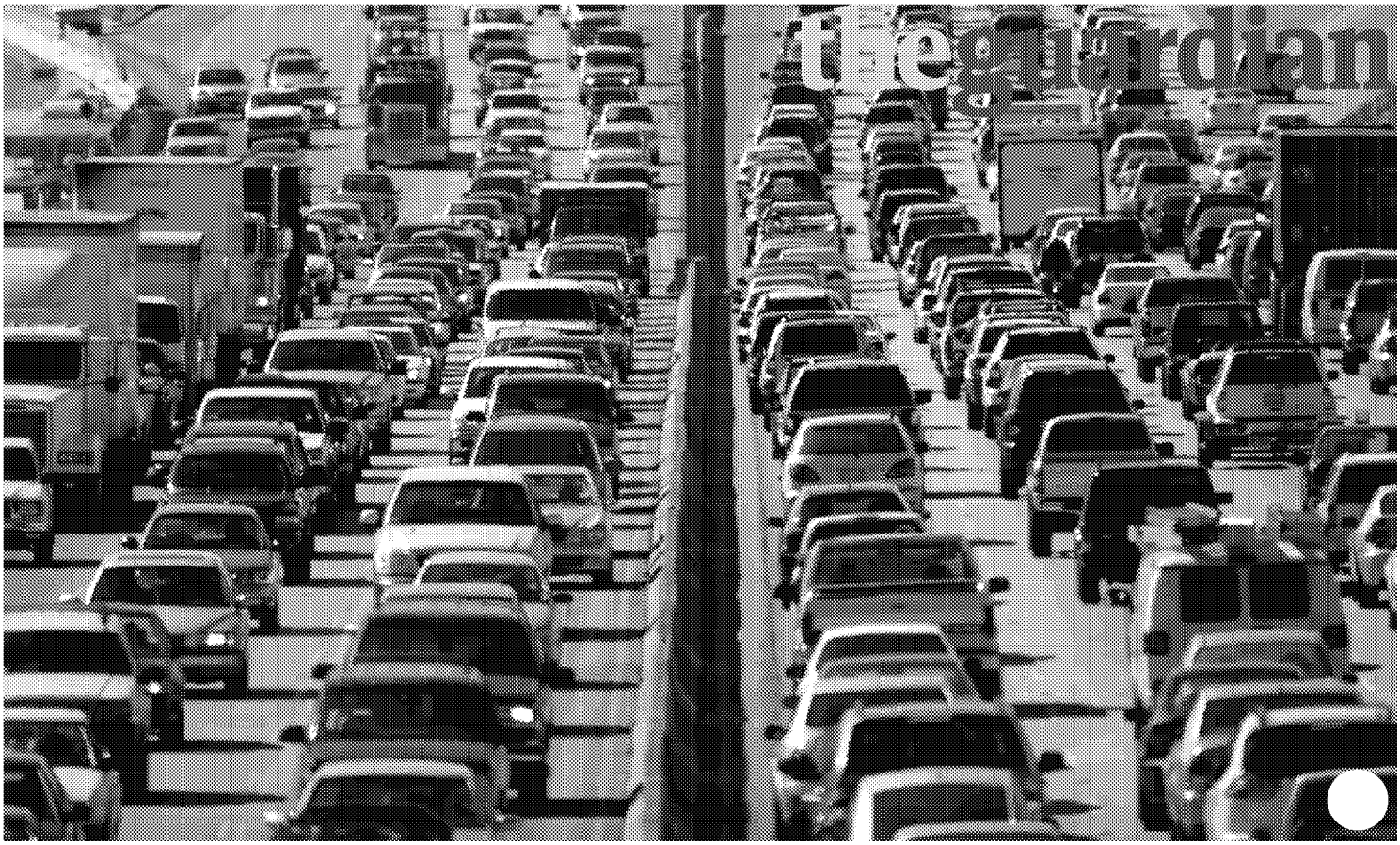

Vehicles are now America's biggest CO2 source but EPA is tearing up regulations

Transport overtook power generation for climate-warming emissions in 2017 but the Trump administration is reversing curbs on auto industry pollution

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Some of the most common avatars of climate change - hulking power stations and billowing smokestacks - may need a slight update. For the first time in more than 40 years, the largest source of greenhouse gas pollution in the US isn't electricity production but transport - cars, trucks, planes, trains and shipping.

Emissions data has placed transport as the new king of climate-warming pollution at a time when the Trump administration is reviewing or tearing up regulations that would set tougher emissions standards for car and truck companies. Republicans in Congress are also pushing new fuel economy rules they say will lower costs for American drivers but could also weaken emissions standards.

Opponents of the administration fret this agenda will imperil public health and hinder the effort to address climate change.

"This Environmental Protection Agency doesn't seem to have met an air regulation that it likes," said Mary Nichols, chair of the California Air Resources Board and a former EPA assistant administrator. "I've not seen any evidence that this administration knows anything about the auto industry, they just seem to be against anything the Obama administration did.

"Vehicle emissions are going up, so clearly not enough is being done on that front. The Trump administration is halting further progress at a critical point when we really need to get a grip on this problem."

The 1970 Clean Air Act, signed by Richard Nixon, set standards for a cocktail of different pollutants emitted from new vehicles. New cars and trucks, which account for more than 80% of transport emissions, now have to meet fuel efficiency standards and display this information to consumers. This approach has helped cleanse previously smog-laden American cities and tamp down greenhouse gas emissions.

