number can be driven only on certain days, simply led people to buy a second car with an alternate ending number. Car ownership continued to rocket in Shanghai even after the

city raised the cost of a new licence plate to roughly three times the cost of a cheap Chinese car.

Solutions must come from ordinary citizens, who can take responsibility for their environment and express it daily in choices such as riding bicycles or taking public transportation instead of driving. The voice of society is growing, and the government is starting to respond, albeit reluctantly, to the air-pollution crisis. The US Embassy in Beijing posts its air-quality readings on Twitter, and activists have been re-posting the readings on Sina Weibo (China's answer to Twitter, which is blocked in the country). The hashtag "I don't want to be a human vacuum cleaner" attracted more than 1.7 million comments. And when the real-estate titan Pan Shiyi asked his millions of Weibo followers: "Do you agree that PM<sub>2.5</sub> should be monitored in 2011?"

Do you agree that the clean-air act should be stricter?", the replies in favour far outnumbered those against.

In response to this groundswell, the government announced last year that Beijing and 73 other cities would start to monitor and publish PM<sub>2.5</sub> data in 2013, far ahead of the previously announced 2016 deadline. Meanwhile, public pressure has helped to get a revised clean air act on the way, with the *China Daily* newspaper noting that "more measures to clean up the air are being considered by municipal departments of Chinese cities after netizens began to point the finger at the government over heavy smog".

In recent years, local protests have successfully blocked the construction of individual polluting projects, including plants in Xiamen and Dalian, which would have produced the industrial chemical paraxylene; a trash incinerator in Panyu; and a wastewater treatment plant in Qidong. China is witnessing the beginnings of a civil society in which the Chinese people spontaneously defend their right to a healthy environment, independent of organizers, political goals and commercial interests.

Chinese citizens who want to drink clean water can buy a water purifier; those worried about poisoned milk can buy imported milk. But when the air is polluted, there is no option but to fight. The various stakeholders of China's environment — government, non-government organizations and industry — should seize the opportunity provided by the growing popular involvement, and promote a civil society that stands up for the environment. The air of the people should be protected — by the people, for the people. ■

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