

Michael P. Walsh
3105 N. Dinwiddie Street
Arlington, Virginia 22207
USA
Phone: (703) 241 1297 Fax: (703) 241 1418
E-Mail mpwalsh@igc.org
Michael@theicct.org
<http://walshcarlines.com>



CAR LINES

ISSUE 2017 3

APRIL 2017

EUROPE.....	3
1. Europe's Drop in Diesel Demand Set to Accelerate in VW Fallout.....	3
2. New Vehicle Emissions Testing Methods Pass German Lower House.....	3
3. EU Calls for Emissions Checks in 20% of All New Cars.....	4
4. Germany Opposes Key EU Car Emission Test Reforms: Document.....	6
5. French Prosecutor Opens Fiat Chrysler Emissions Investigation.....	7
6. Renault Insists Its Cars Don't Cheat as Emissions Doubts Linger.....	8
7. VW, Audi Offices Raided By Prosecutors in Diesel Probe.....	8
8. Court Ruling Brings Munich Diesel Ban Closer.....	9
9. Brussels Mulls Legal Action Against E-Mobility Laggards.....	10
10. London, Paris Steer Drivers Toward Low-Emission Cars.....	10
11. Metropolitan Barcelona to Ban Dirtiest Vehicles.....	11
12. Germany Includes Environmental Incentives in New Highway-Use Fee.....	12
13. MEP: EU Needs Truck CO ₂ Limits Sooner.....	13
14. Former US Climate Negotiator Sees EU Role Increasing.....	13
15. EU Court Reprimands Bulgaria Over Air Pollution.....	14
16. France Champions Emissions Cuts in the Mediterranean.....	14
17. Italy Readies Answer to EU Urban Air Pollution Warning.....	15
18. EU Laws on Ozone Precursors from Petrol 'Fit For Purpose'.....	16
19. Volkswagen's Emissions Fraud May Affect Mortality Rate in Europe.....	16
20. Sweden Under Fire Over Planned Aviation Levy.....	17
21. MEP Urges Improved Global Deal on Aviation Emissions.....	18
22. EU Consumer Agencies to Join Forces to Press VW Over Dieselgate Scandal.....	18
23. Dirty Powerplants Undercut Dutch Electric Car Leadership.....	19
NORTH AMERICA.....	20
24. EPA Chief Pruitt Says CO ₂ Is Not a Primary Contributor to Global Warming.....	20
25. EPA Announces Intent to Reopen Vehicle GHG Decision.....	21
26. Senate Democrats Vow to Defend Obama's Auto Efficiency Rules.....	22
27. California Approves GHG Rules In Spite of Trump Reversal.....	22

28.	California Gearing Up To Block EPA Repeal of Vehicle Waiver.....	24
29.	U.S. Would Slash EPA Vehicle Testing Budget Under Trump Plan	26
30.	FY17 Spending Deal Makes Only Modest EPA Cuts	27
31.	US EPA Announces \$11 Million in 2017 DERA Grant Funding.....	28
32.	Trump Order Cancels Obama Policies Aimed at Paris Climate Pledge.....	28
33.	U.S. 'Needs to Exit' Paris Climate Pact, EPA Chief Says	29
34.	Top Trump Aides Clash on Legal Risks of Paris Climate Accord.....	30
35.	VW's \$4.3 Billion U.S. Deal Completed With Court's Approval	31
36.	US Petroleum Demand In March at Highest Level Since 2008	32
37.	API Lists Emissions Requirements It Would Like EPA to Review	33
38.	Canada to Further Align Heavy-Duty Truck Standards with U.S.	34
39.	Industry Groups Join Calls To Resist 'Drastic' EPA Budget Cut Proposal.....	35
40.	Which States Follow California's Emission And Zero-Emission Vehicle Rules?.....	36
41.	Refiners Petition EPA to Reconsider 2016 RFS Cellulosic Biofuel Mandates	36
42.	Trump's Executive Order Emphasizes Energy More Than Environment.....	37
	ASIA-PACIFIC	39
43.	China Considers Easing Required Ratio for New Energy Auto Output	39
44.	Toyota Hybrids Stage Comeback as China Electric Car Sales Falter	40
45.	Toyota China Supplier Corun Sees Swing to Profit on Hybrid Sales.....	41
46.	Toyota Brings Mirai to China to Protect Fuel-Cell Car Lead.....	41
47.	China Claims Slow, Steady Air Quality Improvements.....	42
48.	Beijing Still Years Away From Blue Skies Even With Improved Air	42
49.	China to Establish Air Pollution Research Fund.....	44
50.	Beijing Eco-Cops Score First Air Pollution Arrest.....	44
51.	Australia Launches Second Case Against Volkswagen over Emissions	45
52.	Supreme Court Bans Sale of BS-III Compliant Vehicles from 1st April 2017	46
53.	Audit Finds Many Vehicles Flouting Emission Norms in Delhi	47
54.	Delhi Air Pollution: Secondary Pollutants Bigger Threat, Warns EPCA.....	48
55.	South Korea to Introduce Real-World Diesel Emissions Tests.....	48
56.	South Korea Set to Double Electric Vehicle Supply Through 2020	49
57.	South Korea Provides Subsidies to Install 9,500 Electric Vehicle Chargers.....	49
58.	India Electric Vehicle Makers Want Subsidies Dropped for 'Mild' Hybrids.....	50
	AFRICA.....	51
59.	Nigeria to Lower Sulfur in Fuels.....	51
60.	ICCT Report: Roadmap for Clean Fuel and Vehicle Standards in Africa.....	51
	GENERAL.....	52
61.	The Cost of A Polluted Environment: 1.7 Million Child Deaths A Year, Says WHO.....	52
62.	PM2.5 Linked to Children's Hospital Admissions and Asthma Attacks.....	54

EUROPE

1. Europe's Drop in Diesel Demand Set to Accelerate in VW Fallout

Diesel engines are set to lose their dominance in Europe as Volkswagen AG's emissions cheating raises doubts about the technology's advantages. Demand for diesel cars is predicted to plunge to some 30 percent of the region's total auto sales by 2020 from about half currently, hampering manufacturers' profit growth while speeding a push to develop battery-powered models, analysts including Jose Asumendi at JPMorgan Chase & Co. reportedly said April 3 in a report.

German automakers will probably experience an average 5 percent earnings reduction as they promote less-profitable hybrid models to meet EU emissions regulations and as prices drop for used diesel vehicles coming off lease, the analysts said. Mercedes-Benz parent Daimler AG and Volkswagen AG's Audi division, along with French rival PSA Group, are in the best position to win customers as they bring out longer range electric vehicles starting next year.

Diesel cars' popularity in Europe has been waning as Volkswagen's emissions test manipulation scandal, which emerged in late 2015, compounded concerns that pollutants from the fuel are outweighing the benefits of its lower carbon dioxide emissions. Mercedes outlined plans to accelerate a rollout of battery-powered cars by 2022, saying combustion engines would continue to be refined only for a transitional period.

"Diesel's share in Europe has been declining for years because of stricter emissions regulation making the technology more expensive," and potential restrictions on the models in cities such as Munich will probably damp sales further, Thomas Schlick, an automotive consultant at Roland Berger, told reporters. "The longer term implications for a drop in combustion-engine demand are significant for the industry as by our calculations about one-third of jobs in the auto industry are related to drive-train technology."

2. New Vehicle Emissions Testing Methods Pass German Lower House

Germany's lower house of Parliament passed a plan to change the way vehicle emissions are measured to reflect real-world conditions. The method would adopt worldwide harmonized light vehicles test procedures (WLTP) for determining a vehicle's carbon emissions, replacing the European Driving Cycle (NEDC) method. The new procedure provides a better overall picture of modern fuel consumption under real-world driving conditions, according to the German Association of the Automotive Industry.

After passing the Bundestag April 27, the Sixth Law to Change the Motor Vehicle Tax was delivered to the upper house of the German Parliament, the Bundesrat, where it will be voted on. If it passes that house, it will become law after being signed by the German president.

If enacted, beginning in September 2018, carbon dioxide emissions for all new vehicles in Germany would be measured according to the WLTP method. And Germany's motor vehicle tax, which is determined according to a vehicle's carbon emissions, would be adjusted in line with the new measurements.

The automobile industry expects that a vehicle's carbon emissions will increase by 20 percent on average due to the introduction of the new WLTP testing method, resulting in as much as a 75

percent increase in the motor vehicle tax for some diesel-engine vehicles, according to figures presented at the Bundestag during a hearing last month on the bill.

The automobile industry backed the new testing methods but not the tax changes.

“It’s unreasonable that car buyers should have to pay significantly more taxes for a vehicle that hasn’t been re-outfitted with new technology and therefore has no worse of an impact on the environment,” Klaus Bräunig, director of the German Association of the Automotive Industry, told reporters.

In December 2016, the European Commission introduced the WLTP measurement method, a brainchild of the both the European Commission and the United Nations Economic Commission for Europe. On the heels of large-scale emissions manipulations by Volkswagen, the commission said it believed the NEDC laboratory testing method used in Europe since 1996 did not properly reflect emissions caused by today’s driving conditions and new vehicle technologies.

The WLTP method still relies on laboratory tests, but takes into account greater variations in vehicle speed and fuel consumption due to technologies such as GPS navigation that weren’t factored into previous measurements.

The new testing method is viewed as a positive step toward eliminating the discrepancy between laboratory results and real-world emissions, which can differ by as much as 42 percent, environmentalists told reporters. “We’ve demanded for years that CO2 values are properly measured,” Juergen Resch, co-director of Deutsche Umwelthilfe, a German environmental nonprofit, said. “For some vehicles, WLTP will mean an improvement.”

3. EU Calls for Emissions Checks in 20% of All New Cars

The European Parliament, meeting in Strasbourg, France, approved the requirement in an amendment to proposals drafted by British Conservative MEP Daniel Dalton to revamp the EU’s type-approval system of standards for vehicles sold in different member countries.

Under the new rule, which needs ratification by the EU Council of Ministers to take effect, EU member states would have to check annually “at least 20% of the number of types (models) placed on the market” the previous year, with the vehicles selected based on “substantiated complaints,” independent test reports, remote sensing and information from testing facilities.

Clearance for the much-amended scheme comes as the Parliament approved a second report, jointly written by Dutch liberal MEP Gerban-Jan Gerbrandy and German Christian Democrat Jens Gieseke, setting out the findings and recommendations from the yearlong Committee of Inquiry into Emission Measurement in the Automotive Sector (EMIS) formed to investigate the Dieselgate scandal primarily involving Volkswagen and Audi cars. It concluded that member states had not reacted to clues of fraud and had disregarded real-world conditions in emission testing practices. The resulting recommendations have called for enhanced European oversight, hinting at the establishment of an impartial EU body to surveil vehicle type approval.

The EMIS committee’s final report asks for a more stringent set of emission measurement regulations, accompanied by a stronger EU oversight. The latter would be carried out through a dedicated EU Agency, which would ensure the compliance of car makers to the standards by overseeing vehicle approvals in member states.

In addition to the proposal for a new EU agency that could act as an independent and objective reviewer in the emission testing process, the final recommendations of the committee emphasize the pressing matter of finalization of the Real Driving Emissions test (RDE) package. The report also advises for a lower conformity factor – a mechanism that allows cars to have higher NOx emissions in the RDE tests than in the lab. Finally, it underlines the dire need for a prompt reform, for there will be no substantial change as long as the new regulations on market surveillance and type-approval are not adopted. Backed by an overwhelming majority of Members of the Parliament, the report shows some substantial political will that could jump-start reform and encourage innovation in the automotive industry.

Be that as it may, the report still needs to cross several milestones to form a firm basis for EU emissions control mechanisms. When it comes to its recommendations, the creation of an independent EU agency could indeed shift gears in the regulation of car emissions. Given a broad mandate, it could act as a neutral watchdog over national regulatory system and ensure compliance to European standards.

Under the new type-approval rules, automakers found cheating could be fined up to €30,000 (\$32,000) per registered vehicle found in breach of the rules, with the European Commission, the EU's executive branch, able to step in and enforce these controls if and when national regulators fail to act. Parliament wants greater EU oversight of type approval in the member states to prevent national regulators shielding domestic automakers from checks and sanctions.

