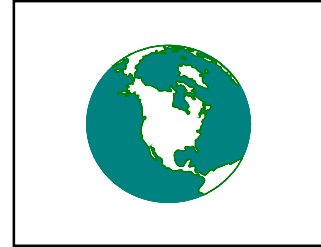


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CAR LINES

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EUROPE

1. Stuttgart Must Ban Euro 5 Diesel Vehicles or Face Court-Imposed Fine

Stuttgart has until the end of August to comply with a court order and come up with an air quality plan that includes a ban on Euro 5 diesel vehicles or face a 10,000 Euro fine. The Stuttgart administrative court has said that by 31 August, Baden Württemberg authorities must amend their air quality plan in line with the Federal Administrative Court's order to ban Euro 5 diesel vehicles in the city from September 2019.

Euro 5 vehicles are those sold between September 2009 and September 2015.

ClientEarth lawyer Ugo Taddei said: "It comes as no surprise that the court has been forced once again to step in to protect people's right to breathe clean air. Repeated court orders have required the introduction of comprehensive and effective traffic restrictions in Stuttgart.

The decision comes after ClientEarth and Deutsche Umwelthilfe (DUH) took the Baden-Württemberg government to court over their failure to reduce air pollution, with the Stuttgart Administrative Court ordering the introduction of traffic restrictions on diesel vehicles. In a landmark decision in February this year, the German Federal Administrative court upheld the order. Last March, DUH followed up when no appropriate action was taken by Stuttgart to comply with the February ruling.

In June, the Administrative Court of Stuttgart ruled that the government's plan to introduce a 'mini-ban' on older Euro 3 and 4 standard vehicles, but exempted residents, was wholly inadequate. The Baden-Württemberg authorities agreed to lift the exemption for residents but refused to make a clear commitment to ban Euro 5 vehicles from September next year.

The Federal state now has a month to update the plan and set a binding deadline for a citywide ban of all Euro 5 vehicles by September 2019.

2. Jürgen Resch and DUH Wage War on Dirty Diesels Using the Lawsuit.

DUH is an NGO with a €10 million annual budget and fewer than 100 staff, up against the car industry responsible for at least a fifth of the German economy, employing almost 800,000 workers, and solidly backed by almost all political parties and at all levels of government.

Resch, a mild-mannered and bespectacled environmentalist, isn't a rabble-rouser or political networker. Instead, he is making inroads into Germany's auto empire thanks to the country's courts, which have mandated that especially polluted cities should ban the most polluting types of diesel cars. The key decision was a February ruling by a court in Leipzig allowing local governments to impose diesel bans to meet clean air standards.

Resch feels he is fighting "a crisis in democracy" as the car industry tries to push authorities to ignore the Leipzig decision.

With 15 million diesel cars on German roads, both the federal and regional governments are trying to water down the court rulings, but Resch is holding their feet to the fire. From DUH's fourth-floor office in Berlin's Hackescher Markt square, overlooking a suburban railway line, Resch coordinates 28 ongoing cases related to air quality across Germany.

Local politicians and the national government — backed by automakers like Volkswagen, Daimler and BMW — are fighting the bans. They argue fleet renewal and software updates to emissions control systems are enough to clean up the smog. More radical action, they warn, could knock out one of the main props of the German economy and hit jobs in big auto cities like Stuttgart and Munich — just the places choked by exhaust fumes.

Those arguments don't get much traction with Resch. Resch feels he is fighting "a crisis in democracy" as the car industry tries to push authorities to ignore the Leipzig decision.

His legal campaign against German carmakers is part of a broader battle against diesel — with cities across Europe clamping down on polluting cars, while the industry fends off accusations of cheating on emissions tests. As a result, diesel car sales are plunging. In the first six months of this year across Europe, new diesel car registrations were down 17 percent compared to the same period in 2017, according to Jato, a consultancy. The fuel type now accounts for just 37 percent of the total market — its lowest share since 2001.

In Germany, Resch has chalked up some recent successes. Hamburg has separately already moved ahead with a limited ban on some diesel vehicles and in late July, a court in Stuttgart gave authorities in Baden-Württemberg until the end of August to ramp up a clean air plan and include a commitment to ban Euro 5 standard diesel cars sold between 2009 and 2015. That came following a case from DUH.

The NGO is also hoping to make progress on cases in Düsseldorf and Munich over the coming few weeks, while hearings in Frankfurt, Berlin and Mainz are due in the early fall.

The Stuttgart judgment threatens to hit the local government with a modest €10,000 fine if it fails to comply, something Resch worries politicians will accept to stave off unpopular bans. But DUH is ready to push further. He wants courts to threaten to imprison politicians who don't implement bans, an ambitious call but one he says is justifiable given that around 70 localities in Germany break legal air pollution limits.

3. German Diesel Woes Prompt Record Exports of Second-Hand Cars

Germany is exporting second-hand diesel cars at a record pace as buyers are confused about possible bans in cities over air quality and because of a more general image problem following the Volkswagen emissions scandal. That helped to push up exports of used diesel vehicles by a record of more than 20 percent last year, according to research from a German university. Italy and Austria were the biggest buyers last year, while sales to Croatia and Ukraine roughly doubled.

"Sentiment is really bad towards diesel engines in Germany," said Christian Kille, a professor at the Institute for Applied Logistics, part of the University of Applied Sciences in Wuerzburg-Schweinfurt, who led the study. Foreign buyers are benefiting from a drop in prices, according to the report, which was co-authored by Björn Helmke.

Germany exported a total of 239,541 used vehicles last year, the highest since at least 2006, the study showed. Italy and Austria snapped up the most at more than 20,000 vehicles, each. Deliveries to France and Spain gained more than 30 percent.

This jump in exports of second-hand diesel cars from Germany coincides with a slump in new registrations. Consumers are buying more gasoline vehicles, a trend that started with revelations

in 2015 that Volkswagen had rigged the emissions setups in about 11 million cars globally. While diesel demand for vehicles is difficult to assess and has been resilient because of wider commercial uses, data from the International Energy Agency show a drop in Germany's total diesel consumption this year from levels in early 2016.

The reticence among buyers in the second-hand market is also linked to talk of bans in German cities following a court ruling earlier this year, Kille said. Restrictions on older diesel cars in parts of Stuttgart and Hamburg have already been announced, with the aim of bringing air pollution levels into line with European Union rules. "People don't know if and how the government will ban diesel and which diesel," said Kille. "Most of the people will not buy diesel cars in order to play it safe."

Kille now expects more of a move toward electric vehicles, he said. Figures from Germany's KBA, the Federal Motor Transport Authority, already show that trend, with sales of hybrids almost doubling in July to 13,559 vehicles, giving them a market share of 4.3 percent, up from 2.5 percent in 2017.

Still, there could be a "renaissance" for diesel engines in Germany in a few years as better controlling mechanisms are developed and the current "hysteria" dies down, Kille said. The market may already be near the bottom, Facts Global Energy said in a report this week, forecasting an increase in registrations in Europe's largest markets by the end of this year.

4. Germany Introduces First Diesel Bus with Catalyst to Avoid Bans

Germany presented its first diesel bus with a technology designed to slash air pollution as it steps up efforts to avoid a ban on older public transport on city roads. The bus, which operates in Dusseldorf and is owned by the Rheinbahn AG, is equipped with a Selective Catalytic Reduction device, the Transport and Digital Infrastructure Ministry said in Berlin. The device can convert as much as 90 percent of the vehicle's harmful nitrogen oxide emissions into innocuous oxides.

The ministry is hoping for a quicker uptake of its offer to help finance the catalyst upgrade after a regional court in February allowed municipal governments to ban older diesel vehicles within city limits. Hamburg in June was the first region to follow up on the ruling, banning vehicles on a busy road with certification lower than the Euro VI standard for emissions.

"Our aim is clear -- we want to avoid a general ban in German cities," Transport Minister Andreas Scheuer said in the ministry statement.

The government and cities need to speed up fitting diesel upgrades, said the Environmental Action Group DUH, a group pushing to ban older diesels from the roads. As many as two-thirds of Germany's 35,000 municipal buses are diesels.

Just 1,000 applications for catalytic upgrades for buses have been made to date, costing 8.5 million euros (\$10 million), according to Scheuer's ministry.

5. City of London Considering Ban on Non-EVs to Cut Air Pollution

At the end of last year, China banned 553 car models that didn't meet the country's strict emission regulations. The City of London is considering doing something similar in the near future.

According to the U.K.'s *The Week*, the City of London is considering a pilot program that would temporarily ban gas- and diesel-powered cars from specific streets that have low-emission restrictions. London's financial center has some of the "worst hotspots" for nitrogen dioxide pollution in the city. The financial center's narrow roads are usually congested and are surrounded by tall buildings, a recipe for a pocket of air pollution.

To help curb the high levels of pollution in the area, Ruth Calderwood, the City of London's air quality chief, stated that the financial district could develop a program that would see the introduction of "ultra-low emission vehicle" roads. On these stretches of tarmac, only electrified vehicles like EVs and plug-in hybrids would be permitted to pass. This would be a clear way to ban gas- and diesel-powered cars.

Apparently, the ban on specific roads would be put into place to help reduce overall pollution in the city. Speaking with the press, Calderwood stated that she didn't believe London Mayor Sadiq Khan's Ultra Low Emission Zone (ULEZ) plan would have enough of an impact on the city's air pollution issue. The ULEZ won't go into effect until next April, and even then, Calderwood isn't too sure that it will be enough.

Calderwood's plan would be one of the first of its kind globally and could have an immediate impact on air pollution in London's financial district. It would also ease the city into Khan's ULEZ plan next April. It would also give the city a look at the kind of impact the ULEZ plan will have on London's pollution issue. While Calderwood's proposal would be a minor solution, she understands that a trial needs to be conducted before a more permanent solution comes to light.

"We want to make sure about the availability of vehicles: we don't want to introduce something that's going to be a problem," she said.

6. Automakers Risk \$16 Billion in Fines on EU Emission Breaches

Automakers failing to cut greenhouse gas emissions risk writing a big check to the European Union. Manufacturers ranging from Renault SA to Mercedes-Benz maker Daimler AG are on the hook for total fines in excess of 14 billion euros (\$16 billion), should they fail to comply with tighter emission regulation phased in from 2020 and in full force the next year, an analysis by IHS Markit shows.

Only a "seismic shift" in demand for electrified vehicles would completely remove the forecast excessive emissions, the forecaster said August 6 in a report. Earlier, analysts at Exane BNP Paribas singled out French automakers PSA Group and Renault SA as most exposed to any payments, with breaches causing such a hit to auto making profits that failing the new rules was "not an option."

Carmakers have known for years about the coming change in EU policy, yet many are struggling to drive down average fleet emissions of climate-changing carbon dioxide. In 2017, carbon dioxide fleet emissions rose for the first time in years after buyers deserted diesel cars, relatively fuel-efficient, in favor of gasoline vehicles in the wake of Volkswagen AG's emissions cheating. Consumers also bought more gas guzzling sport utility vehicles.

IHS said its forecast indicated an average EU fleet emission level of 122.9 grams of carbon dioxide per kilometer, 8 grams higher than an adjusted target. Carmakers' plans to offer all-new electric vehicles like the Mercedes EQ C crossover, as well as fine-tuning existing engine-technology, is setting many carmakers on course to meet the tough targets, they said.

“As we continue to follow carmaker technology developments and any regulatory adjustments, our forecasts may be adjusted accordingly,” IHS said.

7. Merkel Balks at Tighter EU Climate Goals as Germany Faces Crunch

German Chancellor Angela Merkel has rejected a proposal for stricter emissions targets in the European Union, underscoring the clash between climate goals and the country’s booming economy.

Merkel said in a German television interview she expects faster adoption of electric vehicles, which could help limit climate change she said was undeniable after several exceptionally hot summers. Yet she said the EU would do better to meet existing emissions targets rather than set new ones.

“This constant setting of new targets, I don’t think it makes sense,” Merkel told broadcaster ARD in an interview on August 26th. “I’m not so happy about these new proposals, since many EU member countries are already behind in meeting their pledges.”

While putting Germany at the forefront of global efforts to combat climate change, Merkel is hemmed in domestically by an auto industry that’s a major source of exports and an energy strategy that relies on coal generation to bridge the gap to a nuclear-free future.

She was responding to a European Commission plan to examine a stricter climate target that would allow the bloc to reduce greenhouse-gas emissions by at least 45 percent by 2030. The existing 40 percent target is considered too lax to meet the Paris climate agreement’s goal of keeping the rise in global temperatures well below 2 degrees Celsius.

The EU, China and other major economies are upholding the Paris accord after Donald Trump withdrew the U.S. from the climate deal in 2017.

8. Car Emissions Scandal: Loopholes in The Lab Tests Still Being Exploited

Three years after Dieselgate, automakers are still exploiting ‘the lawful but awful ways’ to achieve the best possible scores for CO2 testing in the EU.

It had been an open secret in the industry for years that carmakers were gaming the EU lab tests in myriad ways: over-inflating tires, taping doors, removing the sound system and turning off the air-conditioning were just a few of the methods that helped cut emissions in the lab but that were impossible to replicate on the road.

In 2014, a year before the VW diesel scandal was exposed by the US Environmental Protection Agency, one study showed that carmakers had become increasingly brazen in “optimizing” EU tests to lower their stated carbon-dioxide emissions. From 2001 to 2013, the gap in CO2 emissions in the lab versus on the road nearly quadrupled from 8 per cent to 31 per cent, according to the International Council on Clean Transportation.

Even with carmakers under scrutiny, and European regulators under pressure to enforce rules, the gap has since widened — reaching 42 per cent in 2016.

Recalls to “fix” or “modify” emissions software have since become a regular occurrence. But Europe has not taken strong action to penalize — and thus deter — them for using legal tricks to undermine CO2 tests, which is why problems persist, says William Todts, executive director at the European Federation for Transport & Environment.

That carmakers are still bending EU rules, therefore, is as much a story of ineffectual regulation. Engineers, after all, are tasked with building engines to meet test requirements, just like students focus their reading on what is likely to show up on exams. “Manufacturers will always respond to literal requirements from the regulators,” says John German, senior fellow at the ICCT. “If something isn’t specified in the regulations, it’s not really ethical to take advantage of that — but neither is it illegal.”

In the US, the EPA sets and enforces the rules; in Europe, Brussels sets the rules but enforcement is left to the national authorities. “Nobody has the mandate or legal authority that the EPA has,” Mr German says.

Critics of the EU system say the national authorities’ independence and incentives are questionable. For instance, Germany’s transport authority, the KBA, is in a difficult position to impose billions of euros in fines on a car industry that employs 800,000 people in the country.

When, in April 2016, the KBA found that Mercedes, Opel and VW cars were understating pollution by turning off emissions controls in temperatures not found in test procedures, it recalled 630,000 cars. It issued no fines but simply told carmakers to stop exploiting the loophole.

Emissions testing in the EU is being overhauled, albeit gradually. Simple lab tests under the New European Driving Cycle first designed decades ago and described by T&E as “utterly discredited” are being replaced by longer tests designed to better replicate on-the-road conditions. The new system also gives the commission powers to check cars already on the road, and it can penalize carmakers up to €30,000 a car in case of non-compliance.

Yet critics say Brussels is not going far enough. “They’ve taken away some of the loopholes; they’ve made the cycle more aggressive, but it’s still more gentle than reality,” Mr Molden chief executive of Emissions Analytics, which conducts real-world driving emissions tests says. “Car buyers will still find their cars emitting more CO2 by about 20 per cent.”

Moreover, last month the commission’s research arm said carmakers were already undermining these new CO2 emissions tests — before they even become mandatory next month. The commission’s Joint Research Centre found that cars were still being configured to produce low results on NEDC tests but featured a different configuration to emit higher emissions on the incoming regime, the Worldwide Harmonized Light Vehicle Test Procedure, or WLTP. The logic is to inflate the baseline for 2020 emissions — the year NEDC standards are phased out in favor of WLTP — because targets in 2025 and 2030 are based on a percentage reduction from the start point.

To obtain lower emissions on the NEDC test, carmakers can test the cars on full batteries, enable start/stop engine technology and manually shift gears quickly. To raise emissions for WLTP, they perform a separate test using a depleted battery, disable start/stop functions and shift gears more slowly. Brussels acknowledges that it inadvertently created this loophole when it wrote the WLTP regulations. It tried to prevent carmakers from tricking the system to lower their emissions — it had never thought they might try to make their cars look dirtier than they are.

