

Coronavirus pandemic leads to huge drop in air pollution

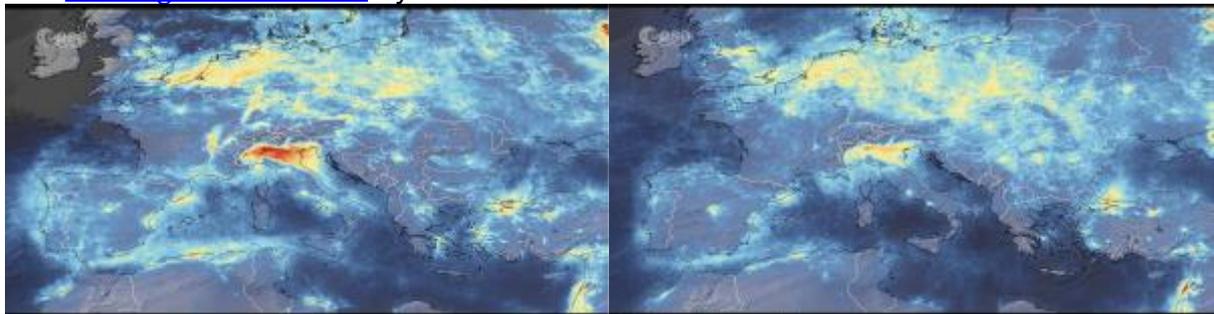
Words by [Lucy Purdy](#) March 24, 2020

New satellite data reveals a significant reduction in air pollution as industrial activity stalls due to the coronavirus outbreak

Air pollution has plummeted in the past six weeks as entire countries hit by the Covid-19 outbreak were forced to hit the pause button on industry.

As factories closed their doors, businesses were forced to shut and traffic fell sharply around cities and industrial clusters in Asia and Europe, there was a marked fall in global nitrogen dioxide levels. The toxic gas is produced by car engines, power plants and other industrial processes.

The impact – a silver lining amid a tragic crisis – is revealed in satellite imagery recorded by the European Space Agency in recent weeks and transformed into [striking visualisations](#) by the Guardian.



Satellite imagery showing how nitrogen dioxide concentrations fell over Italy from January to March 2020. Images: European Space Agency

“We are now, inadvertently, conducting the largest-scale experiment ever seen,” Paul Monks, professor of air pollution at the University of Leicester, [told](#) the Guardian. “Are we looking at what we might see in the future if we can move to a low-carbon economy? Not to denigrate the loss of life, but this might give us some hope from something terrible. To see what can be achieved.”

One of the largest drops in pollution levels is visible over the Chinese city of Wuhan, which is home to 11 million people as well as to hundreds of factories that supply car parts and other types of hardware. Wuhan was placed under strict lockdown from late January.

The impact is also starkly evident in satellite [imagery](#) of Italy: since the country went into lockdown on 9 March, NO₂ levels in Milan and other parts of northern Italy have fallen by about 40 per cent.

Meanwhile, researchers in New York [told](#) the BBC that early results showed carbon monoxide mainly from cars had been reduced by nearly 50 per cent in 2020 so far compared with last year.

There has also been a recorded [drop in CO2 emissions](#) since measures to try to contain the virus began, according to the UK-based Carbon Brief website.

However, experts have warned that levels of both nitrogen dioxide and CO2 could rise steeply once more as the pandemic abates. How governments choose to kickstart their economies again will become all important, they suggest.

Thinking outside the box: how brands and governments are tackling trash

Words by [Gavin Haines](#) March 17, 2020

This article has been created by Positive News and supported by noissue

New legislation in the UK will make rubbish the responsibility of businesses that create it – a big step towards reducing waste. Some brands aren't waiting for the law to take effect and have already switched to sustainable packaging

Finally, a war that pacifists can get behind: the war on waste. Battle lines are still being drawn up – and some protagonists are going in harder than others – but across the world governments and brands are finally stepping up to tackle the estimated two billion tonnes of trash generated by humanity annually.

One of the more ambitious plans for reducing rubbish belongs to the UK government. Due to come into effect in 2023, its waste and resource strategy will shift the duty for rubbish disposal from the state to companies that create it.

The demand for such legislation is driven not only by environmental groups, but also consumers, particularly millennials, who are increasingly taking governments and brands to task over sustainability.

“Consumer behaviour is definitely driving a lot of the change and we see this reflected in the initiatives and laws government bodies are implementing,” says Josh Bowden, co-founder of [noissue](#), which creates sustainable, custom packaging for businesses. “Consumers are voting with their wallets – choosing brands that value sustainability.”

Research by Nielsen, a data firm, supports this: in 2015 it conducted a survey of 30,000 consumers in 60 countries and found that 66% of millennials were willing to pay extra for sustainable goods.

“Despite the fact that millennials are coming of age in one of the most difficult economic climates in the past 100 years, they continue to be most willing to pay extra for sustainable offerings,” the report concluded.

As consumer habits change, brands are pledging to move towards more sustainable packaging. Danone, H&M and L'Oréal are among the major labels to sign up to the New Plastics Economy Global Commitment to eliminate plastic pollution. Small businesses, which are more agile than bigger brands, are often able to make the shift more swiftly – something that noissue wants to encourage by making its packaging products accessible to small businesses and fully customisable.

“Sustainability is something I'm constantly working on, and I'm definitely conscious of the errors I've made in the past,” says Eleanor Longhurst, founder of Little Paisley Designs, a Bristol-based stationer that uses noissue's packaging. “Now, I do

everything I can to reduce my impact on the environment. New products have biodegradable packaging – using corn starch cellophane bags – instead of plastic bags or are sent out ‘naked’ in my custom tissue paper.”

