

AIR POLLUTION IN BIG CITIES

160,000 died 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.

Uphold your pledges to Covax facility

WHO urges vaccine makers; Pfizer says South African variant could significantly reduce protective antibodies

AGENCIES

The World Health Organization yesterday urged Covid-19 vaccine manufacturers to make good on their commitments as the planet's poorest countries await their first doses.

WHO director-general Tedros Adhanom Ghebreyesus said the Covax facility -- the global Covid-19 vaccine procurement and distribution effort ensuring poorer countries can access doses -- was now ready to begin.

Around 336 million AstraZeneca-Oxford doses and 1.2 million Pfizer-BioNTech doses -- the only two vaccines with WHO approval -- are set to start being shipped out later this month through Covax.

Around 145 economies are set to receive enough doses through Covax to immunise 3.3 percent of their collective population by mid-2021.

During his news conference, Tedros noted that countries in Europe -- which have been striking their own deals with manufacturers -- were aiming to vaccinate 70 percent of their populations in a similar same time frame.

The WHO launched its annual Strategic Preparedness and Response Plan for 2021 on Thursday, saying \$1.96 billion was needed to fund another year of battling the pandemic.

The plan's six objectives are to suppress transmission; reduce exposure; counter misinformation; protect the vulnerable; reduce death and illness; and accelerate equitable access to vaccines, diagnostics and

therapeutics.

Meanwhile, a laboratory study suggests that the South African variant of the coronavirus may reduce protective antibodies elicited by the Pfizer Inc/BioNTech SE vaccine by two-thirds, and it is not clear if the shot will be effective against the mutation, the companies said on Wednesday.



The study found the vaccine was still able to neutralize the virus and there is not yet evidence from trials in people that the variant reduces vaccine protection, the companies said.

Still, they are making investments and talking to regulators about developing an updated version of their mRNA vaccine or a booster shot, if needed.

Because there is no established benchmark yet to determine what level of antibodies are needed to protect against the virus, it is unclear whether that two-thirds reduction will render the vaccine ineffective against the variant spreading around the world.

Power restored to many in Texas, but water out for millions

REUTERS, Galveston

Hundreds of thousands of homes in Texas are coping without heat for a fourth day yesterday after utilities made some progress restoring electricity, as criticism mounted over how the state's political leaders have handled the brutal winter storm.

The crisis facing the country's second-largest state was set to continue, with millions of people still without access to water, many struggling to find food, and freezing temperatures expected to last through Saturday.

As of Thursday morning, 154 of the 254 counties in Texas have reported disruptions in water service, affecting 13.2 million people, according to the Texas Commission on Environmental Quality. Many of those affected have been told they need to boil their water.

While the icy conditions should gradually improve, record low temperatures will likely persist in the South Central region of the United States through Saturday. The winter storm was moving northeastward and could drop 6 to 8 inches (15 to 20 cm) of snow in parts of Virginia, West Virginia, Maryland and Pennsylvania, the National Weather Service said.

vitacare

LIFE is like a Cup of COFFEE. It's all about how you make it.

BUY 1 GET 1 FREE Cafelait COFFEE CREAMER

Imported, packed and marketed by: Agrivita Bangladesh Ltd., Doaigaon, Gotashia, Monohardi, Narsingdi-1650, Bangladesh.

PREMIUM COFFEE for creative people