After environmental groups warned them of this possibility, the commission looked for evidence and found that some carmakers were inflating emissions for WLTP standards by up to 13 per cent and on average by 4.5 per cent. At the same time, they continued to “systematically” understate NEDC emissions by 4 per cent.

In response to these accusations, the European Automobile Manufacturers Association pointed out that inflating emissions in 2020 would be “counterproductive”, because with higher emissions comes higher taxes for car buyers. “A manufacturer that would over-declare CO2 values could dramatically lose their competitiveness and market share, which is in no one’s interest,” it said.

T&E’s Mr Todts suggests that cartel activity may therefore be at play. “The only way this trick can work is if all carmakers work together,” he says, adding that Brussels is already investigating German carmakers for cartel activities in other technology such as the size of tanks for AdBlue, a solution to neutralize emissions for diesel cars.

Proposals by the EC to co-legislators to rectify the issue include having future targets calculated on measured rather than declared WLTP values, and systematic collection of measurement data.

The European Automobile Manufacturers’ Association said in a statement that “CO2 values should not be artificially increased on purpose in any way that would undermine the post-2020 CO2 targets”. The trade body said it agreed with the commissioners’ proposed solutions and it would support their implementation.

9. EC Discrediting Electric Cars NGO Says

Advisers to the EU’s climate commissioner are “deliberately and repeatedly” misleading co-legislators about the impact of its proposals for post-2020 CO2 targets for new cars and vans, NGO Transport & Environment has said. Climate commissioner Miguel Arias Cañete and his department’s “defensive moves” have been “to discredit electric cars and warn of job losses”, T&E says in a paper.

T&E says that the EC did not analyze the impact of a 50% CO2 reduction, as only 30% and 40% targets were modelled in the impact assessment for the proposals. The conclusions of the impact assessment sharply diverge from the review made by T&E in its paper, especially in terms of the consequences for employment.

Furthermore, the impact assessment does not reflect a scenario where “electric cars will completely replace engine vehicles before 2030”, the paper reads. It instead projects “a combination of battery, plug-in hybrid and fuel cell vehicles, the latter two creating more manufacturing employment”.

The basis for carmakers considering electrification to be “overly challenging” were recently explained by ACEA secretary general Erik Jonnaert. “[The] carmakers’ intention is clear”, the paper says: their intention is “to prevent an interim 2025 target in the regulation so they can keep selling diesel cars in Europe as long as possible”.

The EC has found carmakers to have manipulated emission results in order to over-declare CO2 values in WLTP measurements. (See story above.) “The WLTP tests were carried out starting with a depleted battery, so that additional fuel was consumed to charge the battery during the test”, a leaked document reads.

Electric vehicles are engineered with a specific technology to help decarbonize the most polluting sector in Europe. “[Their] use is expected to increase, thereby increasing demand for lithium-ion batteries”, according to T&E.

A study by think-tank CEPS on the prospects of lithium-ion batteries entering the market found that they will reach the end of their life in the coming years. Increased collection and recycling efficiency rates in the EU can mitigate CO2 emissions, decrease dependence on imported materials and boost job creation, it found.

Disregarding the availability of materials, the EC's battery action plan aims to have ten battery gigafactories in the EU by 2025. Some of them are planned in Sweden, Germany, Poland and Hungary, according to T&E.

10. Biggest Ever EU Car Market Growth Recorded

With 8.66m cars registered between January and June 2018, the European car market recorded its best first half performance of the century, according to figures from Jato Dynamics.

The figures are despite continued uncertainty in the UK market, which was down 6.3%, whereas growth recorded in Germany, France and Spain kept the overall European rise high. This was aided by midsize markets the Netherlands, Poland and Sweden, while smaller markets Hungary, Greece, Romania, Croatia and Lithuania all posted significant sales increases.

As for diesel, registrations were down 17% during the first six months of 2018, Jato Dynamics data revealed, and the fuel now accounts for 37% of the total market – its lowest share since 2001.

By contrast, alternative fuel vehicles including electric, hybrid and plug-in hybrid posted a 31% increase, rising to make up 5.4% of the total with 450,200 vehicles registered. However, smaller markets saw the highest growth while larger markets continue to observe relatively slow adoption. For example, in Norway, AFVs now account for 56% of the market, compared to 3.4% in Germany.

Meanwhile, SUVs continue to prove their popularity with customers who bought 2.92m across the European region, marking a 24% growth in the first half and 30% in June.

11. VW Woes Continue

Skills Shortage Makes It Harder for VW To Meet New Rules

Volkswagen warned that a shortage of engineers is hampering efforts to get its cars to meet new anti-pollution rules, clouding its sales outlook and overshadowing a forecast-beating 23 percent rise in underlying operating profit. VW has seen a raft of engine experts depart since admitting to systematic emissions cheating in Sept. 2015. That has left the carmaker short of engineers now needed to work on models complying with stricter emissions tests, Chief Executive Herbert Diess said recently.

“Engine development expertise has been lost,” said Diess, explaining that getting engines certified for road use has become a lot harder under a new Worldwide Harmonized Light Duty Vehicles Test Procedure, known as WLTP, that takes effect from September.

The carmaker recently poached BMW engine development expert Markus Duesmann to help overcome the problem but warned that delays in getting road certification will result in bottlenecks for certain model variants between August and October.

"That impacts capacity utilization at our plants, so there will be closure days at our sites during this period," Diess said. Although VW is sticking to its delivery targets, meeting them will be hard.

The introduction of WLTP rules was accelerated in the wake of Volkswagen's diesel cheating. Regulators now take a much more granular look at vehicles and test car pollution levels much more comprehensively, Diess said. "They look at what kind of tires were fitted and whether the air conditioning is switched on," Diess explained.

Rival carmaker Daimler and supplier Valeo cut their outlooks citing the introduction of new stringent emissions standards and a slowdown in growth as a trade war and tariffs hamper global trade. Automakers General Motors Co, Ford Motor and Fiat Chrysler Automobiles lowered their full-year profit forecasts recently due to escalating tariffs.

In the wake of its emissions scandal, Volkswagen accelerated a push to expand its portfolio of electric cars. The carmaker said it could start serial production of solid-state battery cells from 2024 or 2025. "We must not make ourselves dependent on a few Asian manufacturers in the long term," Diess said, explaining that advances in ceramic separators had raised the viability of mass production. A solid-state battery factory would likely be in Europe, or even in Germany under the right conditions, Diess said.

Volkswagen Says New Emission Tests Pose Biggest Threat

Global trade tensions have put automakers under pressure. But Volkswagen says new emission tests in Europe pose the biggest threat to its business.

"We cannot rest on our laurels because great challenges lie ahead of us in the coming quarters — especially regarding the transition to the new ... test procedure," CEO Herbert Diess said in a statement. The tests present a "titanic task" and "the biggest [sales] volume and earnings risk," the CEO said, according to a presentation prepared for reporters. Diess warned that factories could be closed temporarily, and some new models could be delayed.

Volkswagen (VLKAF) isn't alone. Other automakers in Europe are struggling to prepare for the tests, which were introduced in late 2017. Industry groups have reported that testing bottlenecks are causing delays in certification.

The new test, called the Worldwide Harmonized Light Vehicle Test Procedure (WLTP), measures fuel consumption and emissions of CO2 and pollutants in conditions that simulate real-world driving scenarios. It's billed as a major improvement on the previous test, which was designed in the 1980s and failed to detect Volkswagen's rigging of its diesel emissions.

The new tests are performed in independent labs and a single examination can take days to set up. Test facilities are running at 100% capacity and operating 24 hours a day, but that's not enough to avoid delays, according to the European Automobile Manufacturers' Association. "Neither manufacturers nor approval authorities have had sufficient time to prepare adequately," the association said in a statement. "The process of obtaining European Union approval has slowed down, resulting in planned [car] production being stopped or delayed."

All new car models sold across the 28-member states in the European Union must be certified by September. Even after regulators approve a model, vehicles can be randomly tested as they roll off the factory floor.

The British Society of Motor Manufacturers and Traders reported that domestic production of cars for the UK market dropped 47% in June. It said the new emission tests were contributing to the slowdown.

Mike Hawes, CEO of the industry group, said the tests were one factor that had contributed to a "perfect storm" for automakers, which are also worried about the impact of Brexit.

Volkswagen said that it delivered 5.5 million cars in the first half of 2018, an increase of 7% over the previous year. Sales increased 3.5% to €119.4 billion (\$139.5 billion) and operating profit rose nearly 10% to €9.8 billion (\$11.5 billion). The company took a €1.6 billion (\$1.9 billion) charge related to the diesel scandal.

Volkswagen warned that its financial performance could be volatile in the second half of the year because of the emission tests. Shares in the automaker dropped 3%.

12. France Unveils Anti-Pollution Plan

France's ministry for ecological transition headed by Nicolas Hulot has presented an advance draft of a mobility law to be unveiled this autumn, intended to tackle air pollution and promote clean transport. Hulot's private office proposed the creation of low-emission zones (LEZ) in the most polluted areas of the country, where use of the most polluting vehicles will be restricted, by 2020. The new law will require "all agglomerations of above 100,000 inhabitants" to consider setting up such a zone, the plan reads.

Agglomerations applying LEZs would be able to enforce traffic restrictions geographically or during certain hours, differentiating within vehicle categories in a manner that would gradually lead to prohibiting circulation. The government said it will work hand-in-hand with urban areas committed to implementing the LEZ, in compliance with EU emission level thresholds.

A similar system to the LEZ already exists in Paris and Grenoble and will be extended by 2020 to 12 other areas: Marseille, Nice, Toulon, Lyon, Saint-Etienne, Valence, Strasbourg, Reims, Montpellier, Toulouse, the Arve valley and Martinique.

The French government also plans to impose an environmental tax on sport utility vehicles, to be levied according to air pollution emissions. Penalties will range from €50 to €10,500 as of January 2019.

Other measures envisaged include fostering carpooling services, multiplying electric vehicle recharging points five-fold, allowances for companies providing clean energy perks to their employees, differentiating road lanes according to the number of passengers per vehicle, among others.

Air pollution kills 48,000 people a year in France, 13 times more than road accidents, according to the ministry's plan.

13. Romania To Introduce Much-Delayed Emissions Tax for Cars

Romania's ministry of environment has announced that it will finally introduce a delayed pollution tax for cars which do not meet low emissions standards. The country's minister of environment, Gabriela Gavrilescu, announced the measure recently and said, "if someone is polluting, they must pay a penalty". She promised it would be implemented by the end of the year.

The environmental car tax was first due to be unveiled in 2016 but was cancelled.

At the start of the year, Romania's ministry of environment said it would implement this tax by June 2018. However, Gavrilescu said the latest delay was caused by a dispute over the formula used to calculate the pollution tax. She said: "I do not want to make the same mistake again. I want the calculation formula currently under analysis to be a formula that can no longer be disputed or challenged."

Reducing greenhouse gas emissions from the transport sector remains a key priority for the EU. According to the European Environment Agency (EEA), most EU member states employed incentives or taxes based on emissions to steer purchasing decisions on cars in 2016.

Around 20 member states currently tax vehicles based on their CO2 emission levels, according to car trade body ACEA. However, some countries such as Bulgaria, Estonia, the Czech Republic and Poland provide relatively few incentives to encourage the uptake of cars with low CO2 emissions, according to the EEA.

14. Belgian Coast Guard Plane 'Sniffs' Out Air Pollution

Belgium is helping to lead the way in the detection of air pollution. A Coast Guard plane is kitted out with cutting-edge technology which 'sniffs' emissions from ships.

"So, this is the sniffer sensor, it's located in the back of the pilot. It sucks in air from a probe that is located in the bottom of the aircraft," explained aerial operator Ward Van Roy, showing the technology on the plane.

"And the sensor itself measures constantly carbon dioxide and sulfur dioxide. And, based on the ratio of the two, we can calculate the fuel sulfur content."

reporters joined the team on a 'sniffing' mission off the Belgian coast. Taking off from Ostend, it doesn't take long before reaching one of the busiest shipping channels in the world.

"In the first half of this year, smoke plumes of 785 ships were checked out by this hi-tech plane - and 48 of those were identified as having suspect sulfur emissions. Offenders can face prosecution and huge fines."

The air pollution surveillance work is attracting interest beyond the EU.

"Together with Denmark, we're the only ones for the time being in Europe doing this type of sniffer flights. And, worldwide, this is actually attracting a lot of interest. From Canada, for example, from China as well because we are the first doing this," said Ronny Schallier, head of the aerial surveillance team.

The crew is now looking to expand its work, to test for nitrogen emissions - with stricter standards from 2021.

NORTH AMERICA

15. Trump Administration Proposes to Rollback GHG, Fuel Economy Requirements

NHTSA Cites High Costs, Safety; Attacks California Authority; EPA Disagrees

The Trump administration's proposal to roll back vehicle greenhouse gas and fuel economy standards relies significantly on claims that rolling back the standards will boost safety -- including separate claims that heavier vehicles are inherently safer, tougher fuel economy rules slow fleet turnover to newer and safer vehicles, and higher fuel economy encourages more driving and thus increased risk of auto accidents. It includes a hardline attack on California's authority to enforce its own requirements as well as far higher cost projections of the current, Obama-era limits.

Experts are already questioning those claims, and the final language is being intensely scrutinized regarding its revised assumptions on the cost of fuel economy technologies, as well as its legal defense for preempting California and other states' authority to implement GHG rules that are tougher than the federal government.

EPA staff has been essentially frozen out of crafting the detailed justification for the plan, to the point where the agency asked that its logo and a reference to its technical staff be removed from the draft regulatory impact analysis (RIA) weeks before the plan was issued. The request, which was only partially granted, underscores the extent to which EPA staff was often overruled by officials with the Department of Transportation's (DOT) National Highway Traffic Safety Administration (NHTSA) or elsewhere in the Trump administration, with EPA having sharply criticized major elements of the draft plan, including its claimed safety benefits.

"The preliminary RIA is a work product of DOT and NHTSA, and was not authored by EPA," the agency writes in July 12 comments on the RIA, just weeks before the proposal was released on August 2nd. Accordingly, "EPA's name and logo should be removed from the DOT-NHTSA Preliminary Regulatory Impact Analysis document" because it should "reflect appropriately who has authored" it, the agency said.

The proposal also includes language proposing to revoke California's Clean Air Act waiver allowing it to enforce vehicle GHG and ZEV rules, while also arguing such authority is preempted by federal fuel economy law. It states that EPA and the National Highway Traffic Safety Administration (NHTSA) "disagree with the conclusion" of two district court cases -- *Green Mountain Chrysler v. Crombie* and *Central Valley Chrysler-Jeep v. Goldstone* -- which concluded that California and other states' GHG programs are not preempted by the Energy Policy and Conservation Act.

The proposal also includes revised approaches to estimating fatalities from the current standards, arguing that the proposed rollback will save lives -- though this issue reportedly has been a particular point of contention between EPA and NHTSA during interagency review. EPA's own analysis suggests the plan could actually result in a small increase in fatalities and that it overstates the costs of complying with the current, Obama-era standards.

EPA's logo was not removed from the preliminary RIA as requested, though the later version of the document does omit the name of EPA's primary technical office with expertise in vehicle emissions -- the Office of Transportation and Air Quality. But the fact EPA even raised the issue of taking its name off the RIA -- in the context of what is nominally a joint rulemaking by EPA and

NHTSA to revise vehicle fuel economy and GHG standards -- is considered highly unusual or even unprecedented.

The language appears to be “the career people's final stand,” one knowledgeable source says, driven by the fact that a range of major critiques by EPA staff were not addressed in the proposal.

Draft versions of both the RIA and the proposal itself offer numerous indications of EPA's concerns, including broad worries about the justification for rolling back specific standards as well as EPA heartburn at proposed changes that would de-prioritize requirements tied to GHGs other than carbon dioxide. “EPA does not agree that the HFC credit program should be removed from the GHG standards,” the agency wrote in separate comments on the draft regulatory text, referring to the powerful short-term GHG hydrofluorocarbons (HFC) released from automobile air conditioners that the current vehicle rules seek to discourage.

EPA in its comments urged changes including deleting language proposing to exclude air conditioning refrigerants and leakage and nitrous oxide and methane from average performance calculations after 2020, but that language was retained in the proposal.

