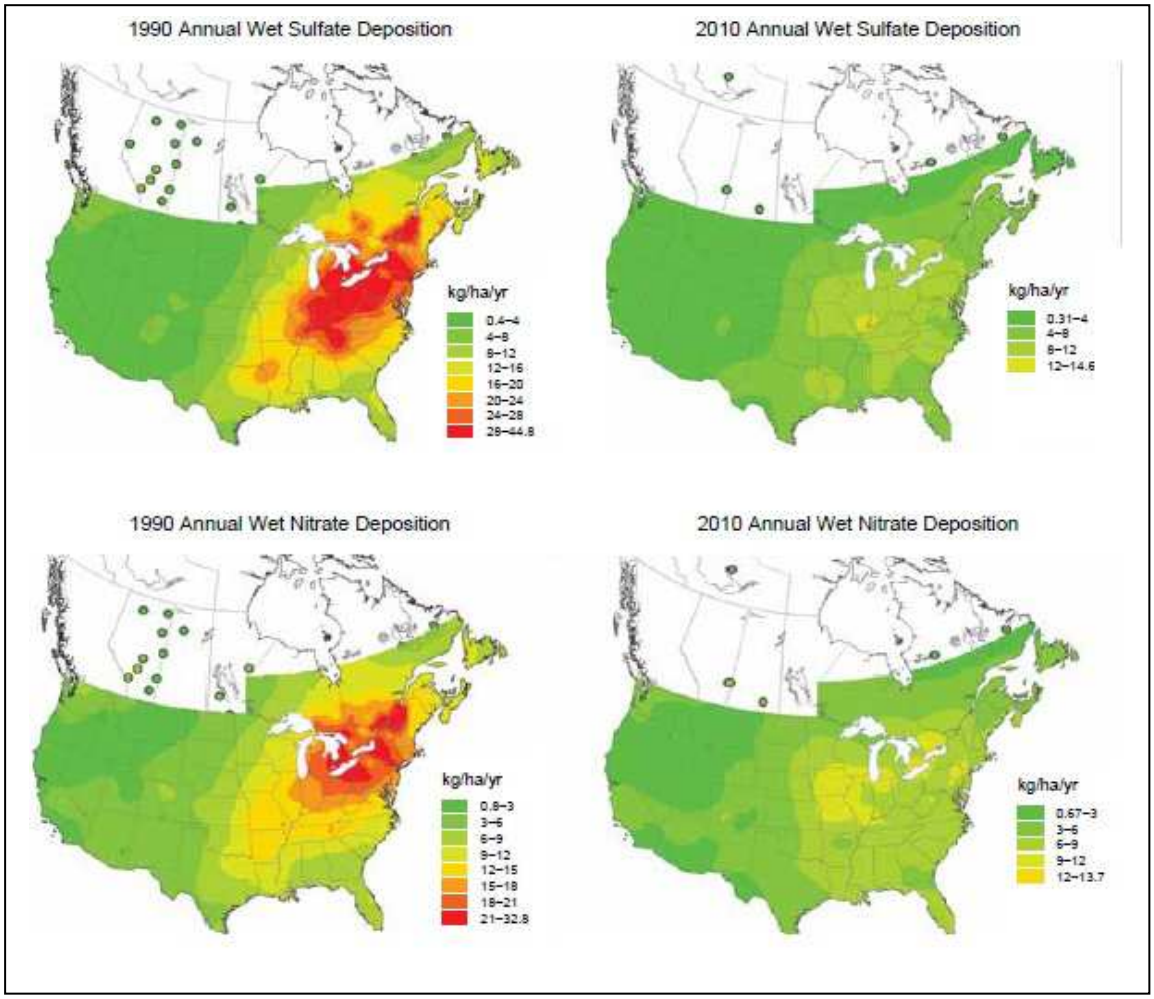
IS THE ACID RAIN PROBLEM SOLVED?

Acid rain is caused by air pollutants such as sulphur dioxide or nitrogen oxide. These chemicals are produced by the burning of fossil fuels, the smelting of ore, the burning of coal, and the processing of natural gas. Then the chemicals can travel long distances by wind, mix with precipitation, and fall on the earth, causing damage to plants, animals, and our health. Electric companies and other industries that burn coal produce sulphur dioxide, and the main cause of nitrogen oxide is vehicles and fossil fuels.