While the European Commission originally proposed European oversight, Parliament's version of the rules takes this further, boosting the powers of a body representing national regulators called the Forum for Enforcement, but stopping short of backing creation of an independent European Vehicle Surveillance Agency.

The Parliament's version of the law insists on "a strict separation of roles and responsibilities" between national type-approval and market-surveillance authorities, which must "function independently from each other." Member states also would have to audit type-approval authorities at least every three years. And while market-surveillance authorities could employ independent organizations for tests and inspections, Parliament insists "responsibility for the results remains with the market-surveillance authority."

To break financial links between automakers and testing agencies, lawmakers insist member states fund type-approval and market surveillance either from national budgets, fees or both. But automakers no longer would pay test houses directly.

Both the law and inquiry aim to prevent a repeat of the Dieselgate scandal that saw VW, Audi and other European car companies use software engineered to produce compliant nitrogen-oxide emissions results only in laboratory tests.

However, the regulatory solutions Parliament now supports to prevent cheating, particularly the requirement that 20% of all new models undergo laboratory tests, is meeting resistance from automakers. A spokesperson for ACEA, the European automakers' association, told reporters: "The industry has grave concerns as to how this would work in practice, given the already existing shortage of testing facilities."

While ACEA appealed to Parliament before the vote, its pleas fell on deaf ears, possibly because automakers did little to ingratiate themselves to lawmakers during the inquiry, with Gerbrandy

telling a press conference after the vote: “Generally the attitude of car manufacturers has been appalling.”

The Dutch MEP criticizes the companies’ lack of apology and compensation for Dieselgate and pledges: “It’s not over yet. It’s inexcusable that the car industry is acting as it is.” Hearing an ACEA representative answer “yes” when asked whether having cars comply only in laboratory tests – and not also on “real-world” highway tests – was within the spirit of the EU type-approval law was “one of the darkest moments of the last 12 months,” Gerbrandy says.

Nevertheless, the Committee of Inquiry report is not binding and the type-approval provisions still must clear EU member states in the Council of Ministers and be passed by the EC.

The Parliament also has given the EC 18 months to report on action it has taken in response to the Committee of Inquiry’s conclusions and recommendations. Notably the Parliament concludes in its report no national authority had suspected or searched for defeat devices, and neither did the EC raise concerns despite its in-house research arm flagging suspicions.

Parliament recommends the EU implement its real-driving emissions-test program rapidly, with on-road tailpipe measurements covering a wide range of driving conditions, as well as unpredictable variations to detect illegal defeat devices.

The lawmakers also want automakers to compensate consumers affected by the Dieselgate scandal and say the EC should propose an EU-wide coordinated, collective redress system.

4. Germany Opposes Key EU Car Emission Test Reforms: Document

Germany is opposing key elements of a European Union proposal to overhaul how car engine emissions are tested for pollution, a document seen by Reuters showed, as Brussels attempts to prevent a repeat of the Volkswagen emissions scandal. The German carmaker’s admission in September 2015 that it used software to cheat U.S. diesel emission tests also highlighted the laxness of the EU’s own tests, prompting the European Commission to seek broader supervisory powers, including the ability to impose fines on carmakers.

Vehicle emissions testing and supervision is currently organized on a national rather than a pan-European level.

A German position paper seen by Reuters shows that Berlin is against allowing Brussels to fine car makers up to 30,000 euros (\$31,925) per vehicle.

EU proposals also include making governments rather than car makers pay for emissions testing. Under the Commission’s proposal, EU nations would have to fund car exhaust testing centers, although they can levy fees from car makers to do so.

Germany is in favor of keeping vehicle testing and vehicle licensing a national affair, the German position paper showed. How tests are funded should also remain a matter for national authorities, the German paper showed.

Germany instead proposes that the independence and supervisory powers of national authorities be strengthened to improve the effectiveness of spot checks on polluting cars, regardless of how these tests are financed.

It also suggests that carmakers test cars on certified test benches operated solely by vehicle approval authorities, rather than at testing facilities owned by the carmakers.

Cheating emissions tests has become harder since European regulators introduced a more stringent testing regime, known as RDE, designed to reflect everyday driving conditions and to narrow the disparity between road and laboratory test results.

Germany is not alone in stalling. An inquiry by the European Parliament has accused EU member governments including Italy, France and Spain of repeatedly delaying the adoption of stricter car emissions tests, despite evidence that this has allowed pollution to go above legal limits.

No manufacturer other than VW has been found to have installed software designed solely for the purpose of circumventing emissions tests, but regulators in Britain and Germany say that carmakers have made extensive use of a "thermal window" which allows manufacturers to turn down pollution-control systems for the sake of protecting an engine.

Brussels is becoming increasingly frustrated by what it sees as governments colluding with car makers. It launched legal cases against Germany, Britain and five other EU members in December and has promised more cases to come.

Since the VW scandal broke other European carmakers including Renault, PSA Group, Fiat Chrysler and Daimler have been drawn into investigations concerning diesel emissions.

While EU member states are still debating the EU's proposal, expecting to hammer out a final position by the end of May, the European Parliament has endorsed the Commission's bill. The legislation will then be finalized in negotiations between the EU's three law-making bodies.

5. French Prosecutor Opens Fiat Chrysler Emissions Investigation

French prosecutors have opened a formal investigation into Fiat Chrysler over allegations that the carmaker cheated in diesel emission tests, according to a judicial source said. The source told the press that the Paris prosecutor had opened the investigation on March 15, after the finance ministry's DGCCRF consumer affairs and anti-fraud body had referred the case to the courts.

A Fiat spokesman said the company took note of the investigation and reiterated that its diesel vehicles fully comply with emission regulations, as confirmed by the Italian Transport Ministry. The spokesman said the company would continue to collaborate with the authorities on all investigations and was confident the matter would be fully resolved.

Following Volkswagen's admission in 2015 of cheating on U.S. diesel emission tests, several European countries launched their own tests on vehicle emissions. They found on-road nitrogen oxide (NOx) emissions more than 10 times above regulatory limits - for some GM, Renault and Fiat Chrysler models - and widespread use of devices that reduce exhaust treatment in some conditions.

The French test program, overseen by a commission set up by Environment Minister Ségolène Royale, has so far led to four carmakers - Volkswagen, Renault, Fiat Chrysler and PSA Group - being referred to prosecutors.

Fiat Chrysler vehicles were among those that recorded the highest NOx emissions under non-standard testing regimes designed to detect banned engine software cheats.

6. Renault Insists Its Cars Don't Cheat as Emissions Doubts Linger

Renault SA insisted its cars meet emissions rules after French newspaper Liberation reported that the country's economic-fraud watchdog found the vehicle maker had misled customers about how much its models pollute.

Renault didn't breach European or national vehicle standards and its models "are not equipped with cheating software affecting anti-pollution systems," the French manufacturer said in a statement. "Renault will prove its compliance with the regulations and reserves its explanations for the judges in charge of investigating this case." A spokesman declined to comment further.

Paris prosecutors opened a preliminary probe into Renault's vehicle emissions in January, on allegations that its cars are a pollution hazard. Liberation reported March 15 that the Economy Ministry's fraud office, known as DGCCRF, said in a confidential report to prosecutors that the carmaker aimed to skew antipollution test results. As many as 900,000 cars with emissions breaching standards could have been sold, according to the newspaper. Renault called the newspaper article "unbalanced," and said it hadn't seen the investigators' report.

Authorities across Europe are focusing attention on whether technology enabling emissions controls to switch off at certain temperatures violates legal conditions that allow the shutdowns as an engine-protection measure. Under French law, carmakers found to have cheated on the vehicle-certification process can be fined as much as 10 percent of their average revenue for the three years prior to the incident. Executives risk up to two years in jail and 300,000 euros in fines.

French prosecutors have also opened preliminary investigations into PSA Group and Volkswagen, and as noted above Fiat Chrysler.

Liberation cited the DGCCRF report as accusing Renault of using fraudulent strategies for more than seven years. The worst-performing vehicles in terms of carbon-dioxide emissions were the main brand's Captur small sport utility vehicle and Clio IV hatchback, the newspaper said. In emails found by the DGCCRF, executives at the company acknowledged that antipollution systems were deactivated on the road but functioned during emissions tests, Liberation said, citing the report.

The fraud office's investigation is partly based on the findings of a committee created by the French Ministry of Environment to test 86 cars from various manufacturers following the Volkswagen revelations. The committee determined that Renault's antipollution systems only activate when outside temperatures are in a range of 17 to 35 degrees Celsius (63 to 95 degrees Fahrenheit), though it didn't have the means to analyze the software used, members have said in interviews in recent months.

7. VW, Audi Offices Raided By Prosecutors in Diesel Probe

German prosecutors have raided the headquarters of Volkswagen Group and its Audi unit as part of investigations into the company's diesel-rigging scandal. VW said on Wednesday that prosecutors were searching offices at its headquarters in Wolfsburg, Germany.

The search coincided with a raid by prosecutors at Audi's headquarters in Ingolstadt, Germany, and offices at its Neckarsulm factory. Audi said it is fully cooperating with the authorities leading the searches.

Munich prosecutors said their investigation was in connection with the sale of around 80,000 Audi diesel vehicles in the United States between 2009 and 2015 on suspicion that they were fitted with devices to cheat on emissions tests. Sales in European markets are not part of the investigation, the prosecutor's office said in a statement.

Audi last month said it had fired four engineers from its diesel division for "gross breach of duty."

According to Audi, officials started searches of its offices in Ingolstadt and Neckarsulm, where the carmaker employs about a combined 60,000 people, around 8 a.m. local time. The searches at Ingolstadt were conducted by about 70 officials, a person familiar with the matter said. Offices and apartments are being searched but not the private home of CEO Rupert Stadler, the person said.

The raids mark a fresh blow to VW Group's efforts to overcome the diesel-engine manipulation scandal that erupted in September 2015. Protecting profit at Audi, its biggest earnings contributor, is key for VW Group as it spends money on fixing as many as 11 million rigged diesel cars while maintaining financial firepower to develop electric models and new digital services.

The prosecutors' probe also adds to Audi's woes as it has been losing ground to Daimler's Mercedes-Benz, which replaced BMW's namesake brand as the world's bestselling premium-car maker last year.

8. Court Ruling Brings Munich Diesel Ban Closer

The Bavarian state authorities must now draft a ban on diesel vehicles in Munich after a ruling by the Bavarian Administrative Court. The court upheld an earlier ruling from July 2016 which had ordered the regional government to adopt a clean air plan to bring down illegal levels of nitrogen dioxide (NO₂) pollution in Munich. The judgement was made on 17 February but details were published only recently.

Under threat of fines if it does not comply, the ruling requires Bavaria to issue detailed plans for a ban by the end of the year, including specific roads and times at which it would be applied. Prior to this it must draw up a complete list of places where NO₂ limits are currently exceeded and update its plan for cleaner air.

Further court proceedings would be required to decide whether a ban would actually have to be put in place.

Whether German states can take such action without federal government action remains uncertain. A ruling from the Federal Administrative Court on a separate air quality case in Dusseldorf is expected to clarify matters.

However, the court decision "will set the tone" for other air quality legal proceedings in the country, said environmental law group ClientEarth, which brought the Bavarian case alongside NGO Deutsche Umwelthilfe.

In 2015, the two groups started legal proceedings against a total of four German states over alleged breaches of air quality standards in the EU Ambient Air Quality Directive (AAQD). Cases concerning pollution in eight other cities, including Frankfurt, Stuttgart and Cologne, are still underway.

Since 2010, the AAQD requires member states to keep NO₂ levels below an annual mean of 40 µg/m³ and a 1-hour peak of 200 µg/m³, which can be exceeded no more than 18 times per year. Breaches of these limits in cities have been linked to heavy traffic, with EU researchers urging EU countries to respond with diesel bans.

The German federal government is simultaneously under threat of court action by the European Commission, which last month gave it until April to end “repeated, persistent breaches” of NO₂ standards in 28 urban areas, including Munich.