The RIA seeks comment on whether to proceed with the proposal to “discontinue” such accounting, or whether the non-CO2 emissions should continue to count toward compliance and remain a feature that “differs between” the EPA and NHTSA programs.

Analysis Indicates Proposal Will Hurt Auto Industry and Climate

According to a recent analysis¹, the rollback proposal threatens the future of the U.S. auto industry and will drive further climate change, along with pain at the pump.

Regarding the auto industry, just 10 years ago when gasoline prices spiked to \$4 a gallon, consumers didn't want to buy the gas-guzzling vehicles U.S. automakers were selling, and so sales of more efficient autos went to foreign competitors. This was part of the reason that U.S. automakers welcomed the fuel efficiency standards set in 2012. They knew the standards would return them to a more competitive position against imported vehicles, and the standards would create a unified national market, bringing California and the 13 states that adopted the California approach together with the rest of the country.

Good jobs and lots of investment followed the new rules according to Oge and Harvey. For example, 288,000 Americans are currently working at 1,200 facilities in 48 states to make today's vehicles cleaner and more efficient, and the clean car standard would create more than 250,000 jobs in 2035. Most of the \$76 billion invested by the auto industry since 2008 has gone to reduce fuel consumption, and auto parts suppliers stand to gain \$90 billion in increased orders for fuel-efficient technology.

Meanwhile U.S. automakers are highly profitable: In 2017 Fiat Chrysler “posted another record performance,” Ford Motor Company “achieved our eighth consecutive year of solid earnings,” and General Motors reported its “third straight year of 10-percent or higher margins.” In fact, the National Highway Traffic Safety Administration reported in 2016 that car companies could meet the higher standards with lower costs and no safety concerns.

¹ “Auto companies might like EPA rollback — but they'll pay for it in the long run”, By Margo Oge And Hal Harvey, Opinion Contributors, THE HILL — 08/05/18

Foreign automakers are racing to build clean cars and electric vehicles, largely to meet rising fuel efficiency standards and EV targets in major markets like China, Europe, and India, as well as California, the single-biggest U.S. market. If the U.S. drops out of this race, automakers and drivers alike will suffer.

Automakers typically have a five-year planning horizon and need roughly three years to develop new vehicles and get them into production. Trump's clean cars rollback faces several years of legal challenges from 18 states which have already sued over the plan — so how can car companies plan for a competitive future without any certainty over which standards will be law?

Trump's clean car rollback also threatens U.S. consumers. Energy Innovation forecasts this move will increase gasoline consumption by 363 million gallons in 2035 and cost consumers \$457 billion through 2050 in additional fuel costs.

Proposal Would Likely Hurt Not Help Workers

President Donald Trump framed his decision to revisit fuel-economy regulations enacted by his predecessor as a move to help U.S. auto workers. "We're going to work on the CAFE standards so you can make cars in America again," he told auto workers in March 2017 outside of Detroit, referring to the Corporate Average Fuel Economy. "We're going to help the companies, and they're going to help you."

But according to some experts—and even the agencies that recommended easing Obama-era fuel economy mandates—those workers may be less in-demand if the proposal takes effect.

U.S. automakers have invested \$63.8 billion in U.S. facilities and have promised another \$12.4 billion through 2020, much of it to meet the environmental dictates, said Zoe Lipman, advanced transportation director from BlueGreen Alliance, a partnership between labor unions and environmental advocates. At least 1,200 U.S. factories and engineering facilities in 48 states and 288,000 American workers are building parts and materials that boost fuel efficiency, according to the group. "Unfortunately, stepping away from strong standards cuts billions of dollars in investments in new technologies and the jobs that go with it," she said.

The analysis by the National Highway Traffic Safety Administration and the Environmental Protection Agency that accompanied the proposed revamp found the auto industry would need fewer work hours to achieve the recommended standards. Under the plan, fleet wide fuel efficiency requirements would stop getting tougher after 2020 rather than continue to grow each year under the terms put in place by former President Barack Obama.

The study projected that the industry's labor needs would rise through 2030 under both scenarios, but more slowly under Trump's. That translated to roughly 50,000 to 60,000 fewer "job-years" a measure of labor need, to meet the lowered standards in each year from 2021 through 2030 than under the Obama administration's standards, roughly 4 percent of expected labor needs in those years, according to the analysis.

Without higher fuel economy requirements, automakers and parts suppliers would spend less to develop and manufacture newer technologies that improve fuel economy, translating to a reduction in labor needs, the analysis said. Those declines outweigh additional labor needs associated with higher sales spurred by lower vehicle prices that the agencies expect from the change, the analysis found.

The negative effects are likely understated, according to Susan Helper, a former chief economist of the Commerce Department during the Obama administration who's a professor at Case Western Reserve University in Cleveland. Cars may be cheaper upfront for consumers, but they will use more fuel and cost more to operate under the easier standards, eating into consumer pocketbooks and hurting demand, she said. Longer term, walking away from higher fuel economy standards puts the U.S. at risk of losing high-value engineering work to China and Europe, which are marching ahead with tougher standards, she said.

"That's really dangerous in terms of future competitiveness and making America great again," said Helper.

To be sure, NHTSA and the EPA make several assumptions, and cautioned that the labor dynamics could play out differently. For example, sales could see larger gains than the analysis projects, meaning job gains could be greater, it said. In the proposal, the agencies note that changes in labor time may not directly translate to actual jobs.

The fewer job-years should not be construed as meaning up to 60,000 jobs will be lost in the U.S. because the analysis measured labor need, not actual employment, and the jobs impacted could be overseas, the Treasury Department said. It also believes that additional labor needs would largely be fulfilled by overtime, meaning losing additional work hours may not lead to job cuts.

That still affects workers in question, said Erica Groshen, a former commissioner of the U.S. Bureau of Labor Statistics and during Obama administration. "A decline in hours does equate to a decline in earnings, either in the form of wages or in the form of a job," said Groshen, who is now a visiting senior scholar at Cornell University's Industrial & Labor Relations School.

Auto parts suppliers provide much of the efficiency-improving technologies that modern automobiles use to meet standards. Those companies would lose some \$20 billion in sales of efficiency technologies between 2021 and 2025 if fuel economy standards are frozen at 2020 levels, even under low fuel prices, according to a study commissioned by Ceres, a nonprofit that works with large companies on sustainability issues.

Big Oil Cheers, Quietly, as Trump Moves to Ease Auto Standards

The Trump administration's plan to relax fuel-economy and vehicle pollution standards could be a boon to U.S. oil producers that have quietly lobbied for the measure. The proposal would translate into an additional 500,000 barrels of U.S. oil demand a day by the early 2030s, about 2 percent to 3 percent of projected consumption, according to government calculations.

Oil industry leaders have been supporting the move behind the scenes and a handful of companies disclosed lobbying on the issue this year, including Marathon Petroleum Corp., Koch Companies Public Sector LLC, and the refiner Andeavor.

The industry's chief argument, mirrored by administration officials, is the Obama-era standards are a relic of a different time, when the U.S. was deeply reliant on foreign oil and gasoline to fuel its vehicles. U.S. exports of crude oil and petroleum products have more than doubled since then, and the U.S. is now on track to become the world's biggest oil producer, surging ahead of both Saudi Arabia and Russia, according to government analysts.

It is now less important to conserve energy and to curb oil demand, given the dramatic rise in U.S. crude production, the Trump administration said in its proposal. “The U.S. is currently producing enough oil to satisfy nearly all of its energy needs and is projected to continue to do so, or become a net energy exporter,” the administration wrote. “This has added new stable supply to the global oil market and reduced the urgency of the U.S. to conserve energy.”

Representatives of the American Fuel & Petrochemical Manufacturers refining trade group and member companies urged White House officials to ease the standards during a June meeting. The refining industry trade group told White House officials that changes were needed to drive down the cost of cars and to give consumers more choice over the vehicles they drive.

The group issued a statement praising the administration for offering a plan “that reflects market realities, industry progress and consumer preferences.”

The extra oil that would be consumed as a result of the proposed changes could cost consumers an additional \$193 billion to \$236 billion cumulatively between now and 2035, according to an analysis by the Rhodium Group.

California Returns Fire at Trump’s Call to Rescind Its Authority

As noted above, President Donald Trump has proposed gutting California’s unique ability to write greenhouse gas emissions limits for cars and trucks. Now California is firing its own heavy artillery. The state plans to force automakers to continue complying with Sacramento’s rules, even if Trump weakens those set in Washington.

This decoupling, set forth in a regulatory filing, is California’s biggest salvo in the escalating fight over Trump’s fuel-economy and tailpipe emissions plans. It could spark years of litigation and create a patchwork of standards that vary from state to state. But Mary Nichols, head of California’s Air Resources Board, said she had no choice. “In case someone might think that the change in federal standards would make it easier to comply in California, it was very important for us to make clear that this is not the case,” Nichols said in a press interview.

Since 2009, the most populous U.S. state has allowed automakers to satisfy its own greenhouse gas requirements by fulfilling national mandates set by the Environmental Protection Agency. California predicated this arrangement on the belief that Washington and Sacramento would continue aligning their rules and neither side would opt for unilateral changes, according to the filing.

But the state’s Air Resources Board plans to vote Sept. 27 on whether to cancel this so-called deemed to comply provision. “California cannot accept radically less protective standards, especially because extensive analysis” of rules now on the books “demonstrated the current standards are entirely appropriate,” the state said in the filing.

The state, which described itself in the filing as “an independent co-regulator for the light-duty vehicle industry,” locked in its tailpipe emissions rules through 2025 and is developing tougher standards through 2030. A dozen other states, which together with California constitute about a third of the U.S. vehicle market, have adopted tailpipe emissions rules that mirror Sacramento’s. They would each likely take separate votes to follow the Sacramento’s decoupling, since most have joined a California-led lawsuit to block Trump’s rollback.

The EPA and the National Highway Traffic Safety Administration proposed revoking California's authority to set rules more stringent than the federal government's and to mandate electric-vehicle sales.

Nichols said she is willing to negotiate but doesn't hold out much hope. "Unfortunately, by putting out these proposals, the administration has effectively precluded our ability to engage in a conversation with them," she said. "We can't possibly, other than in a formal legal proceeding, suggest alternatives they might like."

To underscore her determination, Nichols said that if Trump succeeds in blocking California's tailpipe regulation, the state could use some of its other authorities—including limiting vehicle registrations, fees, and taxes—to seek greenhouse gas reductions. The state also could crack down on emissions from other sectors of the economy, including petroleum extraction and refining.

In a call with reporters, Trump officials acknowledged that the 1970 Clean Air Act gave California unique authority to regulate ground-level ozone and other local pollutants that contribute to local problems such as smog. But the state's special authority does not extend, according to Bill Wehrum, the EPA's assistant administrator for the EPA Office Air and Radiation, to global problems like climate change.

In a rebuttal, Nichols invoked what she called the "climate penalty," that is, a decade's worth of evidence that higher temperatures due to climate change are making ozone harder to control in specific locales like Los Angeles. "Small microclimates are affected differently by pollution and by the buildup of greenhouses gases," Nichols said. "But one thing we know for sure is that local areas affected by increasing heat, and by forest fires on top of that, are going to experience very bad air pollution."

Canada To Review Auto Emissions Regulations as U.S. Moves to Water Them Down

Canada will review the joint vehicle emissions standards it has with the United States before it decides what to do about the U.S.'s plan to weaken those standards in the coming years. Environment Minister Catherine McKenna will unveil a discussion paper soon to kick start that review, just days after the White House announced it is planning to cancel the required annual increases in emissions standards after 2021.

Canada and the U.S. have been aligned on vehicle emissions for more than two decades. Unless Canada scraps the existing regulations and writes its own, which could take at least two years, Canada will automatically follow the American plan.

A spokeswoman for McKenna said the review was planned when the regulations were adopted, not as a result of the Trump move. Canada will look at both environmental and economic impacts in that review and complete it before any decisions are made on how to proceed.

Canadian automakers don't want Ottawa to make any final decisions on regulations here until it's clear what will happen in the United States. "The reality is because we have always followed what the U.S. has done it makes sense to see what comes out of the other end of the U.S. regulatory review process," said David Adams, president of Global Automakers of Canada.

Light-duty gasoline vehicles accounted for about 11 per cent of Canada's entire greenhouse gas footprint in 2016, the most recent year for which emissions data is available, an increase of about

four per cent over the previous decade. Canada's aim to cut emissions to be at least 30 per cent less than they were in 2005 by 2030 requires road transportation to play its part.

If Canada remains aligned with the U.S. on vehicle emissions and the U.S. does halt further improvements after 2021, the International Council on Clean Transportation projected it will add 10 million tons to the annual emissions of cars and trucks by 2030, compared to where they would be with the existing standards.

Nearly Half of Voters Oppose Trump's Vehicle Emissions Plan According to Poll

A large number of voters are opposed to the Trump administration's plan to weaken vehicle emissions standards, a new poll found. Nearly half of voters polled, 49 percent, in the Politico–Morning Consult survey said they were either strongly against or somewhat against the plan to roll back the Obama-era national standards. In contrast, 15 percent of voters said they strongly supported the plan, with a total of 32 percent polled supporting the idea.

When asked whether the economy, automakers or consumers would benefit or be hurt the most by the administration's plan, there was no overwhelming consensus. Thirty-three percent of voters said the environment would be "strongly hurt," the largest percentage.

The poll also found that the majority of voters believed the Environmental Protection Agency (EPA) was lacking when it came to combatting climate change, with 46 percent saying the agency's work was "not enough." In comparison 27 percent of voters polled said the EPA's efforts were sufficient.

The poll, conducted from August 2 to August 6, surveyed a group of 1,994 registered voters and had a margin of error of 2 percentage points.

NAS Grapples with Baseline for Vehicle GHG Study Due to Trump Rollback

A National Academy of Sciences (NAS) panel exploring technologies that could boost vehicle fuel economy out to 2035 is grappling with how to set a "baseline" model year 2025 vehicle against which to measure improvements, given Trump administration plans to sharply roll back Obama-era standards out to that year.

The NAS panel, "Assessment of Technologies for Improving Fuel Economy of Light-Duty Vehicles -- Phase 3," began in May and held its first public meeting July 16. It is intended to inform future fuel economy standards set by the National Highway Traffic Safety Administration (NHTSA) and is tasked "with looking out into the 2025 to 2035 time frame to provide updated estimates on the potential cost, fuel economy improvements, and barriers to deployment of technologies."

The panel will consider emerging technologies and their impacts on fuel consumption, shifts in personal transportation and vehicle ownership models, and consumer behavior including acceptance of new technologies. A report due in early 2022 will include recommendations of technologies for NHTSA to consider in its rules. It will build on the findings of two prior reports, issued in 2011 and 2015.

While the panel is designed to specifically inform NHTSA's fuel economy work, there is significant overlap with EPA's light-duty vehicle greenhouse gas rules. The two agencies recently jointly proposed a major rollback of Obama-era GHG and fuel economy standards through MY25. It

seeks to freeze the limits at MY20 stringency levels and also seek to block California and its allied states from enforcing the current requirements.

EPA currently has final GHG standards through MY25, while NHTSA's statutory limits only allowed it to issue preliminary fuel economy requirements for MY22-25. The two agencies broadly seek to harmonize their rules.

In addition, California and a dozen other states say they plan to enforce their own GHG rules through MY25 -- setting up a major clash between the Trump administration and states representing a third of the auto market.

Because the stringency of the federal standards and the outcome of the administration's dispute with states is unknown, the NAS panel has no idea what a MY25 baseline vehicle will look like as it begins studying technology developing in the following decade.

During the July 16 session, panel member David Greene of the University of Tennessee asked Mike Hartrick, director of fuel economy and climate for the Alliance of Automobile Manufacturers, for "advice" on how the panel should determine the baseline vehicle.

Greene noted that Hartrick argued in his presentation that the panel should adopt a baseline using the most recent data available, which is MY16. "But, in effect, our starting year is 2025. . . . Do you have any recommendations on that point?"

Hartrick responded that he "had not really thought about having your starting point as 2025," and that when he was talking about a baseline he meant the panel should use more up-to-date vehicles than it used in the prior reports. "I'm thinking, you know, we should probably not go back to the 2008 or 2010 model year anymore," he said.

