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EUROPE

1. Local Authorities React As Spain Sent To EU Court Over Air Pollution

There are signs Madrid may have to abandon plans to scrap a low emissions zone, while Barcelona has urged the regional government to tackle transport emissions, after the European Commission referred Spain to court for persistent breaches of EU air pollution limits.

Madrid city councilors voted “to inform the European commission that the council intends to maintain operational the Madrid Central low emissions zone and introduce additional measures to ensure compliance with air quality directive emissions limits.” The commitment, which was passed thanks to a division of opinion within the conservative coalition that currently controls the city government, is in direct opposition to the declared intention of the council to scrap the scheme.

According to Paco Segura of the NGO Ecologistas en Acción, Madrid council “is now fenced in on all sides” following adverse decisions by Spanish courts and the European Commission. “The actions of the Popular Party (PP) to undermine air quality initiatives in Madrid have caused serious concerns in Brussels as demonstrated by the fact that Spain is alone in having legal action reinstated following the suspension agreed last year,” Segura said.

He added that EU action on the slow pace of progress in tackling excessive NO2 emissions in greater Barcelona was also having an impact. Barcelona metropolitan authority (AMB) urged the Catalan government to “fulfil its commitments to tackling transport emissions” at a joint meeting to assess the EU executive’s referral of Spain to the EU Court of Justice over poor air quality in the two cities.

Besides calling for greater public investment in public transport, the AMB proposed the conversion of existing motorway tolls into congestion charges or the creation of pollution tolls within a metropolitan low emissions zone (LEZ) due to come into force in January 2020.

Reacting to the commission’s announcement, the Spanish government said all public administrations concerned “need to act in a coordinated manner and with all possible speed” to implement existing and additional measures to reduce current NO2 levels.

2. Diesel Car Sales Plunge In The World’s Hottest Electric Car Market

Norway is leading the global shift towards private EV transportation, with the highest EV ownership per capita in the world. More than one in two new cars sold in country this year run fully or partially on electricity.

The biggest loser so far? The premium diesel car.

According to Rystad Energy, the independent energy research firm, sales of some diesel car models are down more than 95% over the last six years. For instance, Volvo’s top diesel models – the V40, V70 and XC60 – dropped from close to 9,000 units sold in 2013 to around 400 in the first half of 2019.

On average, the market share of diesel and gasoline vehicles stood at 60% and 29%, respectively, in 2013, but fell to just 32% and 17% in the first half of 2019.
These sales trends have resulted in a modest yet continuous year-on-year drop in transportation consumption of diesel and gasoline in the country, dropping an average of 2% every quarter since the beginning of 2018.

In the first half of 2019, electric vehicle sales in Norway expanded to 55% of total personal vehicle sales, a market which hovers around 150,000 units sold per year. This is a huge leap forward from a market share of only 6% in 2013 and a healthy increase from 49% last year. As in years past, the main factors behind this increase are a handful of consumer benefits offered with the purchase of an electric vehicle, including generous tax reductions.

As for the steep decline for new diesel vehicles, two factors are at play. A high proportion of vehicles sold have traditionally been mid- and high-end diesel models which would naturally take the biggest hit in terms of market share. Secondly, sales reductions of new diesel vehicles are tied closely to consumer fears concerning potential restrictions or even a ban against diesel vehicles in the country. Gasoline vehicle sales suffer relatively less and declines there are spread across both high-end and mid to low-end segments. Sales of plug-in hybrids have also decreased steeply, with Norwegians preferring fully electric vehicles.

We appear to be witnessing an EV Tipping-Point in Norway.
“We are pretty sure we are going to reach 50 percent market share in total this year. Maybe even pass it, which is pretty amazing,” said Christina Bu, head of the Norwegian Electric Vehicle Association.

She added, “Norway shows the whole world that fully electric cars can replace petrol and diesel cars and become an important contribution to combat CO2 emissions, as well as relieving local air from other harmful gases caused by burning fossil fuels.”

“The fresh BEV records are also good news for the used car market, as ever more cars become available at reasonable price levels. We are now aiming for 1.2 million BEVs on Norwegian roads by 2025, which is a little more than five times today’s number.”

Government legislation lies at the heart of this transition. Parliament passed legislation stating that only cars with zero emissions can be sold after 2025. A recent poll found that many people are switching to electric because of the discounted or free toll passes. Providing there are at least two people in the vehicle, EVs are allowed to use bus lanes and do not have to pay any more than 50% of the normal rate for parking, toll roads, and ferries.

Taxes for weight, CO2, and NOx emissions are part of every new vehicle sale. This makes EVs more competitive. A VW e-Golf, for example, is now slightly less expensive than its gas guzzling counterpart — even though there is a more than €10,000 difference in the import price.

Some challenges have arisen however as a result of the rapid adoption of electric vehicles.

More than 70% of the vehicle owners in Oslo, as well as Oppland, Vestfold, and Buskerud counties, are periodically forced to queue up at fast charging stations. “Today there are around 1,950 fast chargers in Norway. We need to build about 1,200 a year to keep pace with the growth in electric car sales,” says Bu.

One of Norway’s biggest insurers reports that EVs have 20% more accidents, with their fast acceleration presumed to be one of the reasons for that.

All new EVs and hybrids must be equipped with sound effects, to alert pedestrians of their presence.

3. Bosch To Cut Jobs Due To Declining Demand For Diesel Vehicles

The declining demand for diesel vehicles would lead to noticeable job cuts at the German automotive supplier, Volkmar Denner, chief executive officer (CEO) of Bosch has announced. "The tailwind is gone" and Bosch was struggling with the economic downturn and upheaval in the automotive industry, CEO Denner told the German newspaper Sueddeutsche Zeitung.

The world's largest automotive supplier was currently expecting total sales this year to only be at the previous year's level and Bosch would be unable "to maintain the high level of returns of the previous year," noted Denner.

"Of course, we must respond to the declining demand," said Denner, adding that the scope of the response had not yet been determined. There would, however, "be repercussions for employees, especially in the diesel production plants," Denner told the Sueddeutsche Zeitung.
The German automotive supplier was "doing everything we can to implement this in a socially responsible manner", emphasized Denner. The options for responding to the declining demand included "severance schemes, early retirement schemes or reducing the number of temporary employees," according to the CEO of Bosch.

The German automotive supplier had been particularly affected by the decline in demand for diesel engines, particularly in Europe and India.

"If we employ 10 associates for a diesel injection system, there are three for a gasoline system and only one for an electric vehicle," noted Denner.

According to Bosch, 50,000 of its jobs worldwide were dependent on diesel engines, of which more than 15,000 were in Germany. Last year, Bosch had cut 600 jobs in its German diesel production plants by not renewing fixed-term contracts or sending associates on part-time early retirement.

Denner made further changes dependent on market trends but said that the car market was developing "much weaker than we all thought a year ago".

This weakening was not a "short-term dent" that could be made up quickly, Denner told the Sueddeutsche Zeitung. The German automotive supplier's planning was now based on the assumption that automobile production "will stagnate in the coming years, unlike in the past when it almost always went up," according to Denner.

4. Daimler Allegedly Faced With $1.1 Billion Fine For Diesel Emissions Cheating Software

Daimler is reportedly going to be slapped with a huge fine, which can range between 800 million to 1 billion euros ($897 million to $1.12 billion), by German authorities over emissions-related violations. German magazine Der Spiegel claims that the German Federal Motor Transport Authority (KBA) has discovered cheating software in diesel-powered Mercedes C-Class and E-Class models, ordering the car maker to recall 280,000 vehicles.

According to the same report, the Stuttgart prosecutor is considering a fine of up to 5,000 euros ($5,600) per vehicle.

A spokesman for the prosecutor said that the process is ongoing and would not conclude before the end of the year. Daimler refused to comment before the investigation is over.

The prosecutor is also investigating Daimler employees for suspected fraud, with the report suggesting that an official announcement should come in September or October.

Back in May 2017, German authorities raided Daimler’s offices as part of another investigation related to emissions-tampering, and more specifically possible manipulation of the exhaust gas after-treatment system found in diesel-powered vehicles.

Moreover, Mercedes was recently forced to recall the diesel-powered GLK 220, which was in production between 2012 and 2015. Daimler is also scrutinized by US authorities, with EPA asking Mercedes for explanations back in 2016, regarding the emission levels in some of its diesel models.
Last May, German prosecutors in Stuttgart fined Porsche 535 million euros ($600 million) and supplier Bosch 90 million euros ($100 million). Similarly, VW was fined 1 billion euros ($1.12 billion) while Audi received an 800 million-euro fine ($896 million).

5. Mercedes-Benz Offers Subsidies To Retrofit Older Diesel Cars In Germany

Daimler said Mercedes-Benz customers in Germany could apply for a 3,000 euro ($3,350) subsidy to upgrade the exhaust filters of older, polluting diesel vehicles, the latest effort among German carmakers to avoid inner-city bans.

Carmakers have been forced to consider upgrading exhaust treatment systems on older cars after German cities started banning heavily polluting diesel vehicles to cut fine particulate matter and toxic nitrogen oxides.

Daimler has launched a website to process applications for financial support, as German motor authority KBA seeks to approve an after-market kit to upgrade the exhaust systems on various Mercedes diesel passenger vehicles.

The company has offered the subsidy to customers in German regions that face potential driving bans, the carmaker said.

The first retrofit kit for Mercedes cars with “Euro 5” diesel engines, including the best-selling E220 and E250 models, has been developed by Dr Pley SCR Technology, a Bavaria-based, family-owned business. It will cost around 3,000 euros to buy and install.

German carmakers initially offered software updates and shied away from endorsing hardware retrofits, instead lobbying for customers to buy new cars with cleaner engines. But consumer groups pressured carmakers to endorse retrofits as a more cost-effective measure.

6. Ex-Audi CEO Stadler Charged Over His Role In Emissions Scandal

German prosecutors have filed charges against former Audi CEO Rupert Stadler, who is being investigated for his role in Volkswagen Group's diesel-emissions cheating scandal. The public prosecutor's office in Munich said Stadler and three other defendants are being charged with false certification and criminal advertising practices.

The three other defendants are accused of having developed engines used by Audi, Volkswagen and Porsche brand cars that included emissions-cheating devices, it added.

"Defendant Stadler is accused of having been aware of the manipulations since the end of September 2015, at the latest, but he did not prevent the sale of affected Audi and VW vehicles thereafter," the prosecutor said in a statement.

Once seen as a possible contender for VW Group's top job, Stadler was arrested in June 2018 and spent months in jail. Audi, which had previously extended his contract, suspended him shortly after he was detained.

VW Group, which has faced billions of dollars in costs related to the scandal, later terminated Stadler's contract against the backdrop of a criminal investigation into whether he was involved in emissions tests cheating.
The accused include former Audi and Porsche manager Wolfgang Hatz as well as two engineers, several people familiar with the proceedings said. Hatz, who is the former R & D chief at Porsche and former head of powertrain development at both Audi and VW Group, spent several months in custody in 2017 and 2018 over his alleged role in the scandal.

People familiar with the proceedings told reporters that Stadler and Hatz have denied wrongdoing.

The prosecutors declined to identify the other defendants. Investigations against 23 further suspects continue, the prosecutor's office said.

Audi, which is VW Group’s biggest profit center, quickly became implicated in the cheating affair, setting back VW Group's attempt to contain fallout. The focus turned to Stadler as prosecutors sought to untangle the origins of the scandal. In the years that followed, repeated recalls of Audi vehicles over their emission performance -- including Porsche cars with engines developed by the brand -- continued to taint the brand.

In April, prosecutors in Brunswick, Germany, charged former VW Group CEO Martin Winterkorn with serious fraud for his role in the diesel-rigging scandal that has so far cost the carmaker about 30 billion euros ($33 billion).

More investigations are pending, including a probe into market manipulation targeting current VW Group CEO Herbert Diess, Chairman Hans Dieter Poetsch and Winterkorn over allegations they informed markets too late about the diesel case and its effect. Volkswagen has said that it couldn't have anticipated the dramatic fallout from the revelations.

7. German Ruling Could Open Door To New Wave Of Dieselgate Legal Action

German car giant Volkswagen could face a slew of new legal complaints after a regional court ruled that software intended to fix a diesel car's emissions ‘defeat device’ was itself illegal.

Following revelations that VW, along with several other carmakers, had installed mechanisms in its range of diesel vehicles to turn on an emissions control system only when under test conditions, Germany's federal transport watchdog, the KBA, ordered the company to update the system’s software to rectify the problem.

However, the Düsseldorf regional court ruled that the software update was “insufficient”, saying that VW had failed to inform the claimant - the owner of a VW Tiguan 2.0 TDI - that the software shut off the emissions control system outside an ambient temperature range of 10-32°C. The average temperature in Germany is only 10.2°C.

The court said that this “thermal window” in the car’s emissions control software constituted a breach of EU regulations regarding defeat devices, but noted its judgment was not final.

A VW spokesperson confirmed the company would lodge an appeal at the Düsseldorf higher regional court, describing the judgment as “erroneous”. “The so-called thermal window used in vehicles with EA 189 engines does not constitute an illegal defeat device,” the spokesperson said. “The cars comply with the law. The thermal window is a permissible defeat device, since it is used for component protection. Thermal windows are included in all diesel vehicles produced in the EU in recent years.”
VW added that the European Commission has created a provision in its regulation governing emissions testing that allows the use of defeat devices to protect vehicle components. The regulation states that a prohibition on defeat devices should not apply where “the need for the device is justified in terms of protecting the engine against damage or accident and for safe operation of the vehicle”.

However, green campaign group Deutsche Umwelthilfe (DUH) said the case could open VW up to a new wave of legal action from vehicle owners. “If the engine only works within certain temperatures when the emissions control system is turned off, it has been badly constructed from the outset,” said Remo Klinger, a lawyer representing the group, in German newspaper Tagesspiegel.

8. Austria To See Increase Of CO2 Emissions From Vehicles: Report

Austria is on track to have another setback in meeting its carbon dioxide (CO2) emissions reduction target by 2030, with vehicle fuel use going up during the first half of 2019, according to an independent traffic authority. In a press release, the Austrian Traffic Club (VCO) said about 10 million liters more fuel was used during the first six months of the year compared with the same period in 2018, indicating vehicle traffic will contribute to an increase in CO2 emissions.

While petrol usage declined by 10 million liters to a total of about one billion liters, this was surpassed considerably by a 20-million-liter increase in the use of diesel fuel, which totaled about 4 billion liters.

The VCO said this will have a more noticeable impact on emissions totals, given that diesel fuel causes about 13 percent more CO2 emissions than petrol.

The Austrian government had previously determined to reduce CO2 emissions to a total of 15.7 million tons by 2030.

However, the total emissions have climbed for four consecutive years, up to 23.9 million tons in 2018.

The VCO called for a number of measures to be pursued to bring the emissions totals down, including making all large regional centers in the country more easily accessible via public transport, and expanding bicycle infrastructure to encourage people to make fewer short trips by car.

9. Air Pollution Causes 33 Percent Of New Asthma Cases Among European Children

New research from the Barcelona Institute for Global Health (ISGlobal) has revealed that air pollution in Europe is responsible for 33 percent of all new asthma cases among children each year. The team reported that nearly 200,000 of these cases could be prevented by lowering levels of harmful particle pollution.

Asthma is the most common chronic childhood disease and is steadily on the rise. By analyzing census population data and information from the Global Burden of Disease (GBD) study, the

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Journal information: European Respiratory Journal
experts determined that more than 63.4 million children across 18 European countries suffer from asthma.

The team used two different scenarios to estimate how many of these asthma cases are linked to air pollution. The first framework referenced the maximum air pollution levels recommended by the World Health Organization (WHO) air quality guidelines. The second framework reviewed the lowest air pollution levels recorded among 41 previous studies.

Based on the first scenario, the researchers found that 66,600 childhood asthma cases could be prevented every year if European countries complied with the WHO air quality guidelines for PM2.5. The team also determined that 2,400 cases could be prevented if these nations complied with the air quality guidelines for NO2.

“The analysis showed that, while meeting the WHO recommendations for PM2.5 would imply a significant reduction in the percentage of annual childhood asthma cases, that is not the case with NO2, where 0.4% of the cases would be prevented,” said study co-author David Rojas-Rueda.

“Therefore, our estimations show that the current NO2 WHO air quality guideline value seems to provide much less protection than the PM2.5 guideline. We suggest that these values require update and lowering to be better suited in protecting children’s health.”

In the second scenario, the researchers discovered that more than 190,000 annual cases of asthma could be prevented among European children if PM2.5 was reduced to the lowest levels documented by previous studies. In addition, the lowest levels of NO2 could prevent 135,000 cases, while the lowest levels of black carbon could prevent 89,000 cases.

“Only in the past two years, several analyses on air pollution and onset of childhood asthma have emerged, strengthening the case from different research teams that air pollution is contributing substantially to the burden of pediatric asthma,” said study leader author Haneen Khreis.

“Largely, these impacts are preventable and there are numerous policy measures which can reduce the ambient levels of, and children’s exposure to, outdoor air pollution. We can and should do something about it.”

The study is published in the European Respiratory Journal.

10. Climate Concern Reaches New Heights In Latest EU Poll

Climate change has leap-frogged the economy, the state of public finances and terrorism to become the second most important issue facing the EU, according to a new poll of European citizens. The latest ‘Eurobarometer’ survey, conducted in spring 2019, shows that 22% of people put climate change in the top two issues that the EU must deal with, up six percentage points from a similar survey last year. This places climate change only behind immigration, which tops the list of concerns with 34%, down six percentage points on 2018.

Some 13% of those asked to put the environment as a whole in their top two priorities for the EU, up from 9% in 2018, the second largest increase in concern after climate change. This follows alarming new scientific findings about the state of the global climate, and the associated decline in the natural environment.
When asked about national priorities, 20% of respondents said climate change, energy and climate are among the top two issues, a six-point rise on 2018 figures.

The survey results coincide with growing momentum for a general strike in Germany demanding more ambitious climate action, as called for by the campaign group Fridays for Future, after the head of the country’s second largest trade union gave it his backing.

Speaking to Westdeutsche Allgemeine Zeitung, Ver.di leader Frank Bsirke said that his union would join the demonstrations, organized for 20 September, and urged members to “clock out and take part”.

“It is about flying the flag,” he said. “We need considerably more meaningful political engagement with climate change.”

According to the Eurobarometer results, there has been a surge in concern around climate change and the environment in Germany, with 36% of respondents saying it was one of the two most important issues facing the country - far outstripping housing and immigration.

### 11. Volkswagen To Install 4,000 EV Charging Points In Germany By 2025

Volkswagen is planning to install around 4,000 charging points for electric vehicles at its German plants by 2025. Also, combined with the dealerships, the group is providing around 36,000 new charging points across Europe.

The first charging station has been already installed with 60 new charging points. The German automobile group is investing around €250 million for expanding the charging infrastructure at its European sites.

The automaker's first charging center has been launched at the Volkswagen Group Components plant in Braunschweig. The charging power level from the points installed at this station is 11kW. This charging center uses the Type 2 plug.

Thomas Ulbrich, a member of the Volkswagen Brand Board of Management responsible for e-mobility, said, "Adequate facilities for charging at the workplace are an important element in our electric offensive. Going forward, charging their electric vehicles while they are at work will be easy and convenient for our employees. We are demonstrating how the gradual transition to e-mobility can succeed."

Otto Joos, Business Field Manager “Chassis” at Volkswagen Group Components, said, "The Volkswagen Group is underpinning its electric offensive with this initiative and at the same time turning e-mobility into a real-world experience for employees, and later also other drivers of electric vehicles. This is a clear and concrete step towards e-mobility."

Volkswagen AG will launch around 70 new electric vehicles in the next 10 years. This is going to be the biggest EV offensive in the world automotive industry.

### NORTH AMERICA

### 12. Ozone Ruling Deals EPA Major Losses On Policy Efforts To Weaken NAAQS
A federal court has dealt EPA a major loss on its ozone national ambient air quality standards (NAAQS), remanding the 2015 “secondary” standard to protect the environment back to the agency to either tighten or better justify, scrapping permits based on older, weaker standards and barring consideration of “background” ozone in setting NAAQS.

The only victory for EPA in the U.S. Court of Appeals for the District of Columbia Circuit’s unanimous opinion issued August 23 is the judges’ decision to uphold the agency’s 2015 primary, or health-based standard, which industry groups and some states claimed was too stringent and environmentalists claimed was too weak.

“The court really beat back the industry challenges,” says one public health advocate, welcoming the remand of the secondary standard, but also noting some disappointment that the court did not mandate a tougher primary NAAQS. “The science shows that a more protective standard is warranted.”

The Obama EPA set both the primary and secondary limits at the same level of 70 parts per billion (ppb) averaged over eight hours, stricter than the 2008 limit of 75 ppb set by President George W. Bush’s EPA.

Echoing an earlier D.C. Circuit decision over the 2008 ozone standards, the per curiam opinion by Judges Nina Pillard, Robert Wilkins and Thomas Griffith defers to EPA on the primary standard, rejecting industry attacks that it is too stringent.

But the court also fends off environmentalists’ attacks that the primary NAAQS is too weak to protect public health with the “adequate margin of safety” required by the Clean Air Act.

However, the court remands to EPA its secondary environment-based standard, finding that EPA failed to adequately explain its decision to use a three-year “form” for the standard, and failed to justify its decision not to set a tougher standard to protect against damage to plants.

The tougher limit, using a form of the standard different from the primary NAAQS, was recommended by the Clean Air Scientific Advisory Committee (CASAC) during its review of the standards.

EPA staff has also previously recommended a distinct secondary limit targeting ozone’s impacts on the environment, but the agency has so far not finalized one. EPA cited scientific uncertainties with the novel method and argued that the 70 ppb primary NAAQS provides equivalent protection for plant life.

“In setting the secondary standard, EPA failed to justify its decision to use a three-year average benchmark without lowering the level to account for single-year spikes in ozone exposures, and it arbitrarily declined to set a level to protect against adverse welfare effects associated with visible leaf injury,” the court finds.

The judges order EPA “to either lower the standard to protect against unusually damaging cumulative seasonal exposures that will be obscured in its three-year average or explain its conclusion that the unadjusted average is an appropriate benchmark notwithstanding CASAC’s contrary advice.”

With respect to leaf damage suffered by plants, the judges find that EPA did not fully address CASAC’s recommendations, and therefore “falls short of reasoned decision making” required for
the court to grant EPA deference over its technical decisions. CASAC had recommended a
tougher value to protect against foliar injury, of 10 parts per million-hours (ppm-hrs.). This
compares to EPA's secondary standard which the agency set at what it says is the equivalent of
17 ppm-hrs.

The court also hands EPA and industry losses on policy options for attempting to ease
implementation of the stricter limit.

For example, the judges agree with environmentalists that EPA unlawfully exempted some
industrial facilities from compliance with the tougher NAAQS when it crafted permits that were
under consideration at the time of the rulemaking. The court therefore scraps EPA's regulatory
provision allowing some applicants to rely on Clean Air Act permits based on the weaker 2008
ozone limit of 75 ppb if their applications were complete or near complete when the tougher 70
ppb limit became effective Nov. 28, 2015.

"That is exactly what the plain text of the Act forbids," the judges write. Their ruling will require
recipients of such "grandfathered" permits to obtain new permits compliant with the 70 ppb limit.

The court further rejects industry arguments that EPA should take costs of implementation into
account when setting NAAQS, and also that the agency should make allowances for background
ozone when setting the standards. Background ozone is either naturally occurring or arises from
foreign sources beyond the control of state air regulators.

While states and industry argued that EPA should set NAAQS at achievable levels, the court says
the air law unambiguously requires EPA to set health-protective standards for the whole country,
regardless of background ozone levels. Even if the NAAQS are tough to meet because of high
background, "the fact remains that Congress decided that EPA should account for background
ozone during enforcement, not when setting standards."

The judges cite a host of air law mechanisms available to states to cope with background ozone
in the implementation phase, such as the "exceptional events" provision that allows states to
exclude air monitoring data gathered during high-pollution events such as wildfires from their
demonstrations of NAAQS compliance.

And although the court backs EPA for not considering background ozone in setting the 2015
standard, it also warns the agency is prohibited from considering it as a factor in setting any ozone
standard -- which has significant implications for EPA's ongoing Clean Air Act-mandated review
of the 2015 NAAQS to determine whether any revisions are necessary.

"Because the Clean Air Act prohibits EPA from adjusting for background ozone in setting the
NAAQS, EPA did not act unlawfully or arbitrarily and capriciously in setting the NAAQS without
regard for background ozone," the opinion says.

Further, the court rejects states and industry claims that EPA should take costs into account when
setting NAAQS. The Supreme Court's 2001 ruling in Whitman v. American Trucking Associations
still precludes this, the court holds.

Environmentalists offered praise for the court's ruling on secondary NAAQS, but criticism that it
did not require a tougher primary limit. "The Clean Air Act requires EPA to set standards that
protect forests against damage from smog. EPA didn't do that here. It must go back and fix its
mistakes so cherished natural spaces like national parks can thrive,” said Seth Johnson, the Earthjustice attorney who argued the case for environmental groups.

“Today’s court decision is a win for the future of our national parks and the millions of people who visit these treasured places every year,” said Stephanie Kodish, Clean Air Program Director for the National Parks Conservation Association.

But environmental groups are also disappointed with the court’s position on the primary standard. Sierra Club attorney Joshua Berman said, “The Clean Air Act requires EPA to protect the public from dirty, dangerous air pollution, and today’s decision unfortunately gave the Agency a pass.”

Meanwhile, California Attorney General Xavier Becerra (D), who led a group of seven state amici in defending the 2015 NAAQS, hailed the ruling as a clear victory for clean air advocates. “Today’s decision strikes down an attempt by corporate interests to weaken ozone standards and continue to collect massive profits at the expense of our children’s health,” he said.

A source with the American Petroleum Institute, which has opposed tightening of the NAAQS standards over the years, says that, “We are reviewing today’s judicial opinion and will plan to respond to EPA’s next proposal on ozone NAAQS, which is scheduled to be completed by October 2020. Since 2005, U.S. ozone concentrations have fallen 17 percent due in part to investments by the natural gas and oil industry of approximately $339 billion since 1990.”

13. Latest Developments in Trump’s Auto GHG Rollback

Auto Deal Curbs CO2 Gains To Keep Push On Low-Carbon Technology

California’s agreement with four major automakers on vehicle fuel economy appears to significantly reduce environmental gains compared to current, Obama-era rules but would extend policies -- including generous credits for electric vehicles (EVs) -- that prod continued advancement in low-carbon vehicle technologies,

The agreement, joined by Ford, Honda, BMW and Volkswagen, touts a top-line requirement of 3.7 percent annual improvement in vehicles through model year 2026 -- compared to roughly 5 percent under the Obama rules.

State regulators outside of California generally say the pact is an acceptable tradeoff because it preserves forward momentum on vehicle standards that would otherwise be lost.

“The details will matter for public health and clean air, but when your choices are no tools or imperfect tools, I will take imperfect tools,” Miles Keogh of the National Association of Clean Air Agencies tells Inside EPA. Keogh calls the agreement a “huge coup” for California and a “really bold step” by the four manufacturers.

The agreement framework includes numerous provisions that make the 3.7 percent yearly improvement target an easier lift for automakers. One key provision is full or partial extension through MY26 of the advanced powertrain “multiplier” credits -- which were slated to expire in MY21 -- applicable to battery EVs, fuel cell vehicles and plug-in hybrids.

