

# China fights big smog with big air purifier

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China has found a novel way to tackle its massive air pollution problem: Putting up a giant air purifier the size of an industrial smokestack in the middle of a smog-plagued city.

Instead of pumping out billows of black smoke like the chimneys rising from factories in the northern province of Shaanxi, the 60-meter (197-foot) tall structure on the outskirts of the regional capital Xian blasts [clean air](#).

Standing between high-rises, the device is capable of cleaning between five million and 18 million cubic meters of air each day, depending on the weather, season, and level of pollution, according to a report by the Chinese website Thecover.cn.

The tower can reduce the density of PM 2.5—the [tiny airborne particles](#) considered most harmful to health—by between 10 and 19 percent in a 10 [square kilometer](#) (3.9 square mile) area, the website said.

PM 2.5 can play a role in heart disease, stroke, and lung ailments such as emphysema and cancer.

For now, the facility—which was built in June 2016—is just an experiment.

But its designers hope to build similar towers across the city.

Cao Junji, an environmental protection expert at the Chinese Academy of Sciences, told reporters that it would take about 100 towers to cover the [city](#) of 1,000 square kilometres (385 square miles).



Pollution is so bad in many regions of China that people often wear masks on the street and buy expensive air purifiers for their homes

A lot of people have questioned the device's effectiveness, he said.

"I questioned it myself. But when we finished, the results were quite good. They met our expectations."

China's government declared "war" on pollution in 2014.

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This past winter, China cut production for many steel smelters, mills and

factories.

The environment ministry imposed tough anti-pollution targets on 28 cities around Beijing, with at least three million homes expected to switch from coal to gas or electric heating.



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A University of Chicago study found last year that air [pollution](#) in northern China had cut life expectancy by three years compared with the south of the country.

But a new study by the university in March found that China had made so much progress against smog that [life expectancy](#) could rise by more than two years.

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