Greene asked if automakers would have thoughts on the dilemma, and Hartrick said it would be best to ask individual member companies. "As a trade association, we can't discuss future product plans." But member companies could discuss the issue in more detail at a private meeting, he offered.

Also, at the meeting, Bill Charmley, an EPA transportation air office official, urged the panel to take advantage of the agency's work on vehicles done out of its Ann Arbor, MI, lab. He noted that his staff briefed the prior two NAS panels conducting the earlier studies at least 20 times.

He also noted that compliance data for EPA's MY17 GHG standard should be publicly available in the fall and that his staff is currently working with MY16 data.

16. Facing Court Deadline, EPA Withdraws Glider Truck Enforcement Waiver

Faced with a looming court deadline to defend its actions, EPA has withdrawn its controversial July 6 policy waiving enforcement of restrictions on the production of high-emitting glider truck kits, acknowledging it is inconsistent with pre-existing EPA policy that restricts such no action assurances to "extremely unusual" circumstances.

"After consultation with the [EPA's air, enforcement and general counsel offices], and information before me . . . I have concluded that the application of current regulations to the glider industry does not represent the kind of extremely unusual circumstances that support the EPA's exercise

of enforcement discretion,” acting EPA Administrator Andrew Wheeler said in a memo posted late on July 26 to EPA's enforcement website.

“Furthermore, the EPA will not offer any other no action assurance to any party with respect to the currently applicable requirements for glider manufacturers and their suppliers.”

The U.S. Court of Appeals for the District of Columbia Circuit had stayed the policy in response to separate petitions from environmental groups and states but the agency was slated to respond to the court's actions in a filing due July 30.

The enforcement waiver, signed on former Administrator Scott Pruitt's final day in office, sought to roll back production caps on glider trucks, which combine a new chassis with a used engine, that do not meet modern emissions standards. Glider trucks.

Pruitt had struggled for over a year to roll back the production limits but the agency had not been able to complete a final rule after the Office of Management and Budget required the agency to conduct a regulatory impact analysis detailing the rollback's environmental and other impacts.

But some glider manufacturers, such as Fitzgerald, had warned that the regulatory uncertainty was forcing them to begin laying off employees. As such, the enforcement waiver was intended to buy time for the agency to complete what officials said was a new rule to formally extend the deadlines for manufacturers to comply with the production limits, even as EPA's proposal to withdraw production limits remains pending.

Wheeler acknowledged the legal hurdles the waiver has faced, noting in his memo that information driving his decision includes “administrative and judicial petitions and motions filed against the policy” as well as “application of agency guidance regarding no action assurances to these particular facts.”

Despite the agency's difficulty in completing the pending rulemaking, Wheeler urged officials to move “as expeditiously as possible on a regulatory revision regarding the requirements that apply to the introduction of glider vehicles into commerce to the extent consistent with statutory requirements and due consideration of air quality impacts.”

The timing of the action may also have been driven by potential political factors as Wheeler was slated to testify before the Senate environment committee August 1.

In a statement, Sen. Tom Carper (D-DE), the committee's ranking Democrat, called Wheeler's action a “step in the right direction” but noted that a regulatory plan to repeal the restrictions on production of glider trucks that are “some of the dirtiest trucks on the roads” remains pending. “I'll keep pushing to see that this misguided proposal is one that never gets finalized.”

17. Air Chief Defends EPA Career Staff and Tests on High-Emitting Glider Trucks

The EPA's top air official is defending testing done by agency career staff that shows trucks with rebuilt engines emit up to hundreds of times more air pollution than new trucks. The Environmental Protection Agency's vehicles lab in Ann Arbor, Mich., “follows rigorous procedures to ensure only high-quality data is utilized by EPA,” agency air chief Bill Wehrum wrote in an August 21 letter to House science committee Chairman Lamar Smith.

Wehrum backed a November 20, 2017, report released by the EPA lab finding trucks using “glider kits”—new truck chassis and cab assemblies built for used engines and transmissions—emitted generally four to 40 times more nitrogen oxides and 50 to 450 times more particulate matter than new model year 2014 and 2015 trucks. His defense is significant, given that critics of the Trump EPA have used the study results as ammunition against its efforts to repeal Obama-era limits on the equipment.

The EPA study has come under the scrutiny of Smith and several other House Republicans. They alleged that EPA career staff worked with Volvo Group North America LLC on the report with the intent to undercut the Trump administration’s repeal efforts—citing emails released to the Environmental Defense Fund and Steve Milloy, founder of JunkScience.com and a former member of President Donald Trump’s EPA transition team.

Volvo, as well as several other major truck makers such as Cummins Inc. and Daimler Trucks North America, have been outspoken opponents of any repeal of the glider kit limits. They argue that allowing glider vehicles to pollute the air with unregulated emissions undermines investments they have made in cleaning up their fleets. Glider kits use old engines that do not have modern pollution controls installed.

Wehrum confirmed that Volvo provided two glider vehicles for the agency’s use, but he said EPA staff conducted the testing independent of outside input. “In particular, they report that, while Volvo did provide unsolicited views on the EPA test program, EPA staff directed and carried out the test program independent of Volvo,” Wehrum wrote.

But even though Wehrum signed the letter, the air chief noted it was based on representations that EPA career staff made to him, Milloy alleged. “The test they did was rigged, and they worked with Volvo to do it at their request. Nothing changes,” he added. “I don’t think that letter is going to have any impact on the Hill.”

The Pruitt EPA on November 16, 2017, proposed to eliminate emissions requirements for glider vehicles, which were tucked into a broader 2016 Obama administration rule setting greenhouse gas and fuel efficiency limits for heavy-duty trucks through 2027. But the repeal efforts have since stalled.

After Pruitt’s exit in July, the agency attempted to give glider kit makers a temporary break from the requirements using enforcement discretion. But EPA acting chief Andrew Wheeler reversed course after a federal appeals court halted the enforcement relief, siding with environmental challengers. (See story above.)

Wehrum, in his August 21 letter, also appears to defend the results of the EPA testing. “EPA’s test results, as presented in the report, were largely consistent with the expected emissions performance of highway diesel engines that were produced in the 1998-2002 timeframe,” Wehrum wrote. Such engines would produce greater emissions of nitrogen oxide and particulate matter, he added, “because such engines do not include modern emissions control technology that has been widely used on heavy-duty engines in the past decade.”

18. California Drivers Could Face \$25,000 Fines for Glider Trucks

Drivers with new truck chassis but old engines that violate California air pollution control standards could face fines of at least \$25,000.

Trucks are considered glider vehicles when older engines, transmissions, and rear axles are added to new truck chassis with frame, front axle, and cab. They are useful to the industry after accidents when the engine and associated components are intact but other parts aren't.

"The problem arises when engines are salvaged from earlier model year vehicles, remanufactured, and installed in the glider kit," a California Senate analysis of the bill, which passed August 20, said. "Despite the fact that these glider vehicles look like brand new trucks, their earlier model year engines often do not comply with the state's air pollution standards."

The bill is being readied for Gov. Jerry Brown (D), who can sign or veto the measure. His office declined to comment to Bloomberg Environment.

The California Air Resources Board estimates that one glider kit vehicle with an older engine puts out the same emissions as 450 modern trucks.

Under state law, diesel trucks with engines that don't meet 2010 heavy duty engine standards will be illegal by 2020, said Stanley Young, communications director of the California Air Resources Board. Those models typically don't filter particulate matter or reduce greenhouse gas emissions.

"We don't care what the chassis looks like," Young told Bloomberg Environment August 21. "What we care about is the engine in the truck."

The board currently can levy fines of \$1,000 and block registrations, but there are no specific rules regarding glider vehicles, he said.

Authored by Assemblywoman Eloise Gomez Reyes (D) and Assemblyman Freddie Rodriguez (D), the bill would prohibit the board from reducing the penalty below a minimum of \$25,000. Money collected would go into a state air pollution control fund.

The California Trucking Association, which supported the bill, couldn't immediately be reached for comment.

19. Trailer Makers Seek Action on Idled EPA Climate Rule Review

After nearly a year of hearing minimal details from the Environmental Protection Agency on its reconsideration of Obama-era greenhouse gas limits on the equipment, the industry is turning to a federal appeals court to get answers. The Truck Trailer Manufacturers Association, in a filing August 6, asked the U.S. Court of Appeals for the District of Columbia Circuit to force the EPA to provide a detailed update on its progress and offer a deadline for when it will decide on trailer requirements.

"The continuing uncertainty as to what the Agencies will do, with no end in sight, is untenable for TTMA's members. It is also unwarranted," the trailer industry group wrote. The Truck Trailer Manufacturers Association's members include major U.S. trailer makers such as Wabash National Corp., Great Dane, and Utility Trailer Manufacturing Co.

Former EPA Administrator Scott Pruitt announced August 17, 2017, that the agency intended to revisit the first-time requirements for trailers—part of a larger 2016 regulation setting greenhouse gas limits for trucks. But since then, the issue has remained largely dormant, as the EPA focused on attempting to repeal another portion of the rule setting air pollution limits for trucks using glider kits, which are new truck bodies allowing for the use of an old engine. (See story above.)

The Truck Trailer Manufacturers Association fought the Obama-era limits in court, winning a temporary pause of the requirements in October 2017. The D.C. Circuit placed that lawsuit on hold, awaiting a decision from the EPA about its reconsideration.

But the industry group said it is past due for the EPA to decide on trailer requirements, which set greenhouse gas and fuel efficiency limits for most new trailers. If the EPA doesn't decide, either by proposing a repeal or revision or dropping the reconsideration, within 90 days, then the trailer group is threatening to ask the D.C. Circuit to restart litigation over the Obama-era rule.

Environmental groups such as the Environmental Defense Fund and the Union of Concerned Scientists, which are defending the Obama-era limits in the lawsuit, say the trailer requirements would deliver at least 10 percent of the regulation's climate benefits. The EPA in 2016 estimated the regulation, which set standards for trucks and trailers through model year 2027, would cut carbon dioxide emissions by roughly 1.1 billion metric tons.

The EPA's efforts to repeal the other portion of the truck rule, emissions limits for glider kits, has hit several roadblocks, including a court order requiring the agency to implement the requirements. EPA officials had tried to use enforcement discretion to allow glider kit makers a temporary break from the limits, but environmental groups and several states challenged the move.

The EPA plans to meet with the Truck Trailer Manufacturers Association to discuss its concerns, the Justice Department said in an August 16 legal filing. No date has been set for the meeting.

Trailers don't have engines, but their aerodynamics can impact the fuel efficiency—and consequently the greenhouse gas emissions released—of the truck pulling the trailer. The trailer industry has long argued, though, that the EPA lacks authority to regulate trailers because they aren't "self-propelled" motor vehicles.

Despite offering a meeting with industry, the EPA is pushing back on trailer makers' request. No statutory deadline exists for the EPA to complete its review of the trailer requirements, which makes it unnecessary for the agency to dictate a timeline, the Justice Department wrote. "The motion to compel, in short, is a bid to obtain the Agencies' internal timelines and deliberations with the goal of rearranging their regulatory priorities to suit Petitioner's own interests," the filing added.

A meeting request didn't quiet the trailer makers, however. In an August 17 filing, the industry group reiterated its request for a detailed timeline from the agency. "Indeed, the Agencies' contentions that they have been working on this for almost a year is puzzling," the filing read. "At issue here are straightforward questions concerning the interpretation of statutory definitions, which have been thoroughly presented to the Agencies in seeking reconsideration."

20. EPA Allows Use of Larger Amounts of Climate-Friendly Coolants

The EPA is allowing manufacturers to use larger amounts of climate-friendly chemicals in household refrigerators and freezers—eliminating what industry has long identified as a barrier to limiting potent greenhouse gas refrigerants.

The Environmental Protection Agency rule will allow household appliance manufacturers to use more than double the amount of climate-friendly replacements for a common hydrofluorocarbon,

or HFC, refrigerant. HFCs are greenhouse gases hundreds of times more potent than carbon dioxide.

Household refrigeration makers, such as Whirlpool Corp. and Samsung Electronics America Inc., have long asked the EPA to increase the allowable amount of the chemicals, consistent with safety standards updated in spring of 2017 by the standard-setting group Underwriters Laboratories. Without the update, household appliance makers said they would struggle to meet requirements set by a 2016 global deal to phase down HFCs.

That agreement, known as the Kigali Amendment, has broad support from the refrigeration and chemical industries—which have ramped up lobbying in recent months to urge the White House to back the deal. But the Trump administration, including top EPA officials, have thus far resisted publicly supporting the Kigali agreement, which the Senate would have to ratify.

The new rule follows a direct final rule issued by the EPA last fall allowing the larger amount for three climate-friendly HFC alternatives. The agency had to withdraw that action and undertake a formal rulemaking process on the issue after it received comments outlining concerns about the flammability of the chemicals.

The HFC alternatives, such as isobutane and propane, have a lower global warming potential, but some are mildly flammable. The EPA, in response to those comments, acknowledged the concerns but noted its analysis of the chemicals didn't show a flammability risk greater than other alternatives already available for use.

"Moreover, EPA is aware of the longstanding widespread use on a global basis of household refrigerators and freezers using this charge limit," the agency added.

21. Zero-Emissions Cars, Fueling Stations Expanding in California

California's burgeoning market of hydrogen-powered cars and network of fueling stations is maturing but needs more attention and funding, according to the state's clean air agency.

More than 4,800 fuel-cell electric vehicles were registered in California as of May, and 36 retail stations were open to the public with 28 more funded, according to a California Air Resources Board report released July 31. An estimated 47,000 fuel-cell electric vehicles are expected to be on the roads by 2024.

"This is clearly reflective of a commitment by California to pursue fuel-cell vehicles as an important part of sustainable transportation and the climate policies of the state," California Air Resources Board member Daniel Sperling told reporters. "It includes not just cars, but larger vehicles."

Fuel-cell electric vehicles are powered by hydrogen and emit water vapor and warm air. They have about a 300-mile range, according to the Department of Energy.

California's federal Clean Air Act waiver allows the state to regulate tailpipe emissions, including setting zero-emissions rules. If the Trump administration seeks to change that, it could alter the incentives for auto manufacturers to sell those type of cars. "It would definitely have an effect," Sperling said.

Gov. Jerry Brown (D) signed an executive order in January setting a target of 200 hydrogen stations by 2025. The California Fuel Cell Partnership 's goal is 1,000 stations to support 1 million fuel-cell electric vehicles by 2030.

Manufacturers such as Toyota Motor Corp. and fuel suppliers such as Shell Oil Co. are committed to growth, Sperling said. Shell has two hydrogen stations in Los Angeles and is working with Toyota and the state to develop the refueling network even more, according to Shell's website.

Sperling, who is founding director of the Institute of Transportation Studies at the University of California, Davis, has driven a Toyota Mirai for more than two years. The only places he can't travel with his fuel-cell electric car because of a lack of stations are Yosemite National Park and far northern California.

"Consumers are probably the biggest question," he said. "It's not really risen into the consciousness of the marketplace. No one was marketing it aggressively, probably because there are not many stations around," he said.

22. Cummins To Recall 500,000 U.S. Trucks Over Faulty Emissions Part

Cummins Inc has agreed to recall about 500,000 medium- and heavy-duty trucks in the United States to correct a faulty emissions control system in the engines it made for the trucks, the U.S. Environmental Protection Agency has announced. The EPA said the Cummins recall of vehicles produced between 2010 and 2015 was the largest ever voluntary recall of trucks due to emissions problems. The catalytic reduction systems were found to be less durable than required and will be replaced, it said.

A spokesman for Cummins said the recall was "in the best interests of our customer and the environment."

The recall is to replace a faulty emissions control systems component that causes excess nitrogen oxides (NOx) emissions. The problem is the result of a defective part and was discovered during emissions standards compliance tests by the California Air Resources Board, which said Cummins "worked collaboratively" with the regulator on the recall.

The Cummins spokesman said the recall will be rolled out in two phases, starting with heavy-duty trucks in August and medium-duty trucks next March.

A previous recall that is underway involves Cummins engines in around 232,000 Dodge Ram 2500 and 3500 pickup trucks made by Fiat Chrysler Automobiles NV.

The EPA said the problem does not involve illegal software known as "defeat devices," which increase the effectiveness of emissions filters to mask pollution levels during tests.

23. US EPA Issues 2018 Air Quality Trends Report

Air Quality - National Summary

EPA creates air quality trends using measurements from monitors located across the country. The table below show that air quality based on concentrations of the common pollutants has improved nationally since 1980.