But in 2016, about 1.9bn tons of carbon dioxide emissions were emitted from transportation, up nearly 2% on the previous year, according to the Energy Information Administration. This increase means that transport has overtaken power generation as the most polluting sector in the country, and it's likely to stay that way.

Cheap gasoline prices have led to a recent uptick in vehicle emissions, despite the fuel standards, at the same time that coal is being rapidly displaced by an abundance of cheap natural gas and the steady rise of renewable energy, driving a sharp decline in CO_2 emissions from the power grid.

While coalminers have lost their jobs to technological advancement and environmental protesters have thrown their bodies in the path of oil pipelines, there has been far less to disrupt the basic emissions-emitting models of cars, trucks and planes.

Americans are buying larger cars and taking more flights - domestic aviation emissions grew 10% between 2012 and 2016 - and face little opposition in doing so.

"The change in power generation has been very impressive over the past 10 to 15 years," said Brett Smith, assistant director of the Center for Automotive Research.

"In the automotive sector, there isn't the same push. There are certainly Americans concerned about global warming but people are driving bigger and bigger vehicles each year. It's not a priority for them. The cost of fuel is pretty cheap and at the moment there isn't a better option out there than the internal combustion engine."

Transport accounts for about a quarter of all US planet-warming emissions but also poses a direct health threat to about 45 million Americans who live, work or attend school within 300ft of roads that are shrouded in high air pollution levels.

This pollution can stunt lung growth, trigger asthma attacks, exacerbate heart disease and cause developmental problems. The EPA estimates 17,000 schools across the US are located next to roads with heavy traffic, with children from low-income and minority groups disproportionately put at risk. California is the only state in the US to ban the construction of a school on the cheap land found beside major highways.

US cities haven't emulated the likes of London and Stockholm by charging drivers a congestion fee to coax them on to public transport, cycling or walking; nor does the US feature the comparatively high rates of fuel tax seen in Europe. France's move to ban sales of petrol and diesel cars by 2040 would be politically unthinkable in the States.
But the air is much cleaner in American cities than it was in the 1970s, and a world away from the fug that now envelops Beijing and Delhi, in part due to vehicle emissions standards that have progressively been ratcheted up by the EPA.

That trajectory has been cast in doubt by the Trump presidency. In March, the EPA scrapped a deal struck between Barack Obama's administration and automakers that would require new cars to run 54.4 miles per gallon of fuel, up from 27.5 miles per gallon, by 2025.

The White House said the new rules had been "shoved down the throats" of car makers, with the main industry lobby group pointing out that consumers overwhelmingly prioritize safety, driving performance and value for money over fuel efficiency. There are more than 70 car models on sale that achieve 40 miles per gallon and they account for just 1% of total new vehicle sales.

Then, last month, the EPA cited "regulatory overreach" by the previous administration for its decision to waive clean truck standards that would have phased out "glider" vehicles that produce 55 times more diesel soot than new trucks. Scott Pruitt, administrator of the EPA, said his predecessors had "attempted to bend the rule of law and expand the reach of the federal government in a way that threatened to put an entire industry of specialized truck manufacturers out of business".

These rollbacks from the executive branch have dovetailed with an effort by Republicans in the Senate and the House to revamp fuel efficiency rules by replacing state and federal requirements with a single standard. Environmental groups and previous administration officials fear this will lead to a further weakening of emissions standards.

"America's clean car standards have dramatically improved the fuel efficiency of vehicles, saving consumers billions of dollars and cutting pollution in the process," said Carol Browner, a former administrator of the EPA.

"Instead of rolling back commonsense, successful and popular clean cars standards, we should focus on innovation and technology that will continue the auto industry's growth and the pollution reductions we've achieved since these standards were first established."

In the short term, this new approach risks a flashpoint between the federal government and California, which has a long-held waiver to enact vehicle pollution standards in excess of the national requirements. Twelve other states, including New York and Pennsylvania, follow California's standards, an alliance that covers more than 130 million residents and about a third of the US vehicle market.

Nichols said she had been disturbed by signals coming from Pruitt and other EPA officials that she said show the federal government is looking to end California's waiver.

"We are very concerned because these standards are the bedrock of our whole climate change platform," she said. "Scott Pruitt has made threatening noises about the Californian waiver, saying that we are trying to run the country. It feels like this is going to be the next shoe to drop. If

it does, we will litigate and fight for our rights in the political arena with other states and consumer advocates."

With federal regulation set to be pared back, technological advances in electric and gas-powered cars, as well as consumer preferences, are likely to play an increasingly important role in whether vehicle emissions are forced back down.

A flurry of recent optimistic studies have forecast that, by 2040, as much as 90% of all cars in the US will be electric. But the current conundrum is that petroleum-fueled vehicles are cheaper and seen as more reliable than their electric counterparts by most new buyers. Affordable gasoline is competing with electric recharging stations that are considered too sparse by many drivers to risk running out of puff, no matter the benefit to the environment.

"It's a challenging position for automotive companies because they are touting electric vehicles but ultimately they have to sell more cars," said Smith. "Consumers in the US aren't pushing for electric vehicles to the extent they are in Europe and unless we take a very different approach as a country, that doesn't look like it will change soon.

"You will need to see a major change in battery technology to make it viable. People are becoming more aware and concerned about global warming, but we aren't there yet. And when you look at the vehicles being put out by the major car companies, you could argue it's not an issue for them, either."

Topics

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