

Dirty secret of electric vehicles: TIRES produce 20% more pollution than gas equivalents

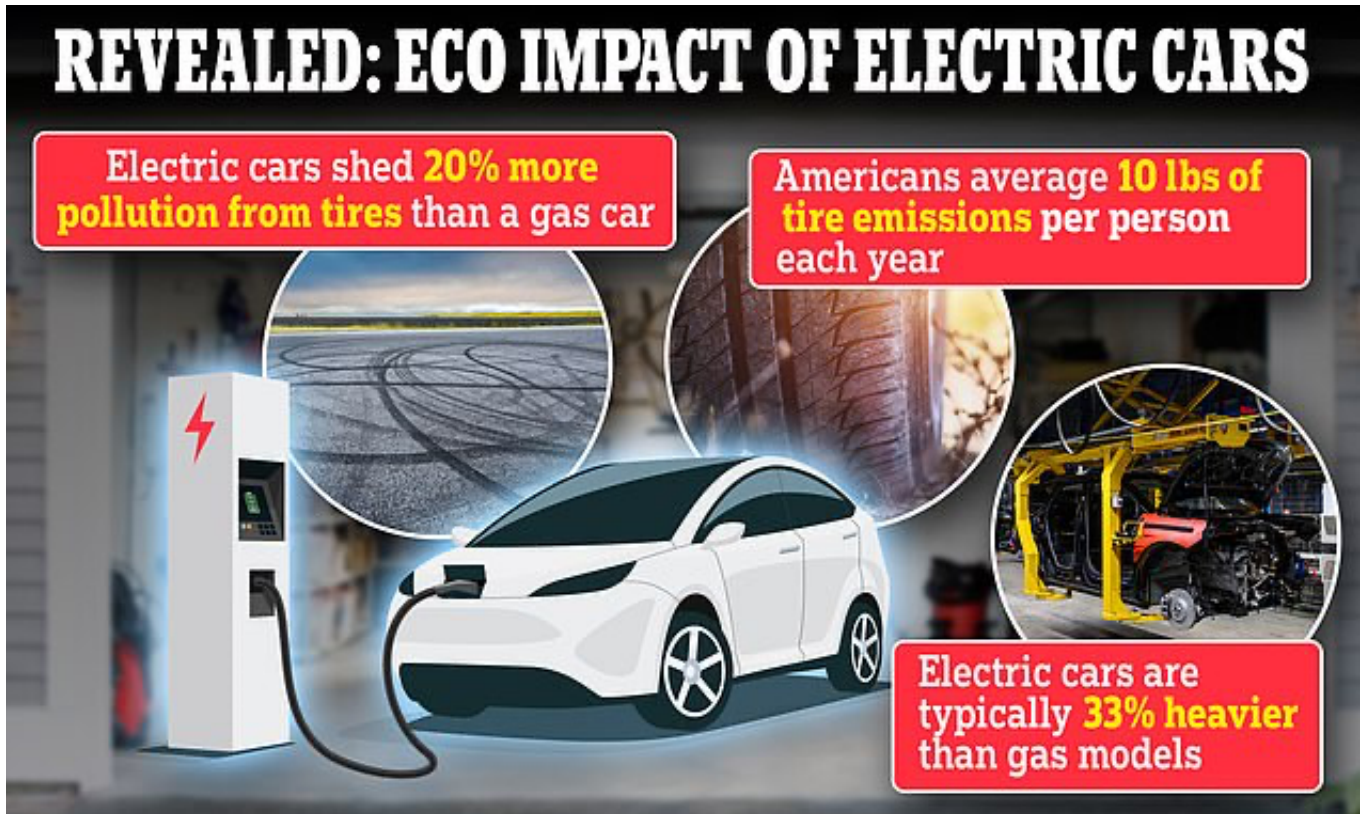
Electric vehicle tires produce up to 20 percent more pollution than their gas-powered equivalents, experts have revealed, meaning EVs could be coming at a higher environmental price than many owners are aware of.