Percent Change in Air Quality

	1980 2017	vs	1990 2017	vs	2000 2017	vs	2010 2017	vs
Carbon Monoxide	-84		-77		-61		-13	
Lead	-99		-98		-94		-80	
Nitrogen Dioxide (annual)	-63		-56		-49		-21	
Nitrogen Dioxide (1-hour)	-60		-50		-35		-14	
Ozone (8-hour)	-32		-22		-17		-5	
PM ₁₀ (24-hour)	---		-34		-30		0	
PM _{2.5} (annual)	---		---		-41		-18	
PM _{2.5} (24-hour)	---		---		-40		-10	
Sulfur Dioxide (1-hour)	-90		-88		-79		-66	

Emissions Trends

EPA estimates nationwide emissions of ambient air pollutants and the pollutants they are formed from (their precursors). These estimates are based on actual monitored readings or engineering calculations of the amounts and types of pollutants emitted by vehicles, factories, and other sources. Emission estimates are based on many factors, including levels of industrial activity, technological developments, fuel consumption, vehicle miles traveled, and other activities that cause air pollution.

The table below shows that emissions of the common air pollutants and their precursors have been reduced substantially since 1980.

Percent Change in Emissions

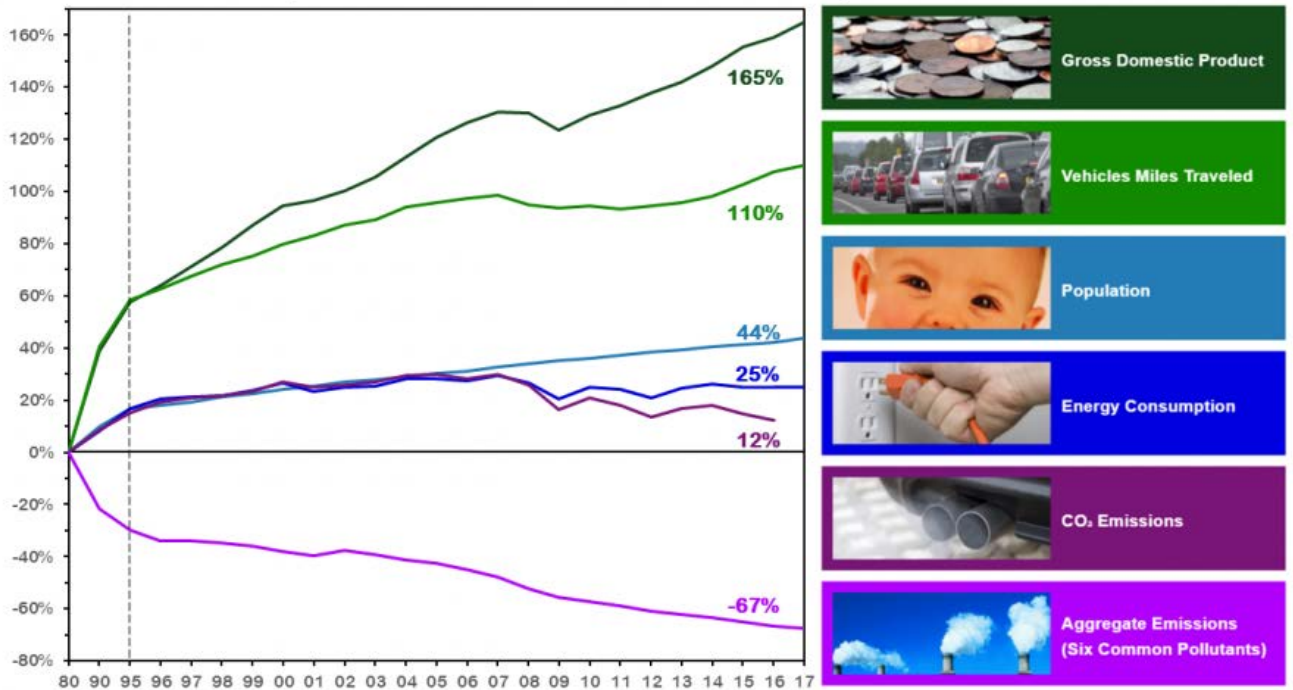
	1980 2017	vs	1990 2017	vs	2000 2017	vs	2010 2017	vs
Carbon Monoxide	-72		-65		-52		-19	
Lead*	-99		-80		-50		-23	
Nitrogen Oxides (NO _x)	-61		-58		-52		-28	
Volatile Organic Compounds (VOC)	-54		-40		-19		-8	
Direct PM ₁₀	-61		-25		-22		-12	
Direct PM _{2.5}	---		-29		-37		-11	
Sulfur Dioxide	-89		-88		-83		-64	

*As a result of the permanent phase-out of leaded gasoline, controls on emissions of lead compounds through EPA's air toxics program, and other national and state regulations, airborne lead concentrations in the U.S. decreased 98 percent between 1980 and 2005. After 2005, the EPA methodology for lead changed and is not comparable to the 2005 and earlier numbers. Since 2008, emissions have continued to decrease by 23 percent from 2008 to 2014. In the 2014 NEI, the highest amounts of Pb emissions are from Piston Engine Aircrafts, and Ferrous and Non-ferrous Metals industrial sources. The 2008 and 2014 estimates were used to approximate the 2010 to 2017 percent change.

Emissions of air pollutants continue to play an important role in a number of air quality issues. In 2017, about 79 million tons of pollution were emitted into the atmosphere in the United States. These emissions mostly contribute to the formation of ozone and particles, the deposition of acids, and visibility impairment.

Annual emissions estimates are used as one indicator of the effectiveness of EPA's programs. The graph below shows that between 1980 and 2017, gross domestic product increased 165 percent, vehicle miles traveled increased 110 percent, energy consumption increased 25 percent, and U.S. population grew by 44 percent. During the same time period, total emissions of the six principal air pollutants dropped by 67 percent. The graph also shows that between 1980 and 2016, CO₂ emissions increased by 12 percent.

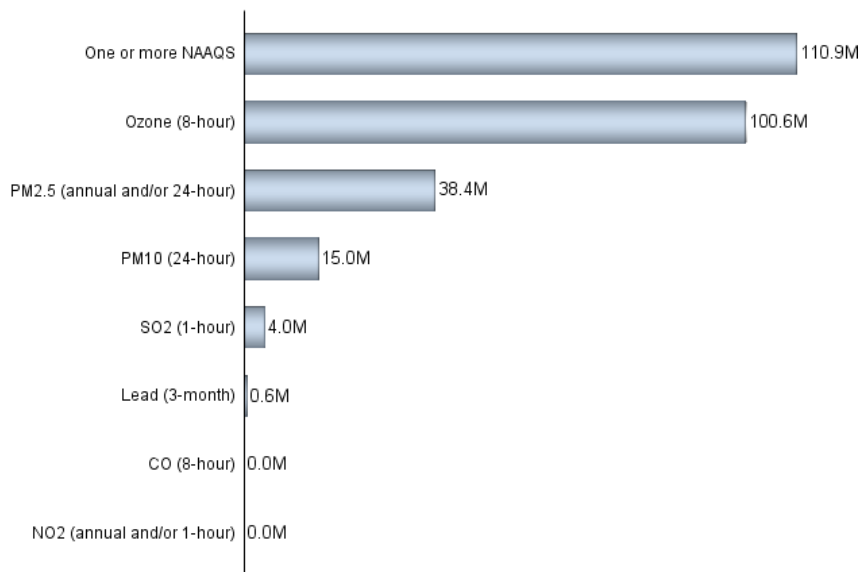
Comparison of Growth Areas and Emissions, 1980-2017



Note: CO₂ emissions estimate through 2016 (Source: 2015 US Greenhouse Gas Inventory Report)

Despite great progress in air quality improvement, approximately 111 million people nationwide lived in counties with pollution levels above the primary NAAQS in 2017.

Number of People Living in Counties with Air Quality Concentrations Above the Level of the NAAQS in 2017



In addition, from 1990 to 2014 emissions of air toxics declined by 68 percent, largely driven by federal and state implementation of stationary and mobile source regulations.

24. EPA To Revisit Background Ozone Question

The US Environmental Protection Agency has decided to complete new background ozone formation limits on schedule in 2020 while revisiting questions about naturally

occurring emissions threatening areas' attainments and triggering penalties under the 2015 requirements. The National Association of Manufacturers was the strongest critic among US business organizations of the agency's August 2nd decision. "EPA made a series of procedural

and technical errors when it generated the 2015 rule, including, for instance, evaluating the impacts of background ozone on attainment,” said NAM Vice-Pres. for Energy and Resources Policy Ross Eisenberg.

“Reconsideration of the 2015 standard was probably the most direct way to correct the record. These issues have not gone away, and now manufacturers must now grapple with them during implementation of the 2015 ozone National Ambient Air Quality Standard,” Eisenberg said.

In its filing with the US Appeals Court for the District of Columbia, EPA said the Trump administration “has been intensively considering and developing a new approach for its NAAQS program since Apr. 11, 2017, in response to two high-level directives.

- The first was President Donald Trump’s Apr. 12 memorandum, directing then-EPA Administrator E. Scott Pruitt to determine if the agency was fully complying with applicable procedural, scientific, and technical review requirements pertaining to its periodic 5-year NAAQS reviews. It specifically directed Pruitt to evaluate compliance with provisions related to advice it received from its statutorily created NAAQS advisory panel, the Clean Air Scientific Advisory Committee (CASAC). This included requirements that the committee advise the administrator “regarding background concentrations and adverse public health or other effects that may result from implementation of revised air quality standards,” EPA’s filing said.
- The second was Pruitt’s follow-up memo on May 9 outlining a “back to basics” approach emphasizing EPA’s commitment to completing the 5-year NAAQS reviews on time and outlining specific steps it would take make the next ozone NAAQS review more efficient (OGJ Online, May 10, 2018). One issue that the filing said required special attention was “the relative contribution of natural and anthropogenic activity,” including additional information on background concentrations of ozone and other pollutants. This memo specified that EPA would solicit advice from CASAC during each NAAQS review on this question and ask that the committee discuss relative proximity to background ozone concentrations in its advice on any recommended NAAQS levels.

EPA initiated the 2020 ozone limits review on June 26 with a call for scientific and policy-relevant information. It also issued a second call for information related to possible adverse effects from various NAAQS attainment and maintenance strategies.

“As part of this review of the ozone NAAQS, consistent with the back-to-basics memo, EPA intends to carefully consider, and solicit comment from CASAC and the public, on topics related to background ozone, including assessments of the relative contribution of natural and anthropogenic ozone to design values, which are used to determine whether areas are attaining the NAAQS,” its court filing said.

“Moreover, EPA notes that it may reevaluate the extent to which the administrator can or should consider levels of background ozone when choosing a standard,” it said. “Because the rationale of the 2015 rule focused on the factual question of whether background ozone would interfere with attainment of the 2015 NAAQS, EPA did not resolve the question of whether raising the NAAQS to accommodate background ozone could be a permissible reading of the Clean Air Act....

“Thus, EPA anticipates revisiting both the question of when background concentrations interfere with attainment of the NAAQS and the question of how to consider potential interference with attainment in deciding whether or how to revise the NAAQS,” the agency’s filing said.

Eisenberg said when EPA sought input last year on how to best reform its regulatory process, NAM asked it to take “whatever measures are available” to ease implementation of the 2015 ozone rule. The agency moved forward with several of the association’s recommendations, and NAM’s members welcome that progress, he noted.

“There is considerably more to be done, however. We appreciate the agency’s decision to focus on background ozone and other NAM concerns during an accelerated review of the 2020 standard, and we will continue to work with EPA and other stakeholders to ensure that these issues are appropriately considered in the 2020 ozone review,” Eisenberg said.

Dan Byers, vice-president for policy at the US Chamber of Commerce’s Global Energy Institute, said EPA’s approach was consistent with most of the administration’s signals during the past few months. “It was in a tough bind. It could have reopened the rule, which could have been a headache. But when Administrator Pruitt said it would try to meet the 2020 deadlines, it decided to let the 2015 rule stand and signal there would be a new process for 2020, including a possible higher level than as a permissible reading of the act,” he told reporters. “Essentially, EPA has been careful not to box itself in.”

25. U.S. Refiners to Benefit from Biggest Low-Sulfur Fuel Capacity, Jefferies Says

Exxon Mobil, Marathon Petroleum and Valero Energy are among the refiners that may stand to gain the most from the coming tougher rules for the world’s shipping fleet, Jefferies analysts say. The U.S. refining system has the biggest capacity to turn crude oil into low-sulfur fuels. Jefferies says, with the U.S. yield of gasoline, jet fuel and middle distillate equaling 82% compared with 63% globally.

Beginning January 2020, vessels moving goods via the world’s shipping routes will be required to burn fuel with less sulfur to help curb greenhouse gas emissions; the new rules are expected to benefit oil refineries around the world, which produce and sell “clean fuels.”

ASIA PACIFIC

26. Oil’s Rising Price Undercuts Clean-Air Push in Southeast Asia

Oil’s rebound from the biggest price crash in a generation is sparking another revival: the use of cheaper, dirtier fuel in Southeast Asia. Indonesia has sought to buy more lower-quality gasoline so far this year than in the whole of 2017, while the Philippines is set to resume imports of higher-sulfur diesel after two years with clean fuels. The nations are embracing such supplies once again as crude’s price increase exacerbates economic pain and boosts inflation, threatening to undermine efforts made during oil’s lower cost period to curb pollution.

The shift in focus to lower-cost dirty fuels and away from the pursuit of cleaner air coincides with political pressure in these countries to shield the public from rising prices. Emerging markets are grappling with weaker domestic currencies and investors pulling out money, with everything from higher U.S. interest rates to a stronger dollar and the American-Chinese trade war to contagion from the crisis in Turkey posing a threat.

“Both Indonesia and the Philippines are for the very first time facing the pressure of what it’s like to have higher energy costs,” said Richard Gorry, a managing director at industry consultant JBC Energy. “This is an interesting way of getting around it, by asking for lower-quality fuel, but that is a two-edged sword because you have environmental fallout.”

Indonesian President Joko Widodo is reining in fuel prices to cap inflation in a bid to increase his chances of a re-election next year. After a two-year freeze on prices of subsidized fuels, Southeast Asia’s biggest gasoline buyer won’t raise prices for 88-RON gasoline and diesel throughout the year, the local press (Kompas) reported last month, citing Energy Minister Ignasius Jonan.

PT Pertamina, Indonesia’s state oil giant, has sought more than 84 million barrels of 88-RON gasoline so far this year via tenders, versus about 62 million for the whole of 2017. By contrast, tenders to buy 92-octane grade slid 45 percent.

In the Philippines, where inflation is at the highest in five years, the government this month told its oil companies to supply Euro 2-compliant diesel to transport and industrial users, an about-turn from the higher Euro 4 standard used since 2016. While the Euro 2 fuel—with 500 parts per million of sulfur—is more polluting than Euro 4 that has 50 ppm, it’s cheaper by about 25 to 30 centavos per liter, government data show.

The fuel downgrade means the country needs to buy the lower-quality grade from overseas as its refineries only produce Euro 4 fuel, with no Euro 2 imports made since January 2016.

The country wants to offer a cheaper option to users such as jeepneys and buses to help shield them from higher fuel costs, said Rino Abad, a director at the Department of Energy. Local diesel prices climbed about 23 percent this year, government data show. Brent crude, the benchmark for more than half the world’s oil, has risen about 11 percent this year, heading for a third yearly advance.

The Philippine central bank this month vowed to take all policy actions to tame inflation. Every one percentage point gain in global oil prices boosts the Philippine consumer price index by 0.03 percent, the bank estimates.

27. Xi’s Clean Energy Drive Paints Bluest Sky Over Beijing in Decade

Beijing residents have been breathing some of the cleanest air in a decade as they begin to reap the benefits of China’s anti-smog push. Of the seven lowest monthly pollution readings in the capital city since 2008, five have been recorded since the beginning of last summer, according to data gathered by the U.S. Embassy in Beijing. That’s when Chinese officials ramped up enforcement of policies restricting coal burning in Beijing and surrounding areas. July pollution levels averaged 44 micrograms of airborne particles per cubic meter, the seventh lowest since recordings began in 2008.