9. Brussels Mulls Legal Action Against E-Mobility Laggards

The European Commission could launch legal proceedings against member states that fail to produce plans to bolster charging infrastructure for electric cars, an official has warned. Peter Handley, the Commission’s head of resource efficiency, confirmed the possibility of legal action over slow implementation of the EU’s Alternative Fuels Infrastructure (AFI) Directive at an event at the European Parliament.

Adopted in 2014, the law required member states to send national plans to the Commission by November 2016 with targets to boost the deployment of charging points for electric vehicles (EV) and of refueling stations for liquefied and compressed natural gas.

However, the Commission says plans have only been submitted by 16 countries to date – including Germany, France and Belgium – and only a handful have been made public. The UK and Poland are among those that have failed to send in a plan.

The German plan foresees one million EVs by 2020 and pledges 43,000 charging points by that year, up from around 5,800 in 2015. Its fleet numbered 55,000 in 2016, according to analysts.

France’s plan commits the country to 2.4 million EVs by 2023 and 7 million charging points by 2030, up from around 14,000 in 2016.

The Platform for Electro-Mobility urged member states to scale up electric transport infrastructure to combat air pollution while boosting jobs and curbing spending on fossil fuels. The Platform, which brings together industry associations, companies and NGOs, called on countries to promote integration between transport modes and to coordinate financial incentives at EU level. It also urged EU funding for e-mobility to be beefed up from the Connecting Europe Facility.

Last November, the Commission proposed to revise the EPBD to require charging points in one in ten parking spaces in certain buildings. At the time, campaigners said member states’ lobbying had weakened the initial draft rules, which had covered all constructions.

10. London, Paris Steer Drivers Toward Low-Emission Cars

London has unveiled plans for a ‘cleaner vehicle checker’ aimed at helping motorists avoid the most polluting diesel and petrol cars and vans. The website to “clearly and more accurately detail” emissions is a response to the recent dieselgate scandal in which car manufacturers were found

to have been cheating in lab-based NOx emissions tests. It is due to go online in the autumn, before an emissions surcharge is applied in October to vehicles in a zone currently subject to a congestion charge.

“By having ‘on the road’ testing I believe we will help Londoners make an informed choice and incentivize manufacturers to build cleaner vehicles sooner,” said mayor Sadiq Khan.

The scheme will use ‘real-world’ emissions testing by UK-based Emissions Analytics, which provides portable emissions measurement systems (PEMS), and the International Council of Clean Transportation (ICCT).

Khan’s Parisian counterpart Anne Hidalgo announced a similar car-scoring scheme, and the two mayors said in a statement that they hoped to inspire others to follow. “Several other major cities, including Seoul, Moscow, Mexico City, Milan, Oslo and Tokyo have already committed to develop a global scoring system,” they said.

Khan and Hidalgo also met carmakers to discuss “the need for tougher Euro Standard testing and a switch to zero and ultra-low emission vehicles”, the London mayor’s office said.

Hidalgo, who chairs the C40 group of cities around the world who have committed to tackling climate change, called the announcement a “wake-up call” to car companies. “For too long, some vehicle manufacturers have been able to hide behind inconsistent regulation and consumer uncertainty about the damage their cars are causing,” Hidalgo said.

Under current Euro 6 standards, new cars and vans are prohibited from emitting more than 80 mg/km of NOx. There is no per-vehicle cap on CO2 emissions but an overall EU target of an average of 95 g/km by 2021.

11. Metropolitan Barcelona to Ban Dirtiest Vehicles

Older cars and vans will be banned from metropolitan Barcelona from 2019 as part of an unprecedented joint air-quality plan agreed by Catalan authorities. The Catalan government and Barcelona metropolitan, provincial and city administrations agreed to cut pollutant emission levels, particularly those of NO2, by 10% within five years and by 30% within 15 years.

The scheme goes further than those introduced in other European cities like Madrid, Paris and Athens because it moves beyond the city center to cover a wide area – the ban will be imposed in Barcelona and 39 surrounding municipalities, affecting 4.3 million of the region’s five million residents. It is a joint venture between local and regional governments and other metropolitan bodies, showing a level of support across the region that has not been seen in other cities.

According to the latest data from the European Environment Agency, metropolitan Barcelona has annual mean NO2 levels in excess of the EU’s annual limit value.

The measure will prevent around 106,000 cars and 22,000 vans registered prior to the Euro 1 standard from entering 40 municipalities on weekdays. This benefits 4.3 million people in these municipalities directly and the populations of a further 34 surrounding municipalities indirectly.

The same restriction will apply from December this year during episodes of poor air quality. Individual municipalities will be at liberty to apply stricter measures as required by local air quality conditions.

End-of-life certificates for diesel vehicles built before 2005 and petrol vehicles built before 1996 will entitle owners to three years of free public transport within the metropolitan area. Incentives will be given for the purchase of low-emission vehicles.

The authorities will also study the creation of both a congestion charge in the metropolitan area and a surcharge on road fuels in order to finance the reduction in the price of public transport. Conclusions will be published before the end of the year.

12. Germany Includes Environmental Incentives in New Highway-Use Fee

German lawmakers passed a long-contested legislative package to establish fees for motorists using the country's highways, including incentives to promote the use of electric and low-emission cars. The environmental sweetener is meant to get the European Union's agreement for the new pay-as-you-go system, which was long believed to violate EU law.

The measures passed March 31 by the upper house of Parliament, the Bundesrat, will set long and short-term "tolls" for foreign drivers while creating an across-the-board annual fee for German drivers. However, electric vehicles will be excluded from the fees, while drivers of vehicles meeting the latest Euro-6 emissions standards will pay less than the set rates for standard vehicles.

The legislative package involves two bills: an amendment to the Infrastructure Contribution Law, which reimagines previously considered tolls for domestic and foreign passenger vehicles based on their size and environmental class; and an amendment to the Transportation Tax, which provides a series of tax cuts to domestic drivers, especially of environmentally friendly vehicles, in order to partly compensate them for the expense of the new fee.

The package, which had been passed March 24 in the Bundestag, the lower house, is expected to be signed into law by the German president, and will take effect beginning in 2019.

The idea of implementing a comprehensive road toll on passenger vehicles in Germany has received much backlash over the past few years from other EU member states, despite the fact that roughly half already have some form of road toll on passenger vehicles based on vignettes (a time-based system) or distance traveled, according to data from the European Commission.

According to the current legislation, all German drivers will pay a yearly flat-rate for their personal vehicles, determined by the vehicle's size and environmental class. Passenger vehicles of the Euro-6 class, the highest emissions standard currently available for gasoline and diesel vehicles, will pay the lowest yearly fee, while electric vehicles will be exempt from paying a toll.

Also, the current proposal establishes a six-tiered price determination for tolls of one year, 10 days and two months, based on the same emissions and size guidelines in place for domestic drivers. For the most environmentally friendly cars, a short-term vignette of 10 days will cost 2.50 euros (\$2.67), as opposed to 5 euros (\$5.34), as was proposed in the original version of the law, according to data from the European Commission.

German drivers will still receive a reduction in their standard vehicle tax, but the reduction will be determined on a sliding scale based on the vehicle's emissions class.

But as many as 11 neighboring EU countries have threatened to sue Germany should the bill become law. Those states, as well as some members of Germany's Parliament, still believe the bill violates European law because of disparate treatment of foreign drivers.

13. MEP: EU Needs Truck CO2 Limits Sooner

A recently published draft recommendation by Damiano Zoffoli, a member of the center-left S&D group, proposes specific changes to the vaguely-worded EU low-emission mobility strategy, tabled by the Commission last July. The strategy promised action on the CO2 emissions of trucks, lorries and buses which, unlike cars and vans, are currently not regulated with EU standards. However, the Commission did not set a timetable for adopting these.

Zoffoli believes an HDV emissions monitoring, reporting and verification (MRV) scheme should be approved before the end of 2017, with targets for 2025 proposed in 2018. Zero-emission buses could be promoted in cities through mandatory public procurement targets, he said.

The Commission's MRV proposal is expected by May 2017 as is the adoption by member state experts of a simulator known as VECTO. This will be used to set reference emission values in preparation of CO2 targets.

The targets themselves are planned for around Easter 2018. These are likely to be differentiated for various categories of vehicles based on criteria such as HDV tonnage.

EU CO2 targets already exist for cars (95 g/km by 2021) and vans (147 g/km by 2020). The Commission is set to propose new standards for 2025 by November this year and should, according to Zoffoli, set them at a range of 68-78 g/km range for cars, backed by the Parliament in 2015, and 105-120 g/km for vans.

On transport fuels, the MEP urged the Commission to phase down crop-based biofuels by 2030 and prevent member states from counting them towards their climate targets under the Effort Sharing Regulation. Advanced biofuels should be further promoted, as should electric vehicles, Zoffoli added. The Commission proposed to cap first generation biofuels at 3.8% and promote advanced biofuels instead under the revised Renewable Energy Directive.

The draft recommendation will feed into the work of the transport committee on the Parliament's position on the EU strategy, which does not directly influence any legislation. The lead committee is scheduled to vote on a draft position, yet to be published, on 25 September.

14. Former US Climate Negotiator Sees EU Role Increasing

The EU's role in maintaining ambition in the Paris climate agreement is set to rise as Washington rolls back environmental protection, the former US climate envoy Todd Stern said recently. Referring to the balance achieved in the COP21 compromise, in an apparent swipe at the new Trump administration, Stern spoke of "those who never liked that balance very much and would be only too happy to pull back from it".

"The US as a driving force in the international context is not going to be there in the same way, and obviously that makes the EU contribution more important than ever," Stern said at a hearing of the European Parliament's environment committee.

Nevertheless, Stern said he was “cautiously optimistic” that the Trump administration would not pull out of the Paris agreement entirely, with a large part of the US business community, including some fossil fuel firms, in favor of remaining.

“The downsides to leaving are so large both in respect to climate change, but also collateral damage the US would incur if it walks away,” Stern said.

However, he warned that, after the postponement of a high level meeting in Washington last week to discuss the COP21 agreement, the US position remained an “open question”.

15. EU Court Reprimands Bulgaria Over Air Pollution

Europe's highest court said Bulgaria had breached limits for hazardous air pollutants, a ruling environmental groups said would help in their efforts to force countries to take action over poor air quality.

The European Court of Justice said higher concentrations of particulate matter recorded at several sites in Bulgaria from 2007 to 2014 showed severe breaches of EU clean air quality rules.

There were no fines attached to the ruling.

Bulgaria's Environment Ministry said in a statement the use of wood and coal for heating as well as the large number of old cars caused the air pollution in the EU's poorest member state and said it was working with institutions to improve the situation.

Apart from Bulgaria, the European Union executive has begun legal action against 15 countries over breaches of air quality standards, including particulate matter. The ECJ is currently reviewing a case against Poland.

The ruling, the first time the court has endorsed EU air pollution rules, was seized upon by campaigners as a precedent for other cases.

"The Court of Justice has opened the door for major progress in Europe's fight for clean air and clarified that people's health comes first," said Ugo Taddei, a lawyer for ClientEarth.

The European Commission has estimated premature deaths attributable to air pollution in 2013 at 13,700 in Bulgaria and around 400,000 in the EU as a whole.

16. France Champions Emissions Cuts in the Mediterranean

A presentation by a French government official reveals the country is pushing to include the Mediterranean as an emission control area (ECA) under the MARPOL convention of the International Maritime Organization (IMO), which deals with pollution from shipping. The document follows French lobbying on the issue at the EU Council's preparatory bodies and at a meeting of the Union for the Mediterranean earlier in March, according to a source close to the process.

If France decides to formally propose the Mediterranean ECA at the IMO, the country will need to choose which pollutants – out of SO_x, NO_x and particulate matter – should be restricted.

If included, SO_x in marine fuels would be limited to 0.1% in the southern European sea, down from the current EU requirement of 3.5%, which will fall to 0.5% in 2020. Engine NO_x emissions would need to be kept below 3.4 g/kWh, while particulate matter would not face specific limits but would be mitigated through high-quality fuel oils and exhaust gas scrubbers.