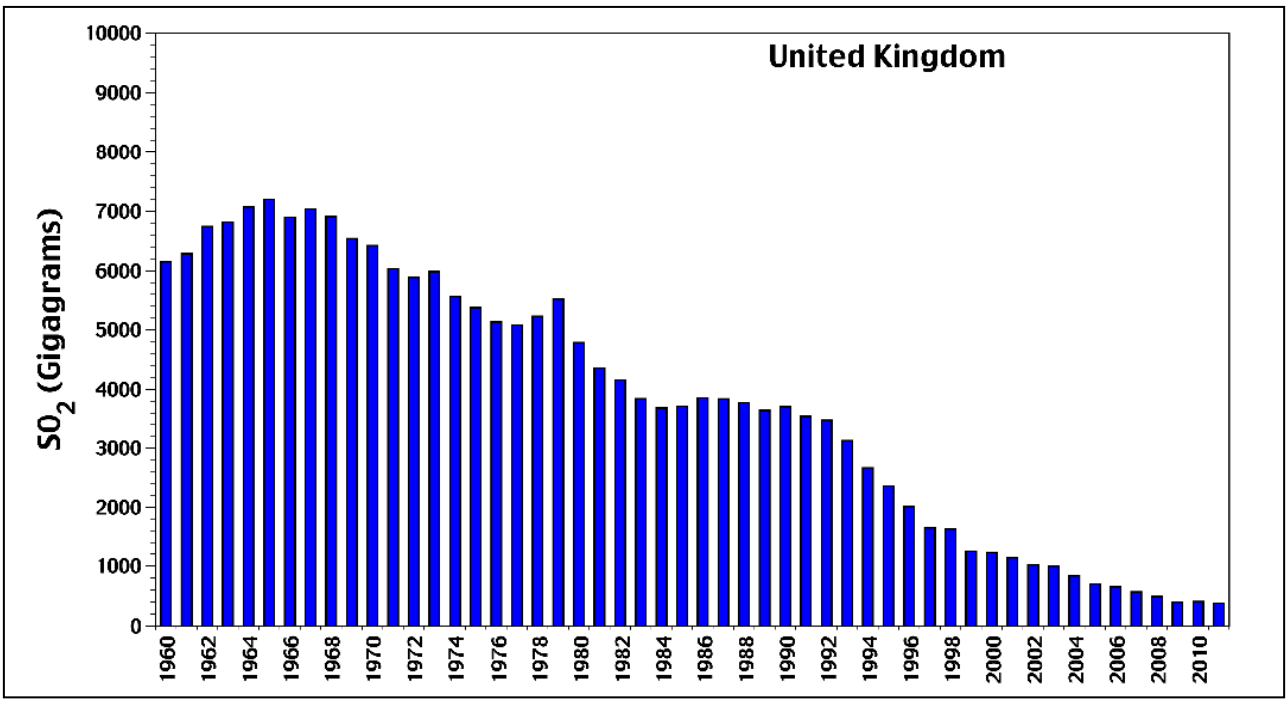
One side of prevention is government environmental regulations, to limit the quantity of emissions released into the atmosphere. To follow these regulations, industries can add "scrubbers" to their smoke stacks to reduce the amount of sulphur released. Another option is washing the coal before it is burned, which reduces the amount of sulphur in the coal. To reduce the amount of car exhaust pollution, catalytic converters can be used in vehicles to make the exhaust less harmless.

On a more personal level, there are many things you can do to help prevent acid rain. Try to use your car as little as possible: walk, use public transportation, and carpool. Turn the heat down in your house, and don't use air conditioning (these things require more gas burning). Conserve water by running a washing machine or dishwasher only with a full load. And remember to turn off lights, and use energy efficient lightbulbs! By following these tips, you will reduce the emissions of fossil fuels by using less energy. If we all pitch in and do our part, we can improve our quality of life and the beautiful earth on which we live.