Removing the current rules’ requirement to account for upstream emissions also encourages EVs and marginally discourages other pathways to comply with the standards.
A fact sheet on the agreement notes that 1 percentage point of the required annual gains can come from use of the multiplier credits -- named as such because compliance credits are multiplied for production of unconventional vehicles.

The deal also raises from 10 grams per mile to 15 grams per mile a cap on off-cycle credits that automakers can claim from a set menu of technologies, starting in MY20. The deal also commits to streamlining review of new off-cycle technologies.

The expert familiar with the rules offers a rough initial estimate that the various flexibilities -- credit multipliers, expanded off-cycle credits and removal of the upstream emissions requirement -- knocks the effective rate of required fuel economy improvement to roughly 1.5 percent per year.

The implications of this decision for the environment and technology development are a matter of some dispute, even among advocates for stricter GHG curbs.

The consequences depend in part on whether one assumes the advanced vehicle credits provide a powerful incentive for automakers to adopt new technologies or simply offer them credit for vehicles they were developing anyway, as some critics charge.

A related concern is the extent to which companies receiving such credit forgo efforts they would otherwise make in various technologies to boost fuel economy in more "conventional" powertrains. "If you want to cut carbon dioxide emissions in the short run, you can't beat conventional engine efficiency improvements," the expert says.

A related question is the extent to which off-cycle credits provide a strong incentive for automakers to adopt novel technologies that can reduce real-world GHGs -- such as new refrigerants in air conditioning systems and better window glass -- or whether they allow too many technologies that don't follow through on their promise.

Another state source says officials are still assessing the implications of the agreement, but that it appears to mean a "short-term" hit on emissions in exchange for maintaining forward momentum on low-carbon technology. The source argues that the difference between the Obama-era standards and the California deal "is not enough to make a difference in the longer term" when strategies like zero-emission vehicles -- not required by the current regulations -- become the key to deep carbon reductions.

In this vein, the industry source calls the agreement's provisions retaining various credits for EVs and similar vehicles a victory for automakers. "The industry was fighting pretty hard to keep those," the source says, given concerns the market alone is not doing enough to ensure demand for such vehicles.

Industry statements praising the California-automaker agreement include a July 25 statement from the Motor and Equipment Manufacturers Association (MEMA) saying it provides "regulatory certainty" for the participating auto companies and their suppliers and "helps preserve long-term supplier investments and manufacturing employment growth in the U.S."

The group adds that the deal "helps provide clarity for suppliers to continue investing in these technologies in the U.S. and ensure that the U.S. remains a global mobility technological leader, ultimately benefiting our environment."
The Automotive Technology Leadership Group -- a coalition of several supplier groups -- offers similar praise while adding, “We hope that this announcement will be a catalyst to a negotiated national program with California, thereby avoiding protracted litigation that could chill continued growth in our sector.”

Many are questioning whether additional automakers may join the four companies that inked the deal -- though some early reports say that additional signatories are likely.

University of California-Berkeley’s business professor Severin Borenstein told the Washington Post that if the deal does not spread, “I think that will be a real problem for its impact.” But he added that other automakers joining would put the Trump administration “in a position with the auto industry lobbying for a set of regulations” different from what Trump officials want. “The real test will be over the next month or two about which auto companies say they are in.”

For automakers, the deal provides “seven years of certainty,” including an assurance that California will not try to craft more stringent requirements even if Democrats prevail in the 2020 presidential election, according to a source.

Trump’s Bid to Ease Auto Rules Would Hike Fuel Costs, Study Says

President Donald Trump’s plan to freeze U.S. vehicle efficiency standards would hike costs for motorists without doing anything to boost highway safety, according to an analysis by Consumer Reports that undermines the administration’s chief talking points in favor of the move.

The Transportation Department argued their proposal would pare the cost of new automobiles and save as many as 1,000 lives annually by spurring motorists to trade in older models for newer, safer vehicles. The agencies also estimated the proposal would spare motorists some $2,340 in average new vehicle ownership costs. And they baked both those forecasts into the name of the measure, dubbed the “Safer Affordable Fuel Efficient Vehicles” proposal.

But the Consumer Reports analysis counters the administration’s assertions that the plan would reduce traffic fatalities and boost highway safety. Consumer Reports argues instead that “the effects on safety from changes in fuel-economy standards are quite small and likely not statistically different from zero.”

That assessment dovetails with concerns raised quietly by EPA officials last year, as the administration prepared to unveil its plan. At the time, EPA regulators repeatedly questioned the underlying safety assumptions, at least once warning that the proposed standards would actually be “detrimental to safety.”

The Consumer Reports analysis also paints a starkly different picture of potential costs for drivers, by highlighting the importance of fuel savings -- rather than vehicle purchase prices -- to motorists. Because most new vehicle buyers finance their purchases, they can start feeling the benefits of lower fuel costs right away, the organization says. And those fuel savings, in turn, drive higher consumer spending and more purchases of newer, safer vehicles, said the group, the advocacy arm of the consumer product research and testing not-for-profit that publishes Consumer Reports magazine.

“The rollback is like a gas tax because it increases drivers’ fuel costs,” said Consumer Reports, likening the proposed policy change to an additional 63 cents per gallon of gasoline for owners of
model year 2026 vehicles. Over the life of that 2026 automobile, the administration’s preferred policy choice would translate to an additional $3,300, the analysis found. The owners of trucks and sport utility vehicles would be especially hard hit, according to the assessment.

“The facts don’t back this rule’s Orwellian name,” said David Friedman, vice president of advocacy for Consumer Reports and a former acting head of NHTSA. “The evidence shows that lowering fuel economy and emissions standards won’t do anything to improve traffic safety, but it will leave Americans stuck with the bill.”

Supporters of the administration’s proposal say the existing auto standards now targeted for changes were established in a different time, driven by assumptions about higher gas prices and climbing enthusiasm for hybrid vehicles. Instead, they say, the surging popularity of sport-utility vehicles and other trucks has made the mileage requirements harder to satisfy, while raising the cost of new vehicles and putting them out of reach for many households.

The administration has acknowledged a link between its plan and higher fuel consumption, saying its proposal could cause the U.S. to use an extra 500,000 barrels of oil daily.

California Plan Embraced by Ford, VW Had Been Rejected by EPA

A recent compromise between four major automakers and California’s clean-air regulator on GHGs had already been rejected by the Trump administration months earlier as not “a productive alternative.” The deal—which Ford Motor Co., Honda Motor Co., BMW AG and Volkswagen AG announced on July 25 alongside the California Air Resources Board—eases the pace of annual efficiency improvements required under current Obama-era rules but is tougher than the Trump administration’s proposal to cap mileage requirements at 2020 levels.

Key elements of the pact were contained in a November 2018 summary of California’s proposal that was prepared by Environmental Protection Agency staff for Bill Wehrum, then-assistant administrator for EPA’s Office of Air and Radiation.

CARB spokesman Stanley Young confirmed that the state had offered the plan to the EPA last November. The previously unreported detail sheds new light on the months-long battle between Washington and Sacramento over the mileage rules that automakers urged President Donald Trump to re-evaluate during his first weeks in office.

“Looking back, it seems that they were never interested in negotiations or discussions,” Young said. He added that the four automakers’ support of California’s compromise “highlights the fact that our proposal is both feasible and realistic.”

Relations between EPA and CARB officials have become tense, with each side blaming the other for the breakdown of talks. In a June 20 letter to GOP lawmakers, EPA Administrator Andrew Wheeler said California’s counteroffer hadn’t yet been endorsed by the state’s governor and attorney general when it was presented to EPA. He accused CARB Chairman Mary Nichols of being “unable or unwilling to be a good-faith negotiator.”

The Trump administration’s 2018 proposal said capping fuel economy standards at 2020 levels would lead to less-expensive new cars than under the current rules. The agencies argued more-affordable cars would allow consumers to replace their older vehicles with newer, safer ones more
rapidly and avoid thousands of traffic fatalities, claims that experts and EPA career staff have disputed.

In a TV interview in early February, the EPA’s Wheeler said the state’s proposal suggested “just taking the Obama numbers and stretching that an additional year. And that doesn’t really get to the lives saved or the reducing the price of the automobiles to where we would like it to be.”

The White House abandoned discussions with California officials a few weeks later, saying, “Despite the administration’s best efforts to reach a common-sense solution, it is time to acknowledge that CARB has failed to put forward a productive alternative” after the federal proposal was released.

The four-company pact with California also highlights a growing chasm between the Trump administration and the auto industry, which after urging the administration to retool Obama-era mileage standards has since pushed back on the resulting plan that recommended capping requirements after 2020.

That plan, put forth last year by the EPA and the National Highway Traffic Safety Administration, also proposed stripping California of its authority to regulate automobile greenhouse gas emissions. The state and others have vowed to fight in court to retain that power, and automakers fear that prolonged litigation will roil business plans that depend on predictable fuel economy standards.

In June, a group of 17 major carmakers unsuccessfully asked Trump to resume talks with California, saying a pact for unified California-U.S. standards will “enhance our ability to invest and innovate by avoiding an extended period of litigation and instability.”

California’s deal with the four carmakers—and the one pitched to the EPA last fall—pushes the 2025 efficiency target back to 2026, lowering the pace of gains each year compared to the current rules starting in 2022. Automakers would get more help to reach those targets from additional compliance credits earned by selling electric vehicles and wouldn’t have to account for carbon emissions by the power plants that generate electricity used by battery-powered cars.

“For over a year and a half, the administration expended a serious amount of resources to achieve a workable deal with California,” EPA spokesman Michael Abboud said in an email, adding, “not once did California submit a meaningful alternative.”

White House Presses Automakers To Spurn California Vehicle Deal

The White House has been meeting with auto companies that have not joined the voluntary agreement California signed with four manufacturers over vehicle greenhouse gas standards, defending its deregulatory plan and prodding the companies not to join the deal, according to press reports. They say that the White House has been in communication this month with at least three automakers -- General Motors, Toyota and Fiat Chrysler America (FCA) -- who did not sign onto California’s July agreement, including during an in-person meeting with the automakers the week of August 5th.

The agreement between California and four automakers highlighted industry concerns with the regulatory, legal and political uncertainty with the still-pending Trump proposal. Since then, California regulators have been prodding automakers that have not joined the deal to begin
formally following the state’s standards starting in model year 2020, a year earlier than when the
state rules are slated to diverge from EPA’s requirements.

In addition, lawmakers on both sides of the Capitol have been pressing the remaining
manufacturers to join the agreement.

California has also been defending the agreement against claims that it represents a significant
weakening of the program, though the deal is nevertheless being viewed as something of a public
rebuke to the administration’s plan, after the four automakers signed on.

Press reports indicate that the White House has been pushing back, though they diverge on how
hard officials have leaned on the three non-signing companies with which it has met to spurn the
deal.

- One industry source reportedly called the conversations an effort to “browbeat” the companies
to spurn the California deal.

- Another source characterizes the conversations as a mix of pep talk indicating the administration
is moving ahead with its deregulatory plans amid the belief it will ultimately prevail in court -- with
the suggestion that companies would want to be on the winning side.

- And a third source says the White House went so far as to threaten adverse consequences on
trade issues important to the automakers.

- Another source, however, downplays claims the White House made explicit threats to retaliate
against automakers on trade or other issues, saying that any such threat was at best implied, and
that companies present were also thanked for not joining the California agreement.

Asked for comment on its receptivity to the California agreement and the White House
engagement, General Motors told reporters “while our executive team regularly meets with
policymakers, we do not disclose details.” It reiterated the company’s focus on working with “all
parties” to reach a 50-state solution to vehicle emissions.

FCA in a press statement similarly declined to elaborate further on the conversations but called
the California agreement a confirmation of the need to relax the current program.

While the effect of the discussions is not entirely clear, they come amid mixed indications on how
close the administration is to finalizing its controversial Safer Affordable Fuel Efficient Vehicles
(SAFE) rule.

Although the administration has announced the formal start of OMB review on August 2 (See
story below.), the press reports that several sources cite indications OMB has received little of
the actual rulemaking text, which may suggest additional delays. The reports indicate that OMB
has not yet received the guts of the rule, but rather language defending a repeal of California’s
waiver of federal preemption, and another separate document, being characterized as either a
table of contents for the rule or an outline of a document that analyzes comments on the
regulation.

That suggests to some that officials are continuing to face challenges translating the proposal into
a defensible final rule, though sources also do not rule out a final rule in September given the
administration has wanted the proposal out for months. Rumors have also swirled that the formal start of OMB review August 2 was accelerated after President Trump himself was piqued at reports of the California agreement, with the rule still not final.

Whether or not Trump specifically objected, another source familiar with the issue characterizes the announcement of the OMB review as driven at least as much by pressures to respond to news of the California agreement as a sign of actual progress on the final rule.

“The fact that [the administration submitted anything to OMB [at this stage] was a direct result of the California deal,” the source told reporters.

California Governor Confirms Mercedes To Join GHG Standards Deal

California Gov. Gavin Newsom (D) is confirming reports that Mercedes-Benz is poised to join the voluntary agreement between California regulators and four major auto companies on greenhouse gas standards for passenger vehicles, and that state officials are in discussions with another “major” automaker to join.

According to an August 20 Los Angeles Times article, Newsom made the comments during a conservation summit at Lake Tahoe with leaders from California and Nevada, where he also repeated criticism of the Trump administration’s pending proposal to roll back current, Obama-era vehicle GHG standards.

Newsom’s comments confirm an August 20 New York Times story that said Mercedes-Benz was about to join the California-automaker agreement.

The deal was seen as a strong rebuke to the Trump administration and a way to create momentum for other auto companies to either pressure the administration to back off its proposal or take California’s side.

“This was a big blow to the Trump administration, what we were able to accomplish, and I don’t think they saw it coming,” Newsom said, according to the Los Angeles Times. “This idea that they’re helping the automobile manufacturers, that’s just been blown up, a complete myth. It was made up.”

But an administration official said the president’s policy will save Americans money and speed the deployment of safer vehicles, adding that the White House attempted to work with California leaders when crafting a new policy, but that the state did not negotiate in good faith, the story adds.

Newsom called the White House meetings “pathetic,” arguing the strategy “shows the weakness of the administration,” the article says. “No one wants [Trump’s mileage policy] except the oil companies. And what a sad, pathetic state of affairs that they’re the ones calling the shots.”

White House Begins Review Of EPA-DOT Final Vehicle GHG Rule Rollback

The White House has begun inter-agency review of EPA and the Transportation Department’s (DOT) final rule rolling back Obama-era vehicle greenhouse gas and fuel efficiency standards, amid continued sharp opposition to the plan from California and others. The Office of
Management & Budget (OMB) says it received the draft final rule August 2, a milestone that aligns with prior expectations that the rule could be completed by late September or early October.

Industry and other observers have said they expect OMB review to last on the order of 60 days, given the complexity of the rulemaking. The rule, once finalized, is sure to trigger immediate litigation, particularly from California which opposes provisions in the proposed version that would block its long-running unique authority to set stricter vehicle GHG standards than the federal governments.

In a joint August 5 statement, the two agencies say they “firmly believe that this rule will benefit all Americans by improving the U.S. fleet's fuel economy, reducing air pollution, helping make new vehicles more affordable for all Americans, and, because new vehicles are safer than ever, ultimately saving thousands of lives and reducing the number of Americans seriously injured in car crashes.”

Sources have cited indications over the past several months that the agencies plan to require between 0.5 and 1 percent annual improvement in GHG reductions and fuel economy. However, environmentalists warn that even that level of stringency could be overstated in terms of on-the-ground requirements, given that some or all of it could be achieved by technologies such as improved air conditioning systems that don’t directly boost fuel savings.

The rollback comes against the backdrop of at least two outside variables that could alter its trajectory.

- First, the U.S. Court of Appeals for the District of Columbia Circuit is slated to hold Sept. 6 oral argument on EPA’s April 2018 determination that the Obama-era rules were not “appropriate” and must be scaled back, a legal predicate to the pending rollback rule. Judges during those arguments could offer public signals about their thinking regarding the Trump administration’s approach to the vehicle standards, even though it is far from clear how the court will resolve the case after argument is held.
- A second major factor is the voluntary deal that four major automakers inked with California late last month to implement GHG requirements across their national fleet. The companies say they recognize California’s special authority to regulate GHG emissions under the Clean Air Act, adding weight to the state’s legal arguments against Trump’s preemption plan. Other auto companies may join the deal -- a move that could undercut the effect of the federal rollback.

The agreement came just a few weeks after 17 automakers urged California and the White House to compromise on the standards and avoid protracted litigation. Similar calls came from roughly two dozen governors and a high-profile bipartisan group of House lawmakers.

In addition, Canadian officials indicated they will press forward with vehicle standards far more stringent than the U.S. rollback, even though the country has historically tracked U.S. standards.

California Is Gaining Allies

More and more states and automakers are uniting behind California in a nationwide debate over vehicle emissions standards, as tensions between California and President Donald Trump’s administration come to a head.
A growing coalition of states is supporting California’s efforts to demand cleaner and more efficient vehicles, at a time when the Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) are seeking to halt standards despite objections from health and climate experts. Those states are now being joined by several major automakers, with others facing pressure from lawmakers.

Three weeks ago, California inked a deal with four major automakers, committing them to increasing both gas mileage and greenhouse gas emissions standards in exceedance of the Trump administration’s proposal. (See story above.) Now, others are under pressure to do the same.

Eight senior House Democrats wrote to 14 other automakers, encouraging them to sign on to the same deal California made with Ford, BMW, Honda, and Volkswagen. “Our districts and the country as a whole need the auto industry to help us address climate change, and in the near-term that means a serious commitment to greenhouse gas reduction through emission reduction from vehicles,” wrote lawmakers led by Reps. Doris Matsui (D-CA) and Paul Tonko (D-NY), the latter of whom is chairman of the House Energy and Commerce Environment and Climate Change Subcommittee. Recipients included major automakers like Volvo, Chrysler, and Toyota.

That appeal echoes an earlier effort from 30 Senate Democrats, who last week similarly called on automakers to join their peers in adhering to stricter standards. “In the absence of an agreement between the Federal government and states, the California agreement is a commonsense framework that provides flexibility to the industry to meet tailpipe standards while also taking important steps to reduce greenhouse gas emissions and save money on fuel for consumers,” that letter reads.

The deal the California Air Resources Board (CARB) struck with the four automakers would see the average fuel economy of fleets increase to 50 miles per gallon by 2026. That commitment is less than Obama-era efforts, which would have seen 54.5 miles per gallon by 2025, but it still marks a major break with the Trump administration.

Under the Clean Air Act, California has for decades been granted a waiver allowing the state to impose vehicle emissions standards exceeding those of the federal government. California has aggressively sought to protect its standards, suing the federal government over the rollback. And automakers have an incentive to side with California. While the oil and gas industry has lobbied hard for easing emissions standards, many automakers have grown worried by the scope of the administration’s rollbacks. One serious concern has been the prospect of a split market, wherein the industry would have to meet different standards in different states. In June, 17 car companies wrote to Trump and warned that weakening standards regardless could destabilize the industry.

Support from other states is also giving California a boost. Twelve states and Washington, D.C., were already committed to California’s standards prior to the Trump administration. But Colorado, an oil-rich state, recently joined that lineup, becoming a “Section 177 state” in a nod to the section of the Clean Air Act that allows for California’s stricter standards. (See story below.) New Mexico, another oil state, also has plans to re-join by the end of 2020; the state had initially joined but repealed the standards under Republican Gov. Susana Martinez. Arizona and Florida have similarly adopted and then repealed the standards.

Environmental groups have expressed optimism that other states may adopt California’s approach, especially amid growing concerns over the potential ramifications of the rollback. Research released last week by the environmental policy group Energy Innovation found that the
Trump administration’s efforts could cost the U.S. economy $400 billion through 2050, in addition to increasing U.S. transport emissions up to 10% by 2035.

And with litigation underway, conversations about auto emissions and climate change are already proving contentious. The Washington Post reported recently that a federal judge who was set to hear the vehicle emissions case between the EPA and the consortium of 17 states led by California was replaced on that panel after he sent emails critical of climate science. The judge, A. Raymond Randolph, had complained in a reply-all email to a colleague about a seminar on climate change science for judges.

“The jurisdiction assigned to you does not include saving the planet. A little hubris would be welcomed in many of your latest public displays,” Randolph wrote. “The supposedly science and stuff you are now sponsoring is nothing of the sort. Get out of this business and back into the business of judging, which is what you are being paid to do.”

Randolph has been replaced on the panel by Sri Srinivasan, a Barack Obama appointee.

Automakers, Colorado Reach Deal On Zero-Emission Vehicle Mandate

Colorado and major automakers have reached a deal on the state’s plan to adopt California’s zero-emission vehicle (ZEV) requirements after earlier talks had ended in failure. The state, which plans to join the California program starting in the 2023 model year, has agreed to allow automakers to earn credits for selling electric vehicles in the two model years prior and use other transitional credits available in other states.

Two major auto trade groups representing 99% of U.S. car and truck sales including General Motors, Volkswagen, Toyota and Hyundai, said the state agreed to address concerns “by providing the support Coloradans need to buy electric vehicles while allowing auto manufacturers to transition into Colorado’s ZEV program.”

“This agreement will ensure that Coloradans have access to the range of clean car choices that are increasingly available to consumers in other states,” said Colorado Transportation Department Executive Director Shoshana Lew.

The automakers said Colorado committed to support “the increased adoption and sale of ZEVs, including the state’s commitment to increase the number of ZEVs in its fleet of vehicles.”

In June, Colorado said talks with major automakers had failed to reach a deal on voluntary efforts to boost electric vehicle sales. The automakers explored a deal after meeting with Colorado Governor Jared Polis in April.

Polis in January signed an executive order directing the state to adopt California’s ZEV rules, joining nine other U.S. states: Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island and Vermont.

The California ZEV mandate, first adopted in 1990 and revised on numerous occasions, requires the sale of an increasing number of electric vehicles or other zero-emission vehicles. Last year, California forecast that about 8% of the state’s new vehicle sales in 2025 will be zero-emission and plug-in electric hybrids.
California and 18 other states, including Colorado, have said they will fight the Trump administration’s freeze in court, a legal battle that could leave automakers in regulatory limbo for years.

The Colorado agreement had to be approved by the state’s Air Quality Control Commission following public hearings.

Witnesses at a public hearing August 13 gave strong support for Colorado’s proposal to adopt the California Zero-Emission Vehicle program, under consideration by the state Air Quality Control Commission.

If the proposed revisions (Regulation 20) are approved, Colorado would become the 10th state to adopt the program, which has been targeted by the Trump Administration.

The rule change would help reduce greenhouse gas emissions and air pollutants such as ozone in the state, witnesses said. It’s all the more urgent given that the U.S. Environmental Protection Agency recently proposed to reclassify the Denver metro area from “moderate” to “serious” nonattainment for ozone, they said.

Climate change poses threats to Colorado’s strong winter sports economy, which provides some 229,000 jobs in the state, more than oil, gas and mining combined, speakers said. The ski season is facing reductions exceeding 50 percent by 2050, Lindsey Bourgoine, manager of advocacy and campaigns for Protect Our Winters. “Limiting greenhouse gases can delay and reduce these adverse impacts to winter outdoor recreation.”

Witnesses also said there’s currently not enough consumer choice in ZEV vehicles in Colorado and passing the rule will increase the variety of models shipped to the state. Passing the rule will also spur charging station infrastructure in Colorado, the lack of which can be a deterrent to consumer choice if not convenient and reliable.

Sherrie Merrow, director of state government affairs for NGVAmerica, a national trade association for the natural gas vehicle industry, read a statement opposing the rule change. Mandating zero emission vehicles unfairly picks winners and losers, she said. It also ignores “upstream emissions,” which are just as important when considering greenhouse gas emissions, she said.

“This is driven largely by our recognition that we need to get ozone pollution levels down below the standards. We need to protect the public health of our residents,” John Putnam, the state’s environment programs director, said in an interview. “We are approaching a tipping point,” Putnam said. “What we want to do is move to that tipping point as soon as possible.”

The formal approval reflects state environmental oomph under Gov. Jared Polis that also includes efforts to shift off coal-fired power plants and curb emissions by the oil and gas industry.

In the past, federal Environmental Protection Agency officials pushed Colorado to clean up the state’s air and comply with health standards in an offending nine-county area encompassing metro Denver and the northern Front Range. Under the Trump administration, however, the EPA has played less of a role, relaxing pressure.

It got to the point that federal Judge John Kane last month ruled against the EPA in a lawsuit alleging the agency failed to enforce the Clean Air Act as required. Polis had declared in March that Colorado would not seek an exemption that could have granted more time to comply by...
blaming the bad air on pollution wafting into the state from China. WildEarth Guardians attorney
Jeremy Nichols made the case that the EPA had blown a deadline for designating Colorado as a

EPA subsequently issued a notice saying officials would begin a process of reclassifying Colorado
as a serious violator, which would trigger tougher enforcement on industrial polluters. “EPA was
behind. They knew they were behind. And they had to move,” Putnam said. “We clearly weren’t
in attainment. The EPA has no reason to sit.”

Colorado car dealers opposed the state push for a mandate on automakers — even though
automakers support the program as long as they receive credit for electric vehicles sold before
2023. “We’re not against electric vehicles. It’s just that consumers don’t really want to buy them.
They want a lower price,” said Jackson of the Colorado Auto Dealers Association.

“Let the market do its thing,” he said, emphasizing that modern gas-powered vehicles pollute
much less than those made in the 1960s. “The problem is old cars that are still on the road.”

There are about 25,000 electric vehicles registered in Colorado, and annual sales have been
increasing between 15% and 70% per year. Colorado Energy Office director Will Toor anticipated
that the state mandate, making more models available and spurring competition, will lead to
800,000 electric vehicles on Colorado roads by 2030.

The population growth boom threatens worse pollution in the future. Vehicle miles traveled have
been increasing, by 2.5% in 2017, despite rail and bus transit options, according to data presented
by the Regional Air Quality Council — with a projected 34% increase by 2040.

Meantime, federal tax credits to ease the initial burden of buying a battery-powered vehicle are
ramping down, though state tax credits have been extended through 2025. State health officials
said they favor tax credits to help more drivers afford electric cars, which become cheaper in the
long run because drivers don’t need to buy gas and can benefit from a widening array of charging
stations.

At the hearings, state air quality commissioners faced a blitz from residents and advocacy groups
demanding action to encourage a faster shift to clean cars.

Global warming is shortening winter by a day a year in Colorado, on average, and is shrinking
mountain snow in a way that is disrupting the ski industry, said David Perry, president of the
Alterra company that runs Winter Park, Steamboat and other resorts. “Reducing greenhouse gas
emissions is really essential to the longevity of our business. … You have an opportunity to help
this huge industry for the state of Colorado,” he said.

Leaders from a coalition of 27 communities as well as athletes and residents from across the
state told commissioners they want to be able to act individually in small ways to address climate
change, by shifting to electric vehicles if affordable.

Mountain trail runner Dakota Jones, who won the Pikes Peak Marathon in 2018 after riding a
bicycle to the starting point near Colorado Springs from his home in Durango, said he is committed
to minimizing heat-trapping air pollution. “Protecting the places where I run is more important than
running through them,” Jones said. “The zero-emissions vehicle program is a great tool to allow
people to reduce their carbon impact as they travel.”
Denver mother Dina Puente, whose 11-year-old daughter suffers from asthma and has had to miss more than 100 days of school, said pollution in the northeastern part of the city is ruining her childhood. Puente urged commissioners to "please help me make my daughter well again." The girl sees neighborhood kids in the street playing ball, Puente said after her testimony. But on poor air quality days, she must stay indoors. "It is frustrating. She breaks down crying."