For decades, the impact of tailpipe emissions from gas-powered cars has been the primary draw of battery-powered vehicles.

But experts are warning that tires, which are often overlooked as a source of pollution, are releasing chemicals and microplastics into the environment. While switching to an electric car no doubt helps lower how much carbon you generate, it actually exacerbates the problem of tire emissions.

EVs typically weigh much more and accelerate faster than their gas-burning counterparts, so tiny particles are shed into the air as the tire wears down.

According to [road tests](#) by research company Emissions Analytics, under normal driving conditions a gas car sheds around 73 milligrams per kilometer from four new tires. A comparable electric vehicle, however, sheds an additional 15 milligrams per kilometer - some 20 percent more.



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'It's a combination of the weight and the torque - which is essentially how aggressively the car can accelerate,' Nick Molden, founder and CEO of Emissions Analytics told [DailyMail.com](https://www.dailymail.com).

'The thing about electric motors is they have the ability to accelerate very fast. If you put together that and how heavy the vehicle is, that is what creates the additional wear on the tire.'

The typical electric car weighs around 1000 pounds more than gas models, according to Molden.

In a [study](#) conducted by Emissions Analytics in March this year comparing the Tesla Model Y - the most popular EV in the US - and the similarly sized

hybrid Kia Niro, the firm found the Tesla produced 26 percent more tire emissions.

'The hybrid Kia Niro delivers around 30 percent CO2 reduction, while the Tesla is probably somewhere around 50 percent,' said Molden.

'The Tesla is better from a CO2 point of view, but not that much. Then you're weighing up some extra CO2 reduction but worse tire emissions.'

According to a [2017 study](#), the average American produces roughly 10 pounds of tire emissions each year. The global average per person is under 2 pounds of tire emissions a year.

The International Union for Conservation of Nature says tires are the second leading source of microplastic pollution in oceans behind textiles.

'People are spending a ton of money on these big monsters, when really we should be going towards small, light, economical vehicles,' Molden added.

It comes as the US faces an electric car revolution - led by a surge in Tesla sales.

Last week, the company, co-founded by billionaire Elon Musk, announced a [record surge in sales](#) in the second quarter of the year - delivering 446,140 cars worldwide in the three months leading up to June, outdoing its own prediction of 445,000.



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Nick Molden, founder and CEO of Emissions Analytics, warns that EV tires produce more emissions due to the weight and torque of the vehicles



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Emissions Analytics compared the Tesla Model Y and the similarly sized Kia Niro and it found the Tesla produced 26 percent more tire emissions

Business in the US has been bolstered by federal tax credits for electric vehicles, although experts have warned it could take up to a [decade to pay off the premium that customers pay for an EV](#).

Although green motors tend to be cheaper to run, the average electric car costs just shy of \$20,000 more to purchase upfront than a gas-powered one.

Despite the flood of interest in EVs, leading automakers this week said President Joe Biden's [electric car push is doomed to fail](#) because it 'underestimates' key challenges - including the cost to consumers.

The White House has set out a target requiring that two-thirds of new

vehicle sales be electric by 2032.

But in comments filed to the Federal Government, Toyota and Stellantis - which owns Vauxhall - blasted the plan as 'overly optimistic' because of inadequate charging infrastructure and high prices. Stellantis said the target 'significantly underestimates' the complexities of building a viable EV market.

Meanwhile tire emissions are not the only environmental question that has been raised around EVs.

Experts have [debated the eco impact of the lithium ion batteries](#) used to power electric vehicles, which require rare metals and huge amounts of energy to manufacture.

For Molden, it is a 'no-brainer' that the world should move towards hybrid vehicles.

'They are hardly heavier than normal vehicles and they give you a big reduction in CO2,' he said. 'If you want to genuinely address the environmental problem, the intuitive way of doing it is making smaller, lighter vehicles. Not bigger and heavier monsters.'