ECAs for SO_x already exist in the Baltic and the North Sea, with plans to also restrict NO_x emissions in these areas in the future.

If France wants an eventual ECA to cover the whole Mediterranean, its proposal to the IMO should be backed by and tabled alongside countries in the region.

Italy has already implicitly supported the 0.1% SO_x cap by adopting a decree in 2014 setting such a limit in territorial waters by 2020, with an earlier 2018 deadline for the Adriatic and Ionian Sea. But this will only enter into force provided that fellow Mediterranean states pass “similar or lower restrictions”.

According to Eurostat, the Mediterranean was the busiest of all EU seas in terms of the short-sea shipping of goods in 2015, while industry figures place cruise passengers in the area at over 25 million a year. In January, EU-funded analysis identified it as the EU’s most problematic marine ecosystem, with 32% of its habitats under threat from pollution and climate change.

17. Italy Readies Answer to EU Urban Air Pollution Warning

Italy is working to comprehensively improve urban air quality after European Union officials warned of consistently poor air quality levels in 12 major Italian cities, officials from the country’s Ministry of Environment said on March 9th.

Last month’s warning from the European Commission said that Italy, along with France, Germany, Spain, and the United Kingdom, was failing to comply with limits for particulate matter and nitrogen dioxide as stated in EU Directive 2008/50/EC. If a country fails to take steps to remedy such a situation it could face sanctions equal to the estimated costs of improving the situation, plus daily fines until the problems are resolved.

According to the warning published last month, particulate matter in the air was consistently above the EU threshold of 50 grams per cubic meter in 12 urban areas, including the country’s largest cities: Rome, Milan, Naples, and Turin. Levels of nitrogen dioxide were also at unsafe levels during the test period in November and December 2015.

Vehicle traffic, heating, and industrial production are the major sources of particulate matter and nitrogen dioxide.

Some of the municipal governments implicated have started to take unilateral action to improve air quality. But in a statement, Italy’s Ministry of Environment said it will soon unveil a “comprehensive plan” that will confront the problem and help avoid EU sanctions. The plan will reportedly include expanded limited traffic areas, incentives for the use of low-emissions vehicles, improvements to public transport systems, a phase out of outdated heating systems, and stricter enforcement of industrial pollution standards.

The ministry will also seek to foster and coordinate cooperation between municipal, local, and regional government entities. The full plan will be unveiled in early April, the spokesman told the press.

18. EU Laws on Ozone Precursors from Petrol ‘Fit For Purpose’

EU laws on volatile organic compound (VOC) emissions from the petrol sector have yielded environmental benefits and do not need stricter limits, according to the European Commission.

Changes to the 1994 Directive on VOC emissions from petrol storage and distribution and its 2009 counterpart on petrol vapor recovery in service stations are currently “not justified” as both laws remain fit for purpose, the Commission’s policy review concluded.

The results, shared recently with the member states, show that the directives have helped these activities curb their release of VOCs by 70% between 1990 and 2012. The emissions can trigger the formation of health-damaging tropospheric ozone.

Some 57% of all VOC cuts since 1995 can be solely attributed to the laws, the Commission said, with the rest largely driven by changes in fuel consumption.

The directives have resulted in health and environmental gains ranging from €92 million to €479 million and have been implemented by all member states “without significant problems”, the Commission said.

However, rules for VOC vapor collection in road tankers remain an issue in Finland and Sweden, where infrastructure needs to be proofed against colder weather, it added.

Some member states polled in the review expressed concerns that the EU’s hourly 35 g/Nm³ limit for vapor concentration in recovery units across petrol-loading terminals, set in 1994, has fallen behind the 10 g/Nm³ limit set under the UN Gothenburg Protocol in 2009.

Austria and Sweden, for example, have adopted the latter limit in their national laws, while Germany has chosen an even stricter 0.05-1.7 g/Nm³ cap.

However, the Commission argued that the Gothenburg Protocol’s limit is not necessarily stricter as it is set according to more lenient baselines and offers more flexibility on grounds of economic feasibility than the EU limit.

EU VOC emissions, which are generally regulated under the new National Emission Ceilings Directive, were found by Eurostat to drop by 60%, from 17 to 6.7 million tons, between 1990 and 2014. However, the ground-level ozone they help generate continues to be an issue for 16 member states, where concentrations breach EU levels, according to the European Environment Agency.

19. Volkswagen’s Emissions Fraud May Affect Mortality Rate in Europe

From 2008 to 2015, Volkswagen sold 11 million diesel cars worldwide rigged with software that cheated emissions tests by running the full emissions-control system only if the car sensed a test was underway. Otherwise, the cars operated without emissions control, releasing more than four times the levels of nitrogen oxides, a class of harmful air pollutants, permitted by European regulation.

Now, scientists at the Massachusetts Institute of Technology estimate that 1,200 people in Europe will die prematurely, each losing as much as a decade of life, because of excess emissions from 2.6 million affected cars sold just in Germany.

To arrive at their estimates, Guillaume Chossière, a research assistant at M.I.T. and lead author of the study and his colleagues calculated excess levels of NOx within Germany by combining data on Volkswagen's sales, driving behavior and on-road measurements of Volkswagen cars' emissions.

Then the researchers simulated how NOx emissions might travel over long distances. Based on how much extra NOx people were breathing across Europe, the researchers estimated increased mortality because of cardiopulmonary and respiratory diseases.

About 500 early deaths will take place in Germany, the researchers reported, while 700 will occur in neighboring countries like Poland, France and the Czech Republic.

The scientists also predicted that by recalling and fixing these cars to meet European emissions limits by the end of 2017, Volkswagen could avert 2,600 additional premature deaths and save 4.1 billion euros in health costs.

20. Sweden Under Fire Over Planned Aviation Levy

A Swedish climate levy on air passengers being considered by the government would hurt the economy and interfere with international action on aviation emissions, the aviation industry has warned.

The Swedish government has been discussing a levy since 2015. An expert commission it appointed issued detailed proposals last November; a consultation period on them ended recently. A government spokesperson told reporters that the levy could be included in this year's autumn budget.

Under the commission's proposals the levy could be introduced from January 2018, set at €8-45 per passenger on departing flights, and yielding around SEK1.7 billion (€187m) in revenues. Passenger levies at similar scale are already in force in other countries, such as Germany, it noted.

This week the International Air Transport Association (IATA) publicly criticized the proposal levy, which it said would cost Sweden 7,500 jobs, and SEK5 billion in lost economic growth, while cutting emissions by only "48 hours' worth" of road transport emissions.

Rafael Schwartzman, IATA's vice president for Europe, added that the measure could in addition "alienate" global efforts to counter climate change impacts of the aviation industry led by the International Civil Aviation Organization (ICAO).

ICAO members adopted a global carbon offsetting scheme for aviation last October.

There seems to be little disagreement over the direct environmental effects of the proposed levy since the Swedish commission forecast a range of only 0.08-0.2 million tons of CO2-equivalent. However, it predicted only a "minor" impact on jobs and the economy, and did not see a conflict with the new ICAO mechanism, suggesting that the national measure could be adjusted once credit pricing under the global scheme is introduced.

Whether UN measures are enough to tackle aviation and shipping emissions since their last-minute exclusion from the Paris Agreement has been controversial, with lobbies from the former and latter sector rejecting regional coverage through the EU's Emission Trading System.

21. MEP Urges Improved Global Deal on Aviation Emissions

The EU should accept intercontinental flights cannot be brought into its emissions trading system (ETS) and push for a better global scheme, MEP Peter Liese said recently. The International Civil Aviation Organization agreed in October on a carbon offsetting scheme for global aviation (CORSIA). In response the European Commission proposed to continue an exemption for long-haul flights from the ETS in February.

The EPP-group MEP questioned the ICAO's claim that the CORSIA was a recipe for carbon-neutral growth, saying emissions would continue to grow under the scheme. "We need to work to improve the CORSIA, to close the loopholes and get more clarity ... not just window dressing," Liese said.

With the technical details of the scheme subject to ongoing talks, it is important to ensure that only genuine carbon offsetting is allowed, said Kelsey Perlman of the pressure group Carbon Market Watch. There is a global glut of unwanted emissions reduction certificates currently trading at around 30 cents a ton, she added.

The NGO warned that indefinitely excluding intercontinental flights from the ETS, a measure first introduced in 2013 as worldwide anger sparked fears of an imminent trade war, would increase the surplus in the EU ETS by 260 million tons.

However, intra-EU flights would remain subject to the EU ETS under the proposal, and Liese called for the ratio of free emissions allowances handed to airlines to be reduced from 85% to 50%. But asking them to pay for 100% of their emissions in Europe risked forcing airlines to start using hubs outside the EU, he added.

The Commission's proposal calls for a review of the decision when the ICAO has finalized its design for the CORSIA system.

"We should decide in two to three years what to do [about intercontinental flights], Liese said, adding that "the world may look very different [then]". A Commission official urged MEPs to agree on the legislation quickly, saying that "stakes are high" as a failure to do so before the next compliance cycle in April 2018 would mean an automatic reversion to the full scope of the ETS for all flights.

22. EU Consumer Agencies to Join Forces to Press VW Over Dieselgate Scandal

European national consumer agencies plan joint action to seek compensation for Volkswagen drivers who bought emissions-cheating diesel cars on the strength of their green credentials, the European Commission said. At a meeting of the EU's 28 consumer protection authorities in Brussels, Dutch officials agreed to prepare "joint enforcement action" against the German carmaker, a spokesman for Europe's Justice Commissioner Vera Jourova said.

"Commissioner Jourova encouraged the authorities to use all means at their disposal to protect European consumers," spokesman Christian Wigand said.

VW has admitted to U.S. regulators that it installed illicit software in as many as 11 million diesel vehicles sold worldwide -- the majority of them in Europe.

Jourova and other EU regulators have repeatedly voiced frustration over VW's failure to compensate customers in Europe, where different legal rules weaken the chances of owners winning a pay out, while the company offers cash payouts to U.S. owners.

While powers of enforcement in the EU lie with national authorities, EU regulators are pushing members to end what they see as government collusion with powerful carmakers to shield them from penalties.

Despite VW's admission of wrongdoing in the United States, it says it has not broken the law in Europe and sees no need to compensate consumers there. The carmaker has committed to fixing all affected vehicles by autumn.

The European Commission hopes national authorities agree that VW has breached two sets of rules that apply across the 28-nation bloc and push for corrective measures from VW, including guarantees that engine refits work and potential compensation if affected vehicles lose value.

The 28 are not required to come to a unanimous agreement for joint action. For those who wish to act, the next step would be a joint letter to VW - which may influence current consumer court cases against the German carmaker.

23. Dirty Powerplants Undercut Dutch Electric Car Leadership

Dutch cities have helped to secure Europe's global leadership in electric vehicles (EVs), but the country is struggling to decarbonize the power these use, according to a new analysis. Almost a third of worldwide EV sales in 2015 was concentrated in 14 cities, eight of which were European, according to a report published recently by ICCT.

Oslo, where EVs made up 27% of all sold vehicles, topped ICCT's ranking, followed by Utrecht (15%), Shanghai (11%), Shenzhen (10%) and Amsterdam (10%). EU capitals that featured in the ranking include Copenhagen and Stockholm (3.7% in each), Paris (1.8%) and London (1.4%), but they placed far behind the leaders.

The researchers praised the Netherlands for its subsidy schemes for EVs, efforts on the electrification of public transport and taxis and for providing charging points in Utrecht and Amsterdam, which outnumbered those in London and Paris by a factor of five to seven in 2015.

However, the ICCT added that the EVs sold in the Dutch market in 2015 generated only 30-40% less CO2 than comparable vehicles with combustion engines. By contrast, EVs in Norway, France and Sweden were 90% cleaner, while those in the UK and Denmark also managed a 50-60% improvement.

Although the Netherlands has made slower progress with renewables, the gap will narrow as the country catches up, Peter Mock, managing director of ICCT Europe, told reporters. According to the latest figures from the European Environment Agency, the Netherlands only had a 5.8% renewable energy share in 2015 – far below Sweden's 54% and France's 14%.