The Colorado program to spur a shift to electric vehicles, starting in 2023, would cut overall emissions of greenhouse gas 3 million tons by 2030, according to calculations by officials in the state's Air Pollution Control Division. They calculated a 300-ton reduction in ozone, which is formed when precursor pollutants including volatile organic compounds mix in sunlight.

Health officials recently began public hearings aimed at establishing tougher rules for the oil and gas industry, which state data show to be the largest source of volatile organic compound pollution along the Front Range. Power plants and transportation in gas-powered vehicles are the main sources of heat-trapping greenhouse gas pollution.

Seeking Auto GHG Deal, Chamber Warns Of ‘Chaos’ From Split Market

Intensifying industry concerns, the U.S. Chamber of Commerce is making a late-hour push for top officials in the Trump administration and California to reach an agreement on vehicle greenhouse gases and fuel economy rules, warning of "chaos and confusion" if automakers are forced to comply with two sets of requirements.

The business group's pitch -- contained in an August 29 letter to EPA, the Transportation Department (DOT) and a top California air regulator -- is broadly consistent with auto sector calls from the past several months, though it comes as EPA and DOT are in the last stages of a rule to aggressively roll back Obama-era standards and scuttle the Golden State's authority to enforce its own limits.

The Chamber's Neil Bradley writes that there is a "growing consensus" that the current rules are too strict, but the group adds in a separate report that the Trump administration's proposal to freeze rules at model year 2020 levels is "misguided and insufficient."

"Clearly, a middle-ground 'sweet spot' exists where continued progress can be achieved that does not result in unintended consequences that undermine environmental, safety and economy goals," the report says.

The joint plan by EPA and the National Highway Traffic Safety Administration (NHTSA) would seek to maintain a uniform national set of rules by scrapping California's waiver of federal preemption under the Clean Air Act that enables it to enforce tougher rules than the federal government, while also allowing more than a dozen states to copy such standards.

But California officials in late July announced a voluntary agreement with four major automakers in which they agree to comply with standards that experts say represent roughly a midway point between the Obama-era rules and the Trump administration's proposed freeze.

California Gov. Gavin Newsom (D) has said that Mercedes-Benz is slated to join the deal. In addition, one other automaker is also expected to voluntarily comply with the deal.
The Chamber cites this deal in its report but does not endorse it, saying that the state both called for compromise on the issue and threatened to “move forward with our current standards” if the White House does not accept the framework.

“As a practical matter, any scenario that results in two sets of standards -- whether via continuation of California’s waiver authority while NHTSA and EPA modify federal standards, or via waiver repeal accompanied by state defiance of the NHTSA/EPA revisions -- is sure to result in chaos and confusion throughout the country,” the group’s report says.

Among the negative consequences, the group argues, is massive uncertainty for industry, which would be “left to do little more than guess at potential outcomes of the dispute.”

The group also warns that overly strict standards could slow fleet turnover, reducing the spread of new safety features and keeping less-efficient cars on the road longer. And it cites “emission leakage” from the California-aligned states, “opportunity costs” from complying with tough rules and the possibility that uncertainty over the fuel economy rules could worsen other threats facing the sector such as trade disputes.

“It goes without saying that the exacerbation of existing uncertainties, increased costs, and general confusion that would accompany dissolution of [a national set of GHG and fuel economy rules] is likely to result in further ripple effects that reach well beyond the auto sector itself and ultimately threaten to harm the broader U.S. economy,” the Chamber argues.

The group also acknowledges that talks between the White House and California “dissolved” earlier this year but asserts there is a “willingness” on both sides to resume discussions, “leaving hope for a middle ground solution that could avoid the impending chaos and uncertainty.”

While California officials have argued their voluntary deal with industry could form the basis of a national agreement, Trump officials have rejected it as a “PR stunt” and pledged to continue with their rollback rule.

As such, it is far from clear whether the Chamber’s new push for compromise has any chance of success, or whether federal officials complete their rule in the coming weeks and critics launch a protracted legal assault on it.

Court Rejects FOIA Suit To Force Release Of Vehicle GHG Model

A federal district court judge has rejected environmentalists’ Freedom of Information Act (FOIA) suit attempting to force public release of an EPA model critics argue was used to craft the Trump administration’s rollback of Obama-era vehicle fuel economy and greenhouse gas standards, saying the model’s disclosure is barred under FOIA exemptions.

In an August 22 opinion and order, Judge P. Kevin Castel of the U.S. District Court for the Southern District of New York says that the agency was right to withhold release of the “core model” known as the Optimization Model for Reducing Emissions of Greenhouse Gases from Automobiles (OMEGA) under FOIA Exemption 5, which applies to material deemed to be deliberative and protected from release.

The judge agrees with EPA that the core model is integral to the agency’s development of vehicle GHG rulemakings, and that it can reflect policy options under consideration and therefore is pre-
decisional material exempt from disclosure. He backs statements made by current EPA officials about the pre-decisional nature of the model and downplays a contrary declaration from former agency transportation air chief Margo Oge about use of OMEGA.

The plaintiffs, Environmental Defense Fund and Natural Resources Defense Council, cited Oge’s declaration as part of their legal bid to win release of the model, which they argued would undercut the administration’s planned rollback of the rules by showing that the Obama-era standards are achievable and cost-effective.

The declaration from Oge, former director of the Office of Transportation & Air Quality within the Office of Air & Radiation (OAR), said that EPA practice was to share the information from OMEGA with stakeholders. The environmental groups said this bolsters their argument in favor of disclosing the model.

But Castel counters in a footnote that Oge’s declaration cannot “overcome the EPA’s presumption of good faith” in its statements about the deliberative, pre-decisional nature of the model because agency policy on the model may have changed since Oge left the agency in September 2012. The judge also notes that Oge appeared to be referring to OMEGA data inputs, rather than the core model itself.

Castel also cites a declaration from former Trump OAR chief Bill Wehrum who said that “[t]he regulatory development process and the process of making upgrades to the OMEGA model have traditionally proceeded in parallel,” such that “the policy choices made throughout the regulatory development process are inextricably tied to the analytical choices internal to the OMEGA model itself.”

Environmentalists had argued the model is not a “letter” or “memorandum” covered by FOIA Exemption 5, but the judge notes courts have long held the waiver covers other types of material.

Castel then backs EPA on the pre-decisional and deliberative nature of OMEGA because of its use in reaching policy decisions. “The fact that, historically, the EPA has used prior iterations of OMEGA to generate data to inform its decisions on GHG emissions standards for vehicles corroborates the EPA’s claim that this iteration was developed to inform future standards,” the opinion says.

The plaintiffs also claimed that the model is not protected under FOIA because it is an accounting program that simply reads data, but the judge also rejects this argument.

He finds that OMEGA is similar to a groundwater flow model that the U.S. District Court for the District of Columbia Circuit found protected by FOIA Exemption 5 in a 2009 ruling in Goodrich Corp. v. EPA, which said the model was deliberative as it reflected the current opinions of EPA staff that might not represent the agency’s final policy decision. Similarly, OMEGA “reflects the mental processes of OMEGA’s authors” and constitutes current staff thinking about policy options that might not be the final agency decision.

Castel also sides with EPA’s claim that disclosure of the model would cause “foreseeable harm” to the agency, citing Wehrum’s declaration that release would “chill free and open discussions of EPA staff regarding their opinions on the appropriate analytical tools to be included in the model . . . [such that] they would be less likely to test or experiment with new calibrations or tools that could help create a more effective and robust version of the OMEGA model.”
Trump Backers Downplay California Auto GHG Deal Amid Industry Unease

Supporters of the Trump administration’s bid to freeze Obama-era vehicle greenhouse gas and fuel economy rules are seeking to downplay the significance of California’s voluntary deal with four major automakers on the issue, despite increasing signs that other auto companies might join the pact or spurn the Trump rollback.

These sources argue that the crux of the fight is the Trump administration’s push to preempt California and other states from enforcing tougher GHG limits than the federal government – and that battle will move to the courts once EPA and the Transportation Department (DOT) complete their rollback and preemption rule this fall.

“The story is about California versus EPA pulling the lever. It’s not about the autos or oil,” argues one energy strategist, adding that the Trump administration no longer wants to cede authority to California and other states that adopt its vehicle rules under the Clean Air Act.

The energy strategist claims that the administration’s reaction to the California deal was “a collective yawn,” arguing it is not the game-changer that the state and its supporters claim. EPA in an August 20 statement argues California’s framework “so far has been nothing more than a press release.”

However, multiple recent developments cast doubt on this notion. Inside EPA first reported that the White House called in three major auto companies -- General Motors, Toyota and Fiat Chrysler -- for in-person meetings early this month to urge them not to join the agreement.

And a subsequent report from the New York Times said President Donald Trump was “enraged” by the California agreement. It also first reported that Mercedes-Benz plans to join the deal in the coming days, a move subsequently confirmed by California Gov. Gavin Newsom (D).

In addition, the Times reported that one of the three companies at the recent White House meetings will “disregard” the Trump proposal and voluntarily stick to the Obama-era standards for at least the next four years.

While the Times did not name the company, Safe Climate Campaign’s Dan Becker suggests it may be Toyota, given its market position as selling highly fuel-efficient vehicles that are typically popular in California and other states that track its standards under air act section 177.

“Irrespective of whether they actually join [the California agreement], they are in a bind if they don’t comply in at least the [section] 177 states. Those are their prime customers. California, New York, New Jersey, is where people buy more Toyotas than anywhere else. They don’t want to go to war with their own customers,” he said.

Becker added that even if Toyota doesn’t join the Golden State agreement, “I believe they are going to go along and continue to make Obama cars for those states, and perhaps all the states.”

Newsom also told the Los Angeles Times that the state is in talks with another “major” automaker rumored to be Mercedes about joining the voluntary agreement. The White House campaign is “pathetic and it shows the weakness of the administration,” Newsom said at a conservation summit in Lake Tahoe. “No one wants [Trump’s mileage policy] except the oil companies. And what a sad, pathetic state of affairs that they’re the ones calling the shots.”
But the energy strategist says the White House meetings urging companies to refrain from joining California’s deal “appear to be an over-reaction.”

The source also downplays multiple letters from congressional Democrats pushing auto companies to join the California agreement, as well as a separate letter from the California Air Resources Board (CARB) prodding manufacturers to comply with the state’s GHG standards next year.

The CARB letter shows the state cares more about “preservation of [its] ability to dictate what kinds of vehicles consumers should buy,” the source claims. “The Trump administration, in contrast, believes that consumers should make those decisions. The letter only serves to make that difference more obvious.”

Another rollback proponent is pointing to the fact that no other company has officially joined the agreement to date despite the high-profile letter-writing efforts. To act “so publicly, and nobody bites, smacks of desperation,” the source says.

The strategist adds of the letters: “The panic is palpable. And it confirms that the Democrats care more about California and the carmakers than they do about consumers.”

However, according to press reports other experts say the California deal poses a potentially lethal threat to the Trump rollback effort. “You get to a point where, if enough companies are with California, then what the Trump administration is doing is moot,” Alan Krupnick, a senior fellow with the think tank Resources for the Future, told the New York Times.

Trump himself is also signaling that he is engaged on the issue, contradicting claims that the administration is exhibiting a “yawn” over the deal. In an August 21 statement on Twitter, Trump charged that automakers are being “politically correct,” and that his proposal would have multiple benefits while having “very little impact on the environment! Foolish executives!”

In a subsequent August 21 message, Trump leveled a personal attack on Ford, arguing the company’s founder would be “very disappointed if he saw his modern-day descendants wanting to build a much more expensive car, that is far less safe and doesn’t work as well, because execs don’t want to fight California regulators.” He added that “when this Administration’s alternative is no longer available, California will squeeze them to a point of business ruin.”

Sen. Tom Carper (D-DE), the top Democrat on the Senate environment panel, pushed back by touting various benefits of a “strong fuel economy rule,” while adding, “What’s ‘foolish’ is not that four automakers joined California -- it’s [Trump’s] reckless rollback that no company wants.”

One opponent of the Trump administration’s rollback argues the California pact has already had an important political impact, and the president’s tweets underscore that point. “It split the industry, and Trump is rattled.”

Yet, the energy strategist notes that the administration for months has ignored automakers’ unease about the scope of its rollback, arguing that the core of the fight focuses on the scope of California and federal authority and has little if anything to do with carmakers’ desires.

Even so, automakers are likely to participate in forthcoming litigation over the EPA/DOT rollback, and their input -- particularly on the preemption issue -- could potentially sway a court. At this
point, the industry could be split if the companies not aligned with the California deal go to court to defend the rollback rule.

Utah Clean Air Advocates Say Trump’s Plan Is ‘Unthinkable’

A bipartisan pair of Utah lawmakers recently decried the Trump administration proposal to weaken the nation’s car-emissions standards, a change the two said their inversion-plagued state can ill afford. Utah Reps. Stephen Handy, R-Layton, and Suzanne Harrison, D-Draper, called on the state’s congressional leaders — specifically Sen. Mitt Romney and U.S. Rep. Ben McAdams — to oppose rolling back the pollution rules and to fight for polices that will enhance air quality.

“I have had patients who have beaten radiation and chemotherapy and even beaten cancer, but they can’t beat our air pollution,” Harrison, a physician, said during the Capitol news conference.

Earlier this year, the American Lung Association ranked Salt Lake City the nation’s 14th most polluted city for ozone; Harrison said the state’s poor air quality has forced some of her patients to stay indoors and others to leave Utah altogether.

Trump’s move to relax the Obama-era fuel efficiency standards would threaten the progress Utah has made on tailpipe emissions and potentially hinder economic development related to clean-car technology, said Harrison and Handy, co-chairs of the Clean Air Caucus.

Vehicle exhaust accounts for about half the Wasatch Front’s air pollution, sickening and even killing Utah residents, research suggests.

Handy said the state has been hard at work to address the problem by bringing cleaner Tier 3 fuel to Utah’s gas stations. Gov. Gary Herbert has called on local refiners to speed up adoption of the new standards, and the Legislature has approved spending more than $2 million in tax breaks to spur the conversion.

“We want cleaner cars. We want alternative vehicles. ... We need to be driving less,” Handy said. “And we all need to be smarter about the technologies that we use to keep our air clean.”

Ben Abbott, an assistant professor of ecosystem ecology at Brigham Young University, said a recent study showed that air pollution kills more people than smoking. And while people pay special attention to “sensitive groups” particularly impacted by poor quality, everyone is affected at some level, he said.

“Any exposure to air pollution degrades our health,” he warned.

The risks associated with bad air range from the obvious — breathing problems — to nervous and reproductive system issues and depression, Abbott said.

Vehicle manufactures have listened to these air quality concerns and shown a commitment to reducing emissions in accordance with the Obama administration’s standards, said Tammie Bostick, executive director of the Utah Clean Cities Coalition. “To propose a rollback of emissions standards is simply unthinkable and hopefully impossible at this point,” Bostick said.
The existing fuel efficiency standards will save the average Utah household $3,050 in gas costs by 2030, money that would be plowed back into the local economy to create an estimated 4,700 new jobs, the Union of Concerned Scientists has predicted.

While the oil industry supports Trump’s rollback plan, automakers have said it goes too far. Four car manufacturers — Ford Motor Co., Volkswagen of America, Honda and BMW — earlier this year sided against Trump and entered into a pact with California to adhere to rules only slightly less restrictive than the Obama standards. Blindsided by the deal, the White House this month was scrambling to prevent more defections by car manufacturers, who are concerned that different fuel efficiency standards would bifurcate the auto market, The New York Times reported.

In response to the morning news conference, Romney’s office sent a statement. “I support greater efficiency standards in cars, trucks, and factories to reduce energy consumption and pollution,” the senator said in the statement. “I support the utilization of all our energy resources including gas, coal, wind, nuclear, geothermal, hydro, and solar.”

When asked for a comment, McAdams’ spokeswoman referred to a Salt Lake Tribune op-ed penned in April 2018 by the Democratic congressman supporting Obama’s fuel efficiency standards and calling on former U.S. Environmental Protection Agency head Scott Pruitt to abandon the proposed rollback.

“At a time when we’ve made great bipartisan progress, with all levels of local, state and federal government working cooperatively towards our clean air goals, we urge Pruitt to reconsider his position,” McAdams, who was Salt Lake County’s mayor at the time, wrote with several council members and city mayors. “Utahns’ health, our economy and our environment are at stake.”

Trump’s Rollback of Auto Pollution Rules Shows Signs of Disarray

Mr. Trump, described by three people as enraged by California’s deal, has demanded that his staff members step up the pace to complete his plan. His proposal, however, is directly at odds with the wishes of many automakers. They fear that the aggressive rollbacks will spark a legal battle between California and the federal government that could upend their business by splitting the United States into two car markets, one with stricter emissions standards than the other.

The administration’s efforts to weaken the Obama-era pollution rules could be rendered irrelevant if too many automakers join California before the Trump plan can be put into effect. That could imperil one of Mr. Trump’s most far-reaching rollbacks of climate-change policies.

In addition to Mercedes-Benz, a sixth prominent automaker — one of the three summoned last month to the White House — intends to disregard the Trump proposal and stick to the current, stricter federal emissions standards for at least the next four years, according to executives at the company, the press reports. Together, the six manufacturers who so far plan not to adhere to the new Trump rules account for more than 40 percent of all cars sold in the United States.

“You get to a point where, if enough companies are with California, then what the Trump administration is doing is moot,” said Alan Krupnick, an economist with Resources for the Future, a nonpartisan energy and environment research organization.
A senior administration official said the California pact was an effort to force Americans to buy expensive vehicles that they don’t want or need. Speaking on condition of anonymity, he called the pact top-down policymaking with California trying to impose its standard on 49 other states.

Mr. Trump has billed his plan, which would freeze the standards at about 37 miles per gallon, as a deregulatory win for automakers that will keep down car prices for American consumers. Mr. Trump’s plan would also revoke the legal authority of California and other states to impose their own emissions standards.

In an extraordinary move, automakers have balked at Mr. Trump’s proposal, mainly because California and 13 other states plan to continue enforcing their current, stricter rules, and to sue the Trump administration. That could lead to a nightmare situation for automakers: Years of regulatory uncertainty and a United States auto market that effectively split.

California officials have said that they expected more automakers to join their pact, which commits carmakers to build vehicles to a standard nearly as strict as the Obama-era rules. “Many companies have told us — more than one or two — that they would sign up to the agreement as soon as they felt free to do so,” said Mary Nichols, the top clean air official in California.

Executives from the three auto companies summoned to the White House declined to comment publicly on their interactions with the Trump administration. But at a recent media event, Mike Manley, Fiat Chrysler’s chief executive, said of the California pact: “We are absolutely going to have a look at it and see what it means.”

In the Trump administration, three senior political officials working on the rollback, a complex legal and scientific process, have all left the administration recently. A senior career official with years of experience on vehicle pollution policy was transferred to another office.

That means the process is now being run by Francis Brooke, a 29-year-old White House aide with limited experience in climate change policy before moving over from Vice President Mike Pence’s office last year. Given the lack of experienced senior staff members, people working on the plan say it is unlikely to be completed before October.

At the same time, staff members at the Environmental Protection Agency and Transportation Department, which are writing the rule, say they are struggling to assemble a coherent technical and scientific analysis required by law to implement a rule change of this scope.

Several analyses by academics and consumer advocates have questioned the administration’s claim of benefits to the public. An August 7 report by Consumer Reports concluded that Mr. Trump’s proposed rollback would cost consumers $460 billion between vehicle model years 2021 and 2035, an average of $3,300 more per vehicle, in car prices and gasoline purchases. It also found the rollback would increase the nation’s oil consumption by 320 billion gallons.

A career staff member at the E.P.A., speaking on condition of anonymity, said the numbers, the public comments and the analysis were at odds with what the White House wanted to do.

The White House official called the staff departures irrelevant and said that the rule was near completion. While acknowledging that a major change such as this takes time, the official said that people who were opposed to the rule, including some in the automotive industry, were starting to worry that the Trump plan was going to succeed.
Policy experts point out that Mr. Trump’s quest to undo his predecessor’s signature climate-change regulation despite opposition from the very industry being regulated is extraordinarily unusual. For automakers, they say, it makes more sense to try to remain globally competitive by building more sophisticated vehicles as the world market moves toward more efficient cars.

“I don’t think there is any precedent for a major industry to say, ‘We are prepared to have a stronger regulation,’ and to have the White House say, ‘No, we know better,’” said William K. Reilly, who headed the E.P.A. in the first George Bush administration.

For some companies, Mr. Trump’s regulations are already moot. An E.P.A. assessment of the 2017 Honda CR-V, the best-selling S.U.V. in the country that year, showed the car is set to meet 2022 Obama-era targets five years ahead of schedule.

Late last month, in the days immediately after the deal between California and the four automakers was announced, White House discussions ranged widely about how to respond.

At one White House meeting, Mr. Trump went so far as to propose scrapping his own rollback plan and keeping the Obama regulations, while still revoking California’s legal authority to set its own standards, according to the three people familiar with the meeting. The president framed it as a way to retaliate against both California and the four automakers in California’s camp, those people said.

Trump Lashes Out Against Carmakers Cool to His Mileage Plan

President Donald Trump lashed out at automobile manufacturers who’ve pushed back on his administration’s plan to weaken fuel-efficiency requirements, dismissing them as “politically correct.”

“My proposal to the politically correct Automobile Companies would lower the average price of a car to consumers by more than $3000, while at the same time making the cars substantially safer,” Trump said in a recent tweet. “Engines would run smoother. Very little impact on the environment! Foolish executives!”

The tweet prompted by the compromise that Ford Motor Co., Honda Motor Co., BMW AG, and Volkswagen AG have reached with California’s clean-air regulator to boost the fuel efficiency of autos sold in the U.S. through 2026, defying the Trump administration’s plan.

Trump regulators have argued that capping fuel economy standards at 2020 levels would lead to less-expensive new cars than under the current rules, allowing consumers to replace their older vehicles with newer, safer ones more rapidly and avoid thousands of traffic fatalities.

Experts and EPA career staff have disputed those assertions.

14. California Reports 2017 GHG Emissions Decline

California officials are reporting that in 2017, the state’s greenhouse gas emissions continued to fall while its economy grew faster than the national average, prompting officials to suggest that they will meet their 2020 emissions target and help them eventually attain their 2030 goal.

“This is further evidence that California’s groundbreaking climate regulations are helping to deliver the greenhouse gas reductions needed to meet our 2020 target -- and give us a running start at our even more ambitious 2030 target, too,” said California Air Resources Board (CARB) Chair Mary Nichols, in an August 12 press release.

Released August 12, the report says that total GHG emissions in 2017 were 424 million metric tons of carbon dioxide equivalent, the second year in a row in which GHG emissions fell below the state’s 2020 reduction target of 431 million metric tons -- or 20 percent below 1990 levels. This represents a decrease of five million metric tons from 2016.

The state’s 2030 target is 40 percent below 1990 levels

The report also shows that in 2017 California’s economy grew 3.6 percent, which is 1.4 percent above the national average, according to the state Department of Finance.

Officials say data in the report also show that for the first time since California started to track GHG emissions, the state power grid used more energy from zero-GHG sources like solar and wind power than from electrical generation powered by fossil fuels, the release says.

Emissions from electricity generation made up about 15 percent of 2017 statewide GHG emissions, according to the report. In 2017, those emissions fell 9 percent from 2016, the largest decline of any economic sector, the release says. A large increase in zero-emission energy resources drove the reduction, powering 52 percent of all California’s electricity consumed in 2017.

Data also demonstrate that emissions from the transportation sector did not rise as fast as in previous years, officials note. Vehicle tailpipe emissions accounted for 37 percent of California’s 2017 GHG emissions; the release says. While those emissions rose, they “showed signs of leveling off. The 2017 increase was 0.7 percent, down from 2 percent the preceding year. Most of the GHG emissions increase came from passenger vehicles.”

In addition, the carbon intensity of the state’s economy -- the amount of carbon pollution produced per million dollars of economic output -- also continued to decline, by 4.5 percent since 2016, and the per capita emissions continued to drop, by 2 percent to 10.7 tons of CO2 equivalent per person, officials say. The national average is 19.9 tons of CO2 equivalent per person.

Industrial emissions over multiple sectors showed a slight reduction or remained flat, according to the administration. California’s industrial sectors generated 21 percent of state GHGs in 2017. Oil and gas refineries and hydrogen production were responsible for one-third of those emissions. The rest came mostly from oil and gas extraction, cement plants, glass manufacturers and large food processors, the release says.

Meanwhile, livestock operations emit more than 50 percent of the methane in California. Methane has up to 25 times the heat-trapping capacity of CO2 and is the most common short-lived climate pollutant in the state, officials reported.

“California is proving that smart climate policies are good for our economy and good for the planet,” said Gov. Gavin Newsom (D), in the release. “As the Trump administration attempts to obliterate national climate protections, California will continue advancing the cause of American climate leadership.”
EPA’s stated February timeline for issuing a proposal to put new limits on nitrogen oxides (NOx) from heavy-duty trucks appears likely to slip until fall 2020, likely ensuring California will move forward sooner with its own standards and underscoring how the issue will either be a second-term priority for the Trump EPA or an unresolved topic for the next administration.

A source familiar with the issue says that the agency has been telling the industry to essentially disregard the February timeline for releasing a proposal, which is listed in the most recent Unified Agenda for a proposed rulemakings.

A second source also tells reporters that industry, which sees the rule at least in part as providing a counterweight to stricter California rules, was never expecting EPA to meet its official timeline. “It’s not going to happen,” the first source says anticipating that a proposal likely will be issued closer to “fall 2020.”

That would come much later than announced plans by the California Air Resources Board (CARB) to advance its own truck NOx rules. The board has said it will release its proposal by Feb. 7, which will be subject to a 45-day comment period. The board then plans to consider the regulation for approval at its March 26-27 meeting, but the rule might not be completed until several months after that, due to expected post-meeting “15-day” changes.

Even so, the diverging timelines could complicate attempts for federal and state regulators to work together on the issue, where possible.

It is not clear if the recent indications of a fall 2020 proposal represent a real change in the process or instead a correction in EPA’s optimistic expectations of its pace. Backers of the plan previously have noted that the Trump administration got off to a late start in pursuing the changes to the federal standards, which have not been overhauled since 2000.

Several sources in recent months have characterized the Unified Agenda’s February goal as partially a manifestation of then-EPA air chief Bill Wehrum’s efforts to explore the quickest possible scenarios for moving a new heavy-truck NOx regulation. But that goal likely overstated the pace at which analysis and other work to support the rulemaking could happen, these sources indicate. Wehrum resigned from the agency under an ethics cloud at the end of June.

In addition, the heavy-duty NOx rule -- unlike most Trump EPA efforts to lift regulatory burdens -- is regulatory in nature. The first source notes that extensive analytical and other work supporting such efforts “takes time.”

There have been signs that the industry and California remain far apart -- at least publicly -- on future NOx standards, with CARB floating a white paper in April that outlined a phased approach for achieving stricter NOx limits for trucks, as well as an attempt to synchronize requirements with greenhouse gas controls.

The state plan included tighter numerical standards beginning in model year 2024 and extending out MY27 and beyond, in an effort to address continuing severe air quality problems in the state.
The white paper also laid out a roadmap for several other provisions related to in-use emissions testing and durability.

EPA, meanwhile, also supports stricter NOx controls, under the rubric of its Cleaner Trucks Initiative, though it is also apparently seeking opportunities to make the program more flexible.

