

Air pollution caused 160,000 deaths in big cities last year

AFP, Kuala Lumpur

Serious pollution caused around 160,000 premature deaths in the world's five most populous cities last year, even as air quality improved in some places due to coronavirus lockdowns, an environmental group said yesterday.

The worst-affected was New Delhi, the most polluted capital on Earth, where around 54,000 deaths are estimated to have occurred due to hazardous PM2.5 airborne particles, according to a report from Greenpeace Southeast Asia.

In Tokyo, the figure was 40,000 with the rest spread across Shanghai, Sao Paulo and Mexico City, according to the report, which looked at the impact of microscopic PM2.5 matter produced by burning fossil fuels.

"When governments choose coal, oil and gas over clean energy, it's our health that pays the price," said Avinash Chanchal, climate campaigner at Greenpeace India.

PM2.5 particles are considered the most harmful for health. They damage the heart and lungs, and increase the chances of severe asthma attacks.

Some studies have linked PM2.5 exposure to a higher risk of dying from Covid-19.

The report used an online tool that estimates the impacts of PM 2.5 by taking air quality data from monitoring site IQAir and combining it with scientific risk models, as well as population and health data.

The tool is a collaboration between Greenpeace, IQAir, and the Centre for

Research on Energy and Clean Air.

Despite the high numbers of deaths, coronavirus lockdowns imposed across the world -- that took traffic off the streets and shut down polluting industries -- did temporarily clear the skies above big cities.



Delhi, for instance, underwent a dramatic transformation for a period last year when curbs were imposed, with residents revelling in azure skies and clean air.

Scientists say that massive drops in some pollutants due to lockdowns are bound to have prevented deaths.

Nevertheless, Greenpeace urged governments to put investment in renewable energy at the heart of plans to recover from the pandemic-triggered economic downturn.

"To really clean up our air, governments must stop building new coal plants, retire existing coal plants, and invest in clean energy generation, such as wind and solar," said the group's air pollution scientist Aidan Farrow.



Police fire water cannon on protesters during a demonstration against the military coup in Naypyidaw, yesterday. Protesters demonstrated across Myanmar again yesterday to denounce the Feb. 1 military coup and arrest of elected leader Aung San Suu Kyi, and police forcefully dispersed crowds, using water cannon in the capital and catapults in a northern town.

PHOTO: AFP

Was there ever life on Mars?

Nasa's Perseverance rover wants to find out

AFP, Washington

Seven months in space, a mission that was decades in the making and cost billions of dollars, all to answer the question: was there ever life on Mars?

Nasa's Perseverance rover prepares for touchdown on the Red Planet Thursday to search for telltale signs of microbes that might have existed there billions of years ago, when conditions were warmer and wetter than they are today.

Over the course of several years, it will attempt to collect 30 rock and soil samples in sealed tubes, to be eventually sent back to Earth sometime in the 2030s for lab analysis.

"It's of course trying to make significant progress in answering one of the questions that has been with us for many centuries, namely: are we alone in the universe?" Nasa Associate Administrator Thomas Zurbuchen said Wednesday.

Perseverance is the largest and most sophisticated vehicle ever sent to Mars.

About the size of an SUV, it weighs a ton, is equipped with a seven foot (two meter) long robotic arm, has 19 cameras, two microphones, and a suite of cutting-edge instruments to assist in its scientific goals.

Tucked under Perseverance's belly is a small helicopter drone that will attempt the first powered flight on another planet.

The helicopter, dubbed Ingenuity, will have to achieve lift in an atmosphere that's one percent the density of Earth's, in a demonstration of concept that could revolutionize the way we explore other



planets.

Before it can embark on its lofty quest, it will first need to survive the dreaded "seven minutes of terror" -- the risky landing procedure that has scuppered nearly 50 percent of all missions to the planet.

Shortly after 3:30 pm Eastern Time (2030 GMT), the spacecraft will careen into the Martian atmosphere at 12,500 miles per hour (20,000 kilometers per hour), protected by its heat shield.

It will then deploy a supersonic parachute the size of a Little League field, before firing up an eight-engined jetpack to slow its descent even further, and then eventually lower the rover carefully to the ground on a set of cables.