The ICCT anticipated progress with EVs in London and Paris, the EU's two largest metropolitan areas, both of which suffer from poor air quality worsened by diesel cars. In London, the government is funding the deployment of 250,000 ultra-low emission vehicles by 2025, while Paris has put in place clean transportation subsidies and electrification schemes, the report noted.

NORTH AMERICA

24. EPA Chief Pruitt Says CO₂ Is Not a Primary Contributor to Global Warming

Environmental Protection Agency Administrator Scott Pruitt said he does not believe carbon dioxide is a primary contributor to global warming. "I think that measuring with precision human activity on the climate is something very challenging to do and there's tremendous disagreement about the degree of impact, so no, I would not agree that it's a primary contributor to the global warming that we see," he said in a TV interview. "But we don't know that yet. ... We need to continue the debate and continue the review and the analysis."

The statement contradicts the public stance of the agency Pruitt leads. The EPA's webpage on the causes of climate change states, "Carbon dioxide is the primary greenhouse gas that is contributing to recent climate change."

Pruitt's view is also at odds with the opinion of NASA and the National Oceanic and Atmospheric Administration. "The planet's average surface temperature has risen about 2.0 degrees Fahrenheit (1.1 degrees Celsius) since the late 19th century, a change driven largely by increased carbon dioxide and other human-made emissions into the atmosphere," NASA and NOAA said in January.

Sen. Brian Schatz, D-Hawaii, co-chair of the Senate Climate Action Task Force, slammed Pruitt for his comments, calling his views "extreme" and "irresponsible." "Anyone who denies over a century's worth of established science and basic facts is unqualified to be the administrator of the EPA. Now more than ever, the Senate needs to stand up to Scott Pruitt and his dangerous views," he said in a statement.

Schatz said lawmakers would hold Pruitt accountable through the appropriations process and oversight of the EPA, and by making sure he follows the Clean Air Act and Clean Water Act.

Pruitt previously served as Oklahoma attorney general, where he rose to prominence as a leader in coordinated efforts by Republican attorneys general to challenge President Barack Obama's regulatory agenda. He sued or took part in legal actions against the EPA 14 times.

Democrats and environmentalists opposed Pruitt's nomination to lead the EPA due to his close relationship with fossil fuel companies and his history of casting doubt on climate change. Conservatives and the energy industry have cheered his efforts to push back on what they view as over-regulation under Obama.

Pruitt maintained it's possible to be pro-growth, pro-jobs and pro-environment all at once. "This idea that if you're pro-environment you're anti-energy is just something we've got to change so that attitude is something we're working on very much," he said.

Asked whether he would seek to roll back the EPA's 2009 determination that carbon dioxide and five other greenhouse gases are a danger to public health, Pruitt suggested he would like to see

Congress take up the issue. "I think all those things need to be addressed as we go forward but not least of which is the response by the legislative branch with respect to the issue," he said.

The Supreme Court ruled in 2007 that the EPA has the authority to regulate heat-trapping gases from automobiles. In 2014, it determined the agency could also regulate some sources of greenhouse gases, such as power plants.

Pruitt also called the Paris Agreement, an international accord aimed at mitigating the impacts of climate change, "a bad deal." He said it puts the United States on a different playing field than developing countries like China and India. The United States has vowed to reduce its greenhouse gas emissions to 26 to 28 percent below 2005 levels by 2025. In comparison, China has committed to reach peak carbon emissions levels by 2030, but will try to reach that point sooner.

"I happen to think the Paris accord, the Paris treaty, or the Paris Agreement, if you will, should have been treated as a treaty, should have gone through senate confirmation. That's a concern," he said.

The Paris Agreement was negotiated by the State Department, and future adherence to U.S. commitments made under Obama will be guided by Secretary of State Rex Tillerson. Tillerson, the former chief of Exxon Mobil, said during his Senate confirmation hearing that he believes the United States should remain a party to the Paris Agreement.

25. EPA Announces Intent to Reopen Vehicle GHG Decision

EPA has released a formal notice announcing that it intends to issue a new determination on whether to retain or change its greenhouse gas standards for light-duty vehicles, effectively reversing the 11th-hour decision by the Obama EPA to keep the current rules for model years (MY) 2022-2025.

The agency, in a pre-publication Federal Register notice released March 15, justifies the move by arguing that the Obama EPA did not consult the National Highway Traffic Safety Administration (NHTSA) when it made the January determination to retain its GHG standards under the Clean Air Act. "NHTSA's views with regard to what [corporate average fuel economy (CAFE)] standards would be maximum feasible for those model years is an appropriate consideration in EPA's determining what GHG standards would be appropriate under the" air law, says the notice, which was signed by EPA Administrator Scott Pruitt and Transportation Secretary Elaine Chao.

The notice adds: "However, NHTSA has not yet considered what CAFE standards would be the maximum feasible standards for MYs 2022-2025. Accordingly, EPA has concluded that it is appropriate to reconsider its Final Determination in order to allow additional consultation and coordination with NHTSA in support of a national harmonized program."

The notice says NHTSA will "engage with stakeholders" as it develops a new rulemaking to set CAFE standards for MY 2022-2025. A senior White House official previewed the move in a March 14 press call, noting that NHTSA "is going to be . . . much more of a partner than they were with the previous EPA."

The move gives automakers the chance to argue that the vehicle GHG and fuel economy rules should be weakened, though supporters of the rules note that such an effort could face technical, legal and strategic hurdles. For example, California has special air act authority to enforce

separate GHG vehicle limits, and it has vowed to press forward with ambitious measures to address climate change. (See next story.)

26. Senate Democrats Vow to Defend Obama's Auto Efficiency Rules

Environmental groups and Senate Democrats are pushing back on possible moves by the Trump administration to weaken federal auto efficiency standards.

Senate Minority Leader Chuck Schumer joined 11 other Senate Democrats in signing a letter urging EPA Administrator Scott Pruitt to uphold agency regulations through 2025 that would slash vehicle greenhouse gas emissions, saying the rules are economically and technically achievable.

"Donald Trump is waging a war on the environment and he wants EPA Administrator Scott Pruitt to make strong fuel economy standards his newest victim," Senator Edward Markey, a Massachusetts Democrat, said in conference call with reporters.

If the administration then moves to weaken the rules, which aim to boost fuel economy to an average fleet rate of more than 50 miles per gallon by 2025, environmental groups vowed a legal challenge. Likewise, they say they will oppose a move reported by some news media that the Trump administration is considering revoking California's right to set its own auto-efficiency standards.

"If the administration teams up with the auto companies to weaken these standards," Dan Becker, director of the Safe Climate Campaign, said during the call, "the environmental community and, I presume, the state of California as well will sue."

Automakers have lobbied Trump and Pruitt to reopen the review of the standards, arguing the rules are overly ambitious given low gasoline prices and other market factors.

"The auto industry is crying crocodile tears about their inability to meet these standards," Markey said. "They know they can meet them, they have been meeting them. They don't want to meet them. That's what this is all about."

Union of Concerned Scientists President Ken Kimmell warned that challenging California's waiver authority could be difficult and would lead to protracted litigation. "There is no precedent for revoking a waiver that's already been granted as it has in this case, and I believe California and the other states would have an extremely strong case in court that it is arbitrary to take away that authority," Kimmell said.

27. California Approves GHG Rules In Spite of Trump Reversal

California approved light-vehicle pollution targets that the Trump administration has put on hold, setting up a potential face-off between federal and state regulators.

California Air Resources Board members criticized the auto industry for asking federal regulators to reconsider light-vehicle emissions targets for 2022-25 established by the Obama White House in 2012. The board then finalized vehicle pollution rules for the state, set a mandate for zero-emission sales over the same time period, and ordered its staff to start work on emissions targets for after 2025.

California regulators have a long history of independent efforts to reduce tailpipe pollution from cars and light trucks, and Friday's move signals the state is prepared to fight the Trump administration. "We're going to press on," Mary Nichols, head of the California Air Resources Board, said during a meeting of the agency.

The state's rules on greenhouse gas emissions for light vehicles were written in cooperation with the Obama administration and created a single national standard for new vehicles through 2025.

Targets for the share of California light-vehicle sales that need to be powered by battery, fuel cell or plug-in hybrid powertrains are set for 15 percent by 2025, from about 3 percent today.

CARB's vote to continue down the path of stricter emissions rules could lead to a showdown with Trump, who described environmental regulations in the U.S. as "out of control" when meeting the CEOs of General Motors Co., Ford Motor Co. and Fiat Chrysler Automobiles NV in January.

Nichols chastised the industry for seeking the review of federal standards that Trump agreed to reopen earlier this month. "What were you thinking when you threw yourselves on the mercy of the Trump administration to solve your problems?" Nichols said during the hearing. "What did you mean when you said you don't want to question the overall thrust of the standards? Why do another review if the current program is basically OK?"

EPA Administrator Scott Pruitt plans to review the state's legal authority to enforce its own limits on pollution and carbon dioxide emissions. Myron Ebell, the former head of Trump's EPA transition team, told Bloomberg News last week that Trump's Transportation Department may determine only the National Highway Traffic Safety Administration can regulate fuel economy and exclude the EPA and California from such rule-making.

"We tried very hard not to provoke or defy the national government and we've had a good past with the EPA," Nichols told reporters following the hearing. "I don't expect there to be a war on California. I was obviously disappointed when I heard Pruitt commenting that he might reconsider the California waiver."

The Alliance of Automobile Manufacturers said ahead of the CARB meeting that EV's share of overall demand for new light vehicles has been roughly flat for years. The trade group representing automakers including GM, Ford and Fiat Chrysler asked the regulator to wait at least two years before considering the higher zero-emission vehicle targets for 2030.

The alliance hasn't asked Trump to revoke the state's right to set its own emissions standards, Steven Douglas, the group's senior director of environmental affairs, said during the CARB hearing.

Pippin Mader, a CARB engineer, said the state may have to return to insisting on compliance with its own standards if the Trump administration dials back those at the national level.

CARB defended its cleaner-car targets Friday as a necessary component of its plan to cut greenhouse gas emissions to 40 percent below 1990 levels by 2030.

Nine states including New York and New Jersey have pledged to adopt the Golden State's targets. Zero-emission vehicles were 0.74 percent of sales in those nine states last year, according to IHS Markit. Automakers face penalties if they don't meet the zero-emissions sales goals.

A provision that allows automakers to fulfill their obligations in New York and other matching states by selling cars in California is set to expire in October, putting pressure on automakers to increase zero-emission vehicle sales. EV sales lag outside California because automakers barely advertise them there, and some don't even sell certain models, according to Christine Kirby, acting assistant commissioner of the Massachusetts Department of Environmental Protection. Most carmakers "have not tried to build the zero-emission vehicle market in the Northeast to the extent that is necessary," she said.

A two-track emissions regulatory system would leave consumers with potentially higher prices and could complicate their ability to move cars between states.

Board member Hector De La Torre compared a potential split between federal and state regulators to a divorce. "If a divorce is going to happen at some point, we are going to litigate that divorce strongly," he said.

A White House official, anticipating the California vote, told Reuters the Trump administration was committed to protecting jobs and providing consumers with affordable cars. "We are disappointed that California has chosen to refuse our good-faith offer to work together with all relevant stakeholders on this important matter," the person said.

California regulators said they would cooperate with federal regulators who are reviewing the federal tailpipe emissions standards. John Bozzella, president and CEO of the Global Automakers industry alliance, focused on the potential for cooperation, rather than the Board's criticism. "I think we are where we want to be, which is working together," he said. "We're committed to a national program."

28. California Gearing Up To Block EPA Repeal of Vehicle Waiver

A group of California state senators is urging Attorney General (AG) Xavier Becerra (D) to take aggressive action, including preemptive litigation, to block EPA from repealing California's Clean Air Act waivers to enforce vehicle greenhouse gas standards that are stricter than federal rules, amid fears that the Trump administration could target the state's authority.

"We respectfully request that you take all actions necessary, including seeking immediately to enjoin the EPA from taking such action and otherwise seeking to challenge and reverse EPA's actions should the administration follow through on these reports," states a March 16 letter from California Senate President Pro Tem Kevin de Leon (D) and 21 other Democratic senators.