Observers and regulators alike have previously downplayed the ability of EPA and CARB to agree on near-term approaches, citing in part four-year federal lead time requirements that might preclude EPA’s ability to require new limits by MY24.

That disconnect has sparked talk of potential voluntary approaches to bridge the gap though there have been signs that industry and CARB remain far apart on an acceptable voluntary program.

CARB has also scheduled a series of workshops over the next three months to further develop its plans.


Volkswagen AG must forfeit greenhouse gas emissions credits and is lowering the fuel economy ratings on 98,000 vehicles after the U.S. Environmental Protection Agency said auto software overstated real-world performance.

Volkswagen said it had agreed to a $96.5 million court settlement, with no fine, to reimburse affected customers.

The software was on roughly 1 million 2013-2017 model year Audi, Bentley, Porsche and Volkswagen vehicles, the agency said. It caused the transmission to shift gears in a manner that sometimes optimizes fuel economy and greenhouse gas emissions during the EPA-prescribed emissions test, but not under normal driving conditions, the agency said.

The vehicles getting lower ratings include versions of the Audi A8, Bentley Continental GT, Porsche Cayenne and VW Touareg. Not all of the five model years are covered by the settlement.

The EPA said Volkswagen has determined the software lowered the fuel economy rating on roughly 98,000 vehicles by about one mile per gallon.

The issue was discovered during an investigation by the EPA and California Air Resources Board into excess diesel emissions in hundreds of thousands of U.S. vehicles.

The German automaker admitted using illegal software to cheat U.S. pollution tests in 2015, triggering a global backlash against diesel vehicles that has so far cost it 30 billion euros ($33 billion) in fines, penalties and buyback costs. In May, it set aside an additional 5.5 billion euros in contingent liabilities.

The EPA said Volkswagen understated greenhouse gas emissions by about 220,000 metric tons and it will forfeit EPA credits and credits in the federal Corporate Average Fuel Economy program. The exact amount of credits will be subject to approval by EPA and the National Highway Traffic Safety Administration.

The issue reduced fuel economy by about 3.5% on impacted vehicles, VW said, adding customers will receive payments of $5.40 to $24.30 for each month the vehicle is owned or leased.
"Volkswagen is committed to providing customers with transparent fuel economy data for our vehicles, in line with U.S. labeling requirements," said VW spokesman Pietro Zollino.

17. Trump Prods GM Over Jobs, Plants In China

President Donald Trump, who is engaged in a trade war with Beijing, said that the largest U.S. automaker, General Motors Co, should begin moving its operations back to the United States.

"General Motors, which was once the Giant of Detroit, is now one of the smallest auto manufacturers there. They moved major plants to China, before I came into office. This was done despite the saving help given them by the USA. Now they should start moving back to America again?" Trump said in a post on Twitter.

Trump appeared to be referring to a Bloomberg News story that reported GM’s hourly workforce of 46,000 U.S. workers has fallen behind that of Fiat Chrysler as the smallest of the Detroit 3 automakers. Over the past four decades, GM has dramatically cut the size of its overall U.S. workforce, which numbered nearly 620,000 in 1979.

GM did not directly comment on Trump’s tweet.

"GM’s China operations are not a threat to U.S. jobs," the company said in a fact sheet, noting that its joint ventures have sent $16 billion in equity income to GM since 2010 and that it has invested $23 billion in U.S. operations since 2009.

GM’s U.S. hourly workforce has fallen by about 4,000 jobs since the end of 2018 to about where it was a decade ago.

Trump’s ire with GM comes as contract talks with the UAW and the Detroit 3 automakers intensify ahead of a Sept. 14 deadline. Trump has previously attacked GM for building vehicles in Mexico and for ending production at plants in Michigan, Ohio and Maryland and threatened to cut GM subsidies in retaliation.

GM’s decision to close four plants in the United States is a central issue in the contract talks.

Trump has made boosting auto jobs a key priority and has often attacked automakers on Twitter for not doing enough to boost U.S. employment. His 2020 re-election bid will hinge on holding key industrial battleground states such as Ohio, Wisconsin, Pennsylvania and Michigan that narrowly voted for him in 2016.

China is the world’s largest auto market, and government policy favors automakers assembling vehicles there, and not importing them from overseas.

In response to Trump’s latest tariffs, China said last week it will reinstitute 25 percent tariffs on U.S.-made vehicles. The U.S. is imposing 15 percent tariffs on more than $125 billion in Chinese goods starting Sunday.

GM sold 3.6 million vehicles in China last year accounting for 43 percent of its worldwide sales. GM booked $2 billion in equity income from its China operations last year.
GM imports a small number of vehicles from China. In June, the Trump administration rejected a request from GM to exempt its Chinese-made Buick Envision from a 25 percent U.S. tariff on utility vehicles.

The compact crossover has become a target for U.S. critics of Chinese-made goods, including leaders of the UAW members in the key 2020 political swing states such as Michigan and Ohio.

**18. Fresh Wave Of Tariffs From Both China And US Takes Effect**

A fresh wave of tariffs has been imposed on a portion of 300 billion U.S. dollars' worth of Chinese goods on September 1. Meanwhile, China's first batch of retaliatory tariffs of either 10 or 5 percent on 75 billion U.S. dollars of U.S. goods also went into effect.

At noon, the U.S.' additional tariffs of 15 percent on a portion of 300 billion U.S. dollars of Chinese imports enter into force. The 15 percent tariffs – which is in addition to the 25 percent tariffs already in effect – essentially covers all of China's exports to the United States.

Negotiators from both countries plan to meet again early this month in the U.S. China's Ministry of Commerce said that the new round of U.S. tariffs will not lead to good conditions for trade talks. It expressed hopes the U.S. can return to normal bilateral trade, on the basis of fairness and mutual respect, rather than continuing conflict.

Trump's tariff strategies have hurt the confidence of U.S. consumers. A recent survey conducted by the University of Michigan shows the U.S. consumer confidence index had its biggest monthly decline since December 2012.

The index fell 8.6 to 89.8. Analysts say tariffs are the main reason as they have led to rising uncertainties and reduced expenditures.

Personal consumption expenditure accounts for about 70 percent of the U.S. economy. It is the main engine of U.S. economic growth and a key pillar of U.S. market confidence.

In addition to tariffs, personal income growth in U.S. is also showing signs of slowing. Data from the U.S. Department of Commerce shows that personal income rose by 0.1 percent annually in July, which is the smallest increase since September last year and also a significant drop compared to 0.5 percent in June.

Personal savings fell from 1.32 trillion U.S. dollars in June to 1.27 trillion U.S. dollars, hitting the lowest level since November 2018.

**19. Survey: Range, Cost, Infrastructure Sum Up Why Shoppers Avoid EVs**

Various polls and surveys say: Active and prospective car shoppers are interested in fully electric vehicles and eager to go electric. The AAA, for instance, has in annual surveys for the past three years found that 15 to 20 percent of Americans “will likely go electric in their next vehicle purchase.”

With battery electric vehicle sales remaining around five percent of the U.S. vehicle market, why are some Americans not yet making the leap? The lack of variety in fully electric vehicle types is certainly part of it, but as a new survey points out, the reason shoppers are avoiding EVs still boils down to some familiar reasons.
In the poll of 1,567 “current car shoppers,” conducted recently, Autolist found the primary reasons for avoiding electric vehicles—in order—to be driving range, the price relative to similar gas vehicles, and the lack of charging infrastructure in their home area. Meanwhile, the most important attributes, in order, were seen as price, range and available charging.

Consumers continue to want high driving-range numbers—and perhaps to the detriment of luxury-priced models like the Jaguar I-Pace and Audi E-tron, they have much higher expectations for rated range from luxury vehicles.

Car shoppers’ EV avoidance reasons - Autolist

When Autolist asked consumers for the minimum range they’d accept in a $35,000 electric vehicle, the leading answer was “between 250 and 300 miles”—stipulations perhaps most closely met by the Hyundai Kona Electric, with its $37,995 base price and 258-mile EPA-rated range. The Chevrolet Bolt EV and Kia Niro EV are also close to meeting those expectations.

But when Autolist asked the same about a $70,000 EV, the responses, the most common response was “more than 500 miles.”

At an EPA-rated 370 miles, the Tesla Model S Long Range currently holds the top rated range of any regular-production electric vehicle. No EV currently achieves close to 500 miles, or even 400 miles.

There’s a riptide beneath these impressions, and that’s age. The survey found a direct and pronounced correlation between age and the importance of EV range. For instance, 32 percent of those 18-23 years old listed range among the top three avoidance issues, while for those over 76 years old it was in the top three for 60 percent. Autolist reports that there was a similar trendline created between age and the importance of the charging network, although that one had an inflection point around age 45.

Also, with rising shopper age, sticker price was less important, but resale value was more important.

A Volvo/Harris poll from earlier this year surveyed both EV drivers and non-EV drivers and found strong belief among both groups that EVs are the future. However, 61 percent of respondents indicated that a lack of charging structure held back a purchase. While 38 percent of EV drivers were concerned about running out of power, 58 percent of all drivers combined indicated this concern.
One other figure stood out as especially surprising (and promising for the future of the technology): 55 percent of respondents said that the EV would be their primary—not secondary—vehicle if they bought one today. The survey also found that 69 percent supported tax rebates and other incentives aimed toward the wider adoption of EVs. That echoes the bipartisan support of the tax credit earlier this year, after it had been potentially on the chopping block.

**20. Canada Sees More Than 14,000 Zero-Emission Vehicles Purchased Or Leased**

Canadians have bought or leased more than 14,000 zero-emission vehicles under a new federal incentive program launched three months ago, Transport Canada has announced. These purchases and leases under the Incentives for Zero-Emission Vehicles program are expected to reduce emissions by 36,000 tons per year, or 429,000 tons over the vehicles’ expected lifespan, said Transport Minister Marc Garneau.

“Over the past three months, the Incentives for Zero-Emission Vehicles program (has) made it easier for Canadians to be part of the solution to climate change while reducing their daily driving costs,” he said in a statement.

Transport Canada says nationwide sales of all zero-emission vehicles were up 30 per cent year-over-year in the first six months of 2019. Over that span, zero-emission vehicles represented roughly three per cent of all new light-duty vehicles sold, compared to about two per cent in the same period last year, according to the department.

Under the program, Canadians who purchase or lease eligible electric battery, hydrogen fuel cell or long range plug-in hybrid vehicles will receive a $5,000 incentive. Those who buy or lease a shorter range plug-in hybrid will take home a $2,500 incentive.

Collectively, there are over 25 zero-emissions models from 15 different manufacturers that are eligible for an incentive, said Transport Canada.

The Canadian Taxpayers’ Federation, though, said no federal incentive is large enough to encourage widespread adoption of electric vehicles, arguing this would only come when the market price becomes more comparable to traditional cars and trucks. “It shouldn’t surprise anyone that when you subsidize something by making it cheaper, demand will jump. But the only way electric vehicles will ever become widespread — instead of making up (three per cent) of new sales — is when their actual market price becomes competitive with other vehicles,” CTF executive director Aaron Wudrick told the press.

“There isn’t enough money in federal coffers to subsidize our way to zero vehicle emissions!”

The federal government is looking for zero-emission vehicles to represent 10 per cent of new light-duty vehicle sales by 2025, before moving to 30 per cent by 2030, and eventually all new sales by 2040.

**21. Air Pollution, Especially Ozone, Tied To Worsening Lung Damage**

The more exposure people have to air pollution, especially ozone, the more lung damage they develop over time, a U.S. study suggests. Researchers already knew that heavy air pollution makes lung disease worse in people who already have lung disease. The new study shows that even among people without lung disease, long-term exposure to air pollution even in relatively
‘clean’ areas can lead to signs of chronic lung disease, said Dr. Joel Kaufman, a co-author of the study and an environmental health researcher at the University of Washington in Seattle.

The current study focused on four major pollutants – ozone, an unstable form of oxygen produced when traffic and industrial fumes react with sunlight; nitrogen oxide, a byproduct of fossil fuel combustion that contributes to smog; black carbon, or soot, from coal-powered factories and traffic; and so-called PM 2.5, a mixture of solid particles and liquid droplets smaller than 2.5 micrometers in diameter that can include dust, dirt, soot and smoke.

Researchers assessed levels of these pollutants near the homes of 7,071 people in six U.S. cities: Baltimore; Chicago; Los Angeles; St. Paul, Minnesota; New York, and Winston-Salem, North Carolina. Each participant got CT scans to look for the proportion of cells in the lung that are damaged – described as the percentage of emphysema. They also underwent lung function tests known as spirometry at the start of the study and again around 10 years later.

About 46% of the study group were lifelong nonsmokers, and 22% of participants had some airflow obstruction at the beginning of the study period. Over 10 years, the average decline in lung function for the entire group was a little over 300 milliliters of volume on inhalation and exhalation tests.

People exposed to higher levels of each of the four pollutants at the start of the study were more likely to develop emphysema damage by the end, researchers report in JAMA.

Levels of most of the pollutants declined during the study, but concentrations of ozone rose. Each 3 parts per billion (ppb) of ozone in the air was associated with a lung function decline of 18 ml on a test of forced exhalation, and 40 ml on an inhalation test.

Over the 10-year period, each 3 ppb in average daily exposure to ozone was linked to lung damage equivalent to smoking a pack of cigarettes a day for 29 years or to an additional three years of aging, researchers found.

Ever-smokers and people with lung damage at the start of the study experienced the greatest increases in percentage emphysema and declines in lung function.

The results suggest that air pollution exposure may help explain why so many people without any history of smoking still develop chronic emphysema, the study team concludes.

One limitation of the study is that researchers only examined air pollution around people’s home addresses, and it’s unclear how much time people spent at work or other places away from home or how much pollution levels might differ at these other locations. “People don’t spend all their time sitting on their front steps, so while we have a very good idea about their air pollution exposures, the exposures are a bit different indoors and when they travel to other places,” Kaufman said.

Even so, the results underscore how important it is for people with chronic lung diseases to take precautions to limit exposure to air pollution, Kaufman advised. “Staying indoors on high air pollution days and having a good air filter at home can be helpful in highly polluted environments,” Kaufman said.

The results also highlight the importance of public health efforts to curb pollution.
“Great progress has been made in reducing air pollution concentrations due to health-based air quality protections and these need to continue to be strengthened,” Kaufman said. “Ozone concentrations in particular still need attention and reducing use of fossil fuels and slowing climate change will help reduce these exposures too.”

**22. New York Among Major Cities Violating Ozone Standards, EPA Says**

The EPA has determined that Chicago, Dallas, Houston-Galveston, New York City, and San Diego are in serious violation of the 2008 national ozone standards, up from being just “moderately” out of compliance with the limits.

In a final rule scheduled for August 23 publication, the EPA said these five major cities, along with two other localities spanning greater Connecticut and the western part of Nevada County, Calif., failed to meet their July 2018 deadline to meet the ozone limits.

In that same rule, the EPA also determined that Baltimore and Mariposa County, Calif., are now meeting the 75 parts per billion standard.

Under the Clean Air Act, a locality that is reclassified from moderate to serious noncompliance with federal air quality standards has to impose additional controls to curb ozone-forming pollutants. Each state has to submit a plan to the EPA detailing how it plans to improve air quality to meet the federal limits.

For these localities, that usually means enhanced vehicle inspections and maintenance, strict compliance with New Source Review permits for any expansion and construction projects, and more frequent monitoring.

Ground level ozone is formed by the reaction of sunlight with nitrogen oxides and volatile organic compounds that are released by burning fossil fuels in automobiles and trucks as well as power plants, refineries, and other pollution-emitting factories.

Eastern states that make up the 12-state Ozone Transport Commission are trying to get the EPA to impose pollution controls on power plants that release nitrogen oxides, an ozone precursor. These states, including New York, New Jersey, and Connecticut, have repeatedly told the EPA they won’t be able to meet federal ozone standards because of pollution blowing across state lines from Pennsylvania.

**23. Air Pollution Cuts Are Saving Lives In New York State**

Lower air pollution levels saved an estimated 5,660 lives in New York State in 2012, compared to 2002 levels, according to a new study. Published in Environmental Research Letters, the study -- led by Columbia University’s Lamont-Doherty Observatory atmospheric chemistry research group -- looked at New York State levels of fine particulate matter, or "PM2.5." These microscopic particulates are a mixture of solid particles and liquid droplets. Some come from burning fuel, and others form in the atmosphere as a result of complex reactions of chemicals such as sulfur dioxide and nitrogen oxides from power plants, industries and automobiles. Long-term exposure to PM2.5 can lead to respiratory and cardiovascular problems.

The study compared seven datasets, including both on-the-ground and satellite measurements, to analyze trends in PM2.5 levels across New York State. The researchers found that PM2.5 levels dropped by 28 to 37 percent between 2002 and 2012. They calculated that this drop cut
the air pollution mortality burden for New York State residents by 67 percent -- from 8,410 premature deaths in 2002 to 2,750 deaths in 2012.

"What's novel about this study is that we use seven different PM2.5 exposure estimates to analyze the long-term change in mortality burden, and they all show a consistent decrease in mortality burden," said Xiaomeng Jin, the Lamont researcher who led the study.

The study considered four ailments triggered by long-term exposure to fine particulate matter: chronic obstructive pulmonary diseases, ischemic heart disease, lung cancer, and cerebrovascular and ischemic stroke.

The study provides evidence that emission controls on air pollutants, initiated by the Clean Air Act of 1970 -- and expanded under amendments passed in 1990 that required a review of scientific evidence on which standards are set and implemented -- have improved public health across New York State, said the researchers.

"Those reviews have sometimes resulted in stricter standards being set, which in turn set in motion the process of emission controls to meet those standards," said Lamont atmospheric chemist and co-author of the study Arlene Fiore.

Among the other factors that have helped clear the air: continued progress in cleaner vehicles; additional programs to reduce air pollution, including programs targeting diesel fuel, a source of sulfur dioxide; and the reduction of high sulfur dioxide-emitting coal-burning power plants.

Fiore said this study is a key step to documenting the health benefits from cleaner air.

**24. IG Clears EPA Staff In Dispute Over ‘Glider’ Truck Emission Tests**

EPA’s Office of Inspector General (OIG) is largely exonerating agency staff from claims by some House Republicans that they improperly coordinated with new truck manufacturers in conducting tests of “glider” trucks, which combine used engines with new chassis, that showed high emissions from the vehicles.

OIG’s July 31 report is a victory for those that support continued restrictions on gliders, given that the agency tests showed the vehicles can emit air pollution on the order of 40 times that of new trucks, undercutting a long-stalled Trump EPA proposal to raise production limits on gliders.

“EPA’s selection and testing of the donated glider vehicles in 2017 was consistent with Clean Air Act authority, standard EPA practices, and relevant policies and procedures,” the report says.

Office of Transportation and Air Quality (OTAQ) staff “obtained approval before planning and conducting glider vehicle testing and followed normal procedures in submitting the test report to the rulemaking docket,” the report adds, noting OIG found no evidence that staff improperly deleted records related to the testing or that a former OTAQ center director committed ethics violations related to the work.

While OIG largely exonerated staff of wrongdoing, it found that EPA “did not fully adhere to its delegation of authority related to acceptance of donated property” under the air act, recommending that the agency revise its delegation of authority policies to “enable practical implementation” of standards to accept donated property and to evaluate whether further guidance on the issue is needed.
EPA “concurred” with both recommendations and “provided acceptable planned corrective actions and milestones,” according to the OIG report.

Specifically, authority to accept gifts has been formally delegated from the EPA administrator to the assistant administrators for the air and research offices, the report notes, but OIG found this “impedes the ability of the EPA to practically implement its [air act] donation acceptance authority.”

A June 10 letter from then-air chief Bill Wehrum, responding to a draft version of the OIG report, says EPA is “pleased that OIG has concluded that EPA complied with standard practices and relevant policies and procedures covering objectivity and integrity in planning and conducting its testing of glider vehicles in 2017.”

The report says that the agency plans to complete its updates to its delegation of authority policies by the end of September 2020.

OIG’s audit was launched following June 2018 requests from several Capitol Hill allies of the glider sector, which makes vehicles that combine used powertrains with new truck bodies. Lawmakers seeking an OIG study into alleged improper coordination between staff and new truck makers included Reps. Greg Gianforte (R-MT), Bill Posey (R-FL), Brian Babin (R-TX), James Comer (R-KY) and Steve King (R-IA).

EPA staff’s testing was notable because the test results were inserted in the regulatory docket in November 2017, just days after then-Administrator Scott Pruitt floated a plan to repeal Obama-era production caps on high-emitting gliders. Those restrictions were included in the 2016 Phase 2 greenhouse gas rule for heavy-duty trucks.

The test results significantly undercut the rationale for the proposal, contradicting a glider sector-funded study by Tennessee Tech University showing the vehicles are as clean as new trucks. The school has since retracted the study after finding its procedures were not sufficient to justify comparisons with EPA work.

The new OIG report notes that the office is still conducting an audit related to the broader development of the repeal proposal. Senate Democrats asked for such an audit in October, arguing the “legally questionable proposal” was crafted under “highly irregular circumstances.” OIG launched that audit in December.

OIG in April blasted the White House regulatory review office for not cooperating on its inquiry, underscoring the office’s apparent reluctance to detail its process for reviewing the controversial plan.

The OIG report notes that OTAQ staff as of this month “have not been directed to work on any additional analysis supporting a final rule,” and that the agency’s Spring 2019 agenda lists the proposal as a “long-term action.”

25. Alaska’s Sweltering Summer Is ‘Basically Off The Charts’

Alaska is warming faster than any other state, having heated up more than 2 degrees Celsius (3.6 degrees Fahrenheit) over the past century — double the global average. And parts of the state, including its far northern reaches, have warmed even more rapidly in recent decades.
This trend, driven in part by the burning of fossil fuels, is transforming the nation’s only Arctic state. Scientists around the world, including in the U.S. government, predict the warming will continue unless countries drastically reduce their greenhouse gas emissions in coming years.

Temperatures have been above average across Alaska every day since April 25. None of the state’s nearly 300 weather stations have recorded a temperature below freezing since June 28 — the longest such streak in at least 100 years. On Independence Day, the temperature at Ted Stevens Anchorage International Airport hit 90 degrees for the first time on record.

More than 2 million acres have gone up in flames across the state as thousands of firefighters have worked to contain wildfires. Stores have sold out of fans and ice. Moose have been spotted seeking respite in garden sprinklers.

Alaska, which logged its warmest June on record, now seems destined to register not only its warmest July but also its warmest month. “Usually if you were to break this sort of record, you’d do it by a sliver of a degree,” said Brian Brettschneider, a climatologist and research associate at the International Arctic Research Center. He said that the state is on course to shatter the record by more than one degree Fahrenheit.

The combination of relentless high pressure, extremely warm sea surface temperatures and high humidity are “basically off the charts,” Brettschneider said.

The entire Arctic is suffering under extreme temperatures. In Siberia, sweeping wildfires are sending smoke thousands of miles away and lofting dark soot particles onto the vulnerable Arctic ice cover. Arctic sea ice is melting at an alarming pace and could break the 2012 record. In addition, the weather system that caused the recent heat wave in Western Europe has now settled above the Atlantic side of the Arctic, accelerating surface-ice melting in Greenland.

Mark Parrington, a senior scientist with the Copernicus Atmosphere Monitoring Service in Europe, said that through July 28, wildfires in the Arctic region, including Siberia and Alaska, had emitted 125 metric megatons of carbon dioxide — the highest of any year-to-date since such monitoring began in 2003.

“We’re seeing something exceptional this year,” Parrington said, even though the acreage burned in Alaska is not yet a record.

Even as researchers in Alaska are working to capture climate change’s impact on the region, sharp cuts by Gov. Mike Dunleavy (R) to the state’s education budget threaten to trigger an exodus of some of the very scientists who are trying to explain the unprecedented changes that residents are experiencing.

“I think it will lead to many of the best Arctic scientists in the UA system [leaving] the state,” Christopher Arp, an associate research professor at the University of Alaska at Fairbanks Water and Environmental Research Center, said. “Having scientists live where they do research is very important in my view, so I think that will have a negative impact on Arctic research that will be very challenging to reverse.”

Meanwhile, this summer’s heat has transformed Alaska’s landscape and waterways, affecting humans and wildlife alike.
The early retreat of sea ice from the Bering and Chukchi seas has led to a jump in sea surface temperatures, altering weather patterns and upending the lives of residents who typically depend on the ice cover for hunting and fishing. It’s also affecting native species, including seals and seabirds.

George Divoky, a longtime Arctic biologist and ornithologist, said that the summer’s high temperatures in the Bering Sea have been devastating for the colony of black guillemots he has been studying on Alaska’s Cooper Island since 1975. The spike in water temperatures has made it difficult for them to find the cod and zooplankton they depend on.

“In the first week after hatching, half of the 120 chicks that hatched had starved to death,” he said. “Many of the chicks that remain alive are not growing, and we expect most of them to die.”

As of July 28, the Chukchi Sea, northwest of Alaska, had just 20 percent of its ice cover left — a record low for this time of year, according to figures from the National Snow and Ice Data Center.

Michael Wald, a wilderness guide, was paddling recently in Demarcation Bay on the Beaufort Sea coast. He had traversed those same waters a decade ago and had a hard time finding a campsite because of ankle-deep muck each time he pulled ashore.

This time, he found the ground parched. “The tundra is so dry you could camp anywhere,” Wald said. “It was almost unrecognizable.”

In south-central Alaska, residents face a different outlook: streams that are running high because snow and glaciers are melting quickly. While this is peak season for fly-in fishing trips, some pilots have had to revise their fight plans, wary of dropping off clients near rivers that are surging from the snowmelt.

The hot days, tinged with wildfire smoke, also have meant a run on fans and air conditioners in a place where few people have needed them.

“Most homes in Alaska are built to trap heat inside,” said Rick Thoman, an Alaska climate specialist at the International Arctic Research Center. “So, you get the choice between it being super hot and stuffy inside, or very warm and smoky outside.”

Tim Craig, who owns Anchorage True Value Hardware on Jewel Lake Road, calculated that his fan sales are up 125 percent compared with last year. From mid-June through last week, he said, every fan that arrived in his store’s weekly shipment was either spoken for ahead of time or gone by day’s end.

Merritt Turetsky, a fire scientist at the University of Guelph, said that having major fires on multiple continents at the same time is unique. When fires burn for an extended period in these ecosystems, she said, they can smolder and enter deeper soils, liberating carbon that has been stored for thousands of years.

Much of northern and central Alaska is covered by permanently frozen soil known as permafrost. When this icy soil melts, the organic matter within it decomposes and releases long-buried stores of greenhouse gases, including carbon dioxide and methane. This, in turn, speeds up global warming. Scientists are increasing their focus on the pace and extent of permafrost melt.
Atop the permafrost sits an insulating layer of moss and lichen a few inches thick. In the summer, unusually warm temperatures and scant rainfall have made it a breeding ground for blazes. “The weather has been impacting fire behavior a lot,” said Alan Hickford, a meteorologist at the National Weather Service in Fairbanks. “The fires start easier and spread easier.”

The recent spate of record warmth has affected more than just life on land.

“In Nome, Pacific cod have been showing up in crab nets. They used to be extremely rare in the North Bering Sea,” Thoman said. “Meanwhile, salmon have been reportedly dying, suffocating as water temperatures climb and less dissolved oxygen remains in the water.”

According to the National Oceanic and Atmospheric Administration, Alaska produces more than 50 percent of the fish caught in U.S. waters, with an average wholesale value of nearly $4.5 billion a year. “More people are employed there than in any other industry,” Brettschneider said.