To ensure brands of all sizes have access to sustainable, custom packaging, noissue keeps minimum order quantities low. It even plants a tree for every business placing an order, which they can do online on the noissue website.

“We plant a tree on behalf of our customers when they join our Eco Packaging Alliance,” explains Bowden. “Customers get to choose where they plant their tree, so we play our part in global reforestation.”

With forward-thinking brands setting the example, the UK government’s waste and resource strategy will ensure other companies follow suit. The strategy will also include a bottle deposit scheme, meaning used containers have a value. Though the exact details have yet to be thrashed out, according to Keep Britain Tidy the strategy has the potential to significantly reduce rubbish, which would save cash-strapped councils millions.

“Local authorities spend around £700 million a year in England alone on cleaning up streets,” explains Richard McIlwain, the charity’s deputy chief executive. “That’s money that could be better invested in things like social care or parks or libraries.”

Having poured over the details of the UK’s new waste strategy, McIlwain concluded that “it’s an ambitious proposal,” adding that once brands have to factor in the cost of disposing of their packaging, they might develop more sustainable alternatives.

“Hopefully, what we will see is a shift in packaging design, away from complex packaging that is not easy to recycle towards packing that is simple, weighs less and is easily recyclable.”

For businesses making the sustainable choice, it may mean increased costs for their customers, but from talking to noissue’s business customers, Bowden believes that consumers are often willing to pay extra.

“They understand that supporting a brand with sustainable practices and values, has a ‘greater good’ component,” he says. “So, I don’t think the costs associated with more sustainable choices is that big of a barrier.”

Beyond the UK, other governments are also driving new legislation forward to reduce waste. France has passed anti-trash legislation requiring companies to pay for the disposal of products they create; from electronic goods to cigarette butts. The Dutch, meanwhile, want their economy to be fully circular by 2050, and Costa Rica aims to be free from single-use plastic next year.

New Study of 900 House Cats Finally Answers Age-Old Question About What Felines Do When They Go Outside

Have you ever wondered where our pet cats go when we're not looking? What mysterious antics they get up to when they're prowling around the great outdoors? And will we ever understand the inner mysteries of the noble cat mind?

In an effort to answer these ancient questions, which have plagued the minds of cat-fanciers since the time of the Pharaohs, one team of scientists launched an initiative to track the movements of our feline friends and glean some insight into their outdoor lives.

The [Cat Tracker Project](#) is simple in concept: find out where cats go and what they do. Founded by researchers from the North Carolina Museum of Natural Sciences, the team placed GPS collars on the cats of willing volunteers.

After tracking the movements and behaviour of nearly 1,000 cats across four countries and analysing the data for six years, the results are in—and some of the findings come as a bit of a shock.

"I was surprised at how little these cats moved," lead project author Roland Kays [told National Geographic](#). "Most of them spent all their time within 100 meters [330 feet] of their yard."

That's not to say that all cats were layabouts, however. National Geographic's Jonathan Losos goes on to note: "Seven percent covered more than 25 acres, and several cats had enormous ranges. The record-setter was Penny, a young female from the suburbs of Wellington, New Zealand, who roamed over the hills behind her house, covering an area greater than three square miles."

Then there was Max, a neutered tomcat from England who walked from his home village of St. Newlyn East all the way to Trevilson—over a mile—and back for no apparent reason. Max made this trek twice in the six days he was tracked, leaving his human as mystified as the researchers.

If you have an outdoor cat, reading some of these anecdotes might confirm something you've long suspected: that the inner machinations of a cat's mind are an unknowable enigma—a felicitous riddle whose answer they themselves might not possess.

On the other hand, don't let the tales of adventurous ramblers worry you—the study found that the vast majority of cats are, simply put, “universally lazy”, according to Kays. Aloof though their personalities may seem, chances are our furry companions are strolling just outside our own backyards, and not farther.

However, the Cat Tracker Project doesn't end there. If have you ever wanted to understand your cat's personality, the project's website explains: “With help from our colleagues at Discovery Circle in Australia, we know that there are 5 overarching traits in feline personality, aptly named the 'Feline Five'. They consist of Skittishness, Outgoingness, Spontaneity, Dominance and Friendliness. The results are calculated on a scale, showing how much your cat exhibits characteristics in each of the Feline Five traits.”

The Cat Tracker Project also has a branch of their work that studies how much pet cats hunt local birds and mammals for sport. By analysing hair and food samples from participants, researchers can learn about whether a particular cat is “snacking beyond the food bowl”. While this might seem merely like an unsavoury side-effect of cat ownership, recent research actually indicates that free-ranging domestic cats in the United States alone kill up to 4 billion birds and 22 billion mammals each year. That could be over three times the population of human beings on planet Earth!

This isn't the first time that the staggering number of birds killed by pet cats has led an intrepid kitty-owner to take action. In 2018, [GNN covered a story about a cat mom](#) named Nancy Brennan who had become increasingly frustrated by how many birds regularly fell prey to her pet cat George—and she became determined to stop him from hunting birds by any means necessary.

Upon reading an article about how birds tend to take notice of bright colors, Brennan created a rainbow kitty collar for George to wear. Its vibrant hues alerted nearby birds to the cat's presence, and shortly after, she was delighted to find that George had stopped killing birds.

Her "Birds Be Safe" collar ended up being so anecdotally effective for other pet owners that an ornithologist and professor at St. Lawrence University, S.K. Wilson, decided to run a 12-week scientific study on its success. Wilson's study proved that cats killed 19 times fewer birds when wearing one of Brennan's bright collars. The study brought a flood of new traffic to Brennan's collar-selling site, which now distributes its bird-saving devices to cat parents all across the world—not to mention the stylish flair that the collars give their cats.