The letter comes as the Trump administration recently reopened a mid-term review of federal GHG and fuel economy standards for model years (MY) 2022-2025, a move that could ultimately weaken the rules, though the administration punted on any plans to target California's waiver for its state vehicle GHG rules.

Nevertheless, Golden State leaders fear that the Trump administration will reject any California requests for future waivers to address GHGs or other pollutants from a wide variety of mobile source sectors.

California has long been expected to vigorously challenge any Trump move to rescind its current waivers or reject any waiver requests. However, it is not clear whether it could successfully "enjoin" EPA from revoking its current waivers as the senator's request.

Becerra's office is reportedly already signaling he plans to be aggressive in taking various legal actions to counter any Trump administration moves to weaken vehicle standards and California's power under the air act. Recently, Becerra filed a motion to intervene in a federal lawsuit filed by automakers March 13 against the Obama EPA's January determination to retain the current GHG standards for MY 2022-2025 vehicles, though following the Trump EPA's recent announcement to re-open the mid-term review, the automakers March 21 asked the court to dismiss the suit. "Given EPA's reconsideration, and to conserve the resources of the Court and the parties, petitioner no longer seeks immediate judicial review," the automakers said in their unopposed March 21 motion.

State lawmakers have also retained Eric Holder, the former Obama-era attorney general, to represent them in climate litigation and other federal policy priorities that the Trump administration may seek to roll back.

And Gov. Jerry Brown (D) in March 15 letters to EPA Administrator Scott Pruitt and automakers offered an aggressive warning that the Golden State would use its special air act authority to retain state GHG standards currently aligned with federal limits. "If Washington continues down this road, California will take necessary actions to preserve current standards and protect the health of our people and the stability of our climate," Brown wrote in his letter to Pruitt.

In the letter to automakers, Brown charged that their request to reopen the mid-term review "breaks your promise to the American people," referring to automakers' broad embrace of the GHG and fuel economy rules in 2011.

Brown was in Washington, D.C., for a series of meetings March 20-23. While his office declined to release a detailed schedule, the Los Angeles Times reported March 21 on several meetings with Democratic allies in Congress, including House Minority Leader Nancy Pelosi (D-CA), Sen. Kamala Harris (D-CA) and other California Democrats, as well as Sen. Ed Markey (D-MA). The Times reported that climate change was broadly one of the issues that Brown discussed with the lawmakers, in addition to Trump's moves on health care, immigration and high-speed rail.

Brown also met March 21 with Transportation Secretary Elaine Chao, according to E&E News, which said the governor "did not seem ready to concede ground" on the vehicle GHG dispute. "This doesn't get over. It will be [a] continuing measure from now on, and we're going to fight as hard as we can," he told reporters.

He later added: "I think we have a strong argument. We have a strong argument with Congress, we have a strong argument in court."

The state senators in their letter to Becerra summarize California's legal rights under the act, noting that for 50 years "the EPA, under Republican and Democratic administrations alike, has routinely approved and updated California's clean cars program due to our uniquely severe air quality problems and the need for our state to continue to set its own standards for vehicular pollution reduction."

They add that more than 140 waivers have been granted, while no waiver has been "fully successfully rejected, and none, to our knowledge, has ever been successfully revoked."

De Leon said in a March 18 press release announcing the letter that "California's right to pursue strong clean air standards is explicitly granted by federal law. If this administration has a problem with that, they can go through Congress or see us in court."

29. U.S. Would Slash EPA Vehicle Testing Budget Under Trump Plan

The Trump administration would virtually eliminate federal funding for the Environmental Protection Agency's budget for vehicle emissions and fuel economy testing but will seek to raise fees on industry to pay for some testing, a government document shows.

The cuts would slash by more than half the staff of the EPA department that conducts vehicle, engine, and fuel testing to verify emissions standards are met and mileage stickers are accurate. Its work helped lead to Volkswagen AG's 2015 admission that it violated vehicle emissions rules for years.

In a March 21 budget document posted online by the Washington Post, the Trump administration proposed eliminating \$48 million in federal funding for EPA vehicle and fuel testing and certification. It represents a 99 percent federal cut to the vehicle testing budget and would require "pretty much shutting down the testing lab," said Margo Oge, who headed the EPA's Office of Transportation and Air Quality under President Barack Obama.

The proposal, which would also cut 168 out of 304 full-time jobs, seeks to partially fund current operations by boosting fees automakers and engine manufacturers pay for testing. An EPA official confirmed the document's authenticity.

The Trump administration has proposed cutting the EPA's budget by 31 percent and eliminating more than 50 programs.

EPA spokesman John Konkus declined to answer questions about how the cuts could affect vehicle testing. "We know we can effectively serve the taxpayers and protect the environment. While many in Washington insist on greater spending, EPA is focused on greater value and real results," Konkus said.

Gloria Bergquist, a spokeswoman for the Alliance of Automobile Manufacturers, an auto trade association, said automakers were concerned the proposed cuts could delay certification of new vehicles "and getting products to consumers."

Janet McCabe, a former EPA official in the Obama administration, said that companies that take care to comply with the rules can be at a disadvantage without strong enforcement of the rules. "We know that a little bit of cheating can mean a lot of air pollution," McCabe said.

The administration plans to release a detailed budget plan in May.

The EPA stepped up scrutiny of automakers after Volkswagen admitted to cheating diesel emissions tests in 580,000 U.S. vehicles. VW agreed to pay up to \$25 billion in penalties and buyback costs and pleaded guilty in March to felony charges.

In September 2015, EPA said it would review emissions from all U.S. diesel vehicles after Volkswagen's admission it used secret software to emit up to 40 times allowable emissions. That review prompted the allegation by the EPA in January that Fiat Chrysler Automobiles NV used undisclosed software to allow excess diesel emissions from 104,000 U.S. trucks and SUVs. Fiat Chrysler denies wrongdoing.

The EPA is also scrutinizing emissions from Daimler AG's Mercedes-Benz vehicles. It has not approved Daimler or Fiat Chrysler's request to sell 2017 model diesels.

The EPA has also investigated cases of several automakers overstating mileage on window stickers in recent years. In 2014, the EPA hit Korean automakers Hyundai Motor Co and affiliate KIA Motors Corp with \$350 million in penalties for overstating fuel economy ratings.

Portable emissions measurement system (PEMS) like the one used to uncover the Volkswagen scandal were developed by EPA researchers at the Vehicle Lab.

Ford—For the 2013 and 2014 model years, 6 different vehicles were required to adjust the fuel economy label information provided by consumers—for one of those (the C-MAX), this was actually the second such adjustment. This resulted in payouts to consumers of up to \$1050.

The fee proposal in the budget is completely inadequate to the task. While the EPA already collects fees to reimburse the Agency, in part, for its certification activities, it is Congress which determines how the fees are appropriated—to date, Congress has not been appropriating this money to EPA, instead using these funds to offset the federal budget deficit. There is no reason to suppose that this would change in the future, which means this proposal would effectively gut the certification process by cutting the staff responsible for the program in half.

With such a drastic staff reduction, effective immediately in Fiscal Year 2018, the certification process will be gummed up to such a degree it will either delay sales of vehicles tremendously or become a meaningless rubber stamp which will undoubtedly lead to even more automaker malfeasance, further eroding the trust of the American people in its auto industry.

30. FY17 Spending Deal Makes Only Modest EPA Cuts

The newly released spending deal that funds EPA and other agencies through the rest of fiscal year 2017 provides \$8.058 billion for EPA -- a modest cut of \$81 million from FY16 enacted levels, while including only a handful of policy riders and embracing several Democratic priorities, including funding to upgrade drinking water infrastructure in Flint, MI.

The bill -- which generally maintains funding for major EPA programs and preserves all current staff positions -- underscores that Democrats retain some leverage to influence spending priorities and defend the agency from cuts the Trump administration had sought even as Republicans were able to rely on the administration to reverse key policies, such as calculation of carbon damages, obviating the need for some riders.

The spending bill, which is expected to win bipartisan majorities when it is voted on mostly spurns a preliminary White House plan that sought to cut an additional \$247 million from EPA's budget as part of an effort to "ease the transition" to the more severe cuts the administration is seeking in FY18.

Democrats also touted a list of dozens of policy riders left out of the final deal, including provisions to bar funding for incorporating the social cost of carbon (SCC) into rulemakings; prohibit EPA enforcement of fuel efficiency and emission standards for trailers and glider kits; block funds for updating EPA's ozone standard; and bar funding for any agency "backstop" actions to reduce watershed pollution in the Chesapeake Bay.

31. US EPA Announces \$11 Million in 2017 DERA Grant Funding

The US EPA announced \$11 million in competitive grant funding for the Diesel Emissions Reductions Act (DERA) Clean Diesel Funding Assistance Program. The EPA has issued a request for proposals (RFP) for projects that achieve significant reductions in diesel emissions in terms of tons of pollution produced and exposure, particularly from fleets operating in areas designated by the EPA as poor air quality areas.

32. Trump Order Cancels Obama Policies Aimed at Paris Climate Pledge

President Donald Trump is moving aggressively to undo policies designed to keep the carbon-cutting promises the U.S. made alongside nearly 200 other countries in Paris, while stopping short of a decision to formally withdraw from that landmark climate accord. Trump signed an executive order March 28 that begins unraveling rules and directives to combat climate change, which President Barack Obama wove into the fabric of the federal government as he made addressing the issue a centerpiece of his second term.

The changes stem from Trump's desire to advance the U.S. economy and domestic production of energy from fossil fuels as well as nuclear and renewable sources, while still protecting the air and water, a senior White House official told reporters.

EPA Administrator Scott Pruitt told Fox and Friends March 27 that Trump was "coming to the EPA to set a new course" that is "pro-growth, pro jobs and pro-environment. "

Trump, who once called climate change a hoax, has vowed to reorient the federal government so that U.S. oil and coal producers thrive, while manufacturers aren't burdened by "job-killing" restrictions. "A lot of people are going to be put back to work, a lot of coal miners are going back to work," he said during a recent rally in Louisville, Kentucky.

Some changes will happen immediately, such as the repeal of a 2016 policy that encouraged federal regulators to consider climate change in environmental reviews as well as directives from Obama that compelled government agencies and the military to factor the phenomenon into their planning. The Interior Department also will swiftly rescind a moratorium on the sale of new rights to extract coal on federal land.

The Trump administration also is eliminating an Obama-era "social cost of carbon" metric that estimated the potential economic damage from climate change and was used to justify a slew of environmental actions, from efficiency standards for microwave ovens to the revamp of government buildings. Instead, the government will return to an earlier 2003 approach for estimating the potential costs of any regulations governing greenhouse gas emissions.

Other policy pivots will take years of work, such as reversing the Clean Power Plan that forced states to cut greenhouse gas emissions from electricity. An Interior Department rule setting requirements for hydraulic fracturing on federal land will be rescinded. And a pair of regulations governing potent methane emissions from oil and gas wells also will be reviewed at the Environmental Protection Agency and the Interior Department—with possible changes or a reversal years away.

Most, if not all, of the changes will face legal challenges from the same environmentalists who already are fighting to defend Obama's Clean Power Plan in federal court.

Trump's actions are politically significant, following months of promises to reverse the fortunes of struggling coal miners -- campaign vows that helped propel him to victory in industrial strongholds like West Virginia and Pennsylvania. Although the changes he is setting in motion will make it cheaper to extract coal and use it to generate electricity, they are unlikely to dramatically boost domestic demand for coal, which faces stiff competition from cheap natural gas and is affected by other pollution regulations untouched by Trump's order.

And mining jobs have been in decline for decades as automated equipment increasingly unearths coal, doing the work that once required pick axes and mules.

Even before the Obama administration imposed the coal-leasing moratorium in January 2016, coal producers had little interest in adding new federal reserves to their portfolios, amid slumping domestic demand. Existing federal leases contain at least 20 years' worth of coal, according to Interior Department estimates.