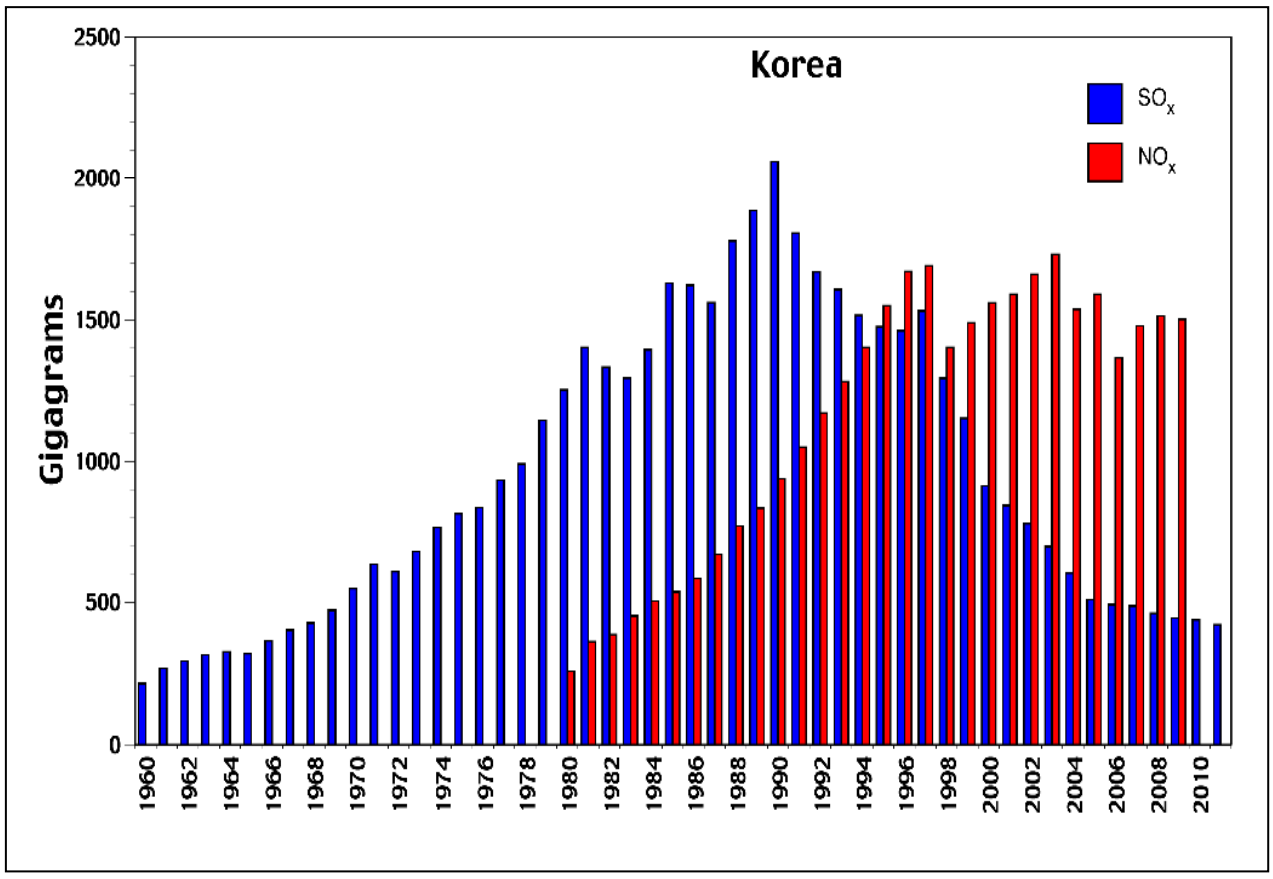
Over the last 30 years these policies have been implemented in Europe and North America and acid rain has been reduced significantly.