The improved air quality underscores how rapidly China is attacking the smog problem that created Beijing’s “airpocalypse” in 2013, when the tiny particles peaked at 35 times the World Health Organization’s recommended limit. Since President Xi Jinping made fighting air pollution one of the country’s main priorities, millions of northern businesses and families were forced to switch from coal to cleaner-burning natural gas for industrial power and home heating.

The rest of the world is paying for Beijing’s cleaner air. China’s skyrocketing gas use has made it the world’s top importer of the fuel and helped raise global liquefied natural gas prices last winter

to the highest since 2014. Production cuts and capacity curbs to reduce pollution from steel mills have helped rebar futures rebound to the highest price since 2013.

But there's still a long way to go and the cost to shift the country's energy mix to cleaner fuels is rising.

China is seeking to lower the amount of energy it gets from coal to 58 percent by 2020 from about 60 percent now through substituting natural gas for home heating and industrial boilers and nuclear reactors for coal power plants, Jefferies Group LLC analyst Laban Yu said in a research note last month.

Retaliatory tariffs prompted by U.S. President Donald Trump may boost energy import costs. Chinese policy makers have now taken aim at U.S. LNG imports, including them on a list of goods that could be hit with a 25 percent duty, signaling Xi may be willing to suffer some pain to avoid backing down from Trump's escalating trade dispute.

28. Environmental Data Fraud Brings Jail Time in China Crackdown

A Chinese company was stripped of its responsibilities to operate and maintain 25 air quality monitoring stations in China's coal-belt province of Shanxi after an investigation revealed it had covered up several instances of data fraud. In addition, the former head of the local environmental protection bureau was sentenced to two years in prison, and 16 others were punished for destroying air pollution data from monitoring systems.

China's Ministry of Ecology & Environment is trying to snuff out data fraud and management problems across the country through a three-year enforcement plan to be released in the next few weeks.

The action against Shenzhen-listed Hebei Xianhe Environmental Protection Technology Co., Ltd. stems from a series of investigations in the Shanxi city of Linfen during the past several months. Local officials had tampered with six monitoring stations that Hebei Xianhe operated in Shanxi, causing abnormalities that the company failed to report, according a statement from the China National Environmental Monitoring Center, which announced the results of its investigation August 15.

Hebei Xianhe will lose about 3.25 million yuan (\$473,000) in revenue after its contract with Shanxi province was severed, the company said in a statement about the case released to the Shenzhen Stock Exchange on August 16.

The company, which operates monitoring systems in 88 cities and areas in China, said it's reviewing its policies and implementing monthly trainings, conducting random checks on review of data, periodically rotating staff responsible for monitoring systems, and centralizing automatic monitoring systems to detect abnormalities.

Two employees of the company responsible for the monitoring systems in Shanxi, Cui Mou and Zhang Mou, were sentenced to jail terms of eight months and six months, respectively.

A company executive blamed local government officials in Shanxi for the problem.

“The two employees were very young and were bribed with a small amount of money,” Wang Shaojun, secretary of the board at the company, told reporters. “We’re putting in a system to rotate people around so these things don’t happen in the future.” He said the government employees were given envelopes of 1,000 and 2,000 yuan—about \$145-\$300.

In mid-July, Li Zhanshu, chairman of the Standing Committee of the National People’s Congress, the country’s legislative body, said there are “problems with false data and gaps in implementing monitoring in many localities” across the country during a review of implementation of China’s air pollution control laws.

Early in July, the environment ministry also detailed cases of data fraud, inaccuracy, and poor management of automatic environmental monitoring systems at 44 companies in Gejiu, Yunnan province, a major tin production area and home to many nonferrous metal smelting companies, which they cited as representative of wider monitoring problems.

Cases of data fraud were discovered in several provinces since measures were released in April strengthening requirements for automatic monitoring systems at companies that are covered by the policy, the ministry said.

The environment ministry internally released a three-year action plan August 10 aimed at solving problems with environmental monitoring, though the full plan has not been circulated to the public yet.

A ministry official said in a statement posted to the ministry website that inspections of data and monitoring systems for irregularities during the next three years will primarily focus on key air and water pollution control areas in and around Beijing, in and around Shanghai, and in the Shanxi-Shaanxi region, with industries such as papermaking, coal-fired power, steel, chemicals, and wastewater treatment facilities in the cross-hairs.

The official said inspections related to the three-year plan have already started.

29. More Local Leaders Ousted in China’s Pollution Crackdown

China’s pressure against local government leaders who look the other way when companies violate pollution laws has continued with the removal of three officials in connection with an environmental enforcement action against a veterinary drug maker. The local officials, including the deputy mayor of Yinchuan, the capital of the western autonomous region of Ningxia, were removed from their positions after one of China’s top veterinary medicine producers resumed operations even though central government inspectors in June ordered it to shut down.

Tairui Pharmaceutical Co. Ltd., the world’s leading manufacturer of veterinary antibiotics tylosin and tiamulin, restarted operations sometime after June 22. Reports said local officials allowed production to resume. The company was shut down again August 18.

China’s President Xi Jinping has made fighting air pollution a priority, demonstrated in part through a strengthened Ministry of Ecology and Environment that can use newly granted powers to damage careers of local officials and inspect companies at will for compliance with environmental rules. Local government officials who oversee permitting and environmental enforcement may face reprimands including demotions, firings, and possible criminal charges for dereliction of duty.

The initial inspections and resulting shutdown at Tairui 's main production facilities came after local residents complained of a strong smell coming from the fermentation devices, China Environment News, a news agency directly tied to the Ministry of Ecology and Environment, reported August 20.

Inspectors said the Shanghai-listed company had not operated properly or kept full records of running equipment meant to reduce emissions and that airborne emissions of sulfur dioxide, nitrogen oxide, and dust were excessive, state-run China News initially reported on June 8.

Locals reportedly had complained about the smell of the facility for at least 15 years.

Besides the deputy mayor, the secretary of the Yongning County (Communist) Party Committee and the county magistrate also were removed.

Tairui said it had dealt with the excessive emissions since the June shutdown, adding that it had put into place a plan to relocate the facility over a three-year period, according to several statements on its website between June and August. The company also said it had worked to conform with environmental requirements for over two decades, spent more than 300 million yuan (\$44 million) on environmental and technological upgrades since 2016.

Statements from the company called the news media reports “ugly and false” and pinned the blame for the shutdown on “malicious attacks” from competitor companies without specifically naming them. Representatives from the administrative department of Tairui refused several requests from the press to comment, referring to the statements on its website and then abruptly hanging up.

30. China Ministry Empowered to Crack Down on Polluters, Regulators

Shaanxi Huangling Coal Chemical Co., Ltd., in China's Shaanxi province, had to halt production and pay a fine to address water pollution problems it had ignored after a crackdown by central government inspectors who have strengthened enforcement powers. The crackdown also cost five company leaders their jobs while 27 local officials and environmental bureau staff are under investigation. They could face further punishment for turning a blind eye to the problems that were known since 2016, according to state-run television broadcaster CCTV.

The action is an example of the newfound powers granted to China's upgraded Ministry of Ecology and Environment. The ability to damage careers of local officials and inspect companies at will has given the ministry sharper teeth to enforce environmental regulations since plans to reorganize it were announced in March.

A more powerful environmental ministry could make local officials more cautious in approving potential polluting projects and in enforcing laws against existing companies as they face reprimands including demotions, firings, and possible criminal charges for dereliction of duty.

At the forefront is the Central Ecology and Environmental Protection Inspection Office created to launch and coordinate Beijing-led inspections across the country. The office can punish local officials who fail to uphold environmental laws and regulations, the official news agency China News reported on August 13.

Shaanxi Huangling Coal Chemical had been inspected eight times since 2016 by local officials who did not stop illegal wastewater and waste gas discharge violations. In all, 40 people are said to be under investigation due to the violations there.

“The teeth [of enforcement] lie really in the inspection campaigns that the environment ministry is conducting on an ongoing basis,” Li Shuo, senior climate and energy campaigner at Greenpeace East Asia, told the press. Results of central government-led inspections are now being released on a nearly daily basis. “Previous campaigns tended to be one-off [inspections], but now they are regular and year round,” Li said. “The ministry is now also supported with resources to conduct these campaigns and has the [staff] to actually have boots on the ground.”

On August 16, the ministry provided a roundup of 38 violations inspectors discovered in the region around Beijing, including companies illegally operating coal-fired boilers, air pollution from an open pit mining operation, firms that had not addressed previous violations for volatile organic compound emissions, and large numbers of construction and industrial facilities that had failed to control dust emissions.

The reorganization, which has been internally circulated but not officially released, would expand the number of departments within the ministry from 17 to 21. The ministry will be taking on environmental enforcement responsibilities from several other government bodies, including those overseeing agriculture, climate, water, and the oceans. The reorganization was announced at the annual National People’s Congress meetings in Beijing in March.

31. China Includes More Cities in Air Pollution Rankings to Pressure Local Officials

China extended monthly air quality rankings to 169 cities from 74, including in the high-pollution region of Shanxi-Shaanxi in the country’s northwest, adding pressure on local authorities as it intensifies its campaign against air pollution.

Cities in the Fenwei plains area of Shanxi, Shaanxi and Henan provinces, the Sichuan-Chongqing region and middle reaches of the Yangtze River were added to the previous rankings, which had focused mainly on 28 northern cities and provincial capitals known for their smog-filled skies.

“By including more cities in the ranking, it will strengthen public supervision on air pollution and urge local governments to adopt effective measures to improve air quality,” said the Ministry of Ecology and Environment (MEE) in a statement.

The country recently expanded its anti-pollution fight to 82 cities across China in a long-awaited 2018-2020 pollution action plan. The ranking system is part of an effort included in the anti-pollution action plan to pass pollution-control pressure over to local governments.

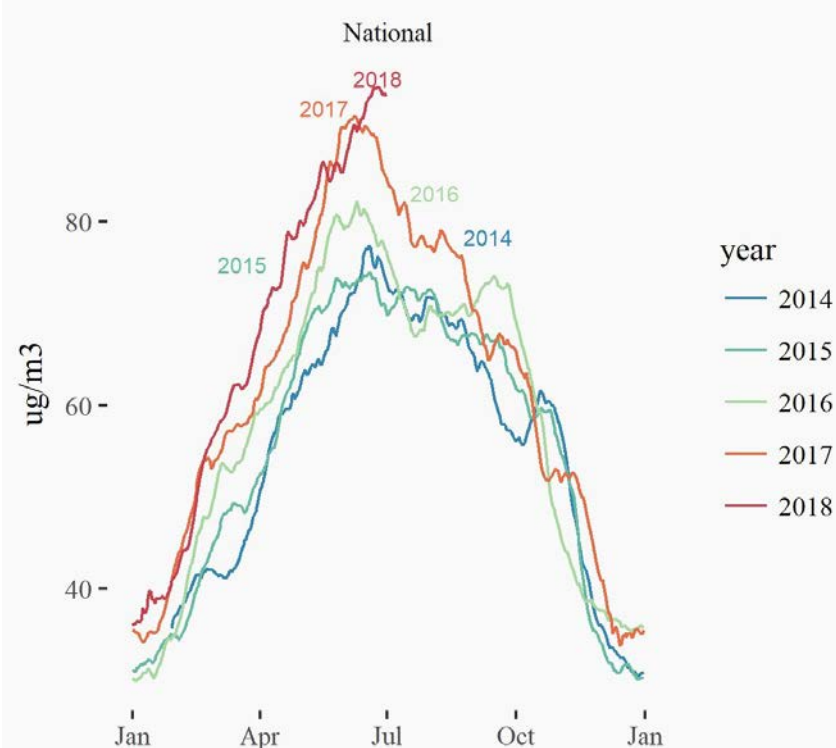
The MEE also said as part of the ranking that every month it will publish the 20 cities with the best air quality and the 20 cities with the worst pollution across the country.

Tangshan, the top steelmaking city in Hebei province, was named as the worst place for air quality in the new list of 169 cities in June, according to the MEE. Coal-producing hub Linfen performed worst for the first half of the year. In response, Tangshan started six weeks of production curbs at steel mills, coke producers and coal-fired power plants to deepen reductions in toxic emissions.

Capital Beijing also appeared as one of the 20 worst offenders for air pollution in June, with its concentration of small particulate matter (PM2.5) jumping 14.3 percent from a year ago. This is the second month in a row for Beijing to be found as one of the nation's most polluted cities.

Average PM2.5 concentrations in 338 prefecture-level cities that are closely monitored by the central government were at 44 microgram per cubic meter in January-June this year, down 8.3 percent from same period last year but still above the national target of 35 micrograms per cubic meter.

30-day trailing O3 levels in China by year



32. China Has A New Air-Pollution Crisis in Ozone

Ozone is a powerful chemical. In the upper atmosphere, it protects against the sun's harmful ultraviolet radiation. But down below, breathing it harms the lungs and can lead to respiratory diseases.

China is finding this out the hard way. An analysis of government data by Uearthed, a Greenpeace-funded news publication, found that Beijing and its neighboring city Tianjin are suffering from record levels of ozone (O3)

Though China has made impressive strides in cutting sulfur oxides (SOx) and particulate-matter pollution (PM 2.5), other pollutants remain. Ozone is created when nitrogen oxides (NOx) react with volatile organic compounds (VOCs) in the presence of sunlight. Hotter temperatures increase the rate of ozone production. Both NOx and VOCs are mainly the result of burning fossil fuels in industry, transport, and power plants.

Each year ozone pollution is estimated to cause 70,000 premature deaths in China, according to the Global Burden of Disease study. The country doesn't yet have regulatory limits on ozone pollution, but one may be in the works, according to Uearthed.

33. China Cuts Taxes on New Electric Vehicles to Spark Demand

China eliminated taxes on domestically produced electric vehicles and cut taxes in half on some small-engine vehicles in a move that is expected to encourage demand of relatively clean cars.

Other recent government measures aimed at supporting China's electric-vehicle industry include phasing in a new carbon tax through 2019, requiring automakers to produce a certain percentage

of e-vehicles, and announcing an e-vehicle battery recycling program across 17 cities and regions.

China's electric-vehicle sales have been strong for some time and are expected to remain so this year, according to a report by the state-run Xinhua news agency. Sales of the vehicles increased 111.5 percent year-on-year to 412,000 units in the first six months of this year, while production rose 94.9 percent to 413,000 units, according to the China Association of Automobile Manufacturers.

The government expects annual new electric-vehicle output to hit 2 million in 2020, and for their sales to make up 20 percent of the overall auto market by 2025.

China also seeks to spur demand on small-engine vehicles by halving taxes on some of them, the Ministry of Industry and Information Technology announced July 31. These are lower-power engines that burn less gas and emit less carbon and nitrogen oxides.

Four percent of sales last year were for foreign-brand electric vehicles, with Tesla far outselling other brands, according to research by electric vehicle consultant and database EV Volumes.

Foreign brands, which don't compete on price with domestic electric vehicles, are unlikely to feel a direct impact from the new tax break, but a larger market could lead to increased sales as new models are launched next year, according to auto market analysts.

34. Electric Cars Critical to China's Future Car Industry Leadership

Around the globe, automakers and governments are making big plans for electric vehicles, lining up billions of dollars for the investments needed to replace the world's carbon-burning cars and trucks. But there's one place that stands out for the number of EVs actually hitting the road: China, where the government has put its might behind establishing the country as a leader in this revolution. The result might not only be cleaner air, but a reshaped global auto industry.

Sales of new energy vehicles (NEVs), including plug-in hybrids, rose by about half in 2017, while electric-only sales roughly doubled. And for the first time, electric-only global car sales exceeded 1 million; China accounted for more than half and is targeting sales of 7 million by 2025. Local brands include Geely and BYD. Startup NIO is positioning itself as a top-end challenger to Tesla.

It's a key part of China's plans to cut the air pollution that chokes many of its cities, and to meet the carbon reductions it pledged as part of the 2015 Paris accord to tackle climate change. China's leaders also aim to reduce the country's heavy dependence on imported oil, which they view as a strategic vulnerability. A government plan released last year envisages NEVs making up all the future sales growth in China.

For automakers, there are tougher vehicle emission rules and quotas for producing zero- or low-emission cars from 2019. For consumers, there's been a 10 percent tax rebate as well as subsidies from provincial governments. (Combined, they cut \$11,000, or one third, off the price of a new BYD e5 sedan.) China spent about \$1 billion on subsidies in 2017, but it's preparing to eliminate them by 2020.