26. Freight Revenue Expected To Soar While Trucking’s Share Declines

The American Trucking Associations predicts that freight tonnage will increase by 25.6 percent by 2030. Economic and population growth will push annual freight revenue past $1.6 trillion a decade from now, according to their new projections.

“America’s trucking industry, and the overall freight transportation industry, are poised to experience strong growth over the next decade as the country’s economy and population grow,” said Bob Costello, the ATA’s chief economist.

The ATA publishes its forecast annually. The finding’s in this year’s report include:

- Overall freight tonnage will grow to 20.6 billion tons in 2030, up 25.6 percent from 2019’s projection of 16.4 billion tons.
- Freight industry revenues will increase 53.8 percent to $1.6 trillion over the next decade.
- Trucking’s share of total freight tonnage will dip to 68.8 percent in 2030. That’s down from 71.1 percent this year.
- Trucking’s tonnage will grow to 14.2 billion tons in 2030 from 11.7 billion tons this year.
- Trucking’s revenue will be about $1.1 trillion in 2030.
- Both trucking and total rail transportation will lose relative market share, even as revenues and tonnage grow. Intermodal rail, air and domestic waterborne shipping will show modest growth. Pipeline transportation will experience explosive growth – surging 17.1 percent in tonnage and 8.6 percent in revenue over the next decade.

At least for now, the trucking industry is logging robust growth. It grew almost 10 percent last year, according to the ATA. Trucking revenue soared to $796.7 billion in 2018 from $700.1 billion the previous year.

Trucks moved 11.49 billion tons of freight last year, or 71.4 percent of the nation’s tonnage freight. Trucking’s revenues accounted for 80.3 percent of the nation’s freight bill.

27. Heavy-Duty Truck Orders Fall to Lowest Level Since 2010
The market for new Class 8 trucks continued to deteriorate in July with motor carriers placing orders for just 9,800 vehicles. That was the first time since 2010 that new monthly bookings fell below 10,000.

July orders plunged 82 percent compared with the same period a year earlier, according to research firm FTR Transportation intelligence. “Fleets continue to take a wait and see approach to 2020 equipment. Potentially higher equipment costs, uncertain demand and enough available capacity in the market are keeping order activity at bay,” said Jonathan Starks, an FTR analyst.

After several years of robust sales and sold-out production capacity, truck makers face a “market correction,” said Kenny Vieth, president of ACT Research, an industry consulting firm.

“There is a gap between the perception that things remain A-OK in the heavy truck business on the one hand and the rapid erosion of transportation fundamentals on the other. ACT has been warning subscribers for months about the possibility of a slowdown into the end of 2019,” Vieth said.

He said a weak freight market and deteriorating shipping rates across North America have combined with a still-large backlog “to bedevil new Class 8 orders.” ACT Research pegged July’s orders at 10,200, slightly higher than FTR’s 9,800 estimate.

Vieth believes the industry has racked up two quarters of negative growth and has tumbled into a recession.

Several companies have ceased operation:

- Terrill Transportation Inc. of Livermore, Calif. ceased operations late last month.
- LME trucking in New Brighton, Minn., also abruptly shut down last month. It closed 30 delivery centers in multiple states and laid off hundreds of workers.
- Also, in July, Timmerman Starlite Trucking, Inc. of Ceres, closed suddenly, ending service in 11 western states.
- Earlier this year Youngstown-based Falcon Transport Co. shuttered, letting 550 workers go. It ran into financial trouble after a nearby General Motors factory closed.
- New England Motor Freight shut down its trucking operations and laid off 233 workers statewide in March.

“Those who are getting out now were most likely the carriers that would not have survived over the last couple of years,” if not for high shipping rates in 2017 and 2018, Starks said.

Truck production backlogs at manufacturers remain high, Starks told Trucks.com. But they are falling rapidly as order activity has weakened. “Orders aren’t likely to show any real positive movement until we hit the fall ordering season and carriers have better visibility into 2020,” he said.

The industry will build 353,000 trucks in the largest Class 8 weight segment this year, according to FTR estimates. It will fall back to about 275,000 vehicles next year.
28. Sales Slumps In China, India Clobber Automakers Banking On Asia For Growth

Steep drops in auto sales for China and India over recent months are serving as a painful reminder that the two world’s most populous markets are not living up to earlier heady expectations.

Take China for instance. Former Beijing Automotive Group Co Ltd (BAIC) President Wang Daizong confidently predicted in 2010 that annual sales in the world’s biggest car market would hit 40 million vehicles by 2020. More circumspect but still bullish, the Chinese government said two years ago it was targeting 35 million by 2025.

Today, neither prediction gels well with the reality on the ground.

Hit by a slowing economy, the U.S.-China trade war and the chaotic implementation of new emission rules, vehicle sales logged a 12th straight month of declines in June. Industry officials and analysts now expect car demand to slide some 5% this year after a 2.8% fall last year to 28.1 million - its first decline since the 1990s.

The slump is exacerbating problems of excess capacity, with factory utilization rates at China plants for many automakers estimated below break-even point. Last year, Suzuki Motor Corp became the first big foreign car manufacturer to shut up shop in the country.

“What we’re seeing in China, we’re seeing the market increasingly moving towards maturity, it’s a case of peaking demand,” said a head of China operations at a major global automaker, adding the market was beginning to become cyclical.

Shrinking markets in China as well as India spell lower earnings for many automakers, which have invested heavily in plants and vehicle development in both countries on expectations they would power global auto sales growth for years to come.

The slumps in sales also come at a time when car makers can ill afford them. Costs are jumping as the industry strives to meet new emissions standards and develop electric vehicles while wrestling with competition from tech firms in self-driving vehicles as well as from ride-hailing companies.

Auto sales in Asia-Pacific, estimated at around 43-44 million vehicles last year, are expected to fall 2-3.5% this year after declining roughly 1% in 2018, data from IHS Markit and LMC Automotive shows. While a small bounce back is expected for 2020, they expect sluggish to flat growth for some years to come - one that calls for ‘a mindset reset’ says May Arthapan, director of Asia-Pacific forecasting at LMC. “We’d better get used to an adjusted view of Asia,” she said.

If China’s slowdown has had the biggest impact, India has perhaps been the biggest disappointment, failing to live up to hopes it would become Asia’s “next China”, auto industry executives say. With 1.3 billion people, its population is similar in size to China’s but annual vehicle sales stood at 3.3 million in the last financial year to end-March. That’s far short of earlier analysts’ predictions of more than 5 million by 2020.

The downturn has led to cuts in production or temporary plant shutdowns with some automakers taking more drastic measures. General Motors stopped selling cars in India at the end of 2017 while Ford Motor Co is looking at folding its India operations into a joint venture, sources told Reuters in April.
Brands with a strong presence and growing sales include Toyota Motor Corp, Honda Motor Co and Mercedes Benz but others have seen painful slides in sales and must deal with excess manufacturing capacity. According to U.S. consulting firm AlixPartners, 2018 capacity utilization rates at China assembly plants operated by Hyundai Motor Co, Kia Motors Corp, Fiat Chrysler, Renault SA), PSA Group and Ford were below 50%. Normally, rates of around 70-75% are considered the break-even threshold.

Among foreign automakers, PSA and Ford had the lowest rates at just 26% and 24% each.

PSA’s joint venture partner Dongfeng Group was so concerned about the state of their business that Chairman Zhu Yanfeng last year tried to convince Honda and Nissan to take over one of PSA’s China assembly plants, sources with knowledge of the matter said.

A Paris-based PSA spokesman said the automaker was working hard to change its China business model and that one option “could be ‘capacity rental’ to other car-makers.” Honda, Nissan and Dongfeng declined to comment.

Despite the current slump, the China market has much room to grow, as there are only 170 vehicles per 1,000 people compared to 550 per 1,000 for Japan and 800 per 1,000 in the United States. It will just take more time than most in the industry would like.

**Chinese Overall Sales of New Vehicles Decreasing**

Sales of new vehicles in China declined for the 13th consecutive month in July, decreasing 4.3 percent to 1.8 million as consumer demand remains weak amid a slowing economy.

The first car slump in a generation is showing no signs of easing as the Chinese economy faces a slowdown and stricter emissions rules and a U.S. trade war weigh on demand. Carmakers that relied on the world’s largest auto market for growth for decades, pouring billions of dollars into the country, are now left questioning future investment decisions.

In July, deliveries of new light vehicles dipped 3.9 percent to below 1.53 million, according to the China Association of Automobile Manufacturers. Sales of commercial vehicles including buses and trucks dropped 6.4 percent to around 281,000.

Through July, cumulative new-vehicle sales for the year fell 11 percent to roughly 14.1 million with new light-vehicle deliveries dropping nearly 13 percent to 11,654,000 and new commercial-vehicle sales slipping 4.4 percent to about 2,447,000.

**Chinese Domestic Manufacturers Hit Especially Hard**

Domestic manufacturers were hit especially hard. In the first half, aggregate light-vehicle sales of Chinese brands tumbled 22 percent to below 4 million. As a result, their domestic market share dipped 3.9 percentage points from the year-earlier period to below 40 percent.

The biggest domestic carmaker -- Geely Automobile Holdings -- wasn’t immune, with sales tumbling more than 20 percent for the fourth straight month in July.

Chinese brands are struggling especially because their target customers have been hit harder than those of global brands by the slowing economy. Domestic brands mainly produce compact
and subcompact sedans and crossovers for low-income consumers who typically live in rural and inland China. And they market the vehicles at prices ranging from 50,000 yuan ($7,100) to 100,000 yuan, which are affordable options. But facing dim economic prospects, low-income consumers are more likely than affluent households to cut discretionary spending on big-ticket items such as cars.

China’s economic growth slowed to 6.2 percent in the second quarter, down from 6.6 percent for all of 2018. Economic growth will remain subdued, dampening new-vehicle demand, as long as China’s trade dispute with the United States plays out. And with both the US and China imposing new tariffs on each other, including on cars and car parts, the situation will likely get worse.

Geely has made substantial progress in expanding its product portfolio. This year it launched sales of three new products – the brand’s first multipurpose vehicle, a compact crossover that shares a platform with the Volvo XC40 and a compact car under the newly created electric vehicle brand, Geometry. But none of the new models has generated meaningful volume. Geely sales fell 24 percent to 91,375 in July.

Reduced Subsidies Hurting EV Sales

Most domestic Chinese carmakers, spurred by generous government subsidies, have invested heavily to launch electrified vehicles in the past few years. But on June 25, Beijing slashed subsidies by more than 50 percent for EVs and plug-in hybrids with the aim of phasing out the incentive program by the end of 2020. The move instantly chilled demand for those vehicles. In July, sales of EVs and plug-in hybrids at BYD Co., China’s largest electrified vehicle maker, dropped for the first time this year, declining 12 percent from a year earlier. Another major domestic EV maker, Jianghuai Automobile Co., had its EV sales plunge 66 percent.

Overall demand for electrified vehicles quickly ran out steam in July. Combined July sales of electric vehicles and plug-in hybrids dropped 4.7 percent to approximately 80,000.

The government has also raised the technology threshold for EVs that qualify for subsidies and halved subsidies for plug-in hybrids.

In the first seven months, aggregate sales of EVs and plug-in hybrids in China still surged 41 percent compared to 2018 to approach 700,000.

And with Beijing set to phase out remaining subsidies for EVs and plug-in hybrids by year end, Chinese brands will find it even tougher to navigate at home.

China Restrictions On Buying Cars To Be Rolled Back

Amid a slowing economy, the State Council has said local governments should gradually ease or cancel limits on buying new vehicles, whether powered by internal combustion engines or electricity.

Cars and trucks are a major source of pollution in China, contributing as much as 50% of air pollutants in cities like Beijing. In recent years, Beijing, Tianjin, Shanghai, Hangzhou, Guangzhou, Shenzhen and other metropolises have tried to slow the rise in vehicles by allocating a limited number of new license plates by lottery. Beijing, with its 22 million people, aims to cap licensed vehicles at 6.3 million by the end of 2020.
However, those policies are now confronted with an economy in need of a boost. As the world’s largest car market, China has seen 13 consecutive months of declining car sales since July 2018. The China Association of Automobile Manufacturers estimates the industry will end the year with sales 5% lower than last.

Those cities with license plate quotas account for about half of electric vehicle purchases in China. Back in June, the central government warned local authorities not to restrict the purchase of such vehicles. The State Council’s announcement can be seen as a call from central government to unleash the country’s car market potential.

**India Diesel Car Share In Total Q1 Sales Falls To 14%**

The share of diesel cars in total car sales fell to 14% in the first quarter of this financial year from the peak of 47% seven years ago, reflecting the shift in consumer preference amid uncertainty over diesel vehicles in the wake of growing environmental concerns and the government’s push for cleaner fuels ahead of the implementation of BS-VI emission norms by 2020.

According to the Society of Indian Automobile Manufacturers (SIAM), the trend was not confined to sedans and compact cars but also impacted sports utility vehicles (SUVs), which have been traditionally powered by diesel. The share of petrol-driven SUVs grew nearly eightfold to 23% in April-June 2019 from 3% in the corresponding quarter of 2012-13.

Industry executives said that announcements by some leading carmakers to vacate the segment on switchover to BS-VI emission norms, ban on use of some diesel vehicles in the National Capital Region (NCR) and the narrowing price difference between petrol and diesel fuels dampened demand for diesel vehicles.

Market leader Maruti Suzuki India Limited (MSIL) saw the share of diesel vehicles decline to 22% during the first quarter of this fiscal from 28% in the year ago period. “The shift in consumer demand towards petrol segment is now even more evident, with petrol segment now contributing to 66% of passenger vehicle industry’s domestic sales during the quarter,” Ajay Seth, MSIL’s chief financial officer told analysts after the company announced its first quarter results. “For the company, the contribution of petrol increased further from 72% in Q1 financial year ’19 to 78% in Q1 financial year ‘20.”

During the quarter under review, the company had announced plans to stop sale of diesel vehicles (fitted with up to 1.3 liter diesel engines) come April 2020 as it anticipated demand tapering off further because the cost to meet new emission rules would widen their price difference with petrol-run cars and SUVs, especially in the segments where the company operates in.

French rival Renault too has said it would stop selling diesel vehicles next year onwards. Meanwhile, domestic automaker Tata Motors has said the high costs involved for upgradation to BS-VI emission standards would not justify investment in developing a new small capacity diesel engine for entry and midsize diesel models.

In the luxury vehicle segment, the German trio Mercedes, BMW and Audi have also been adding petrol variants to their portfolios, which previously comprised mostly diesel cars. “For a luxury car, with the amount of taxes you pay in India, you are paying a lot of money,” said Rahil Ansari, head,
Audi India. “And the development cost of BS-VI will also have an impact on the price. It cannot be absorbed by the manufacturer. I doubt the willingness of the customer to pay more.”

At Audi India, the contribution of diesel vehicles to overall volumes is expected to come down to 50% next year from 90% seen in 2015.

V Ramakrishnan, managing partner at Avanteum Partners LLP, said, “The price differential between diesel and petrol has come down significantly since the fuel was deregulated in 2014. Owners already have to drive a higher number of kilometers to break-even on the premium they pay on a diesel vehicle. This will increase even more when BS-VI comes in. Diesel will only remain relevant at the higher end of the SUV market in future.”

Toyota Kirloskar Motor (TKM) is planning to continue to sell diesel models in the country even as prices of such vehicles are expected to go up significantly with the upcoming BS-VI emission norms from April 1 next year, a top company official has said. "We still see demand for diesel variants and will continue to manufacture them till we have the future technology setting in," TKM Vice-Chairman Shekar Viswanathan told PTI.

The company has even invested in a plant in India to make diesel engines which is capable of manufacturing diesel BS-VI engines with minimum investment, he added. This was done keeping in mind the 'Make in India' philosophy, Viswanathan said.

TKM sells popular models such as Innova Crysta and Fortuner in the country and based on its total vehicle sales from January to July 2019, the current diesel-petrol ratio is 82:18.

However, considering only the passenger car segment, the petrol-diesel ratio is close to 50:50.

**Slump Impacting All Segments in India**

"This is a very deep sort of a slump that is impacting every segment of the industry," SIAM Director General Vishnu Mathur said.

India had been a bright spot for carmakers until recently, with annual sales of passenger vehicles rising by about 33% over the past five years. Big global players like Hyundai and its subsidiary Kia have invested billions to expand their footprint in the country, and new players like Chinese state-run carmaker SAIC have also tried to grab a slice of business.

Before the slump hit, India was predicted to overtake Germany and Japan to become the world's third largest car market by 2020 — behind only China and the United States.

But the country's biggest carmakers are now struggling. New safety and emission regulations have driven up prices, troubles among India's consumer finance providers have hit lending and a broader economic slowdown has made consumers reluctant to spend.

Mahindra & Mahindra (MAHMF), the leading Indian manufacturer of electric vehicles, suffered a 17% slump. It said that it would have "no production days" at several plants for up to 14 days this quarter to manage falling sales.

Global rivals are also suffering. South Korea's Hyundai, the No.2 player in India, saw its sales fall 10% in July compared to the same month last year, while Japanese giant Toyota fell 24%.
The slump has prompted companies to slash over 330,000 jobs through the closing of car dealerships and cutbacks at component manufacturers, Mathur said, citing data from industry associations that govern those two sectors.

The Automotive Component Manufacturers Association of India warned in a statement last month that its "crisis-like situation" could result in a million people being laid off.

Carmakers in India have directly axed at least 15,000 temporary workers, according to Mathur. "The industry has stopped all fresh recruitments," he added.

That's bad news for Indian Prime Minister Narendra Modi, who won re-election by a landslide in May but is currently presiding over India's slowest economic growth in five years and its highest unemployment rate in several decades. Modi's 2016 ban on high-value bank notes, higher tax rates under a new goods and services tax regime, a boom of ride-sharing firms such as Uber and Ola, and a weak rural economy have all played a role.

But many dealers and automakers agree it is a deepening liquidity crunch among India's shadow banks that has been the biggest single factor in the auto sales collapse. Non-banking finance companies (NBFCs), or shadow banks, have dramatically slashed lending following the collapse of one of the biggest, IL&FS, in late 2018.

IL&FS, or Infrastructure Leasing & Financial Services Ltd, was a behemoth in shadow banking and its defaults and unravelling, amid fraud allegations, have dried up funding for rivals and led to a surge in their borrowing costs. Non-bank or shadow banking firms generate credit outside traditional lenders, by means such as collective investment vehicles, broker-dealers or funds that invest in bonds and money markets.

In India, NBFCs have in recent years helped fund nearly 55-60% of commercial vehicles both new and used, 30% of passenger cars and nearly 65% of the two-wheelers in the country, according to rating agency ICRA.

To aggravate matters, the stress in the autos market has also prompted banks to begin trimming their exposure to the sector.

India is one of several big car markets to face a major slump, as the global car industry struggles with trade tensions, an economic slowdown, new technologies and regulatory changes. The world's biggest car market, China, shrank for the first time in more than two decades in 2018.

Germany, home to some of the world's top carmakers like Volkswagen, BMW and Mercedes-Benz owner Daimler, is still grappling with the effects of a diesel emissions scandal and the prospect of a messy Brexit.

Much of the problem in India can be explained by the broader slowdown in the economy. Growth in gross domestic product (GDP) has slowed to a near five-year low of below 6%, with consumer demand far weaker than seen in recent years. In such a situation, it is natural that fewer new vehicles would be bought. In addition, credit availability is tight, fuel prices are high, a judicial intervention has raised upfront insurance costs sharply, and the prices of automobiles have gone up on account of higher input costs. All these have depressed demand to varying extents. Policymakers believe some of these factors are temporary, and expansion would resume once the adverse trends reverse.
Given the sharp slide in sales, it appears likely that some of it also has to do with the government’s aggressive push for the adoption of electric vehicles (EVs). Car manufacturers appear ill-prepared for New Delhi’s hasty transition plan. But even consumers could be having second thoughts about making four-wheeler purchases. Their fear, as a few industry stalwarts have observed, is that conventional vehicles would turn obsolete in less than a decade. This may be prompting consumers to defer purchases until greater policy clarity emerges.

To address the crisis, the industry has asked for a cut in the goods and services tax rate. This may not help if the problem has more to do with technology uncertainty than affordability and access to credit. Unfortunately, the government’s EV transition road map offers little by way of reassurance. To smoothen the process, the Centre should spell out its objectives clearly and elaborate how it plans to enable such an ambitious shift with minimal disruption. With technology standards currently in flux, this would make a difference.

**29. China Mulls Ban On Gasoline Cars In Some Regions**

China is considering testing a ban on gasoline-powered vehicles in some parts of the country and may set a timetable to eventually phase out such vehicles, according to the industry ministry. The government has encouraged sales of electric vehicles as part of a crackdown on pollution, but auto industry officials doubt it will completely phase out traditional internal combustion engines any time soon given regional differences in climate and environment.

Authorities must first analyze factors such as market demand and emissions levels to decide whether to test no-go zones for gasoline-fueled vehicles, according to a document on the Ministry of Industry and Information Technology website. The document was issued in response to a proposal from China's parliament on July 16.

China is the world's largest market for new-energy vehicles, with 1.3 million units sold last year. NEV sales, which include battery electric and plug-in hybrids, are expected to reach 1.5 million this year.

The ministry may formulate a timetable to phase out gasoline-fueled vehicles, according to the document, but did not say if it would be specific to certain parts of the country or a nationwide phase out.

However, neither the ministry, which regulates China’s automotive sector, nor any automaker is ready to stop conventional vehicle sales any time soon. But the ministry says it may consider allowing experimental no-go zones for conventional vehicles. But its main point is clear: It won’t rush to draft a timetable to ban sales of such vehicles.

The key message was made evident in the beginning of the reply.

After reviewing recent robust sales of electrified vehicles -- or new-energy vehicles, as they are called in China -- the ministry quickly states: “While supporting the development of new energy vehicle industry, our country has also placed strong emphasis on the development of energy saving vehicles and insisted on well-concerted development of energy saving and new energy vehicles.”

In China, energy-saving vehicles refer to hybrids and fuel-efficient conventional vehicles.
The ministry says that before drafting a time frame to phase out fossil fuel vehicles, it needs to engage other government agencies to carry out a thorough review and weigh electrified vehicles against conventional vehicles in technology development costs, fuel economy and market demand.

Among the 31 provinces and provincial-level municipalities and minority regions in mainland China, only the island province of Hainan in south China has set a deadline for stopping conventional vehicle sales. In March, Hainan, a popular summer resort for Chinese tourists, announced that it would ban sales of vehicles running on fossil fuels in 2030.

Among automakers, two state-owned Chinese companies -- Changan Automobile Co. and BAIC Motor Co. -- seem to be out front in efforts to phase out conventional vehicles. But a closer look at what they have said reveals neither is ready to abandon such vehicles.

- In October 2017, Changan announced a plan to stop producing fossil fuel vehicles in 2025, shocking investors. A few days later Changan clarified that the plan would not apply to energy-saving vehicles such as those with 48-volt electrical systems.

- Two months later, BAIC disclosed plans to phase out conventional vehicle output by 2025. But the plan also has exceptions -- it will continue to build fossil fuel SUVs for military use and other vehicles for special purposes beyond 2025, the company said.

Behind generous government subsidies and other incentives, such as free license plates for EVs and plug-in hybrids, China has become by far the largest electrified vehicle market. In the first seven months, aggregate sales of EVs and plug-in hybrids surged 41 percent to approach 700,000.

But it is a small number in a market in which 14.1 million new vehicles were delivered during the same period.

To ease fiscal burdens on government budgets, Beijing is set to wind down the subsidy program for EVs and plug-in hybrids at the end of 2020 after making a major cut in the subsidies in June.

30. Study Doubts China Can Electrify All New Passenger Cars By 2030?

China’s electric vehicle industry is entering a new phase of accelerating development, President Xi Jinping wrote in a congratulatory message to participants of a new energy vehicle conference in early July. In 2018, China sold almost as many electric vehicles as the rest of the world combined. At the same event, the chairman of Chinese electric vehicle giant BYD upped the ante, challenging China to electrify all passenger vehicles by 2030.

New energy vehicles include:
- Plug-in hybrids
- Pure battery electric
- Hydrogen fuel cell

A recent report from the Innovation Centre for Energy and Transportation (iCET) made the first public proposal of a timeline for the phaseout of petrol and diesel vehicles across China. According to the Beijing-based thinktank, 2030 is premature, but an entire phaseout could be
possible by 2040. However, the report also highlights significant uncertainties ahead, including whether consumer appetite for electric vehicles will wane when government subsidies are cut.

Starting in 2016, regions and countries around the world began proposing an end to driving as we know it. China’s vice minister of industry and information technology made waves when he announced in 2017 that China, the world’s largest car market for the past decade, was researching a phaseout of petrol and diesel vehicles.

The news followed a steady drumbeat of policies supporting the growth of China’s new energy vehicle industry in recent years. From generous government subsidies to driving restriction exceptions in China’s congested cities, the government has been coaxing the industry along.

China has much to gain from phasing out all petrol and diesel vehicles. For one, the country relies on imports to meet 70% of its crude oil demand, 42% of which is consumed by vehicles. Emissions from petrol and diesel vehicles also have a major impact on public health. As car ownership has climbed, increasing oil consumption has also contributed to China’s rising greenhouse gas emissions.

iCET’s study proposes an incremental phaseout based on the type of vehicle and region. The largest cities that already have strong electric vehicle markets are prioritized along with cities suffering the most from pollution, while relatively underdeveloped regions are given more time to make the transition. Taking the lead will be government-owned vehicle fleets, followed by private vehicles, which will allow some time for costs to come down further for alternative vehicle technologies. The majority of passenger vehicles will be replaced by new energy vehicles and non-plug-in hybrids (like the Toyota Prius) according to the study.

Although the study’s timetable aligns with current policies and projections, the authors highlight several uncertainties that could influence China’s path. The electric vehicle industry is in the midst of a major transition. Subsidies have long been boosting sales, accounting for 20-35% of the take-home sale price for manufacturers in 2016. Now, the government has decided to wean the industry off the handouts, likely entirely by 2020.

This shift could dampen consumer appetite. Projections show that electric vehicles could reach price parity with petrol and diesel vehicles by 2030 or sooner, but for now they will likely remain out of reach for many Chinese buyers without government support. The Tesla Model 3, for instance, is being advertised as a vehicle for the mass market. But its price tag is still about US$15,000 above the average new car price in China.

Whether enough alternative cars can be produced is also moot. Production of new energy vehicles is slightly above current sales in China, but even at over one million sales in 2018, it is dwarfed by the market for conventional vehicles. To encourage production, this year China is introducing a national production policy for large manufacturers. The system is slightly more complex than a pure quota, but it essentially requires automakers to meet production targets for 2019 and 2020 or buy credits from overperforming companies. The policy is expected to double new energy vehicles’ share of sales, according to Bloomberg New Energy Finance, but no quota has been set for after 2020.

Whether infrastructure can keep up with the phaseout is also a looming question. Building out enough charging stations to supply a rapidly expanding electric vehicle fleet is a government priority, and an unprecedented challenge. The power grid may also struggle to keep up with
charging if demand is not timed intelligently. A Natural Resources Defense Council (NRDC) study found that peak load on the grid could increase 58% by 2030.

The iCET study finds that greenhouse gases and air pollution would be reduced significantly if their timetable is followed. A study by the China Automobile Technology Research Centre found that phasing out petrol and diesel vehicles would lead to a 41% drop in nitrogen oxide and a 35% drop in particulate matter emissions in 2050, compared to a 2017 baseline. Based on the iCET study, end-user greenhouse gas emissions would fall 51% in 2040 and 77% in 2050 while lifecycle emissions (including from electricity generation) would fall 55% in 2050.