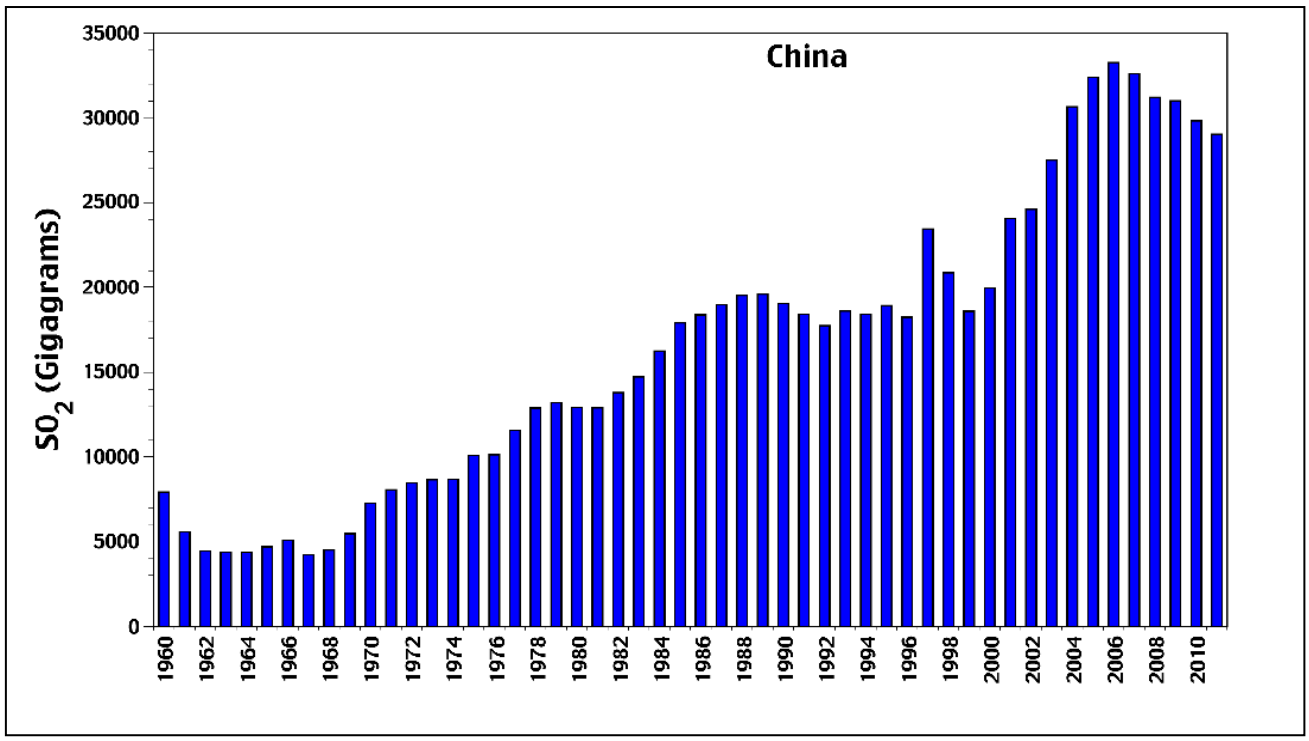
Look at the sulphur dioxide reductions in the UK. The pattern for the USA is similar.