The EPA Clean Power Plan was already in legal limbo, having been put on hold by the Supreme Court in February 2016, while lower court proceedings were underway. The U.S. Court of Appeals heard arguments on the challenge last September but has not ruled on the case that the Trump administration will now seek to put on hold. Environmental groups and states that support the rule and are defending it in court have vowed to fight to keep those proceedings going.

33. U.S. 'Needs to Exit' Paris Climate Pact, EPA Chief Says

The U.S. "needs to exit" the Paris climate pact, EPA Administrator Scott Pruitt said April 13, siding with those in the Trump administration who want complete withdrawal from the 2015 agreement reached among nearly 200 nations. "Well, Paris is something we need to really look at closely, because it's something we need to exit in my opinion," Pruitt said during a TV interview, calling the pact a "bad deal" for the U.S.

The EPA head's comments come amid continued signs of an internal struggle in the administration over whether President Donald Trump should, as he vowed during the campaign, withdraw the U.S. from the accord.

Pruitt skirted questions on what the U.S. should do with the Paris deal in the run-up to his Senate confirmation in February. In written responses to Democratic senators in January he repeatedly stressed it was not his decision to make and that the fate of the Paris Agreement rested with the State Department. "Should the Administration decide to continue to participate" in the deal, Pruitt wrote, "I will collaborate with all involved agencies to ensure that commitments made on behalf of the United States are achievable and consistent with requisite legal authorities delegated by Congress."

Pruitt in March questioned whether humans are a "primary contributor" to rising global temperatures and suggested there is still "tremendous disagreement" over to what extent climate change is manmade.

In his April 13 TV remarks, the EPA administrator also said the climate pact, the first to include actions from developed and developing nations alike, "was a bad deal for America" because it "frontloaded" U.S. actions to cut its emissions while giving China and India until 2030 to act. "China and India had no obligations under the agreement until 2030, we frontloaded all of our costs," Pruitt said. The EPA head also suggested the U.S. has made more progress than China and India—or even the European Union—in cutting its emissions over the last two decades.

Staying in the Paris pact would mean “contracting our economy to serve and really satisfy Europe and China and India. They are polluting far more than we are,” Pruitt said, noting that U.S. emissions have been cut to levels not seen since the early 1990s.

It’s true the U.S. emissions have been declining in recent years even as emissions in India and China increase; the U.S. for example cut its emissions 5 percent between 2010 and 2015, according to the EPA. But since 1990, the EU has made far deeper cuts than the U.S. EU emissions declined 24.4 percent between 1990 and 2014, according to the European Environment Agency. By contrast, U.S. emissions in 2015 are actually slightly higher than they were in 1990, according to the EPA’s greenhouse gas inventory released in February.

“Since 1990, U.S. emissions have increased at an average annual rate of 0.2 percent,” according to the EPA report.

Ahead of the Paris deal, the U.S. pledged to cut its greenhouse gas emissions 26 percent to 28 percent by 2025 from 2005 levels. But Trump’s recent rollback of various climate policies—including the centerpiece of its Paris pledge, the EPA’s power plant carbon pollution limits—has raised doubts about whether the U.S. can meet that pledge.

34. Top Trump Aides Clash on Legal Risks of Paris Climate Accord

Senior advisers to Donald Trump were divided over the Paris climate accord in a meeting April 27, as Cabinet members and staffers considered whether staying in the pact could legally jeopardize the president’s regulatory rollbacks, according to people familiar with the high-level gathering. The split means Trump’s staff could end up giving the president dueling advice, with one camp of advisers urging the U.S. to stay in the treaty and another urging an exit. The White House has said a decision on whether to remain in the pact will be made by the end of next month, when world leaders gather for the Group of Seven summit in Italy.

The question has divided top administration officials. Secretary of State Rex Tillerson has said the U.S. should keep its seat at the table, while EPA chief Scott Pruitt wants the U.S. to get out. Energy Secretary Rick Perry says the U.S. should remain in the deal, but renegotiate.

All three were in the roughly hour-long meeting at the White House April 27, that also included Treasury Secretary Steven Mnuchin; White House advisers Jared Kushner, Steve Bannon and Ivanka Trump and Attorney General Jeff Sessions, according to administration officials.

Under the accord, signed by more than 190 countries, the U.S. set a target of reducing greenhouse gas emissions by 26 percent by 2025 from 2005 levels. It’s one of former President Barack Obama’s signature achievements on climate change, but Trump vowed on the campaign trail he would seek to end U.S. involvement in it, calling it a bad deal.

A draft three-page internal State Department memo circulated in advance of the meeting said the accord imposes few obligations on the U.S., noting that “legal obligations are relatively few and are generally process-oriented.” That was the one area of emerging consensus April 27, according to people familiar with the meeting, who declined to be identified because it was an internal discussion. The top-level officials seemed to agree that there is no legal mechanism for the United Nations to punish the U.S. for flouting its commitment.

But there are potential domestic legal implications of staying in the deal anyway, representatives from the White House counsel's office told the group. There is some risk that if the U.S. stays in the agreement and doesn't take actions to cut emissions, it could surface in legal challenges to Trump's moves to roll back environmental regulations, they said.

Ivanka Trump, the president's daughter and a special assistant at the White House, was described as outspoken in favor of remaining in the pact. Pruitt and Sessions, meanwhile, jointly argued the U.S. has an obligation to honor the commitments it makes to other countries, and if it wouldn't aim to get to the 26 percent reduction, should leave.

Supporters of sticking with the accord have argued that U.S. exports, including sales of liquefied natural gas, could be jeopardized if the country ditches the deal. Ahead of the meeting, some Republicans argued that the U.S. should stay in the deal but revise its climate pledge.

Rep. Kevin Cramer (R-N.D.), who served as an informal energy adviser to Trump on the campaign, sent a letter with eight other Republican lawmakers advising Trump that the U.S. can leverage its role in the deal to encourage worldwide use of its energy resources and technology. "The U.S. should use its seat at the Paris table to defend and promote our commercial interests, including our manufacturing and fossil fuel sectors," they wrote. "Our engagement must prevent the development of harmful policies which undermine economic growth and energy security here and abroad. "

Companies ranging from oil giants such as BP Plc and Exxon Mobil Corp. to utilities such as Pacific Gas and Electric Co. have also made the argument the U.S. should remain in the pact. But opponents argue that Trump promised to exit, and if the U.S. is abandoning its efforts to cut emissions it should also abandon this pact, too.

"Those who argue for us to remain in the agreement are essentially arguing for us to become (officially) liars," Mike McKenna, a Republican energy lobbyist, said.

35. VW's \$4.3 Billion U.S. Deal Completed With Court's Approval

Volkswagen AG will pay a \$4.3 billion penalty for misleading U.S. regulators and customers about its diesel engines' emissions after a federal judge approved the company's plea deal, moving the carmaker closer to resolving one of the biggest scandals in automotive history.

U.S. District Judge Sean Cox in Detroit signed off April 21 on the plan for the German carmaker to pay \$2.8 billion in criminal fines as part of a settlement with the U.S. government that also includes \$1.5 billion in civil penalties and a guilty plea. The judge also approved a three-year probation overseen by an independent monitor, Larry Thompson, who prosecuted Enron Corp. while at the U.S. Justice Department and most recently was chief counsel at PepsiCo Inc.

"This is a case of deliberate, massive fraud perpetrated by Volkswagen," Cox said. He said it was still unclear how far up the ranks of the company the criminal conduct went. He urged U.S. and German investigators to "find those responsible for this deliberate, massive fraud that damaged an iconic auto company."

The approval of the sentence turns the final page on the criminal probe of the company in the U.S. VW admitted in September 2015 that it had rigged as many as 11 million diesel vehicles worldwide with so-called defeat devices to cheat on emissions tests. The company has set aside

\$24.2 billion to cover cheating-related expenses, with the largest share going to compensate consumers who sued in the U.S.

Volkswagen “deeply regrets the behavior that gave rise to this case,” the company’s general counsel, Manfred Doess, told the judge. “Plain and simple, it was wrong. We let people down and for that we are deeply sorry.” He said the company is taking steps to ensure that something like this never happens again. “Volkswagen is not the same company it was 18 months ago,” he said.

The company isn’t out of the woods. Still pending are investor lawsuits in the U.S. and Germany and consumer suits in Germany and the U.K. There are also criminal investigations in Germany and the U.S., where seven executives have been charged. Prosecutors around the world are pressing forward with those probes.

VW spokesman Nicolai Laude said April 21 that some of the executives who have been charged are still employed by the company and some are no longer there. He declined to specify numbers or why some left, citing privacy rules.

Cox rejected a request by some VW car owners that he order restitution for losses caused by the company’s fraud. Because the plea deal didn’t allow for such restitution, Cox cited the burden it would place on the court and a consumer restitution plan that’s already in place.

VW reached a \$14.7 billion settlement with owners and leasers of affected 2-liter diesel engines and is paying another \$1 billion to cover 3-liter vehicles equipped with so-called defeat devices.

Last month, VW pleaded guilty in Detroit federal court to conspiring to defraud regulators, obstruction of justice and making false statements. Cox said then that he needed “more time to reflect and study” before deciding on what the company’s sentence should be.

Cox had harsh words for VW April 21. “Who’s been hurt by this corporate greed?” Cox asked. “Not the managers at Volkswagen, the ones who get paid high salaries and large bonuses. As always, it’s the little guy, the Volkswagen laborer working on the line.”

John Neal, an assistant U.S. attorney in Detroit, said that VW’s criminal plea was “a very significant benefit to the public and a significant aspect to this resolution.”

36. US Petroleum Demand In March at Highest Level Since 2008

Total petroleum deliveries in March increased 0.2% from March 2016 to average nearly 19.7 million b/d—the highest March deliveries in 9 years, according to data from the American Petroleum Institute.

For this year’s first quarter, total US petroleum deliveries, a measure of US petroleum demand, were up 0.4% compared with first-quarter 2016 to average 19.5 million b/d. These were the highest first quarter deliveries since 2008.

Gasoline deliveries, meanwhile, were up in March from the previous month, but down from the prior year as well as last year’s first quarter. Total motor gasoline deliveries increased 4.3% from February, but were down 1.7% from March 2016 to average 9.2 million b/d. These were the second-highest March deliveries ever recorded.

US crude oil production increased in March for the third straight month, up 1.4%, but posted declines compared with levels in the previous year as well as last year's first quarter. At an average of 9.2 million b/d, US crude oil production decreased 0.2% from March 2016 and was down 1.8% from first-quarter 2016.

Natural gas liquids production was up from the previous month and last year's first quarter, but was down from the prior year. NGL production in March averaged 3.4 million b/d, which was the second-highest level for the month on record. This was 0.4% above February's output and 0.8% higher than first-quarter 2016.

US total petroleum imports in March averaged nearly 10 million b/d—the second highest March total petroleum imports level, since 2012. Total petroleum imports were down 3.8% from the prior month, and down 0.1% compared with the prior year. For the first quarter of 2017, total petroleum imports were up 4.4% compared with the first quarter of 2016.

37. API Lists Emissions Requirements It Would Like EPA to Review

The American Petroleum Institute said it would like to see the US Environmental Protection Agency review requirements to limit emissions from new oil and gas operations, quotas under the federal Renewable Fuel Standard, and implementation of ground-level ozone controls under National Ambient Air Quality Standards (NAAQS).

“Technological innovations and industry leadership have propelled the oil and gas industry forward, despite the unprecedented level of federal regulatory actions targeting our industry,” API Regulatory and Scientific Affairs Senior Director Howard J. Feldman said during an Apr. 24 public meeting hosted by EPA's Air and Radiation Office. The meeting was in response to US President Donald J. Trump's Apr. 5 Executive Order 13771 for federal departments and agencies to review and improve their regulations.

“Consistent with President Trump's stated objectives of American energy independence and economic growth, EPA and other federal agencies should embrace smart, cost-effective regulations,” Feldman said.

He said API submitted a detailed petition for administrative reconsideration of the final New Source Performance Standards (NSPS) rule to then-EPA Administrator Gina McCarthy in August 2016. “The previous 2012 standards, developed in collaboration with industry, and innovation, driven by industry's incentive to capture more of what we sell, are already effectively reducing emissions,” he said.

