

## Tackling Air Pollution In China

By: Jack Perkowski | December 3, 2015

As reported in news media around the world, air pollution in Beijing reached hazardous levels earlier this week. According to one report: "Schools in the Chinese capital kept students indoors and parents brought their kids to hospitals with breathing ailments Tuesday as Beijing grappled with extremely severe air pollution for the fifth straight day ... Readings of the tiny poisonous PM2.5 particles reached into the high 600s micrograms per cubic meter throughout the capital, as compared with the World Health Organization safe level of 25. Some suburban neighborhoods logged levels up in the 900s on Monday."

Mother Nature came to the rescue late Tuesday night, however, as a cold front set in and then friendly, easterly winds swept the pollution away. As a result, Beijingers woke up on Wednesday to clear skies, with pollution at reduced levels well into Friday morning. Over the last two days of this week, PM2.5 levels had remained below 50. Despite this rapid turnaround and welcome respite from toxic air, though, the dark skies on Monday and Tuesday were stark reminders that China has a long way to go with respect to improving the country's air quality.

While many may question Beijing's seriousness in addressing its pollution problems, criticism on social media, as well as the fact that some of the worst pollution occurs in China's capital, where China's most senior government and corporate leaders live with their families, has moved the improvement of air quality to the top of the government's list of priorities. Official reports regularly detail how much China is spending in this regard. For example, by the time China's 12th Five Year Plan ends in December, the country will have [invested](#) more than 5 trillion yuan (\$780 billion) in environmental protection during the plan period. Undoubtedly, the 13th Five Year Plan to be unveiled in March will call for an equally impressive level of investment over the next five years.

Past experience, however, shows that money is not enough. Tough enforcement of new and existing environmental regulations, which are often in conflict with other important government objectives such as keeping inflation low and employment high, is also needed. It is in the area of enforcement that China most often falls short. In this context, there is a growing body of anecdotal evidence suggesting that the central and local governments are now willing to make the hard decisions necessary to tackle the country's environmental problems.

Much of the blame for air pollution is directed at China's burgeoning auto industry that now produces 24 million vehicles every year, approximately 30 percent of the vehicles produced annually throughout the world. Of the vehicles produced in China, about 80 percent are passenger cars, which, in general, employ the latest in emission technology. The problem has always been in commercial vehicles — the workhorse, diesel powered trucks that move freight between and within China's cities. Because freight is an important factor in the price of goods, and because the freight industry is comprised of thousands of individual operators who depend on their truck for their livelihood, the Chinese government has been reluctant to enforce strict emission standards requiring the adoption of

expensive new technologies. As a result, most of the trucks used for carrying freight in China employ emissions technologies that have been out of date for years in mature economies.

Despite the higher cost of new technologies capable of controlling harmful tailpipe gases, cities like London in the United Kingdom have simply mandated that only trucks meeting the highest emissions standards would be allowed in the city after a pre-determined date, forcing freight companies to either scrap their trucks or undergo expensive retro-fits. Given China's concerns with the level of freight costs and the health of its fragmented freight industry, such a draconian measure has been out of the question. In recent months, however, several provinces have taken a different approach by announcing programs whereby the local government would subsidize truck retro-fits, amounting to as much as \$5,000 or \$6,000 per vehicle. But for the government's concern for the environment, programs like this that effectively subsidize companies in the private sector have been unheard of in China until now.

Another example is in the approach that China has taken with respect to the illegal importation of used tires. In the United States, approximately 300 million passenger car tires are discarded every year and must be recycled. Producing useful products from waste tires is an important business for many companies in the United States, which is why an executive at the largest U.S. tire recycler complained in 2010 that the cost and availability of used tires was being negatively impacted by the illegal smuggling of tires into China.

Meanwhile, recycling smuggled tires had become a big business in southern China, where farmers who had lost their land and primary source of income due to industrialization began to use the tires to refine a very low quality — but very cheap — fuel for tractors and other agricultural vehicles. Although local residents resented the increased pollution caused by the burning of such low-grade fuel, the local government was reluctant to enforce the regulations and crack down on the smugglers and refiners for fear that doing so would exacerbate the unemployment problem in their areas. Precisely due to environmental concerns, however, the much-needed crackdowns have now taken place and the practice of producing low-quality fuel from smuggled tires has since been all but eliminated.

China has a long way to go in its battle to address the environmental damage caused by the country's rapid industrialization. As shown by the two anecdotes above, progress in the fight for air quality will not only require a large investment, but also a willingness to go against vested interests and enforce environmental regulations. Hopefully, anecdotes such as these will become the rule, not the exception.

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