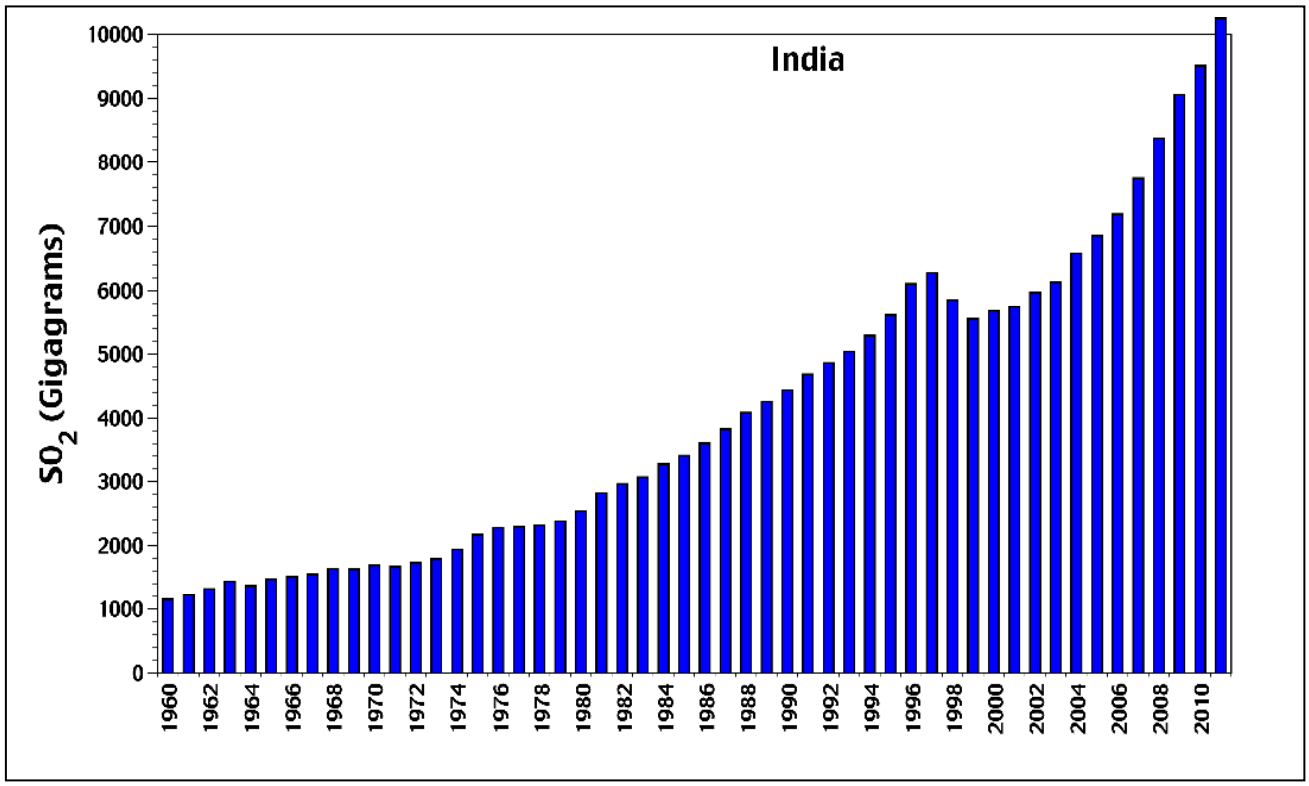


Even a newly Industrialised country such as S. Korea is beginning to address the emissions problem. Although, as you can see it is having greater success with sulphur emissions than with its Oxides of Nitrogen emissions.

