Can China clean up fast enough?

The world's biggest polluter is going green, but it needs to speed up the transition

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"HELL is a city much like London—a populous and a smoky city," wrote Percy Bysshe Shelley in 1819. It is a description that would suit many Chinese cities today for, like Britain in the early 19th century, China is going through an industrial-powered growth spurt. Like Britain back then, the urge to get rich outweighs the desire for clean air, so the Chinese are chucking all manner of filth into the atmosphere. And, rather sooner than Britain did, China is beginning to clean up its act. If China were simply following the path of rich countries from poverty through pollution to fresh air, there would be little to worry about (unless you lived in one of those hellish cities).

But the parallels fall apart, for two reasons. One is time. When Britain's industrial engine was gaining speed, levels of CO2 in the atmosphere were the same as they had been for millennia. Now they are half as high again, and not far off 450 parts per million, which most scientists think is the danger level. The other is place. China is so vast and its economy is growing so rapidly that its effect on the world is far greater than that of any other single country.

Dragon breath

The muck that spews from Chinese factories most immediately affects those unlucky enough to live nearby. In January 2013 the air of Beijing hit a level of toxicity 40 times above what the World Health Organisation deems safe. A tenth of the country's farmland is poisoned with chemicals and heavy metals. Half of China's urban water supplies are unfit even to wash in, let alone drink. In the northern half of the country air pollution lops five-and-a-half years off the average life.

All this has led to an explosion of protest across China, including among a middle class thathas discovered nimbyism. That worries the government, which fears that environmental activism could become the foundation for more general political opposition. It is thereforedealing with pollution in two ways—suppression and mitigation. It has jailed environmental activists and is planning to limit the power of judicial oversight by handing a state-approved body a monopoly over bringing environmental lawsuits. At the same time, it is pouring money into cleaning up the country. It has just said that China will spend \$275 billion over the next five years improving air quality—roughly the same as the GDP of Hong Kong, and twice the size of the annual defence budget. Even by Chinese standards it is a massive sum.

The pace at which it deals with local pollution is a matter for China itself. But the country's emissions are of wider interest because they also pollute the atmosphere, which is a global resource. The scale and speed of China's development—it consumes 40-45% of the world's coal, copper, steel, nickel, aluminium and zinc—means it is doing so fast. Since 1990 the amount of CO2 pouring from Chinese smokestacks has risen from 2 billion tonnes a year to 9 billion—almost 30% of the global total. China produces nearly twice as much CO2 as America. It is no longer merely catching up with the West. The average Chinese person produces the same amount of CO2 as the average European. Even if you reduce that number by a quarter to take account of the emissions produced by China's exports, it is still huge.

Size has a silver lining

China's government is trying to make a dent in these alarming figures. It is cutting the amount of energy that large companies use to produce each unit of output, and it has created impressive new solar and wind-power industries. But the targets and executive orders it uses to try to reduce its emissions are not very effective. They tend to get negotiated away in local deals between officials and the managers of big state firms who have been given greater incentives to meet their economic targets, create jobs, raise output and suchlike. And, as the economy slows, there is increasing pressure on the government to lower environmental targets and loosen controls. Even in an autocracy, leaders feel the need to respond to pressure from mid-level officials

If China cannot cut its CO2 emissions substantially, then either other countries will have to reduce theirs by more than they are doing now—which seems unlikely—or the world will need to find other ways to cope. That means exploring the possibilities of geoengineering the atmosphere or investing in ways of adapting to higher temperatures, such as droughttolerant crops. But getting China to cut back further is not a lost cause. The place is vulnerable to climate change: in absolute terms, more people live at sea level in China, and so are threatened by rising oceans, than in any other country. The leadership therefore knows it needs to come up with a more effective means of changing behaviour. The obvious way is through a carbon tax, which would be more transparent and less subject to negotiation than targets. The government has promised to introduce one, and should get on with it.

China is more likely to move if it sees movement elsewhere. Although attempts to reach a global deal on emissions have failed, Western countries need to continue to lead by example. In addition, America and China have made progress through bilateral negotiations. They recently agreed to cut hydrofluorocarbons (an especially potent greenhouse gas), develop carbon capture and storage and reduce emissions from heavy vehicles—a good start. It is worth rich countries' while to fork out to support emissions-cutting measures in China, because a dollar spent reducing Chinese emissions goes further than a dollar spent at home.

For the rest of the world, there is an upside as well as a downside to China's vastness: it cannot shirk its responsibilities. National policy in China, unlike that anywhere else except America, makes a global difference. If China continues to pour emissions into the atmosphere, its own people are likely to suffer along with everybody else. If, on the other hand, it wants to do something about warming, it will have to cut its own emissions—and everybody will benefit.

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