Automakers outside China also all have plans for non-gasoline cars. Volkswagen AG intends to spend 70 billion euros (\$81 billion), most of which is the cost of batteries, to offer electric versions of all its models by 2030. General Motors Co. plans 20 all-electric models by 2023. Volvo Cars

will begin phasing out automobiles that run just on fossil fuels in 2019. Tesla delivered the first of its mid-market Model 3 sedans in mid-2017, although it's struggled to meet production goals.

In terms of barriers to acceptance, the limited range of EVs may be the most important factor. However, the technology is improving. The extended range version of the Model 3 offers 310 miles (500 kilometers) between charges. That's not much less than many gas-powered cars, though charging a vehicle to go just over half that range takes about 30 minutes using Tesla's most powerful charger. As for expense, Bloomberg New Energy Finance estimates that EVs should rival their gas competitors on cost by 2025.

Thanks to its sheer size and accumulating wealth, China looks certain to be the world's 21st century automotive hub. (Vehicle sales there outstripped the U.S. by 68 percent in 2017.) The question is whether its companies will dominate in the way that Detroit's Big 3 did for much of the last century. China may have more success than it did developing gasoline cars since the EV industry's youthfulness presents more of an even playing field. And South Korean manufacturers have shown how it's possible to shake up car markets with high-quality, well-priced products.

35. China's New Emission Control Areas Rule to Have Little Impact on LSFO Demand

The expansion of emission control area or ECA rules to China's entire coastline from 2019 is expected to have little impact on low sulfur bunker fuel demand, given the limited area to which it applies and the ability of ships to switch to marine diesel to meet the new regulation, industry sources said recently.

China's Ministry of Transport this month announced changes to the country's existing marine fuel regulations. The announcement includes the implementation of the 0.5% sulfur content limit to be applied to vessels sailing within 12 nautical miles of the coast, in addition to just berthing.

China's bunker fuel demand currently exceeds 650,000 b/d, and is mainly fuel oil and marine diesel, according to a Wood Mackenzie report. Nearly two-thirds of it is used in inland waterways and the remainder in the coastal areas, the report said.

Vessels can switch to 0.5% sulfur marine gasoil from high sulfur fuel oil when they are in restricted waters, and the consumption volume will be limited, China-based bunker traders said. So, the additional cost will be small, they added.

"As an alternative, the crew can stop the ship's engine and berth the vessel with the aid of tugboats," a source said.

Bunkering demand from domestic vessels will be harder hit relative to ocean-going ones, sources said. "Ocean-going vessels usually come from overseas, and navigate in ECA for a short time, using less marine gasoil. Whereas domestic vessels will navigate in the ECA for a much longer time, and use much LSFO," a Shanghai-based bunker supplier said.

China's latest move to expand its ECA means that bunker fuel costs could rise but the differential won't be all that much, a shipowner said. "The [2019] regulation applies to only 12 nautical miles to the sea. This is not much," another shipowner said.

China is also considering implementing other rules, including a tightening of the sulfur specification to cap it at 0.1% sulfur from 2020, and that too with a wider coverage of up to 200

nautical miles from the coast. "There is a 0.1% sulfur limit which is pending, authorities should announce before the year end," a Zhoushan-based trader said.

Meanwhile, shipowners are also expecting little or no impact from the new ECA rule, given that they have adequate preparation time to comply with the limited scope of the change, shipping sources said.

China's new regulations kick off at a time when pollution from shipping, particularly sulfur emissions, has become a global concern. Many of the country's initiatives to curb pollutants from shipping come as part of China's 'blue sky defense' action plan and ahead of the International Maritime Organization's global sulfur limit rule for marine fuels.

The IMO rule will cap sulfur in marine fuels at 0.5% worldwide from January 1, 2020, from 3.5% currently. This applies outside the designated emission control areas where the limit is already 0.1%.

36. Chinese Vehicle Imports Tumble 87% Ahead of Tariff Changes

Chinese vehicle imports declined 87 percent in June from a year earlier to 15,000 vehicles as automakers delayed shipments before tariff cuts on foreign-made vehicles took effect last month, according to an industry association.

The data from the China Automobile Dealers Association, which was recently reported by local media, also showed that overall sales of imported vehicles during the first half of 2018 fell 22 percent year on year to 451,971 vehicles.

In May, China said it would steeply cut import tariffs for foreign-made automobiles and car parts to 15 percent from 25 percent starting July 1. But in July, China raised tariffs on vehicles imported from the United States to 40 percent amid rising trade tensions with Washington.

China imported 1.25 million vehicles last year, according to data from the China Association of Automobile Manufacturers. The tariff cuts announced in May prompted many automakers such as Japan's Toyota Motor Corp. to say at the time that they would look at adjusting their retail prices in China to provide competitive offers to customers.

But companies affected by the higher duties on vehicles imported from the U.S. such as BMW Group and Ford Motor Co. later decided to take a profitability hit rather than raises prices fully on U.S.-produced crossovers and SUVs.

37. Hong Kong Gov't to Miss Air Pollution Targets, Says Green Group

Government plans to curb roadside pollution will likely miss the 2020 targets, environmental group Clean Air Network (CAN) said in a recent study. "The air quality in Hong Kong, especially roadside pollution, remains an untamed challenge for public health in the half year of 2018," they said.

"Such [a] condition reflects the unsatisfactory performance of Carrie Lam's administration... in air pollution control policies ranging from end-of-pipe control to alleviating traffic congestion..."

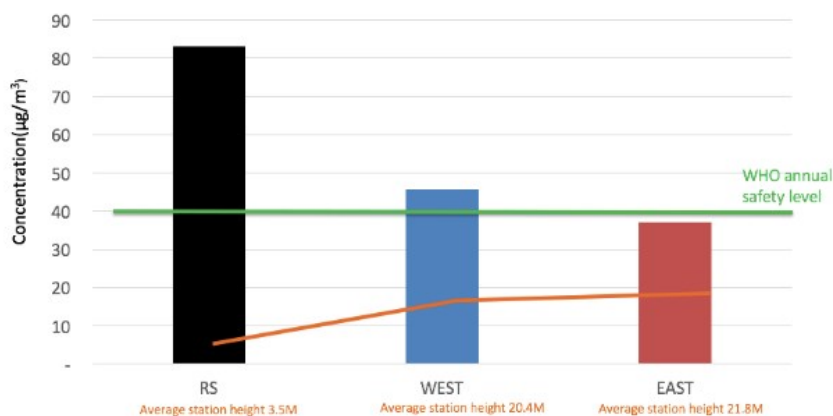


Hong Kong haze comparison File photo: Wikicommons.

The government announced a Clean Air Plan in 2013 that aimed to reduce roadside pollution by 40 per cent by 2020. Its schemes included an HK\$11.4 billion scheme to reduce commercial vehicle emissions by 2019 and a HK\$300 million fund to support green public transport.

But the green group said that a more long-term plan was needed for the city to transition to zero emissions vehicles.

A representative of CAN told HKFP: “The Clean Air Plan to phase out old diesel vehicles is good, but at the same time this is just the tip of the iceberg – there needs to be a progressive, long-term solution to promote the zero-emission of commercial vehicles.”



Nitrogen dioxide (NO₂) concentration in Hong Kong, in the first six months of 2016-2018. Photo: Clean Air Network.

The group collected data on air pollution from three roadside points – Mong Kok, Central and Causeway Bay – for the first six months

of this year and compared it with that of the previous two years. It registered a reduction in Nitrogen dioxide (NO₂), PM_{2.5} and PM₁₀. But the fall was not enough to meet future targets.

CAN also said that the current air pollution levels breach the World Health Organization's Air Quality Guidelines and said that the projected 2020 NO₂ and PM₁₀ levels will surpass the guidelines by 77 per cent and 59 per cent respectively.

In response, the Environmental Protection Department told HKFP: "Although the level of nitrogen dioxide at the roadside has declined in recent years, it is still at a high level. With the retirement of more [diesel] commercial vehicles, we believe that roadside nitrogen dioxide pollution will continue to improve."

38. Improving Air Quality Could Prevent Thousands of Deaths in India

More than 6.1 million people worldwide die each year as a result of exposure to air pollution, which increases the risk of cardiovascular disease, lung disease, and cancer. In India, which contains many of the world's most polluted cities, the annual death toll from air pollution exceeds 1.6 million. Now, a new study shows how implementing stricter emissions standards in India could save hundreds of thousands of lives each year.

One of the most dangerous components of air pollution is fine particulate matter (PM_{2.5}), nanoscopic particles and droplets produced by burning fuels, which travel deep into the lungs and bloodstream and damage the lungs and heart. On average, Indian citizens are exposed to PM_{2.5} concentrations between 15 and 32 times the air quality guidelines set forth by the World Health Organization, and scientists project that India's PM_{2.5} levels will double by 2050 relative to 2015. In New Delhi, one of the world's most polluted megacities, PM_{2.5} concentrations have reached more than 1,200 micrograms per cubic meter, 48 times the guideline established by the World Health Organization.

The Indian government has policies in place to reduce the rapid rise of pollution, such as curbing emissions from buses and trucks and expanding the household use of liquified petroleum gas to replace solid fuels. In their new study², Conibear et al. decided to compare India's existing and planned policies to a more aggressive plan to reduce emissions. The team used a high-resolution computer model to estimate the pollution levels people breathe at ground level throughout India and test how different emissions policies would affect their exposure and health.

Under India's existing and planned policies, dubbed the New Policy Scenario, the rate of growth in Indian citizens' exposure to pollution decreased by 9%, the team found. Compared to the present day, that plan of action will avert about 61,000 premature deaths in 2040, they calculated. A more aggressive plan, called the Clean Air Scenario, would decrease the rate of growth in air pollution by about 65% and avert around 610,000 deaths, they found.

Even with zero emissions growth, India's rapidly growing and aging population means that the rates of disease and premature mortality caused by air pollution will increase by 75% from 2015 to 2040. Despite that grim statistic, the team argues, hundreds of thousands of deaths could be avoided through tighter emissions standards—like cleaner iron and steel manufacturing—and universal access to clean household energy.

² "Stringent Emission Control Policies Can Provide Large Improvements in Air Quality and Public Health in India", Luke Conibear, Edward W. Butt, Christoph Knote, Stephen R. Arnold, Dominick V. Spracklen. <https://doi.org/10.1029/2018GH000139>

39. Pune Environment Status Report 2017-2018: Automobile Air Pollution Big Challenge

The continued expansion of Pune city, coupled with rising population and the consequent pressure on the civic administration to provide basic infrastructure and services to the growing population, is taking a toll on the environment, the Pune municipal corporation's (PMC) environment status report 2017-18 has revealed.

Taking cognizance of the observations made in the PMC general body meeting, the report has noted that solid waste management has emerged as the biggest environmental challenge before the city.

The report has noted that air pollution, as a result of the growing vehicular population, has been the leading cause for the increase in respiratory ailments among residents. It has also led to greater noise pollution due to residents' habit of incessantly honking on the roads, the ESR stated.

The ESR has emphasized the importance of trees and urban greenery to arrest pollution and PMC's commitment to initiatives such as promotion of non-conventional energy and solar power. The promotion of public transport, non-polluting CNG (compressed natural gas), metro rail, cycle tracks, vertical garden, steps to collect e-waste, and establishment of sewage treatment plants to arrest river pollution, have been highlighted among the steps being taken by PMC to achieve sustainable development.

Hadapsar and Lohegaon are the areas worst affected by air pollution. Sulfur compounds, nitrogen compounds and nitrogen dioxide are found above permissible limits in the two areas. Gufran Baig, project director of Safar (system of air quality and weather forecasting and research), said, "The air quality index of Hadapsar is the worst when compared to other areas in the city. Lohegaon is second worst-affected area. Vehicular pollution has been one of the major reasons for the poor air quality. Also, the increased air traffic has resulted in deteriorating air quality index in Lohegaon."

40. Toyota Claims Australian Fuel Quality Standards Are Blocking Super-Efficient Cars

Toyota has slammed the proposed rollout of strict new vehicle emissions regulations across Australia, saying it's not possible to deliver world-class fuel economy on cheap poor-quality fuel. The Federal Government is yet to announce a deadline or which vehicle emissions standards Australia will adopt, but it is in the middle of reviewing the regulations.

Australia has the fifth cheapest unleaded petrol in the world due to comparatively lower taxes but the fuel is of a poorer quality, ranking 66th out of the Top 100 countries — and the lowest in the 35 OECD countries — according to a 2016 report.

"Put simply, we can't achieve first-world emissions without our first-world quality fuel," Toyota Australia sales and marketing chief Sean Hanley told media in Brisbane. "Toyota's view is that Australia must harmonize its standards for emissions with leading overseas markets. That will require us to do the same with fuel standards — namely, high-octane, low-sulfur fuel."

World's best practice for fuel is a maximum of 10 parts per million of sulfur; Australian regulations allow fuel to contain up to 150 parts per million of sulfur. The petroleum industry says it can deliver higher quality fuel but prices would go up at the fuel dispensing pump.

The car industry says super-efficient hi-tech engines of the future won't be able to run on Australia's high-sulfur fuel, and instead would force motorists into dearer 95 and 98 octane premium unleaded.

Toyota is also urging the Federal Government to create separate emissions regulations for passenger cars versus utility vehicles, vans and SUVs. It would be next to impossible for heavy, thirsty vehicles such as Utes and 4WDs — that Australians favor — to meet stricter emissions standards.

"Any (emissions) targets should distinguish between passenger cars and light-commercial vehicles, with off-road passenger SUVs included with light-commercials," said Mr Hanley. "That's how they do it in the US and Canada."

The Toyota executive said some media reports have suggested "mandated targets will kill off, for example, the rugged diesel-powered vehicles for which Toyota is renowned". "Let me assure you: that will not happen," said Mr Hanley. "Our plans — as far out as we can see — include continued strong demand and sales of vehicles such as HiLux and Land Cruiser."

In the meantime, Mr Hanley said, Toyota is not waiting for emissions laws to be enacted. "We recognize that all car-makers must reduce emissions and the overall environmental impact of their vehicles," he said, adding that Toyota would double the number of hybrid vehicles on sale in Australia from 5 to 10 over the next 30 months.

"We have a responsibility as the industry leader to take a stand — and we're doing that with a hybrid model offensive," said Mr Hanley.

41. Climate Policies Help Claim Another Australian Leader

Climate and energy issues have once again figured into a change at the top of Australia's government, as a politician who famously goaded his foes by bringing a lump of coal into Parliament was sworn in as the country's new prime minister on August 24th. Scott Morrison became prime minister after the Liberal Party, which governs in a coalition with the National Party, appointed him as party leader to replace Malcolm Turnbull.

Disagreements within the Liberal and National Party coalition over a National Energy Guarantee, which was advocated by Turnbull to curb greenhouse gas emissions from power plants and ensure a reliable electricity supply, was a key factor in his demise, even though Turnbull froze the policy this week.

The dramatic change in Australia's leadership created uncertainty about the country's climate and energy policy. While the economy and immigration issues played a big role in the leadership change, Turnbull joins a succession of leaders tripped up at least in part by the country's politics around energy and climate change.

Morrison becomes Australia's sixth leader in a little over a decade.

Australia is one of the world's most resource-rich nations, with massive coal and natural gas reserves used to light up cities across Asia. At home, though, energy has become something of a curse for politicians, particularly as electricity prices have soared in the so-called land of plenty.

Some elements within the Liberal Party were hostile to Turnbull's energy plan, which sought to address climate and energy issues in part by using natural gas to bridge the gap left by the shutdown of decaying coal-fired stations, and the gradual shift to solar and wind energy. Environmentalists considered its emission-reduction targets too weak, while right-wing Liberal Party politicians said the policy was too onerous on industry.

Morrison ducked a question on the fate of the energy plan in his first media conference after being appointed Liberal Party leader, saying it was one of the "matters of detail" that he would deal with in consultation with colleagues. He hasn't announced a plan to address climate and energy, and his views are somewhat murky.

Despite his February 2017 parliamentary antics in support of Australia's traditional power source, in which he told fellow politicians — "This is coal. Do not be afraid. Do not be scared. It will not hurt you. Those opposite have an ideological, pathological fear of coal"—Morrison has never denied the science of climate change.

Climate policy has proved a treacherous issue for prime ministers and party leaders in Australia.