However, electric vehicles are not without their own environmental hazards. Battery supply in particular has raised red flags. Currently, battery recycling remains very low due to there being diverse battery types and an unwillingness from recyclers to take responsibility for safety risks. The iCET study warns that if a better recycling system is not established, lithium, cobalt and manganese in the batteries could cause significant damage to public health and the environment. Dealing with this blockage in the electric vehicle lifecycle could slow down the rollout, the authors argue.

The government has set a number of long-term targets for new energy vehicle production. The most ambitious is for them to account for 40% of car sales by 2030. Will China ratchet up the pace by setting a phaseout target on top of that?

Hainan has already fired the starting gun. However, its vehicle market is relatively small (the province has about one sixth as many cars as Beijing) so it will not be as significant an undertaking there. A Caixin article suggests that Beijing might be a good candidate to follow Hainan’s example as it has led in the establishment of other new energy vehicle policies in the past.

At the report release, Wang Baixia, one of the drafters of Hainan’s phaseout plan, said having a target would send a strong signal: “A timetable is still needed, for the government and companies, everyone needs such a timetable … this long-term expectation is very important.”

The government is working on a 15-year new energy vehicle development plan, which may provide further clarity on its phaseout plans.

31. Air Pollution Remains a Significant Challenge in China

Summer Ozone Pollution

The Ministry of Ecology and Environment has warned of ozone pollution in major urban and industrial areas during the second half of August. The ministry said that ozone would be the dominant pollutant in the Beijing-Tianjin-Hebei area of north China, which has previously been plagued by pollution from fine particles (PM2.5).

While most air pollutants have been declining in recent years, some cities have seen average levels of ozone increase by as much as 40% between 2014 and 2017. Recent data shows a sharp increase in a few areas in northern China since the end of this year’s winter action plan on air pollution.
Ozone pollution forms when sunlight interacts with nitrogen oxides and volatile organic compounds. It is therefore typically higher in the sunnier summer months. Those pollutants come from motor vehicles, power plants, factories and other sources.

In July this year, Columbia University published a paper claiming that China could save 330,000 lives by 2050 if it acts on ozone pollution.3

**PM2.5 Worsens In Multiple Chinese Cities**

China's Ministry of Ecology and Environment has warned Shaanxi, Shandong and other provinces to take actions to rein in worsening air quality in the first half of the year.

While air quality generally improved in H1 with PM2.5 density, a key indicator of air pollution, falling 2.4 percent year on year nationwide, some cities in northern China saw air quality worsen during the period, official data showed.

In east China's Shandong Province, the average density of PM2.5 and nitrogen dioxide climbed by 9.4 percent and 12.5 percent year on year respectively in H1, and the number of days of heavy air pollution increased by 3.8 from a year ago.

During the same period, the average PM2.5 density rose 11.3 percent year on year in northwest China's Shaanxi Province, with six cities in the province reporting worse air quality compared with 2018.

Local authorities attributed the slipping air quality to unfavorable weather conditions, large quantities of pollutant emissions and inadequate efforts on air pollution control.

Local governments are required to pay attention to the tendency of polluting enterprises to relocate to rural-urban fringe zones, rural areas as well as the country's central and western regions.

The ministry will give written warnings to cities that fail to fulfil air quality targets or hold interviews with these cities every half year to strengthen accountability on air quality control.

**Hebei Province Warns Cities For Pollution Failures**

China's biggest steel producing province of Hebei has summoned the leaders of three cities after they failed to control air pollution in the first half of this year, the local environmental protection agency said in a notice.

Hebei, which produces about a quarter of the country’s steel, is set to impose tougher emission requirements on its industrial firms this year, and the province is under more pressure from neighboring Beijing after three of its cities failed to meet their targets in the first six months.

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3 “By Cutting Ozone Pollution Now, China Could Save 330,000 Lives by 2050”, by Daniel Westervelt along with Arlene Fiore, Mike He, Marianthi-Anna Kioumourtzoglou, and Gustavo Correa also from Columbia University; Clara Ma from Yale University; Patrick Kinney from Boston University; and Shuxiao Wang, Jia Xing, and Dian Ding of Tsinghua University.
Average concentrations of PM2.5 rose in the cities of Handan, Hengshui and Xingtai in the first half of 2019, bucking provincial and national trends and “failing to meet public expectations”, Hebei’s environmental protection agency said. “Some local party committees and governments were paying insufficient attention to the prevention and control of air pollution”, the agency said, pointing to “supervision blind spots”.

Chinese steel production hit record levels in the first half of this year, with much of the increase coming from smaller, polluting mills with lower environmental compliance costs, the country’s official steel industry association said.

According to Reuters calculations, 30 out of 39 northern Chinese cities subject to special pollution controls last winter failed to meet their targets, raising concerns that local governments were relaxing their efforts amid a slowdown in the economy.

Trade War, Slower Economy Complicate China Air Pollution Efforts

China is giving local governments more authority to implement air pollution policies and is differentiating among industries, which could lead to uneven approaches and a second year of dirtier air for the citizens of the world’s most populous country.

The policies were outlined in guidelines issued to industry by the Ministry of Ecology and Environment for the winter of 2019-2020. They were reported in state-run media recently and appeared on several industry websites but haven’t yet been publicly released.

The guidance allows local governments flexibility in crafting more specific policies for controlling emissions of PM 2.5. According to the policy documents, industries will also be managed differently based on more specific guidelines for individual industries’ emissions reduction during heavy pollution periods. The more specific guidelines have also been distributed but not yet publicly released.

Industries such as steel, coking, metal casting, glass and petrochemical enterprises will be classified into three different levels based on their emissions control efforts and adoption of ultra-low emissions policies and technology. Lists of companies affected or potential exemptions to these guidelines aren’t yet available.

The guidelines echo the same approach the government took last year, when it decided against “one-size fits all” measures to combat periods of heavy pollution that had led to widespread shutdowns during inspection campaigns.

Analysts say the policies suggest air pollution is unlikely to drop and may climb for the second year in a row, as the government takes a laxer approach to air pollution amid fears of an economic slowdown and the trade war with the U.S.

Pollution spiked 6.5% between October 2018 and March 2019 in Beijing, Tianjin, and 26 other cities that are part of a special air pollution reduction zone. That came after significant reductions in air pollution between 2013 and 2017, particularly around the Beijing capital region.

China is grappling with a slowdown that will see output growth slide to the weakest pace in almost three decades this year, according to forecasts, while the trade war with the U.S. has entered a second year.
“Recently we have seen some mixed messages,” Ma Jun, head of the environmental think tank Institute of Public & Environmental Affairs in Beijing, said August 22. One message is a continued focus on air pollution control. The other has been the central government allowing localities to provide different treatment to companies, which may exempt some of them from heavy scrutiny while putting others in the spotlight, he said.

“The pressure could be too big to sustain [air pollution control efforts] by some local governments with the economy slowing down and the trade war,” Ma said, allowing air pollution to creep up again.

Companies can be exempted from the pollution rules if they have implemented ultra-low emissions policies or installed the latest technology to control emissions, shielding them from shutdowns.

Lists of such companies are being created by provincial and local governments, Ma said, adding that he generally supports the idea of treating companies differently based on performance. But he said he’s worried about uneven application, especially for companies that may have severe pollution-control violations.

“Leaving cuts to local governments means they’ll only cut as much as they think makes sense economically,” said Lauri Myllyvirta, a senior analyst at the Greenpeace Global Air Pollution Unit.

If overall economic demand stays high, “they’ll cut little if at all,” Myllyvirta said. “If demand eases, local governments could use this to curtail supply and concentrate output at the biggest plants.”

32. China Government Think Tank Presses For 2025 CO2 Cap

An influential Chinese think tank is calling on the government to set absolute caps on climate-warming greenhouse gas to ensure the country is on course for emissions to peak by the end of the next decade.

China, the world’s biggest producer of greenhouse gas, has pledged to bring its total emissions to a peak by “around 2030” as part of its commitments to a global 2015 accord aimed at curbing temperature rises. However, a research report circulated by the government-run National Center for Climate Change Strategy and International Cooperation (NCSC) warned the goal might not be within reach unless absolute limits on carbon emissions are included in the nation’s 2021-2025 five-year plan.

On a “business as usual” trajectory, annual CO2 emissions would grow from 11 gigatons in 2020 to 14.3 gigatons in 2030, and would still be rising, it said.

Non-fossil fuels would account for 17.6% of China’s total energy mix by 2030 under current policies, falling short of China’s pledge of around 20%, the study added.

But CO2 emissions could be capped at around 10.6 gigatons by 2025 and kept stable over the 2025-2030 period. Tougher measures could also keep per capita emissions at 7.2 tons by 2030, lower than the “business as usual” level of 8.3 tons.
It said there was still room for big improvements, with recent policies focusing too heavily on industrial- rather than consumer-related emissions, particularly in areas like energy, construction and transportation.

China also needs to further reduce energy consumption per unit of GDP, speed up the elimination of backward coal-fired power technology and implement even tougher efficiency, waste heat and fuel economy standards, the think tank said.

Policymakers have also been too short-term in their thinking when it comes to setting industry goals, meaning that high-carbon assets in sectors like steel or coal could end up being “stranded” when policies are tightened in the future, it said.

The NCSC is a unit of the Ministry of Ecology and Environment and plays a role in setting climate policies, but it remains unclear whether China will heed its recommendations, especially with the economy under pressure.

33. China Poised To Become Used-Vehicle Export Giant

A Chinese company in Guangzhou recently exported 300 used cars to buyers in Cambodia, Nigeria, Myanmar and Russia. The shipment was a first for China, which till now had restricted large-scale exports of used vehicles in deference to manufacturers, who feared that poor vehicle quality could damage their reputations. There will be more such shipments -- and their impact will reverberate well beyond the mainland’s used-car lots.

With all the focus on electric and self-driving cars, it’s easy to overlook just how big and influential the market for old-fashioned vehicles remains. In developed economies, more than twice as many used cars are sold as new ones. For example, there were 17.3 million new vehicles sold in the U.S. during 2018 -- and 40.2 million used ones. The gap is forecast to widen in 2019, driven by the ever-escalating price of new cars and a flood of used vehicles coming off lease. Automakers may be forced to slash prices of new vehicles and eliminate incentives in order to prop up sales.

Rich countries from Japan to the U.S. have shipped at least some of their older vehicles to nations such as Mexico and Nigeria for decades now. The trade has done more than get polluting autos off the roads; it has helped boost new-car sales by reducing the supply of secondhand alternatives.

Compared to domestic sales, of course, the numbers are quite small: The U.S. exported just under 800,000 used cars last year, a number that’s remained relatively steady since 2013. Nevertheless, that accounted for nearly a third of the passenger vehicles and light trucks exported from the U.S. in 2018. Japanese exports often approach 1 million vehicles annually. Singapore, Korea, several European countries and Canada also export a significant number of used cars.

It makes sense that China would join them. For one thing, inventory is building. In 2018, China sold 28 million new cars and nearly 14 million used ones. Soon, the ratio will flip: China is home to more than 300 million registered vehicles and it’s just a matter of time before more of them are resold. The quality of Chinese cars has also improved to the point where many developing-world consumers may well choose them as a cheaper alternative to used Toyotas or Fords.

At the same time, China’s automobile industry is in a slump and policymakers are keen to find ways to boost it. Used-car exports, the government says, can "stimulate the vitality of the domestic automobile consumption market."
That spells competition and possibly trouble for the automotive sector globally. An increase in the supply of used cars will inevitably drive down prices, especially in the emerging markets such as Nigeria and Cambodia to which Chinese exporters will be marketing their vehicles.

While that’s good news for prospective car buyers in Lagos, over the long term it will impact new car sales and even manufacturing in developing countries, many of which are part of automakers’ global supply chains. Likewise, as fewer cars are exported, say, from the U.S., the competition between new and used vehicles domestically will only stiffen.

And cars are just the beginning. Just as China's factories drove down the cost of new goods over the last three decades, the growing piles of used stuff purchased -- and now unloaded -- by Chinese consumers will exert downward pressure on the price of used and new products everywhere.

34. Indian Government’s EV Push Has Oil Industry Worried

The emphasis on Electric Vehicles (EVs) by the government has the oil and gas industry in India concerned. The industry feels that the prevailing situation will lead to investors and bankers having second thoughts on making investments in the oil and gas sector. The players under the aegis of Federation of Indian Petroleum Industry (FIPI), which represents Indian Oil Corporation, Reliance Industries, Nayara Energy, BP, ONGC to name a few, propose to take up the issue with the Ministry for Petroleum and Natural Gas.

“What happens to the investments made in projects for BS VI fuel quality, Bio-CNG and 2G ethanol bio refineries is the fear,” said an industry player.

“Huge investments have already been made by the oil refiners for BS VI stage. The public sector refiners alone are executing projects worth more than ₹30,000 crore to move from BS IV to BS VI fuel quality level,” Direct-General FIPI RK Malhotra told BusinessLine.

Malhotra feels that instead of just pushing EVs, the government should promote and incentivize hybrid technology (IC Engine plus battery) that do not require charging stations.

“Many factors will come to play when we are looking at a scenario of 100 per cent EV mobility in the future,” he said adding that these include development of efficient power storage system; battery technology and dependence on imported lithium and cobalt; charging infrastructure and mode of electricity generation for EVs.

Besides, the economic and environmental benefits of EVs should be weighed vis-a-vis oil and gas industry and the impact on jobs created by this industry, he said. “While the petroleum sector contributes significantly towards the central and state exchequers, alternatives fuels and EVs need incentives,” Malhotra said.

The confusing signal coming from the government has left the industry worried. On the one hand the government wants the players to increase domestic oil and gas production and on the other it is fixing deadlines for EVs.

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4 Ten million
India’s energy demand is going to more than double by 2040 and this has to come from various sources. EVs may have some role in future, but not immediately.

Malhotra said that for heavy duty vehicles like trucks, the EVs option is not viable as trucks are supposed to carry pay load rather than heavy batteries. In fact, LNG as a transport fuel is a better option, he said.

The government aims to bring down pollution levels, but if EVs need power generated from coal, it raises questions over the policy’s efficacy. “If you compare diesel engine emissions with improved efficiencies, it will be and is lower than coal power generation,” he said.

According to a 2018 TERI study, the contribution of vehicle exhaust emissions to air quality deterioration in terms of particulates was only 28 per cent. On moving from BS IV to BS VI norms the particulates and NOx emissions will further come down by around 50 per cent to 90 per cent.

Thus, the contribution of the vehicles towards air pollution will be insignificant, Malhotra said quoting the study. Besides, the other initiatives like 2G ethanol, Bio-CNG, CNG will also help in creating a cleaner environment.

According to the industry, the government should be looking at hydrogen fuel cell vehicles. These have already begun trickling into select markets of Asia, Europe and North America. “China and Korea are reviewing EV policy vis-à-vis hydrogen fuel cell vehicles,” he said.

35. Industry Lauds PM’s Assurance Of Petrol/Diesel’s Co-Existence With Electric Vehicles

Automobile industry the world over is scrambling to develop and improve electric vehicle technologies along with improving charging infrastructure and reducing charge times. A common cry from across the globe for cleaner emissions from vehicles considering the rising levels of pollution has led to some governments considering banning internal combustion engines (ICEs) eventually. Having a number of cities on the list of most polluted in the world, India has a need to go green all the more. The government has been pushing to improve electric vehicle popularity with a reduction in tax on EVs and incentives for EV buyers and charging infrastructure developers.

Very recently, a proposal from the Niti Aayog had the two-wheeler industry in India very concerned with renowned names like TVS Motor Company and Bajaj denouncing the proposal as an impractical approach. Under this proposal, the Niti Aayog has suggested the ICEs must be banned for three-wheelers by 2023 and two-wheelers below 150cc by 2025.

Now though, a statement from Prime Minister Narendra Modi relating to the matter has had the Indian auto industry lauding his assurance. PM Modi recently stated that electric vehicles and ICE vehicles can co-exist to which TVS and SIAM reacted, saying it is a welcome statement.

“The recent clarification by the Prime Minister that ICE and electric vehicles will both be encouraged and grow is a strong step to encourage investment and employment in the automotive sector in India,” Venu Srinivasan – Chairman, TVS Motor Company.

“This will provide reassurance to millions of people across the supply chain ranging from component manufacturers to OEMs, dealers, mechanics and associated people across the
A technology-agnostic approach that encourages all options is very important for a developing country like India which is dependent on fossil-based sources for much of its power.

“Also, with some of the other measures announced towards increasing liquidity this clarification will provide the stability to ensure India continues to remain one of the leading investment destinations in the world. It will also help Indian companies to be globally competitive. This approach will give further fillip to the Prime Ministers visionary Make in India program.”

PM Modi’s assurance that both internal combustion engine (ICE)-based automobiles, as well as electric vehicles (EV), can co-exist is indeed a very welcome statement, said Rajan Wadhera, President, SIAM.

This is completely in-line with SIAM’s recommendations that all relevant technologies should co-exist in our journey towards sustainable mobility, and hence would call for a long-term roadmap for all futuristic technologies, which instills confidence in the industry to get going.

36. Delhi Govt Criticized For Opposing Technology To Combat Pollution

“Don’t you want our children to live in good quality air?” the Supreme Court asked recently, pulling up the Delhi government for its opposition to the use of remote sensing technology to help identify polluting vehicles.

In the last hearing on the matter in July, a bench comprising Justices Arun Mishra and Deepak Gupta had asked the Centre and the Delhi Transport Department to respond to the Environment Pollution Control Authority (EPCA) report.

The EPCA report filed in the apex court said it held a meeting on July 16 with all stakeholders or government agencies, including the Ministry of Road Transport and Highways (MoRTH) and the Delhi Transport Department. The meeting focused on the implementation of remote sensing devices to monitor pollution emitted by vehicles, which is referred as on-road emissions monitoring. This technology would also capture the images of the number plates of the vehicles breaching the emission norms.

Senior advocate Aparajita Singh, who is assisting the apex court as amicus curiae in the matter, informed the court that the implementation of this technology was very crucial to monitor polluting vehicles. “The remote sensing technology would help in checking the emission of particulate matter (PM) along with other hazardous gases like nitrogen oxide (NOx) and sulfur oxides (SOx)…”

“The Ministry of Road Transport and Highways has already agreed on this matter,” Singh argued.

The court asked the Delhi government counsel to identify the ground for opposing the implementation of the technology but could not get a convincing reply. The top court has given the green signal to this technology and asked the Delhi government to implement it.

The apex court also alerted the Delhi government to stick to its responsibility for the people in the city and should offer full cooperation on the matter. The matter has been fixed for further hearing in two months.

The Delhi government, citing the shortcoming of this technology, said: “Out of the 1,76,667 vehicles of whose emission data was validly captured and studied using Remote Sensing Device,
only 1,262 were 2/3 wheelers, even though the 2/3 wheelers comprise about 68 per cent of the registered vehicular population in Delhi."

The government also informed the court it was considering purchase of only one or two machines and not five machines as suggested by the EPCA, citing insufficient experience in the implementation of the technology.

This response from the government did not go down well with the court.

The amicus had earlier informed the apex court that the technology was already implemented successfully in Kolkata. She told the court that an agency which was tasked by the top court to test the technology had scanned 1.76 lakh\(^5\) vehicles and concluded that this technology was useful.

The amicus had requested the top court to ask the Delhi Transport Department and MoRTH to respond to its report on the implementation of the technology.

In contrast to the Delhi government, MoRTH submitted an affidavit indicating its response on EPCA’s report. According to the report, MoRTH shall be required to frame rules under the Central Motor Vehicle Act. These rules will define the scope of the remote sensing program to enforce and monitor on-road emissions.

According to the EPCA report, this technology will co-exist with the ongoing pollution under control (PUC) program, which adopts physical verification of emissions of the vehicles. Moreover, this remote sensing technology can scan thousands of vehicle every day.

The report had pinned the implementation of the program in the city by the Delhi government and recommended the Transport Department to publish a global tender for the procurement of this technology. Detailing on the role of MoRTH, the report said it can frame rules regarding the usage of this technology for PUC, which includes penalties to enforce strict pollution norms.

The apex court was apprised on this technology during the hearing of matter connected with rising levels of air pollution in the city.

37. Indian Govt. Approves 5,645 Electric Buses For Operations In 65 Indian Cities

Indian government is going full speed ahead in its aim to increase electric vehicle use in the country. Following a considerable cut in the Goods and Services Tax (GST) applicable on electric vehicles, the center has now sanctioned more than 5000 electric buses to be used across 65 cities of India soon.

The confirmation came from Niti Aayog CEO Amitabh Kant. According to a tweet by Kant, the sanction for 5,645 e-buses was given by an inter-ministerial panel for EVs. “The inter-ministerial committee for EVs today sanctioned 5,645 electric buses for intracity operations in 65 cities and for intercity operations to 8 state transport undertakings. This will give huge impetus to automobile sector, clean up our cities & drive Make in India,” mentioned Kant’s tweet.

\(^5\) One hundred thousand
The move is the latest in the line to promote clean mobility modes in India. Last week, the GST
council led by Finance Minister Nirmala Sitharaman announced the reduction of GST applicable
on EVs from 12% to 5%, effectively bringing down the cost of electric vehicles for the buyers.

During the union budget 2019, the Finance Minister had also mentioned a tax rebate of up to Rs
1.5 lakh on the interest on loans taken for electric vehicles. The idea is to make electric vehicles
more affordable for the public, as they are generally way costlier than their IC engine counterparts.
The tax rebates, reduced GST as well as other subsidies and incentives will propel more buyers
to opt for electric vehicles instead of the conventional fossil fuel ones.

38. As Market Share Woes Pile Up, Bajaj Quietly Phases Out Five Bikes

Bajaj Auto, India’s fourth largest two-wheeler maker, has discontinued at least five bikes, including
four models from the Pulsar brand, as rivals mount pressure on the Pune-based company. The
company’s market share has also seen a sharp decline in recent times.

The Pulsar 135LS became the latest to be pulled out of Bajaj showrooms, following months of
dwindling demand for the mini Pulsar. The Pulsar AS150, AS200 and NS150 were pulled out a
few months ago.

“We stopped selling the Adventure Sport (AS) model of the Pulsar some months ago. We are now
selling the Naked Sport (NS) models,” said a Mumbai-based Bajaj Auto dealer. The NS150 was
replaced by a slightly bigger NS160 less than a year ago.

With the recent phasing out of the Avenger 150, the company has now discontinued at least five
models from its line-up in the past one year.

This restructuring of Bajaj Auto’s product portfolio follows a similar attempt by the company for
the Discover brand, when it discontinued and then relaunched several models under the troubled
brand.

Under the Discover series, Bajaj launched 100M, 100T, 110, 125 DTSi, 125T, 125ST, 125M, 135
DTSi, 150, 150 DTSi, 150F and 150S. It phased out each of these models, before bringing back
the 125 and 110 models that are currently on sale.

The Discover was positioned as a better alternative to Hero MotoCorp’s twin mileage masters
Splendor and Passion. However, the Splendor remains the country’s second largest two-wheeler
brand after Honda’s Activa.

Several new models have made their way to the 150cc and above segment where Bajaj Auto has
been the market leader with the Pulsar brand. Models from Honda, Yamaha, Hero MotoCorp,
Suzuki and TVS Motor Company have been launched in this segment, putting pressure on Bajaj’s
market share.

Thus, from a targeted 24 percent share in the motorcycle segment by end of the last financial
year, Bajaj’s share in the bike segment stood at just under 16 percent in FY18, as at the end of
February.

The 400cc Dominar launched by Bajaj, though not an underperformer according to the company's
executives, has not seen a scale up in volumes as was expected. The Dominar was launched to
take on the Royal Enfield 350cc range.
Bajaj only has a presence in the motorcycle segment, as it exited the scooters market more than a decade ago. All other bike manufacturers also have scooters in their line-up. The Society of Indian Automobile Manufacturers (SIAM) is yet to announce sales figures for March 2018.

Japanese heavyweight Honda, which posted a growth of 24 percent in volumes till February, trailed Bajaj by only 14,000 units in motorcycles and closed the month at third spot. Bajaj’s volumes showed a fall of 2 percent during the same period, as per SIAM data.

39. A Social Venture Hopes To Improve Lives, Reduce Emissions With Electric Rickshaws

A social enterprise is helping people from low-income groups in Bihar and Uttar Pradesh to own and operate electric rickshaws. The e-rickshaws are helping drivers earn a decent livelihood, lowering the city’s vehicular pollution and carbon emissions, and even empowering women.

The company, SMV Green Solutions, won the 2019 Ashden Awards under the International Sustainable Mobility category. The company provides a safe and affordable transport alternative for last-mile mobility, or the last leg in a passenger's journey, usually delivered by buses and auto-rickshaws.

In 2015, Naveen Krishna founded the company intending to eliminate the drudgery faced by manual rickshaw pullers prevalent in northern India.

For the rickshaw pullers, lack of access to funds and confidence to try new technology were barriers to upgrading to an electric vehicle (EV) independently. With this in mind, the company tied up with multiple entities involved in procuring a ready-to-drive e-rickshaw.

The company’s thrust rides along with the state government’s objective of achieving 100 percent electrification of auto-rickshaws by 2030 in Varanasi and other cities.

“Despite toiling hard, rickshaw pullers usually pay rent for their vehicle and lack healthy working conditions. The SMV model is about ownership. After about 24 months of the loan payment, they become proud owners of the e-rickshaw,” Krishna said.

A recent survey showed that six of the world’s most polluted cities in terms of PM2.5 are in Uttar Pradesh and three are from Bihar. Varanasi ranked 14th on the list. Particulate matters and polluting gases from automobile emissions contribute to making breathing the air in the city a death sentence.

Sugandha Pal, an urban transport planner and a research associate at The Energy and Research Institute (TERI) who studied autorickshaw emissions in Bengaluru, said, “7.5 percent of total emissions in India are from the transport and automotive sector.”

Citing TERI’s estimates, Pal added, “Three-wheelers could increase from 6.8 million in 2017-18 to 19.5 million in 2030 and further to 66.25 million in 2050, which provides scope for leapfrogging towards e-rickshaws and replacing the conventional three-wheelers.”

Assuming improvement in grid emission factors, TERI also suggests that a 30 percent conversion from conventional three-wheelers to electric three-wheelers by 2030 would result in 7 percent
reduction in CO2 emissions and a 100 percent conversion by 2050 would result in 18 percent decrease as compared to the business-as-usual scenario.

The net savings from EV deployment (the difference between emissions produced in the lifecycle of EVs and that by an equivalent internal combustion engine fleet) was 40 million tons of carbon dioxide equivalent (MtCO2e) in 2018, according to an annual publication from the International Energy Agency (IEA) about electric mobility across the globe.

The stock of electric three-wheelers in India is about 2.38 million.

SMV has enabled 1038 e-rickshaw ownerships, of which 550 are in Varanasi, and the company estimates that it has reduced 2076 tons of CO2 emissions since its inception four years ago.

In March, the Indian government approved the second phase of Faster Adoption and Manufacturing of Electric Vehicles (FAME II) to boost the transition to electric mobility. The scheme aims to reduce the purchase price of EVs used for public or shared transportation, which includes rickshaws. Its successful implementation is expected to create a significant reduction in oil imports and emissions.

But the electrification of India’s transport sector is in a bumpy ride. Considering e-rickshaws, Krishna feels that the price and taxes on lithium-ion batteries, the charging infrastructure, and the commercial rate of electricity per unit are the biggest hurdles.