Its target site, the Jezero Crater, is full of perilous terrain, but thanks to new instruments Perseverance is capable of landing with far greater precision than any robot sent before it.

Scientists believe that around 3.5 billion years

ago the crater was home to a river that flowed into a lake, depositing sediment in a fan-shaped delta.

"We have very strong evidence that Mars could have supported life in its distant past," Ken Williford, the mission's deputy project scientist said Wednesday.

But if past exploration has determined the planet was once habitable, Perseverance is tasked with determining whether it was actually inhabited. It will begin drilling its first samples in summer, and its engineers have planned for it to traverse first the delta, then the ancient lake shore, and finally the edges of the crater.

Perseverance's top speed of 0.1 miles per hour is sluggish by Earth standards but faster than any of its predecessors, and along the way it will deploy new instruments to scan for organic matter, map chemical composition, and zap rocks with a laser to study the vapor.

"We astrobiologists have been dreaming about this mission for decades," said Mary Voytek, head of Nasa's astrobiology program.

Winter storm pulls away from Texas

Millions still without power, water

AFP, Houston

Power was gradually being restored but hundreds of thousands of households remained without electricity early Thursday across Texas, the oil and gas capital of the United States, with some facing water shortages as a deadly winter cold spell that pummeled the southeastern part of the country headed east.

The National Weather Service (NWS) issued a winter storm warning for a swathe of the country ranging from east Texas to the East Coast state of Maryland.

The NWS said the storm would bring ice, sleet and heavy snow to parts of Texas, Louisiana, Arkansas and Mississippi as it tracks to the northeast, causing power outages, tree damage and making driving hazardous.

Even though the Arctic air mass was beginning to lose its grip on an area of the country not used to such extreme cold, the frigid temperatures would continue, the NWS said.

"Record cold daily maximum and minimum temperatures are likely to transpire in the South Central US through Saturday morning," it said early Thursday.

"The Plains and Mississippi Valley can expect daily temperature anomalies ranging between 20 and 30 degrees below normal." President Joe Biden was forced to postpone until Friday a visit to the Pfizer Covid-19 vaccine manufacturing site in Kalamazoo, Michigan, while federal government offices in Washington were closed yesterday.

More than 30 storm-related deaths have been reported by media in the United States since the cold weather arrived last week,

many in traffic accidents.

Hundreds of thousands of residents of the Texas metropolis of Houston were suffering from both power outages and a loss of water pressure.

Nearly seven million Texans were being advised to boil their water before drinking it or using it for cooking, Toby Baker, who heads the Texas Commission on Environmental Quality said Wednesday, adding that nearly 264,000 people were impacted by non-operational water systems.



Power companies in Texas have implemented rolling blackouts to avoid grids being overloaded as residents crank up the heat.

Many weather-related deaths so far have resulted from traffic accidents, but Houston police said a woman and a girl died from carbon monoxide poisoning after sitting in a car in a garage with the engine running to keep warm.

And emergency medical authorities around the state said dozens of others have been treated for suspected carbon monoxide poisoning, while 77 were treated for hypothermia in northern Texas Tuesday.

Eyeing China, 'Quad' foreign ministers meet

REUTERS, Washington

US Secretary of State Antony Blinken was to meet virtually yesterday with his counterparts from Japan, Australia and India in the "Quad" framework, a grouping seen as part of efforts to balance China's growing military and economic power.

The meeting, announced by State Department spokesman Ned Price at a regular briefing on Wednesday, will be the first of the informal group under the Biden administration that took office on Jan. 20, although it has discussed its future role in bilateral calls with members since then.

"This discussion with the Quad foreign ministers is critical to advancing our shared goals in the free and open Indo-Pacific and rising to the defining challenges of our time, including coordinating our efforts and COVID-19 response, as well as climate change," Price said.

President Joe Biden has said working closely with allies will be key to his strategy toward China, in which he has said the United States will aim to "out-compete" Beijing.

Biden and Indian Prime Minister Narendra Modi agreed in a telephone call last week to strengthen Indo-Pacific security through the Quad.