- In 2010, public support for Labor Prime Minister Kevin Rudd plummeted after he abandoned efforts to introduce an emissions trading program known as the "Carbon Pollution Reduction Scheme."
- He was consequently deposed as prime minister by fellow Labor politician Julia Gillard, who in 2012 introduced a carbon pricing plan that was intended to transition to emissions trading. But Gillard struggled to justify and explain the carbon price to the public.
- She was replaced as prime minister by Rudd in 2013.
- Rudd led the party to defeat in the 2013 federal election, with then-Liberal Party leader and climate change-skeptic Tony Abbott becoming prime minister after an anti-carbon-tax campaign.
- Abbott's government abandoned the carbon pricing scheme. He was replaced by Turnbull in 2015.

42. Fuel-Cell Booster: Toyota Looks to Introduce Mirai

Fuel-cell vehicles, still in their infancy across the world due to lack of fuel stations and expensive technology, are seen to hold an edge over electric vehicles as they not only deliver substantially higher running range but also faster fueling. Toyota will study the introduction of the Mirai fuel-cell car in India, while homegrown Tata Motors and Korean Hyundai could be other manufacturers that may bet on zero-emission technology, following the GST Council's decision to slash duty on hydrogen-powered vehicles.

Fuel-cell booster: Toyota looks to introduce Mirai Fuel-cell vehicles, which are still in their infancy across the world due to lack of fuel stations and expensive technology but are seen to hold an edge over electric vehicles as they not only deliver substantially higher running range but also faster fueling.

It may take around five minutes to tank up a fuel-cell car with hydrogen. Compare this to electric cars that need to be charged for a few hours to achieve full range.

And the range of a fuel-cell vehicle — which emits only water vapor — is strong. For example, Hyundai's Nexa — which the company had recently showcased to PM Narendra Modi — has a

range of nearly 600km after a single re-fueling. Electric cars can run around 150km after a single charge.

Toyota Kiroskar Motors deputy MD N Raja told the press, "It is encouraging to see the government considering technology-agnostic solutions when it comes to controlling vehicular emissions. Looking at fuel cell technology, it will definitely be considered now. However, cars such as the Mirai may still be unviable as importing them after paying steep duties will make them very expensive."

A fuel-cell vehicle carries hydrogen fuel tanks, an electric motor, a battery and a power control. The hydrogen gas is fed into the fuel cell stack, where it is combined with oxygen from the ambient air. Together, the hydrogen and oxygen create an electrochemical reaction producing electricity that is used to power the vehicle with a by-product of water.

GENERAL

43. Death of Fuel Oil Exaggerated as Ships Fit Scrubbers

One of the world's most polluting fuels may have some life left in it yet. Demand for high sulfur fuel oil is expected to crater in 2020 when the International Maritime Organization introduces a cap on sulfur. But companies that build exhaust cleaning systems for ships, which enable the vessels to keep burning the fuel, reported bumper orders recently. Shares of one, Alfa Laval AB, rose to a record after saying it was nearly sold out for next year.

Weakness in the fuel oil market has been one of the biggest impacts of the IMO's impending 2020 sulfur cap. Fitting ships with exhaust cleaning systems -- known as scrubbers -- is still expected to be a relatively marginal solution for vessels and demand for the fuel will still drop sharply in 2020. But with companies now reporting surging orders, some think that the fuel oil market may have overshot.

"Ships have to go offline to get scrubbers fitted, so the economics have to be telling," said Richard Fullarton, founder of London-based oil hedge fund Matilda Capital Management. Fuel oil cracks, or its price relative to crude oil, "may have gone too far and if more scrubbers are fitted, demand will be stronger than people expect."

Officials at Wartsila Oyj said in an interview that they'd seen an increase in orders for scrubbers from the first quarter to the second this year, aided by a 170 million euro (\$197 million) contract with a major European container shipping company. Shares of Alfa Laval, also a big supplier of scrubbers, jumped this week after its earnings were buoyed by surging orders. Although the company didn't detail an exact order pipeline, one analyst on the company's post-earnings call said he believed demand had tripled since the first quarter.

Alfa Laval previously said that it expects to see 5,000 ships fitted with scrubbers. That estimate may increase, CEO Tom Erixon said on a call with reporters. The merchant fleet numbered about 94,000 ships at the end of 2017, according to data from Clarkson Research Services Ltd., a unit of the world's largest shipbroker.

44. Report: 47% Of EV Launches By 7 Global Automakers to Be SUVs

New Delhi: At least seven of the leading global automakers are building dedicated electric vehicle (EV) platforms to meet their EV deadlines. This marks a departure from the earlier approach of

designing and manufacturing EVs based on similar combustion engine cars. In a bid to counteract higher upfront costs, manufacturers plan to launch nearly half of upcoming electric vehicles as SUVs and crossovers going forward.

Models like Daimler's EQC, Audi's e-tron Sportback and Ford's Mach 1 will be available in 2019-20 in segments with higher-than-average margins and rapid sales growth, according to the Bloomberg long-term new Energy Finance Report.

A Hyundai Motor India spokesperson when asked about his reaction agreed that globally the trend is moving towards SUVs. Even in the emerging markets of India, China, Russia and Brazil the SUV is more sought after due to its convenience, fuel efficiency and larger seating capacity.

In India it is the fastest growing segment and an electric SUV will be a more feasible choice for the consumers.

Incidentally Hyundai is planning to rollout a compact electric SUV in the Indian market next year that will be brought in CKD kits.

Experts feel that an electric SUV with a 300 km range on a single charge would be suitable for city conditions in India.

Meanwhile, the Bloomberg Long-term forecast further states that EVs will constitute 5% of U.S. vehicle sales by 2022. The number of EV models in the U.S is set to rise from 38 at the end of 2017 to 100 by the end of 2022.

Meanwhile, EV sales in China will hit 19% of total vehicle sales by 2025 and 60% by 2040. About 49% of all EV sales globally will be from China in 2025, 39% in 2030 and 28% in 2040.

EV sales in Europe will reach 860,000 by 2022, representing 5% of all new car sales and up from 280,000 in 2017. France, the U.K. and Germany will corner 60% of all EV sales thanks to policy support and the large auto market sizes in each country.

Rising mean car prices and consumer preferences for SUVs will align well with the upcoming EV models being released. Tesla, Volkswagen, Renault-Nissan, Daimler and Peugeot SA will lead EV sales in the region through 2022 due to lower-priced EVs.

New models that are expected to sell well include the Tesla Model 3, Volkswagen's I.D. line, Daimler's EQ line, Volvo's XC series, Kia Niro, the Audi e-tron, and the Peugeot 3008.

The Bloomberg Report pitches the Nissan Leaf as the all-time best-selling EV, followed by the Tesla Model S. The BAIC EC180 was the bestselling BEV in 2017 with 78,000 units sold, making BAIC the fourth largest BEV manufacturer in history.

BYD is the leader of all automakers in cumulative EV sales, closely followed by Nissan. Tesla is expected to overtake Nissan in 2018 as Model 3s start to be delivered.

The electrification of road transport will move into top gear in the second half of the 2020s, thanks to tumbling battery costs and larger-scale manufacturing, with sales of electric cars racing to 28%, and those of electric buses to 84%, of their respective global markets by 2030.

The long-term forecast from Bloomberg New Energy Finance (BNEF) shows sales of electric vehicles rising from 1.1 million worldwide last year to 11 million in 2025, and then surging to 30 million in 2030 as they establish a cost advantage over the internal combustion engine (ICE) cars. China will lead this transition, with sales accounting for almost 50% of the global EV market in 2025 and 39% in 2030.

The number of ICE vehicles sold per year (gasoline or diesel) is expected to start declining in the mid-2020s, as EVs bite hard into their market. In 2040, some 60 million EVs are projected to be sold, equivalent to 55% of the global light-duty vehicle market. 'Shared mobility' cars will be a small but growing element.

Battery pack prices will reach \$100/kWh with current lithium-ion technology by the mid-2020s.

45. Is Africa Becoming the World's Dumping Ground for Dirty Diesel Vehicles?

As emission regulations become stronger for new vehicles in industrialized countries, cars as old as 25 years no longer able to meet emission standards are being exported to Africa. Air quality is suffering as a result.

Any child playing at the Uhuru garden — a recreation park in the middle of the Kenyan capital Nairobi — is oblivious to the health dangers in the air around him or her. But that air is laden with toxic pollutants, which have become a leading cause of respiratory disease in Kenyan cities. According to the World Health Organization, 15,000 children under five died each day in 2016 due to respiratory disease.

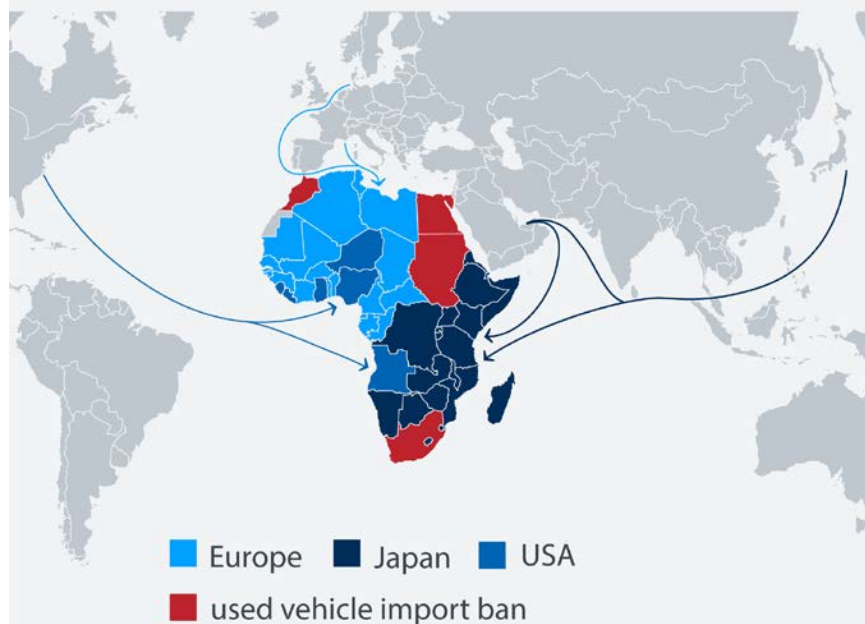
But the vehicles that contribute a large part of that pollution trace a long path to Africa.

As emission regulations become stricter in the European Union, Japan, and the United States, cars no longer able to meet current standards are exported to other regions, including Africa. In Africa, 25 countries have placed a maximum age limit on used car imports. But due to weak enforcement, cars as old as 25 years are sold in Africa.

A recent report³ from New Delhi-based Centre for Science and Environment indicates that Germany and China account for 14 percent of car imports to Africa, while Japan and the US account for 15 percent.

³ 'Clunkered: Combating Dumping of Used Vehicles -- A roadmap for Africa and South Asia', (www.cseindia.org)

Trade in used vehicles to Africa



Source: Centre for Science and Environment

©DW

Infographic trade in used vehicles to Africa

As the population in African cities grows, unreliable public transport systems mean demand for cars is increasing. But low purchasing power, lack of stringent emission controls, and poor fuel quality have contributed to an influx of used cars that have been pushed out of industrialized countries by more stringent emission rules.

The Dieseldate scandal was unearthed in late 2015 when German automaker Volkswagen was found to have intentionally programmed its diesel engines to show lower-than-actual emission of

pollutants. Installed software allowed Volkswagen cars to meet the emission standards during laboratory testing. However, on the road, the same cars emitted up to 40 times more nitrogen dioxide and nitrogen oxides (NOx), a major air pollutant.

In the wake of the Dieseldate scandal, the European Union introduced stringent measures to ensure cars comply with the EU emission standards. "Before being released to the market, new car models are now tested on-road in addition to the standard laboratory emission testing," Peter Mock, EU regional lead at the International Council on Clean Transportation, told DW.

On-road inspections check nitrogen oxide, particulate matter, and carbon monoxide levels, while hydrocarbon emission levels are tested in the laboratory, Mock explained.

Backlash around Dieseldate has caused the value of older diesel cars in Europe to plummet. Trade — both legal and illegal — is now bringing those dirty diesels to Eastern Europe and beyond.

Vehicle emissions include toxic chemicals, heat-trapping greenhouse gases and fine particulate matter, which impact public health and heighten climate change risks.

World Health Organization figures show that globally, around 7 million people die annually from exposure to polluted air. Vehicle emissions are a major source of air pollution

Gerphas Opondo, executive director of the Nairobi-based Environmental Compliance Institute, warns that the transport sector is becoming a major source of air pollution in African cities. "Cities

in Africa have high particulate matter, hydrogen oxide, hydrocarbon, and carbon monoxide concentrations, recorded along busy roads and intersections," he explained.

Apart from deaths due to air pollution, many more are sickened.

Research indicates that of the 4.2 million annual global chronic respiratory diseases, nearly 3.3 million occur in low- or middle-income countries. This includes cardiovascular and respiratory disease such as stroke and asthma, as well as increased risk of cancer.

Jane Akumu, air quality and mobility program officer at UNEP, told DW that a major problem is how vehicle emissions standards, tough emission inspection systems, and clean automotive fuels are lacking in the majority of African countries. Many African countries lack strict emissions testing schemes

"Most African countries are yet to adopt the euro 4 standards, which were required in Europe in 2006," she explained.

"High sulfur levels in diesel are also deterring the efficiency of emission technologies in Africa," Akumu continued.

Low-quality, harmful fuels categorized as illegal waste are exported to Africa. In addition, a lack of refineries, cleaner diesel is considered too expensive by some governments.

Combustion of highly sulfurous fuels results in emissions of sulfur dioxide, a major air pollutant.

Akumu stressed the need to utilize cleaner fuel to effectively implement cleaner vehicle technology. "Even if Africa imports a high-quality car, the maximum environmental benefits are not realized due to low-quality fuel," she pointed out. Fuel in Africa is often high in sulfur

To curb emissions, UNEP is helping Africa implement the euro 4 standards that require 50 ppm of sulfur in diesel cars, which is the euro 4 standard. "Europe and Japan are at 10 ppm," she noted.

There is progress, as 11 African countries, six of them in East Africa, have adopted sulfur fuel standards of 50 ppm. Beyond that, the Economic Community of West African States (ECOWAS) is working with UNEP to harmonize emission and fuel standards in West Africa.

But standards will have to be accompanied by rigorous enforcement in order to have a positive impact on the looming air pollution crisis facing many African cities.

46. Warming Arctic Could Be Behind Heatwave Sweeping Northern Hemisphere

Accelerated warming in the Arctic compared to the rest of the planet could be a key contributor to the heatwaves across much of the northern hemisphere. The heatwaves have killed dozens in Japan and Korea, triggered wildfires in California and Sweden, and led to prolonged dry weather in the UK and across northern Europe, raising temperatures beyond 30°C in Scandinavian sectors of the Arctic Circle. In Greece, the deadliest wildfires in more than a decade have claimed at least 74 lives.

Last week, temperatures exceeded 30°C in the Scandinavian region of the Arctic Circle, with Norway recording a record high temperature of 33.5°C in Bardufoss, a town just south of Tromsø. More than 50 forest fires raged through Sweden in mid-July.

Heatwaves in Japan and South Korea have claimed at least 40 and 10 lives respectively, with high temperatures and dry conditions triggering wildfires in California. In Algeria's Sahara Desert, a temperature of 51. °C was recorded on 5 July, a record for Africa, and Canada has already seen 18 days exceeding 30°C, compared with nine all last summer.

One reason is that the jet stream—a fast-flowing river of air snaking continually round the northern hemisphere at altitudes of around 6 kilometers—has stalled over Europe since May, and could continue to do so, trapping regions of high pressure that are cloudless, windless and extremely hot.

“It's been a key player in the astounding heatwaves across the UK and Scandinavia this summer,” says Jennifer Francis of Rutgers University in New Jersey. She says evidence is mounting that accelerated warming of the Arctic is a major reason why the jet stream keeps getting stalled. The stream is driven by collisions between cold air descending southward from the Arctic and warm air pushing northward from the equator.

The greater the temperature difference between the colliding air streams, the more powerful the jet stream. But the temperature gap—and therefore the power of the jet stream—is being weakened because the Arctic is warming twice as fast as the rest of the planet, supplying the stream with increasingly warmer air.

“Heatwaves over northern hemisphere continents in recent years fit the hypothesis that rapid Arctic warming is playing a role,” says Francis.