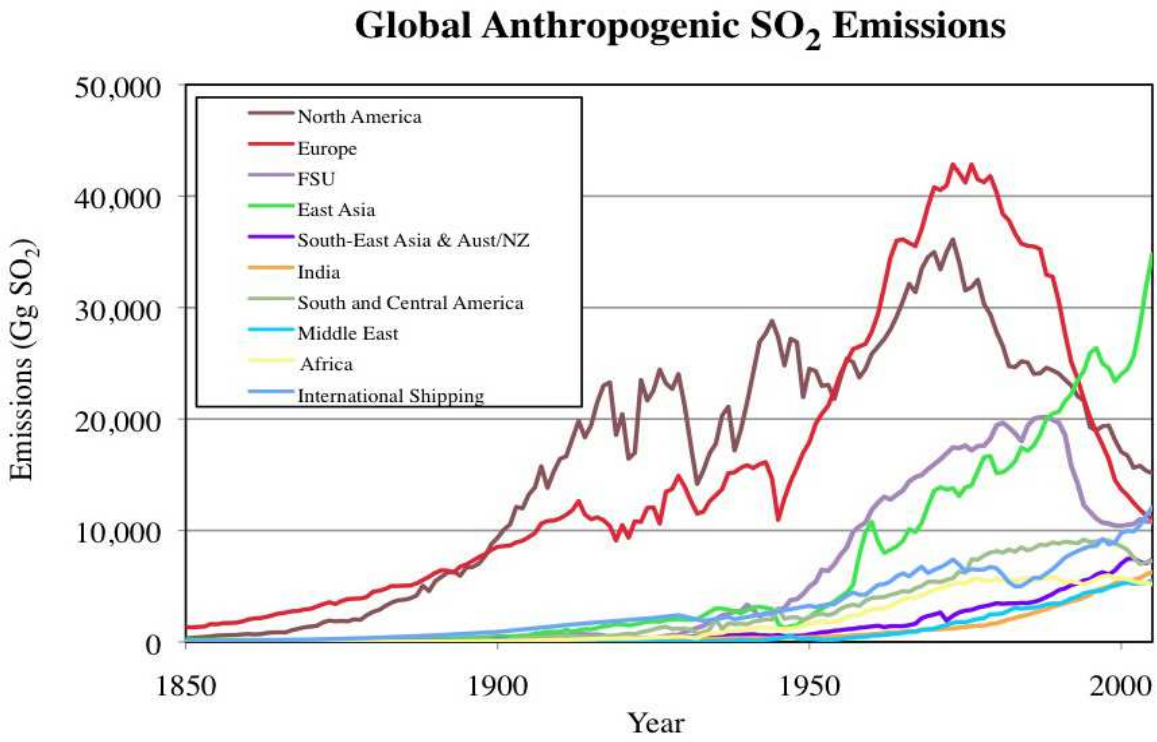


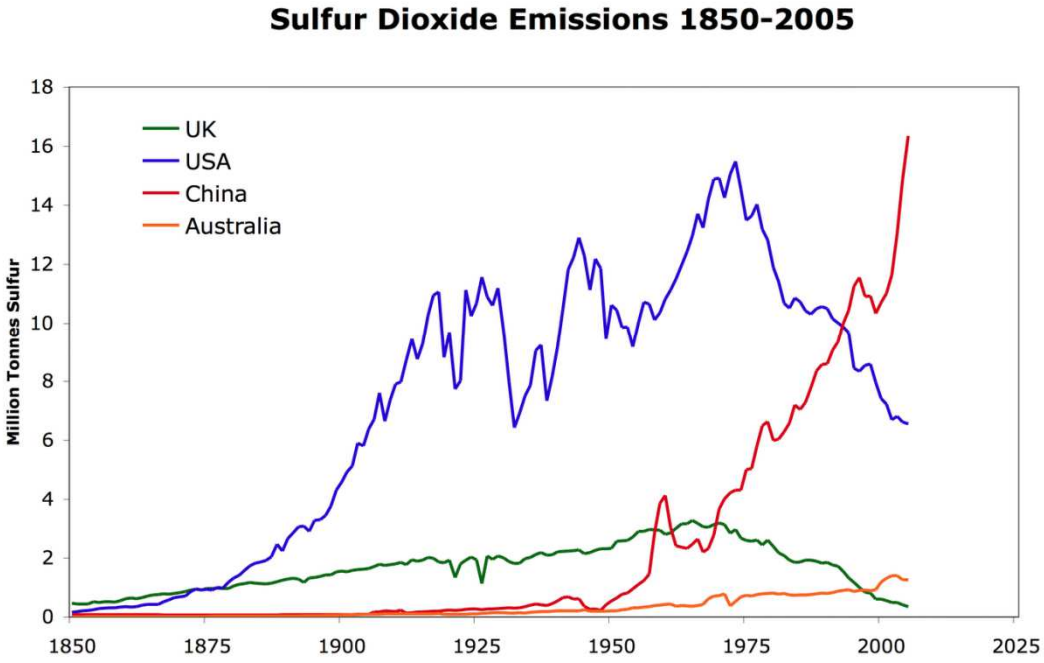
The problem is still severe in the emrging economies. In China and India, the rapidly industrialising nations that still retain coal as their most important energy sources, emissions are still high and in some cases continuing to rise.





We can see that marked regional and national differences exist in the emission of acid rain gases.





China smog sparks red alerts in 10 cities

- 24 December 2015

Hazardous smog blanketing China's north-east has sparked more red alerts, with authorities advising residents in 10 cities to stay indoors.

The announcement follows last week's warning that a vast area of China would be badly hit by pollution.

Beijing saw its second red alert over the weekend. The latest wave of alerts includes the industrial port Tianjin.

Red alerts trigger advisories for people to stay inside, schools to stop classes, and restrict vehicle use.

An environmental ministry statement issued on Wednesday night said the 10 cities with red alerts include Tianjin as well as smaller surrounding cities Puyang, Xinxiang, Dezhou, Handan, Xintai, Langfang, Hengshui, Xinji and Anyang.

They are among 30 cities including Beijing seeing "severe pollution". Another 20 cities have "heavy pollution".

The latest news was met with resignation, and even some jokes, by Chinese netizens who have endured bad air quality levels in recent weeks.

On Wednesday, images of a purple-tinged sunset in Nanjing spread across social media with many users attributing it to the pollution in the city.

"New type of haze: grape flavoured," joked Weibo user Chenyingshisupoman.

Another Weibo user Diliutianmaoxianjia said sarcastically: "Compared to the heavy smog of Beijing, the strong smog of Hebei, and damp heat of Shanghai, I prefer the colours of Nanjing's smog... it is durable and refreshing... once you breathe it in it sticks to your heart."

China's air pollution alert

- A red alert is the highest of a four-level alert system instituted two years. The other colours are blue, yellow, and orange.
- Red means hazardous air pollution for three consecutive days. Air quality levels higher than 300 is considered hazardous.
- It triggers advisories to residents to avoid outdoor activity and for schools to stop classes.
- It also triggers restrictions on vehicle use, factories and construction work.

But some parts of neighbouring Henan and Hebei regions were still seeing heavy pollution, with levels of the PM2.5 pollutant surpassing 300 mg per cubic metre - the hazardous level in China.