“As compared to the eight to ten hours of charging required by lead-acid batteries that are widely used, lithium-ion batteries need only around three hours to reach full charge and last for 100 km,” explained Krishna. “But they are very expensive [almost four times] and to charge them you still need to visit a garage or a charging station and lose three hours of opportunity to earn money.”

To tackle the issue, SMV has established two battery swapping stations in Varanasi with a capacity to charge 15 batteries at a time. The drivers can exchange their drained batteries with a fully charged one for Rs. 200 ($2.88) and get back to business within minutes. Krishna is convinced that in his region, swapping stations are the best option for an e-mobility infrastructure.

People usually choose e-rickshaws for distances less than four or five kilometers, estimated the drivers in Varanasi. The models currently on road have a maximum speed of 25 km/hr. Though the lightweight toto itself is noiseless, anyone riding the slow-moving vehicle in the city will be subject to a lot of agitated honking from other vehicles. “When manufacturers release e-rickshaws matching the speed of regular rickshaws, their use will be wider,” Krishna added.

The Indian government recently announced a reduced GST rate of five percent instead of 12 percent on electric vehicles. It reduced GST rates on chargers and charging stations from 18 percent to five percent.

The e-mobility industry is expected to create 10 million jobs. Pal also believes that the sector will provide a lot of job opportunities globally and in India and positively reflect on the nation’s economy due to the reduction in oil imports. But she added that some of the micro-industries dependent on diesel/petrol vehicles that provide jobs to many would need careful hand-holding during the transition phase.
In 2017, SMV launched the Vahini program to enable women to own an e-rickshaw and earn a livelihood. “Vahini provides dignified jobs to women and safe, affordable transport for female passengers and children,” explained Krishna. “Freedom of mobility is empowerment,” he said.

Despite the numerous social challenges, Krishna feels the e-rickshaw became a vehicle for achieving multiple goals: women empowerment and emission reduction. 42 female e-rickshaw drivers currently benefit from this program, most of them in Prayagraj (formerly Allahabad), around 120 km from Varanasi. Many more will join the movement soon, he says with hope.

40. Mahindra Electric To Play Key Role In SsangYong’s EV Drive

Mahindra & Mahindra, a leading player in electric vehicles in the country, has now set eyes on electrification of some of the models of its South Korean arm SsangYong Motor, a top company official said. The company, which already sells electric vehicles like e-Verito and e2o, is also working to develop electric three-wheelers using a lithium-ion battery.

"Mahindra Electric is working with SsangYong to electrify some of their products," the company's CEO Mahesh Babu told the press.

Mahindra Electric, the manufacturer of electric vehicles of the diversified USD 17.8 billion Mahindra Group, will play a key role in the electrification of existing products such as e-Verito and e-Supro for Mahindra's auto division. "We will play a similar role for SsangYong," Babu said.

Elaborating on the SsangYong project, he said Mahindra Electric will sell some of the powertrains and electric parts to the South Korean auto firm. "We will supply some electric parts to them and also to Mahindra and they will sell the cars," Babu said.

Mahindra & Mahindra (M&M) had inked a pact in 2010 to acquire majority stake in SsangYong.

When asked about the company's strategy regarding electric vehicles in the domestic market, Babu said: "We have now products in the mass market segment...as part of our strategy going ahead, we will get into new technologies with higher power voltage powertrains and higher range products".

With a few electric products already in its portfolio, the company will now focus at expanding its base on the back of new products with higher range and performance, he added.

"We are now working to develop three wheelers based on lithium-ion batteries," Babu said.

In September, the company had introduced e-rickshaw -- e-Alpha Mini - to cater to last mile connectivity.

M&M has earmarked an investment of Rs 600 crore over the next two-three years to expand its electric vehicle production capacity from 500 to 5,000 units a month. The capital will also be utilized to develop new technologies and come up with the infrastructure to produce battery components.

The company is also looking to ink joint ventures in the field of power electronics and motors. When asked about the proposed joint ventures, Babu said: "The process is going on. It hasn't yet concluded."
41. South Korea Says Busy Sea Ports Will Become Bigger, and Cleaner

South Korea says it is about to spend billions of dollars to make some of the busiest ports in the world bigger but also cleaner, producing lower levels of air pollution and greenhouse gases. The Ministry of Oceans and Fisheries recently announced a 41.85 trillion won ($35.2 billion) plan to expand 12 ports across the country by 2040 and reduce their environmental damage. The government will invest about 16.08 trillion won, leaving the rest to private investors.

The ports will be designed to fuel ships with liquefied natural gas (LNG), which produces lower levels of carbon dioxide than the carbon- and sulfur-intensive bunker fuels most ships use.

International shipping contributes 2 percent of global carbon dioxide emissions. That amount, if shipping were a country, would rank it sixth, behind Japan, BloombergNEF reported in January.

Currently, no cargo ships in South Korea use LNG fuel, said Kim Myeong-jin, an official at the Ministry of Oceans and Fisheries. However, “that trend will soon change” under rules from the International Maritime Organization, Kim said.

The IMO will require large vessels to reduce the upper limit of their sulfur oxide emissions, which harm health and the environment, from 3.5 percent to just 0.5 percent starting in 2020.

Ships can meet the limit by switching to low-sulfur bunker fuel, installing scrubbers, or retrofitting to run on LNG or biofuels. The changes also reduce greenhouse gas emissions. South Korea plans to provide port facilities to store LNG. Ships also would have to build new engines to use it.

The upgraded ports also will help South Korea cut air pollution from ships waiting at docks. Typically, they run on diesel generators that produce what Bloomberg NEF’s report described as “enormous docking emissions.” In the future, ships in South Korea’s ports will run on electricity instead. “All ships will be receiving electricity from land [when anchoring], so they will no longer need fuels. Thus, gas and fine dust will decrease,” Kim said.

Construction is expected to begin as early as 2020. Ports will be expanded in areas including Busan, Gwangyang, Pyeongtaek, Mokpo, Pohang, Boryeong, Ulsan, and Incheon.

Busan was ranked sixth in the world in cargo volume in 2017 by Lloyd’s List. By comparison, the largest port in the U.S., Los Angeles, was 17th.

Once completed, the Ministry of Oceans and Fisheries projects the nation’s gross tonnage across the 12 ports will increase from 1.32 billion in 2017 to 1.85 billion in 2040.

42. New Zealand Poised To Introduce Clean Car Standards And Incentives

The New Zealand government has proposed new fuel efficiency standards to cut greenhouse emissions, along with consumer rebates for cleaner cars – paid for by fees on high-polluting cars.
The long-awaited proposed changes would bring New Zealand in line with most other developed countries; apart from New Zealand, Russia and Australia are the last remaining OECD nations without fuel efficiency standards.

New Zealand’s long tradition of not regulating its car market, combined with substantial indirect subsidies for private cars, makes addressing emissions from the transport sector both challenging and highly significant.

Land transport emissions – the single largest source of fossil carbon dioxide in New Zealand – grew 93% between 1990 and 2017. There are multiple causes. The population grew 44% during this period, mostly through immigration. The car ownership rate also grew rapidly, partly due to economic growth and deficiencies in public transport in the main cities. Car ownership in New Zealand is now the highest in the OECD and there are more motor vehicles than adults.

Fuel efficiency improved only slowly over this period, before stalling in recent years: at 180g CO₂/km, the emissions of newly imported vehicles in New Zealand are 50% higher than in Europe. Because of the lack of a fuel efficiency standard, importers provide less efficient versions of their bestsellers to the New Zealand market. Of the ten bestselling new vehicles, five are utes (which also benefit from a fringe benefit tax exemption, four are SUVs and one is a regular car.

In addition, half of all vehicles are imported secondhand, mostly from Japan. They are cheap, but less efficient than newer models. Emissions, and congestion, are likely to continue rising as the national vehicle fleet is increasing by 110,000 vehicles a year.

One bright spot in the present situation is the emergence of an electric vehicle segment, mostly driven by the availability of cheap second-hand Nissan Leafs from Japan and the construction of a fast-charging network by a private company. Although sales have stalled in the past year at a market share of 2%, there are now 15,000 electric vehicles in New Zealand. (Australia has around 10,000 electric vehicles.)
New Zealand does not have a strong record of taxing “bads”. The only goods subject to excise taxes are tobacco, alcohol and fuel. The fuel tax is moderate by international standards. Over the past decade, the fuel tax has been fully allocated to road construction and maintenance.

New Zealand has an emissions trading scheme. The current carbon price of NZ$25/ton of carbon dioxide adds five cents per liter to the price of fuel. Clearly, any likely increases in the carbon price are not going to be enough to change car buying decisions. Research shows that consumers tend to focus on upfront costs, while underestimating future fuel and maintenance costs.

Despite that, a special Auckland fuel tax of 10 cents per liter that co-funds public transport investment provoked a brief but intense backlash from the public. Plans to extend the scheme to other centers were canned.

The proposed fuel efficiency standard would require car importers to either meet it or pay a fine. The suggested standard is 150gCO\(_2\)/km in 2021, falling to 105gCO\(_2\)/km in 2025, with further falls thereafter. There are more than 3000 car importers in New Zealand, so this could prompt a major shakeup, including possible price adjustments.

The standards are similar to those proposed by the Australian Coalition government in 2016, which have not yet been taken any further. Internationally, fuel efficiency standards cover 80% of the light vehicle market.

But the second component of the proposal, the clean car discount, has attracted more attention. Cars emitting less than the current threshold would receive a discount, initially up to NZ$1800 for an efficient petrol car, up to NZ$4800 for a hybrid and up to NZ$8000 for a battery electric car. Cars costing more than NZ$80,000 would not receive a discount.

Known as a “feebate scheme”, those rebates would be paid for by increased fees for high-polluting cars, of up to NZ$3000. The amounts are designed so that the entire scheme would be revenue neutral to the government. Modelling suggests that the proposed standard and discount combined would save motorists NZ$12,000 over the life of a vehicle.

There is international experience with similar schemes, and they have been broadly effective. France has been operating a “feebate” scheme since 2008 with periodic adjustments. New Zealand’s proposed scheme is similar to the French and Swedish schemes.

But there is also room to get it wrong. Tinkering with electric vehicle incentives has led to wild sales fluctuations in the Netherlands and Denmark.

The spread between tested and real-world fuel use has widened, up from 9% in 2001 to 42%. The new Worldwide Harmonized Light Vehicle Test Procedure testing cycle, currently being adopted by Japanese and European manufacturers, is believed to be more representative of real-world fuel use, as is the test already in use in the United States.

But overall, the New Zealand proposal has been received positively by car makers and across political parties.

43. Honda To Move Accord Hybrid Production From Japan To Thailand
Honda Motor will shift Japanese production of its Accord hybrid sedan to Thailand, where it wants to take advantage of tax incentives for manufacturing greener cars, according to press reports. Honda's plan follows Mitsubishi Motors’ announcement earlier this month of its intention to make plug-in hybrids in the Southeast Asian country, starting in early 2021.

The move will start with the Accord model scheduled for release in Japan in early 2020. Honda is also considering exporting from Thailand to other countries, including Australia.

The automaker plans to spend 5.82 billion baht ($189 million) on the plan, which will expand its output of cars with electric motors.

The Thai government is encouraging production of such cars -- including electric vehicles and hybrids -- by dangling corporate tax breaks, cutting excise duties and lowering levies on imported manufacturing equipment.

Honda’s plant in Sayama, north of Tokyo, has been making the Accord but will terminate auto production by the end of March 2022. Honda decided it would be more efficient to import the Accord from Thailand, where its plant already makes the model with the steering wheel on the right side -- the standard configuration in Japan.

The Accord is considered a high-end sedan and a signature model for Honda. It sold about 500,000 units in 2018, mainly in the U.S. and China, though it sold only about 2,000 in Japan.

The Thai plant turned out a little more than 3,000 Accords in 2018, but the figure is expected to significantly increase in 2019, driven by the planned increase in hybrid output.

Honda's shift comes as the world's automakers grow more selective about investments, aiming to enhance efficiency. Emerging economies in Asia, which are rapidly becoming more technologically advanced, have become appealing options for making not just compact cars but also vehicles like hybrids.

Japan’s Toyota Motor and Mazda Motor also plan to make electrically driven vehicles in Thailand.

### 44. Philippine Government Set To Issue Rules On Motor Vehicle Emissions

The government is tightening its regulatory measures on emissions of motor vehicles—both private and public utilities—as it is close to issuing the procedural guidelines of the National Motor Vehicle Inspection and Maintenance Program (NMVIMP).

In a draft joint administrative order (JAO), the Departments of Transportation (DOTr), of Trade and Industry (DTI) and of Environment and Natural Resources (DENR) delineated their roles in the implementation of the NMVIMP.

The Clean Air Act, passed two decades ago, mandates implementation of the program.

Under the draft JAO, the DTI’s Consumer Protection and Advocacy Bureau is mandated to formulate the rules and regulations for the effective implementation of the NMVIMP. It is also tasked to update existing rules and regulations on the accreditation of service and repair shops, and to develop and implement an advocacy campaign on the regular maintenance of motor vehicles to ensure safety.
On the other hand, the DTI’s Philippine Accreditation Bureau is obliged to certify public and private Motor Vehicle Inspection Centers (MVICs) based on applicable international standards.

The DTI’s Bureau of Philippine Standards will issue Philippine National Standards for motor vehicles. The Fair Trade Enforcement Bureau and the Regional Operations Group, for their part, are mandated to accredit private service centers for maintenance and repair in accordance with existing rules and regulations.

The Technical Education and Skills Development Authority (Tesda) is tasked to train and certify teachers who will educate inspectors and technicians on motor vehicle emission control and vehicle systems. The Tesda is also responsible for the training and accreditation of competency assessors who will evaluate motor vehicle emission technicians, vehicle inspectors and automotive experts. It is further obli­ged to award a national certificate or certificate of competency to technical personnel who have been found competent in automotive servicing, including motor vehicle emission control.

The Land Transportation Office (LTO) will formulate and enforce rules and regulations for the authorization of private MVICs. It is also mandated to inspect private in-use motor vehicles, vehicles with enhanced engines whose chassis are pre-registered with the LTO and public-utility vehicles (PUVs) prior to renewal of registration. The LTO will also conduct periodic monitoring of all private MVICs to check compliance.

The DENR is tasked to develop, adopt and update standards for emissions, as well as regulate the specifications of the emission-testing equipment to be used by all public and private MVICs.

The MVICs are mandated to conduct mandatory inspection of motor vehicles based on existing LTO rules and regulations as prerequisite for their renewal of registration. They must also ensure that all machines and equipment used for inspection are properly calibrated.

Under the draft JAO, MVICs are required to possess these minimum test equipment: testers for headlight, roller, sideslip, speedometer, emissions, among others, for light vehicles and motorcycles.

Motor vehicle owners are mandated to enroll their in-use units in a mandatory inspection process to be undertaken by the LTO or any authorized private MVIC within 60 days prior to renewal of registration.

Units that passed the inspection will have their motor vehicle registration renewed, while those that failed will undergo repair in a DTI-accredited service and repair shop and will be returned for inspection after.

SOUTH AMERICA

45. Russian Fuel Is Flowing Thousands of Miles to Crisis-Hit Venezuela

Russian oil products are making their way to sanction-stained Venezuela, affording a reprieve for the Latin American nation as it battles persistent fuel shortages.

Venezuela received at least 616,000 barrels of gasoline and 500,000 of vacuum gas oil, a feedstock used to produce gasoline, in June and July. According to press reports, the cargoes
sailed from the Black Sea port of Taman to Malta, where they were transferred to other vessels heading to Venezuela, according to people familiar with the cargoes and ship-tracking data.

More Russian cargoes could be coming as the vessel Commander, which loaded VGO in Taman in late July, is also heading for Malta, one of the people said. Tanker-tracking data confirm the movement.

The fuel shipments could help Venezuela ease its gasoline crisis. Once an exporter of gasoline to the Caribbean and the U.S. East Coast, the country now must import almost all of its fuel amid breakdowns at its domestic refineries. Before sanctions imposed by U.S. president Donald Trump, Venezuela imported most of its gasoline from the U.S. and India, but recently switched to supplies from Turkey, Latvia, Greece and now Russia.

It’s a long trip. Gasoline vessels from Russia take 30 days to Venezuelan shores, while supplies from the U.S. arrive in a little over a week.

Russia froze domestic gasoline prices in the first half of this year, making fuel exports a more attractive option. From July, the government removed the cap but reached an informal agreement with producers to keep retail and wholesale prices growing in line with inflation, according to Vedomosti, a Russian language business daily.

Russia has been a traditional ally for Venezuela, with the Kremlin voicing support to Nicolas Maduro on many occasions after relationships between governments in Caracas and Washington deteriorated. Russia’s largest oil producer, Rosneft Oil PJSC, has received crude oil from Venezuela state oil company Petroleos de Venezuela SA under pre-payment supply deals. Russia is also one of the largest foreign investors in Venezuela’s upstream segment.

AFRICA

46. Rwandans Switching From Petrol To Electric Motorcycles

Transport e-mobility (electro-mobility) may be a global multi billion business but in Rwanda it’s a relatively new idea. However, following the introduction of a national e-mobility policy and a call from President Paul Kagame to speed up the process, manufacturers are becoming more enthusiastic about the potential.

Electric vehicle company ‘Ampersand’ has been in the e-mobility market for four years and is now helping Rwanda shift from gas driven motorbikes to electric motorcycles. In a pilot program targeting motorcycle taxi drivers it produced ten e-bikes for tests and is now selling them.

“We’ve been developing these vehicles for about four years now and making them so that they’re better and cheaper than the petrol motorcycles that are available on the road in Rwanda, that’s been our goal all along,” says Chief Executive of Ampersand, Josh Whale.

Ampersand is banking on government support to make these affordable and a viable business and has set itself a target to put out 3 million electric motorcycles in the East African region.

“The suppliers that we work with on the components for our vehicles are very large and we could potentially replace all the vehicles in Rwanda within a month so production capacity is not the issue, the issue is financing and working out the best mechanism to get motorcycles into drivers’
hands that’s good for the driver, and good for the country and good for us as a business,” says Whale.

Over 3 million people in East Africa make their living as motorcycle taxi drivers.

James Musisi has been a motorcycle taxi driver in Kigali for nine years and switched to an e-motorcycle seven months ago. He says he has been able to make more profit from the new electric motorcycle than a regular bike: “Before using it I was using ordinary bike which was fuel less and per day I usually get 15,000 (Rwandan francs) or 16,000 per day. For this one I get 20,000 per day and above, 20,000 a day, 26,000.”

He also says using an electric bike as opposed to a fuel bike has improved his respiratory health.

The cost of buying an electric motorcycle ranges from 1,330 and 1,600 US Dollars.

Ampersand has received 2,500 requests from potential rental and sales clients, with 500 of them recorded in the two days after the president’s commitment to e-mobility financing and support.

Coletha Ruhamya is Director General of Rwanda Environment Management Authority and says, “The government is working hard to promote green mobility. We have recently introduced, are working on, e-mobility policy to see what are the quick measures that can be implemented but currently we have promoted e-mobility in terms of motorcycles because motorcycle is a big transportation system in the country and we realize that they are the one that mostly contribute to air emission or air pollution in the transportation sector.”

2012 research conducted in Rwanda revealed at least 2,227 deaths that year resulted from air pollution and that poor quality of air has also increased the numbers of respiratory diseases. Since then Rwanda has put an air quality monitoring system in place which helps collect current data and find ways in which the government can intervene.

From 2015 Rwanda passed bylaws in accordance with the 2011 East Africa Community (EAC) resolve to import only low sulfur fuel (cleaner fuel) to avoid sulfur oxides which cause respiratory diseases.

Commercial vehicles now undergo a gas emissions test twice a year while tests on personal vehicles will be conducted once a year.

The e-mobility policy is part of Rwanda’s commitment to address the issue of transport related pollution and move towards green mobility.

**CLIMATE CHANGE**

**47. UN Calls On Governments To Align Climate Change And Air Pollution Policies**

The United Nations Environment Program (UN Environment) and the Climate and Clean Air Coalition have launched a new ‘Clean Air Initiative’, which calls on governments around the world to ‘align climate change and air pollution policies’ by 2030.

In a statement, the coalition says climate change and air pollution are ‘closely linked’ because the main driver of climate change, fossil fuel combustion, also contributes about two-thirds of outdoor air pollution.
They called climate change mitigation ‘an opportunity and not a cost’ which can bring about ‘immediate and visible benefits’ to local populations around the world.

The initiative recommends several actions that governments can take including implementing air quality and climate change policies that will achieve World Health Organization (WHO) Ambient Air Quality Guideline values by 2030.

Other actions include implementing e-mobility and sustainable mobility policies and better assessing the number of lives saved and financial costs avoided from implementing these policies.

It also recommends that governments track progress and share best practices through an international network supported by the Breathelife Action Platform.

The announcement was made by the Secretary-General’s Special Envoy for the Climate Action Summit, Ambassador Luis Alfonso de Alba, in New Delhi, India, following two days of meetings with representatives of governments, business and civil society.

Mr de Alba said: ‘The climate crisis and the air pollution crisis are driven by the same factors and must be tackled by joint actions.

‘Governments at all levels have both an urgent need and huge opportunity not only to address the climate crisis, but also to improve the health and save the lives of millions of people around the world, all while making progress on the Sustainable Development Goals,’ said Ambassador de Alba.

‘We call on governments at all levels to step up to this challenge and bring powerful commitments and concrete plans to the upcoming Climate Action Summit.’

48. 'Unprecedented': More Than 100 Arctic Wildfires Burn In Worst Ever Season

The Arctic is suffering its worst wildfire season on record, with huge blazes in Greenland, Siberia and Alaska producing plumes of smoke that can be seen from space.

The Arctic region has also recorded its hottest June ever. Since the start of that month, more than 100 wildfires have burned in the Arctic circle. In Russia, 11 of 49 regions are experiencing wildfires.

The World Meteorological Organization (WMO), the United Nations’ weather and climate monitoring service, has called the Arctic fires “unprecedented”.

The largest blazes, believed to have been caused by lightning, are located in Irkutsk, Krasnoyarsk and Buryatia. Winds carrying smoke have caused air quality to plummet in Novosibirsk, the largest city in Siberia.

In Greenland, the multi-day Sisimiut blaze, first detected on 10 July, came during an unusually warm and dry stretch in which melting on the vast Greenland ice sheet commenced a month earlier than usual.

In Alaska, as many as 400 fires have been reported.
“These are some of the biggest fires on the planet, with a few appearing to be larger than 100,000 hectares,” Thomas Smith, an environmental geographer at the London School of Economics, said.

“The amount of [carbon dioxide] emitted from Arctic circle fires in June 2019 is larger than all of the CO2 released from Arctic circle fires in the same month from 2010 through to 2018 put together.”

In June alone, the WMO said, Arctic fires emitted 50 megatons of CO2, equal to Sweden’s total annual emissions.

**49. Climate Change Is Happening Too Fast for Animals to Adapt**

The speed of climate disruption is outstripping many animals’ capacity to adapt, according to a study that warns of a growing threat to even common species such as sparrows, magpies, and deer. Scientists behind the research described the results as “alarming” because they showed a dangerous lag between a human-driven shift in the seasons and behavioral changes in the natural world.

Previous academic work has shown that species respond to warming temperatures by earlier timing of biological events, for example egg-laying by birds, budding of plants and flying of insects. The new meta-study, published in Nature Research, examines how effective this is in terms of reproduction and survival.

Based on 10,090 abstracts and extracted data from 71 published studies, it found a clear lag in the majority of species studied and none could be considered safe. “The probability that none of the study species is at risk is virtually zero,” the paper notes.

The authors said hundreds of thousands of species were not covered by their study, which was weighted heavily towards birds in the northern hemisphere, but they said the problems of adaptation to climate change were likely to be even greater for other animals already deemed at risk of extinction.

Viktoriia Radchuk of the Leibniz Institute for Zoo and Wildlife Research in Germany said: “Personally I find the results alarming. Species attempt to adapt to changing environment, but they cannot do it at a sufficient pace to ensure that populations are viable. Climate change has caused irreversible damage to our biodiversity already, as evidenced by the findings of this study. The fact that species struggle to adapt to the current rate of climate change means we have to take action immediately in order to at least halt or decrease the rate.”

A similar message was delivered to the UK parliament as senior conservation figures warned that the nation’s natural infrastructure – which provides fresh water, clean air, carbon sequestration and human wellbeing – was being undermined by the climate crisis, pollution, urban sprawl and budget cuts.

Tony Juniper, the chair of Natural England, which is the government’s main advisory body on conservation, said: “The 21st century will be characterized by our success or not in wrestling with these huge challenges. If we carry on as we are, I fear biodiversity will continue to decline in this country.”
He told the Environmental Audit Committee that the present system of monitoring and protecting nature reserves and sites of special scientific interest had been undermined by a 60 percent budget cut over the past 10 years, which had left a stressed and demoralized skeleton crew.

It was not too late to reverse this, he said, and outlined plans for a “nature recovery network” that would rebuild woodlands and peatlands, and work with farmers to protect species and restore soil quality, which can draw down the carbon dioxide that causes global heating.

“This is the soundest investment we can make in the future of the country,” Juniper said. “Unlike other assets – like roads and bridges, which depreciate over time – you get more value in the future,” he said, citing economists’ estimates of a 10 to 100-fold return in terms of better food, water and carbon sequestration.

His views were echoed by the head of the Committee on Climate Change, John Gummer, who said it would be impossible for the UK to reach its goal of “net zero” emissions by 2050 without investing in biodiversity protection and renewal.

50. Greenland Is On Track For A Record Melt Year; 250 Billion Tons Of Ice Lost Already

The extreme weather event that caused widespread melting across the Greenland ice sheet recently, sending temperatures soaring above the freezing mark at the highest point on the island, may have ended, but the melt season overall is poised to set a new and more significant record.

According to the National Snow and Ice Data Center (NSIDC) in Boulder, Colo., Greenland has already lost a total of over 250 billion tons from a combination of melt runoff and low total snowfall earlier in the season. That’s enough to fill more than 90 million Olympic-size swimming pools. Or to put it another way, that much water could sustain the global population’s water intake for more than 40 years.

During the recent extreme melt event, Greenland lost from 12 billion to 24 billion tons of ice per day, which was about 6 to 18 billion tons above the typical rates seen on these dates seen during the period from 1981-2010.

All told, a computer model that tracks ice mass gained or lost by snowfall and snow and ice melt, but does not include the ice mass lost by glaciers which terminate in the ocean waters, found that the ice sheet lost a total of about 55 billion tons through melt runoff during the extreme melt event, which was about 40 billion tons more than the 1981 to 2010 average for the same time period, NSIDC reported.

“The glacier flow system also contributes to loss and will likely add another 60 to 100 billion tons of loss [as icebergs],” said Ted Scambos, a senior research scientist at the University of Colorado.

According to Scambos, 2012 eventually reached 300 billion tons of surface ice mass loss from Greenland. The rate of ice loss in Greenland has increased six fold since the 1980s, according to a recent study, with the ice sheet responsible for raising global sea levels by 13.7 millimeters since 1972, half of which occurred in just the past 8 years.

A combination of natural climate variability, such as a pattern of atmospheric pressure known as the North Atlantic Oscillation, plus long-term global warming has led to a much warmer than average summer melt season in Greenland and throughout the Arctic.
In response to the above average temperatures, Arctic sea ice is well on its way to one of the five lowest levels on record since satellite records began in 1979. Ice-free areas feature much above average sea surface temperatures, which is reinforcing the transport of mild air into the region and helping to melt more sea ice. Sea ice ended the month of July at a record low and was continuing to drop sharply into early August.

Currently, there is no sea ice off the shores of Alaska, something that has never occurred before so early in the melt season. Ice has even pulled back again from the coastal waters north of Greenland, which had long been a refuge for the oldest and thickest ice cover. This was first seen in 2018, and no longer appears to be a fluke.

In addition, a widespread outbreak of Arctic wildfires has been billowing smoke across the Greenland ice sheet and other parts of the Arctic, where soot deposition darkens the ice surface and melts it faster.

Another feedback involves natural darkening of the ice cover, since above average temperatures tend to reduce the reflectivity, or albedo, of the ice, thereby melting more of it as incoming solar energy is readily absorbed. Satellite imagery shows broad regions of dark ice across Greenland, particularly in western areas.

51. Global Food Supply Seen Threatened by Climate Change Impacts

Land used for activities including agriculture and lumber added significantly to the amount of carbon dioxide, methane, and nitrous oxide in the atmosphere between 2007 and 2016, the Intergovernmental Panel on Climate Change said in a new report. The group identified the loss of wetlands and natural forest as significant climate change factors.

The result: lower crop yields that can lead to a scarcity of food, more land being turned into desert, and less plant diversity, according to the report. Less food waste as well as changes in diet can mean less need to convert land from its natural state, it said.

“There are many ecosystems throughout the world where we are already seeing the impacts of climate change and land use change, and it emphasizes the need for urgent action,” Jo House, one of the authors of the report and a professor at the University of Bristol, said in a conference call with reporters.

The report, prepared by more than 100 scientists, is one of series coming from the United Nations group aimed at driving global discussions on climate change.

Individuals can take action, the authors said. Cutting down or eliminating the consumption of meat, which would reduce the need to clear land for large cattle ranches and eating more grains and vegetables will help.

“Diets that are rich in plant-based foods have lower greenhouse gas emissions than diets that are heavy in red meat consumption,” said Cynthia Rosenzweig, an author and a researcher at the NASA Goddard Institute for Space Studies in New York. Replanting of devastated forests will also help.

Since pre-industrial times, temperatures over land have increased twice as fast as the global average and are higher by about 1.53 degrees Celsius (2.8 Fahrenheit), said Louis Verchot,
researcher at the International Center for Tropical Agriculture in Cali, Colombia, and a lead chapter author for the report.

While plants can have short-term benefits from increased carbon dioxide in the air, those gains won’t last, according to Rosenzweig.

In a high-carbon atmosphere, wheat will become less nutritious, losing 6% to 13% of its protein, 4% to 7% of its zinc, and 5% to 8% of its iron, the report said. “Now we are finding decreases in nutritional quality in crops,” Rosenzweig said.

Asia and Africa, parts of which already are dependent on imported food, may be the first victims, increasingly vulnerable to intensifying drought as temperatures rise. In lower altitude regions, yields for crops such as wheat and corn are already declining, according to the report, while some animals are growing at slower rates due in part to heat stress.

The Bloomberg Agriculture Spot Index, a price measure of nine crops, plunged to the lowest in a decade in May as global grain supplies were set to swell. But the index in June surged to a one-year high as too-wet weather in the U.S. and hot conditions in Europe stoked worries that harvests would shrink instead. The volatile moves in prices show how quickly food prices can rise amid adverse weather.

Large parts of the Amazon rain forest are being lost in Colombia, Peru, and Brazil, Verchot said. Melting permafrost in Arctic areas also will lead to more greenhouse gases escaping into the atmosphere, as will a massive shift by South American farmers to use more nitrogen fertilizers.

The Earth has been able to absorb carbon, “but that subsidy could very easily be lost if we continue on current trajectories, if we continue to have the land degradation, the ecosystem degradation, the soil degradation, and the water degradation we’re currently experiencing,” Verchot said.

52. July Was Earth’s Hottest Month Since Records Began
Global average surface temperatures during July 2019 compared to the 1951-1980 average. (Credit: Berkeley Earth)

Data from thousands of surface monitoring stations worldwide, including ocean buoys in the Pacific and land-based thermometers dotting the continents, show that July 2019 was the warmest month on Earth since at least 1850.

Berkeley Earth, an independent climate monitoring and research organization, released data showing July 2019 beat August 2016 for the title of the warmest month by 0.14 degrees (0.08 Celsius).

“Though the margin is small, given the uncertainty range, we consider July 2019 to have set a new record for the highest monthly average temperature,” the organization said in an analysis. Previously, the European Union’s Copernicus Climate Change Service had also found that July 2019 was the warmest month on record, though by a small margin compared to its previous hottest month on record.

The NOAA also announced that July was the warmest month on record, with the global average surface temperature coming in at 1.71 degrees (0.95 Celsius) warmer than the 20th century average. According to Deke Arndt, head of climate monitoring for NOAA, July 2019 marked the 415th straight month that was warmer than the 20th century average.

In keeping with accelerating global warming, nine of the 10 warmest Julys have occurred since 2005, NOAA found.

July brought extreme heat to Europe, and massive wildfires to the Arctic, including Alaska, Siberia and even Greenland, as well as a record and sudden melt event to the Greenland Ice Sheet. During the European heat wave in late July, Sweden set a record for the warmest temperature
observed in that country north of the Arctic Circle, NOAA reported, with a maximum temperature of 94.6 degrees (34.8 Celsius) in Markusvinsa on July 26.

At the end of the month, both Arctic sea ice and Antarctic sea ice were at their lowest levels on record for the month, missing a total of 1 million square miles of ice, according to NOAA. If this were a country, Arndt said, it would be the 10th largest nation worldwide.

What makes the July temperature record, as well as the year-to-date trajectory, stand out so much is that there is no longer an El Niño event in the tropical Pacific Ocean. Such natural climate cycles feature warmer than average ocean temperatures that send extra heat into the atmosphere, boosting the planet’s average temperature. A particularly strong El Niño during 2016 propelled that year to record levels, yet in 2019 there has only been a weak El Niño that recently dissipated entirely.

This demonstrates how, due increased concentrations of greenhouse gases in the air from the burning of fossil fuels, the climate no longer needs a strong natural extra dose of warming in order to set a new temperature milestone.

“If you think about climate change as long-term gain on an escalator, kind of riding it up over time, and El Niño and La Niña kind of jumping up and down on that escalator,” Arndt told reporters on a conference call.

He said the fact that July was in the vicinity of a record without a strong El Niño being present is “almost entirely due to climate change.”

Ominously, Berkeley Earth found that July 2019 was 2.20 degrees (1.22 Celsius) warmer than the 1850 to 1900 average, which is often used as the baseline for preindustrial temperatures.

In the Paris climate agreement, world leaders committed to keeping long-term global average surface temperatures to “well below” 3.6 degrees (2 Celsius) compared to preindustrial levels, but they have not followed through on making the massive cuts to greenhouse gas emissions that are required to meet that goal. The United States shaped that agreement, but the Trump administration announced it would withdraw from it.

Berkeley Earth found that during July, 73 percent of the Earth’s surface was “significantly warmer” than the 1951-1980 average, with just 5.9 percent of the globe significantly colder.

Warm areas that stood out include Alaska, Greenland, Europe, Africa, and parts of Asia and Antarctica. “We estimate that 4.7% of the Earth’s surface set a new local record for the warmest July monthly average. In July 2019, no places on Earth experienced a record cold monthly average,” the report states.

In addition, NASA found that July was 1.67 degrees (0.93 Celsius) above the 20th century average, making it the warmest July and “vies for the warmest month in absolute terms with August 2016” in its record.

Separately, the Japan Meteorological Agency also found July 2019 was the warmest month on record, though it was in a virtual tie with July 2016.
This chart shows monthly temperature divergence in selected years from a multiyear average (1980-2015), serving as a reference period.

53. Addressing Climate Change Will Help Economic Growth, Study Finds

Slowing the pace of climate change in line with the Paris Agreement has clear economic benefits as global warming is increasingly seen as a risk to financial stability and the economy.

Abiding by the Paris Agreement and limiting annual average temperature increases to 0.01 degree Celsius reduces global income by 1.07% by 2100. That compares with a 7.22% hit to gross domestic product if the temperature rises by 0.04 degree Celsius a year, according to a National Bureau of Economic Research paper.6

Bank of England Governor Mark Carney has been at the forefront of a push by central bank officials to build awareness about the potential losses for companies and economies as global temperatures rise, making storms more powerful and the weather less predictable. Officials are also calling for funding for green finance.

In a sign of what’s at stake, a report by the Network for Greening the Financial System included a finding, attributed to Munich Re, showing that annual costs for natural disasters topped the 30-

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year average of $140 billion in seven of the past 10 years -- and that the number of extreme weather events since 1980 has tripled.

The authors, including Matthew Kahn of the University of Southern California and Jui-Chung Yang of National Tsing Hua University, used data from 174 countries for the period 1960 to 2014 and found that per capita output suffered by persistent changes in temperature.

“In contrast to most of the literature, we illustrated that these negative long-run growth effects are universal, that is they affect all countries, rich or poor, and hot or cold,” they wrote.

54. Pope Urges Politicians To Take 'Drastic Measures' On Climate Change

Pope Francis challenged governments to take “drastic measures” to combat global warming and reduce the use of fossil fuels, saying the world was experiencing a climate emergency.

Francis issued his appeal, a written message for Sunday’s World Day of Prayer for the Care of Creation, ahead of the United Nations Climate Action Summit this month in New York, a follow up to the 2016 Paris Agreement to curb global warming.

Calling the U.N. summit “of particular importance,” he added: “There, governments will have the responsibility of showing the political will to take drastic measures to achieve as quickly as possible zero net greenhouse gas emissions and to limit the average increase in global temperature to 1.5 degrees Celsius with respect to pre-industrial levels, in accordance with the Paris Agreement goals.”

Francis has made many calls for environmental protection and has clashed over climate change with skeptics leaders such as U.S. President Donald Trump, who has taken the United States out of the Paris accord.

“We have caused a climate emergency that gravely threatens nature and life itself, including our own,” the leader of the world’s 1.3 billion Roman Catholics said in the message for the prayer day, which is marked by various Christian Churches.

“Our prayers and appeals are directed first at raising the awareness of political and civil leaders,” he said, adding that governments should “renew commitments decisive for directing the planet towards life, not death”.

He listed constant pollution, continued use of fossil fuels, intensive agricultural exploitation and deforestation as being among the man-made causes of global warming and said the Amazon, where fires are raging, is “gravely threatened”.

“Now is the time to abandon our dependence on fossil fuels and move, quickly and decisively, towards forms of clean energy and a sustainable and circular economy,” he said.

Other phenomena, such as the melting of glaciers and the presence of plastic and microplastics in the oceans “testify to the urgent need for interventions that can no longer be postponed,” he said.

“Egoism and self-interest have turned creation, a place of encounter and sharing, into an arena of competition and conflict,” he said.
Francis, who wrote an encyclical in 2015 on environmental protection, said now was the time for people to reflect on their lifestyles, urging them not to make “thoughtless and harmful” decisions on food, consumption and transportation.

“Too many of us act like tyrants with regard to creation,” he said.

Protection of the environment is expected to be a main these of the pope’s trip to Africa, which starts soon.

**GENERAL**

**55. Particulate Air Pollution Linked To Risk Of Premature Death; No Threshold**

A new international study has found that air pollution is linked to increased cardiovascular and respiratory death rates. The study is the largest of its kind to investigate the short-term impacts of air pollution on death, conducted over a 30-year period. The study analyzed data on air pollution and mortality in 24 countries and regions.

The study, led by Dr Haidong Kan from Fudan University in China, analyzed data on air pollution and mortality in 652 cities across 24 countries and regions, and found increases in total deaths are linked to exposure to inhalable particles (PM10) and fine particles (PM2.5) emitted from fires or formed through atmospheric chemical transformation.

Published in the New England Journal of Medicine, it's the largest international study to investigate the short-term impacts of air pollution on death, conducted over a 30-year period.

Associate Professor Yuming Guo from Monash University's School of Public Health and Preventive Medicine in Australia, said as there's no threshold for the association between particulate matter (PM) and mortality, even low levels of air pollution can increase the risk of death.

"The adverse health effects of short-term exposure to air pollution have been well documented and known to raise public health concerns of its toxicity and widespread exposure," Professor Guo said. "The smaller the airborne particles, the more easily they can penetrate deep into the lungs and absorb more toxic components causing death.

"Though concentrations of air pollution in Australia are lower than in other countries, the study found that Australians are more sensitive to particulate matter air pollution and cannot effectively resist its adverse impacts. This may be attributed to Australians' physiological functions having adapted to living in areas with low levels of particulate matter air pollution.

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"Given the extensive evidence on their health impacts, PM10 and PM2.5 are regulated through the World Health Organization (WHO) Air Quality Guidelines and standards in major countries, however Australians should pay more attention to the sudden increase in air pollution," Professor Guo said.

The results are comparable to previous findings in other multi-city and multi-country studies and suggest that the levels of particulate matter below the current air quality guidelines and standards are still hazardous to public health.

56. Off-Road, Construction Equipment are Next Up on Electric Highway

The next wave in electric vehicles – tractors, airport vehicles and off-road construction equipment is coming. Research firm Interact Analysis says that electrification will be a crucial trend in off-highway vehicles. Stringent emissions standards coming into play in regions such as Europe, India and China will encourage electric equipment adoption according to their analysis.

Those areas already have launched plans to phase out diesel fuel that runs the current generation of tractor and construction equipment. Parts of Europe plan to ban diesel and petrol cars starting as early as 2025. India has a 2030 goal and China is considering 2040, Interact Analysis said in its recent report.

“Ultimately, machine builders and engine manufacturers for vehicles such as bulldozers, excavators, loaders, telehandlers, aerial work platforms and lift trucks will be forced to respond as internal combustion engines are phased out,” Interact said.

Swedish truck and equipment maker Volvo Group already is pursuing an electrification strategy. Earlier this year, the company’s Volvo Construction Equipment division unveiled an electric compact excavator and wheel loader. Starting next year, Volvo will launch its range of electric compact excavators and wheel loaders. It will stop new diesel engine-based development of the models.

California, which is using environmental regulations to push electric vehicles, is considering a new voucher incentive program dedicated to off-road, freight and cargo handling. “It seems likely that this program will accelerate commercialization of zero-emission yard trucks, terminal tractors, cargo handlers, gantry cranes etc. in California – and that will be noticed around the world,” said Stanley Young, spokesman for the California Air Resources Board.

Electrifying off-road equipment such as ground service equipment for airports, cargo handling equipment for ports, terminals and railyards is coming. It will also happen with construction equipment and transport refrigeration units, said Bill Van Amburg, senior vice president at Calstart. The Pasadena-based nonprofit provides clean-energy consulting services for the trucking and passenger vehicle industries.

“We are working on a lot of demonstration projects specifically around this sector,” Van Amburg told Trucks.com. “Some of the power systems and components are transferable from on-road platforms.”

Hybrid systems for heavy-duty equipment will probably make more sense than pure electric vehicles, said Mike Ramsey, an automotive and transportation analyst at Gartner Inc. “You would have to have a pretty giant battery to be useful,” Ramsey said.
Any global trend will likely start with lift trucks, according to Interact. That’s because fork-lift trucks are the biggest vehicle segment in terms of unit shipments – with nearly 1.5 million delivered globally in 2018. They “are also forecast to have the highest adoption rate of electrification,” Interact said in its report.

Lightweight equipment will adopt full-electric technology far faster. Interact forecasts medium and large vehicles to have an electric adoption rate of just under 15 percent in a decade.

Interact Analysis said the long-term economic benefits of employing hybrid or all-electric powertrains are compelling for off-highway vehicle manufacturers. “This is because electric motors do not require the same levels of service as internal combustion engines, such as oil or filter changes,” the firms said.

But such vehicles will cost more to purchase. Buyers must measure whether the total cost of ownership savings outweigh the higher initial outlays necessary for electric vehicles. Charging infrastructure also is a “major challenge.”

Equipment sellers will have to develop a program that includes charging infrastructure, grid connections and consultation.

57. Electric Truck Market Poised for Fast Growth, Says Analysis Firm

After a sluggish 2018, the electric truck market this year will begin a multiyear run of double-digit increases, a British analyst firm is predicting. The nearly six fold growth from just under 180,000 units in 2019 to 1.2 million in 2025 will be pushed largely by sales in China. Increased emissions regulations in Asia and Europe also will play a major role, according to the new report by Interact Analysis.

Awareness in the trucking industry that electrification can reduce fuel and maintenance costs also is increasing, Rueben Scriven, a trucking electrification analyst with Interact, told the press.

Operating cost savings, along with steadily decreasing prices, will be an important driver of electric truck sales in the U.S. in coming years, but will be less significant in Europe than the regulatory climate, he said.

Growth in the U.S. market will be slower than in Europe and Asia because of its low diesel prices and the lack of significant regulatory push, Scriven said. Electrified trucks will account for less than 1 percent of new truck sales in the U.S. in 2025, compared with about 5 percent globally, he said.

The Interact report predicts global sales of slightly more than 4 million battery-electric, plug-in hybrid and conventional hybrid trucks – most of them light and medium-duty models – from now through 2025 after a 12 percent sales decline in 2018.

That drop, to about 155,000 electrified trucks from just over 175,000 in 2017, came largely on the heels of a significant reduction in state-sponsored subsidies in China. Concerns about the overall state of the economy and the impact of a potential trade war with the U.S. “may have also negatively influenced the market” in China, the report noted.

Outside of China, however, the electric truck market actually grew by 63 percent in 2018, Interact found.
Smaller, independent truck electrification specialists such as Orange EV and Chanje dominate the market now with medium and heavy-duty models. But large, established truck manufacturers are joining the race and can be expected to play a big role in future growth, according to the report.

Volvo has said it would be electrifying its FE and FL truck series. DAF, a division of Paccar Inc., has partnered with VDL Group and Cummins to electrify its CF and LF trucks. Freightliner, Daimler Truck’s U.S. brand, recently introduced the eM2 medium-duty electric truck and the eCascadia—an electric version of the most popular long-haul truck in North America. Paccar’s Peterbilt Motors division just this month unveiled a new medium-duty electric chassis for regional freight, deliver and refuse truck use.

Major investments in electric truck and bus research and development were also announced, with Daimler saying it would spend $3.2 billion in the next few years and Volkswagen allocating $1.7 billion.

Volkswagen and its MAN Truck and Bus unit entered the market in 2018, and Nissan reported more than 7,000 orders for electric trucks, setting 2019 up to be a record year for the company’s electric truck unit.

The established truck makers should “begin to acquire significant market share in the medium- and heavy-duty markets” by 2020, the report said.

The increase in electric trucks will also create a secondary market for depleted battery packs, the report said. The lithium-ion batteries are still good for power storage when they can no longer handle truck duties. “The provision of new services such as grid management and on-site power generation will become important new revenue streams. New Flyer, Nikola, Chanje and Nissan have taken this approach and many more will follow suit,” the report said.
For 2019, Interact is estimating global sales of 163,000 light-duty electrified trucks, 12,250 medium-duty models, and just over 3,500 heavy-duty trucks. Heavy-duty sales will include 1,900 regional delivery and distribution trucks and slightly more than 1,600 long-haul models.

Estimated 2019 sales of 179,563 e-trucks represent less than 1 percent of the market. But if the number swells to 1.2 million in 2025, that would be just under 5 percent market share, Scriven said.

58. More Octane Means More Pain If You Need the Very Best Gasoline

Premium gasoline for your luxury ride is set to cost even more in the coming months as the U.S. transitions to cleaner fuel. With change it will get harder for refiners to keep the octane high enough to meet the needs of high-performance engines. That’s boosting demand for a key ingredient, known as alkylate, and threatening to add to the cost of filling up a Mercedes or Lamborghini.

“We believe we’re seeing octane get more and more expensive,” Homer Bhullar, vice president of investor relations at Valero Energy Corp., told analysts during the company’s second quarter earnings call.

About one in seven cars sold in the U.S. is a luxury model, according to auto analyst Kevin Tynan of Bloomberg Intelligence. Drivers of those cars could be paying as much as 72 cents more per gallon for premium gasoline than regular next year. AAA has the current spread between regular and premium at 58 cents.

“The average driver could be faced with higher costs for premium but more so east of the Rockies than California,” said Patrick DeHaan, head of oil analysis at GasBuddy. “The gap between the price of regular and premium could jump 10% to 25% in the months ahead, depending on how bad it gets.”

The new gasoline specifications, known as Tier 3, technically went into effect in 2017 but many refiners received a three-year waiver to the requirement to reduce sulfur and remove all but 10 parts per million of sulfur from fuel.

“In 2017 and 2018, approximately five of every six gallons of gasoline sold in the U.S. had over 10 ppm of sulfur in it,” Roger Read, senior analyst at Wells Fargo wrote in a research note. “We attribute the non-compliance to the extensive use of valuable Tier 2 credits, small refinery exemptions and avoiding the negative effects and costs of full compliance under a profit maximization approach.”

Sales of premium gasoline at U.S. retailers declined from the mid-1990s through 2015 before leveling around 2.4 million barrels per day, U.S. Energy Information Administration data show.

Efforts to remove sulfur from fuel could also reduce octane that would have to be replaced for all grades of gasoline, likely with alkylate, Tudor Pickering refining research director Matthew Blair said.

Most U.S. alkylate has 92 to 93 octane. It trades at a premium to 87-unleaded gasoline year round and it meets most summer specifications.
Refiners are taking steps to ease the high-octane shortage:

- Delek U.S. Holdings Inc. said in June that its new alkylation unit at its Krotz Springs, Louisiana, plant boosted production of premium gasoline.
- CVR Energy Inc. said in its earnings call that it is adding alkylate production at Wynnewood, Oklahoma.
- Valero is adding an alkylation unit at its Houston refinery.

Blair said he is not ready to go as far as to say the shortages of octane will be dire because refiners seem to be prepared, but he acknowledged that the market will be tighter for blend stocks. The extra capacity, and imports from faraway refineries that have extra octanes, should help ease the pain for those that need the octane, Blair said.

"Alkylate is an amazing blend stock," Blair said. "And in a 10 ppm sulfur environment, it is eventually going to be in short supply."

59. Battery-Powered Ships Next Up in Battle to Tackle Emissions

Four Japanese companies have teamed up to build the world’s first zero-emission tanker by mid-2021 that will be powered by large-capacity batteries and will operate in Tokyo Bay, according to a recent statement. The new company e5 Lab Inc. is a venture between Asahi Tanker Co., Exeno Yamamizu Corp., Mitsui O.S.K. Lines Ltd. and Mitsubishi Corp.

The global maritime industry is facing an onslaught of legislation to improve its environmental performance. From next year, a majority of vessels will have to burn fuel containing less sulfur. A challenge requiring even more innovation, though, is a goal to halve shipping’s carbon emissions by 2050.

While fully-electric ships have struggled to penetrate major markets, momentum is gathering. Rolls-Royce Holdings Plc said last year that it had started offering battery-powered ship engines, while Norway’s Kongsberg Gruppen ASA is developing an electric container vessel. Still, there are challenges in making the technology applicable to ships navigating thousands of miles across oceans because of the need to recharge batteries.

Industries from auto to aviation are also looking to go electric. Komatsu Ltd., the world’s second-biggest construction equipment, has developed its first-battery powered electric diggers. Electric-plane company Eviation Aircraft Ltd., which has signed up its first customer, predicts that in a few years it may not be able to keep up with orders.

60. IMO Promotes “Sustainable Shipping for a Sustainable Planet”

The International Maritime Organization (IMO) selected “Sustainable Shipping for a Sustainable Planet” as the 2020 World Maritime theme. The theme aims to raise awareness of the work that IMO and its member States undertake to contribute to achieving the Sustainable Development Goals (SDGs).

IMO Secretary-General Kitack Lim proposed the theme, saying he believes it will provide opportunities for the IMO Secretariat and member States to highlight the “already significant
contributions of shipping and the IMO" to building a sustainable future. Lim highlighted the contributions of the Organization and the shipping industry towards a sustainable future, including the implementation of the Ballast Water Management Convention, adoption of measures to reduce greenhouse gas (GHG) emissions, improvements in the efficiency of shipping through the exchange of electronic information, and efforts to reduce marine litter, protect the polar regions and reduce the sulfur content of ships’ fuel oil.

Lim said the IMO Secretariat's SDGs Strategy outlines the Organization’s strategic approach to contribute to SDG achievement. He emphasized the year 2020 will mark the “beginning of a decade of action and delivery” that will be decisive for both the shipping industry and for life on the planet. Lim further highlighted the SDG Summit, the Climate Action Summit and the UN Ocean Conferences as opportunities for the shipping sector to reflect on progress to date and future steps towards a sustainable future.

The IMO Council endorsed the theme at its 122nd session.

61. EIA: Global Oil Market Expected To Remain In Balance In Second Half

The US Energy Information Administration, in its latest Short-Term Energy Outlook, forecasts Brent crude spot prices will average $64/bbl. in this year’s second half and $65/bbl. in 2020. The forecast of stable crude oil prices reflects EIA’s expectations of a relatively balanced global oil market amid the combination of risks for oil-supply disruptions and lower expectations for economic growth.

EIA forecasts global oil inventories will increase by 100,000 b/d this year and 300,000 b/d in 2020.

EIA expects West Texas Intermediate crude oil prices will average $5.50/bbl. less than Brent prices during this year’s fourth quarter and in 2020, narrowing from the $6.60/bbl. spread during July. The narrowing spread reflects EIA’s assumption that crude oil pipeline transportation constraints from the Permian basin to the Gulf Coast will ease in the coming months.

However, this updated differential forecast is wider than the $4/bbl. spread forecast made in last month’s report, as EIA revised its assumptions about the marginal cost of moving crude oil via pipeline from Cushing to the Gulf Coast.

Brent crude oil spot prices averaged $64/bbl. in July, almost unchanged from the average in June but $10/bbl. lower than the price in July 2018. Brent and WTI prices on August 1 declined by more than 7% on the day following the US announcement of new tariffs on China, which was a substantial single-day decline.

Brent crude oil prices in July traded in a $6.36/bbl. range—the second-narrowest range during any month in the past year. The narrow trading range in July occurred amid offsetting upward and downward oil price pressures.

Continued Middle East tensions presented risks of supply disruptions and higher crude oil prices. Iran seized a British tanker in the Strait of Hormuz in late July, but crude oil transit in the region has not been markedly disrupted to date.

Meanwhile, continued demand-side concerns have generally added downward price pressure to crude oil prices. The International Monetary Fund recently lowered its estimates for global economic growth in 2019 and 2020. In addition, China’s gross domestic product growth for this
year's second quarter was 6.2%—the lowest growth rate for any quarter since estimates began in 1992. The July manufacturing Purchasing Managers' Index for the Eurozone, China, and Japan all indicated contraction in manufacturing activity as well.

EIA expects Brent prices to increase to $65/bbl. by this year’s fourth quarter and remain there throughout 2020. EIA’s flat crude oil price forecast recognizes that upside and downside price risks and EIA’s forecast for global oil inventory growth are currently balanced.

However, given the uncertainty in the risk factors discussed, prices could break out of the mid-$60/bbl. range if the supply or demand concerns materialize in the coming months. Although Brent crude oil prices stayed within a relatively narrow trading range in July, Brent's implied volatility increased in the middle of the month before declining when the September contract expired. Higher implied volatility could reflect increased uncertainty among market participants about the future direction of oil prices.