Feldman said API was encouraged by EPA's announcement earlier in April that it would review the 2016 final NSPS rule, and urged the agency to extend compliance deadlines while the review takes place.

When it comes to the RFS, he said API would like EPA to use its waiver authority to reduce the advanced, cellulosic, and total renewable fuel obligations to ensure the mandate does not exceed the E10 blendwall.

“In order to maintain a market for ethanol-free gasoline, EPA should not set a RFS mandate that would cause the average ethanol content to exceed 9.7% of projected gasoline demand,” Feldman said. “EPA should use realistic projections of E0, E15, E85 and cellulosic demand when setting the annual RVOs.”

API also asked EPA to resist calls to remove the RFS's point of obligation as proposed by the American Fuel & Petrochemical Manufacturers and some independent refiners. Doing this simply reallocates the problems to a different group of fuel supply-chain participants without alleviating the RFS's significant structural flaws, Feldman said.

He also urged EPA to work with Congress to reform and ultimately end the RFS, which API considers unworkable "as the program does reflect current market realities and it creates the potential for economic harm."

Regarding the ozone NAAQS, Feldman said that API previously said that the requirements EPA imposed in late 2015 were unnecessary since ambient levels were declining already under 2008 requirements which several states had not implemented fully. "Unfortunately, EPA's new standards create tremendous burden on states and risk significant impacts on job growth, and the potential number of US counties thrown out of attainment could more than triple," he warned.

API supports EPA reconsideration of the 2015 Ozone NAAQS based on the issues API identified in its comments and court briefs, and is encouraged by EPA's motion to continue oral argument on the 2015 Ozone NAAQS, Feldman testified.

"Since the deadlines pertaining to the 2008 and 2015 ozone NAAQS are staggered and both standards are progressing, it is difficult for states to harmonize activities toward the implementation of the NAAQS. For this reason, we encourage EPA to expeditiously complete its review," he said.

38. Canada to Further Align Heavy-Duty Truck Standards with U.S.

Canada is proposing to continue alignment of its emissions standards for heavy-duty trucks and other vehicles with U.S. rules by applying more stringent standards starting in the 2021 model year, but the costs of meeting the standards would be more than offset by expected fuel savings.

The changes would require manufacturers of on-road heavy duty vehicles to cut their products' emissions of greenhouse gas emissions to meet Environmental Protection Agency rules and would introduce new standards for heavy-haul tractors and their trailers. The new standards would also apply to products imported into Canada.

Proposed amendments to the Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations would meet Canada's commitment in March 2016 for a second phase of aligned greenhouse gas emissions standards for heavy duty vehicles, the government said March 4. They also meet commitments made in 2011 under the Regulatory Cooperation Council initiative to harmonize standards, it said.

The proposed standards would apply to all on-road, heavy-duty vehicles, including full-size pickup trucks and vans, transport tractors manufactured primarily for hauling trailers and a wide range of specialized "vocational" vehicles such as school, transit and inter-city buses and freight, delivery, service, cement, garbage and dump trucks.

New requirements for heavy-haul tractors, with a gross combined weight rating of 140,000 pounds or more used to haul very high payloads over short distances, would apply starting with the 2021 model year. They would be less stringent than for tractors with a lower weigh rating and would align with the corresponding U.S. standards.

However, the regulations would include a Canadian-specific definition of heavy-haul tractor, given that greater weights are permitted on Canadian roads, the government said. The U.S. definition includes tractors with a weight rating of 120,000 pounds or more.

The new requirements for trailers hauled by transport tractors would apply to trailers manufactured on or after January 1, 2018. Companies that manufacture trailers would face new reporting requirements.

The standards apply to emissions of nitrogen oxides, volatile organic compounds, fine particulate matter (2.5 microns or smaller in diameter), sulfur dioxide and carbon monoxide.

Adopting the new standards is expected to cost Canadian manufacturers about C\$4.8 billion (\$3.6 billion) over the 2018-2029 model years, largely due to C\$4.1 billion (\$3.1 billion) to develop new technologies, the government said. Benefits are projected to total C\$13.6 billion (\$10.1 billion) over the same period, including C\$10.3 billion (\$7.7 billion) in reduced fuel costs, it said.

The Canadian changes follow on the final rule published Oct. 25 by the EPA on the second phase of its greenhouse gas emissions and fuel efficiency standards for heavy-duty vehicles, engines and trailers. The Phase 2 standards, intended to fully apply in the 2027 model year, build on existing standards phased in over the 2014-2018 model years.

39. Industry Groups Join Calls To Resist 'Drastic' EPA Budget Cut Proposal

A host of industry and professional groups -- including chemical, engine and vehicle manufacturers, truckers, builders, water utilities and radon prevention technicians -- is resisting plans by the Trump administration to slash EPA's budget, warning that the cuts will harm programs they rely on to reduce compliance costs and create jobs.

A host of manufacturing, transportation, construction and other groups signed a March 3 letter to Pruitt urging the administrator to fight to preserve funds for the agency's Diesel Emissions Reduction Act (DERA) program, which was one of several that OMB reportedly proposed to "zero out" in EPA's FY18 budget.

The program, authorized by Congress with broad bipartisan support, provides funds to manufacturers and municipalities to restore and retrofit diesel engines that are not currently meeting emission standards that opt in to the program. DERA grants serve a variety of stakeholders, including city governments which use them to retrofit school buses.

The program is so popular in Congress that when the Obama administration proposed eliminating the program in several of its budget plans -- at one point citing unspent DERA funds allocated as part of the 2009 stimulus package -- but bipartisan Congresses voted to restore funding for the program each time.

The industry groups argue in the letter to Pruitt that the program is worth funding because it is "completely voluntary, merit-based, and cost-effective." They said it leverages significant matching funds from the private sector and provides significant health and economic benefits, supports state programs and imposes few bureaucratic hurdles.

And they say the program continues to be needed because of the “long-lived nature of diesel engines,” they write. “The program effectively cleans our air and supports domestic employment in innovative industries while also helping businesses invest in new and efficient technologies.”

Groups signing the letter include a host of transportation sector trade associations, Associated General Contractors of America, and manufacturing groups and companies, including Caterpillar, Corning, Cummins, Navistar and Volvo.

40. Which States Follow California’s Emission And Zero-Emission Vehicle Rules?

California leads the nation in policies that promote reductions of carbon emissions from road vehicles. It is unique in having a federal waiver that allows it to set its own, stricter emissions standards, along with a zero-emission vehicle mandate that requires automakers reaching certain sales volumes to sell a certain number of cars without tailpipes.

And where California leads, other states have followed.

Thirteen states—mostly in the Northeast and Northwest—and the District of Columbia have adopted California’s stricter emissions standards, many of which also participate in the zero-emission vehicle mandate. Known as “Section 177” states, those 13 are: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington.

Arizona adopted California’s standards in 2008, but the state repealed them as soon as Governor Jan Brewer took office in January 2012.

Nine of those states also participate in the mandate to increase sales of zero-emission vehicles: Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Vermont. Together, the nine “ZEV states” and California represented 28 percent of new-car registrations in the U.S. in 2015.

But while the nine states are nominally included in the ZEV mandate, automakers do not generally treat them differently than ones that are not. That’s because of a “travel provision” in the ZEV rules through 2018 that essentially allows carmakers to earn ZEV credits in every state for a zero-emission vehicle that’s sold in any ZEV-Program state. That means sales are still largely concentrated in California, which has the most generous incentives and the most expansive charging infrastructure of any state.

California buyers can choose from a much larger selection of plug-in cars than those in other states—even those states with their own ZEV mandates.

Sales of hydrogen fuel-cell vehicles are also limited to California at this time, as it is the only state with any substantial fueling infrastructure.

41. Refiners Petition EPA to Reconsider 2016 RFS Cellulosic Biofuel Mandates

Refiners are petitioning EPA to reconsider an Obama-era decision to deny them a waiver from having to comply with renewable fuel standard (RFS) cellulosic biofuel blending requirements for 2016, teeing up a test for the Trump administration on a controversial aspect of the RFS that is also at issue in suits over the 2017 mandates.

The American Fuel and Petrochemical Manufacturers (AFPM) announced March 16 that it has filed a petition for reconsideration with EPA asking the agency to reverse its January 17 denial of the group's Dec. 28 request for a waiver of the 2016 RFS cellulosic biofuel volume.

AFPM says that EPA's own data shows that cellulosic biofuel production in 2016 was approximately 40 million gallons short of EPA's mandated level of 230 million gallons. Under the RFS, obligated parties must surrender credits known as renewable identification numbers (RINs) sufficient to cover their blending obligations. If they cannot generate RINs themselves, they must buy them from others.

EPA in its denial said that there should be sufficient RINs carried-over from compliance year 2015 to allow compliance. However, AFPM in its petition notes that other parties holding those credits are under no obligation to sell them. If AFPM's members lack sufficient RINs, they must buy "cellulosic waiver credits" instead, also incurring millions of dollars in costs.

The petition says, "obligated parties who buy cellulosic waiver credits are essentially paying for a renewable fuel that does not exist and cannot be used by American consumers."

Refiners are claiming EPA overestimated cellulosic fuel production as part of their attacks on EPA's 2014-2016 RFS in the case *Americans for Clean Energy, et al. v. EPA, et al.*, which consolidates various challenges to that rule in the U.S. Court of Appeals for the District of Columbia Circuit.

Oral argument in the multi-year RFS suit is slated for April 24 and the court has put a suit over the 2017 RFS on hold until it rules in *Americans for Clean Energy*. Nevertheless, refiners and others recently filed statements of legal issues that they intend to raise over the 2017 RFS once that case resumes.

The 2017 RFS rule restores to statutory levels the amount of conventional corn-based ethanol "implied" by the RFS, although there is no explicit corn ethanol mandate, angering groups that say mandated biofuel levels are too high. The cellulosic biofuel mandate, which contributes to the total requirement for biofuels, is again at issue.

For example, the American Petroleum Institute in a March 13 statement of issues in *Coffeyville Resources Refining & Marketing, LLC, et al v. EPA, et al*, now the lead case in consolidated litigation over the 2017 RFS, questions whether "the 2017 cellulosic biofuel volume requirement set forth in the Environmental Protection Agency's Final Rule is arbitrary, capricious, and contrary to law."

42. Trump's Executive Order Emphasizes Energy More Than Environment

US President Donald J. Trump signed a much-anticipated executive order that was directed more at energy than environmental regulation. While it calls for a reevaluation of former President Barack Obama's Clean Power Plan, which was designed to aggressively reduce carbon emissions, Trump said his March 28 order also will lift the federal coal leasing ban Obama's administration imposed; "lift the job-killing restrictions on the production of coal, oil, and gas"; and return regulatory power to states.

"With today's executive action, I'm taking steps to lift the restrictions on American energy, to reverse government intrusion, and to cancel job-killing regulations—not only in this industry, but

in every industry,” Trump declared in an address at the US Environmental Protection Agency’s headquarters before the signing ceremony.

“We’re doing them by the thousands. And we’re going to have safety. We’re going to have clean water. We’re going to have clean air,” Trump said. “But so many [regulations] are unnecessary, and so many are job-killing. We’re getting rid of as many of those as we can. One after another, we are keeping our promises and putting power back into the hands of the people.”

At the US Department of the Interior, the executive order calls on Secretary Ryan Zinke to review three final rules DOI issued regarding oil and gas production on both federal and private land and the US Outer Continental Shelf as well as the US Bureau of Land Management’s 2016 federal coal-leasing moratorium. BLM’s final rules on methane emissions and hydraulic fracturing on onshore federal and American Indian lands also will be under review.

“Our nation can’t run on pixie dust and hope. The last 8 years showed that. The hallmark of a great president is one who takes decisive action. That’s exactly what our president has done,” Zinke said in remarks before the signing ceremony. “Energy independence is necessary for a better environment because it’s better to produce it here under regulation than in other countries where there’s none. It’s better for American jobs. And it’s better for security, not just for ourselves but for our allies.”

The order also requires EPA to review, and if appropriate suspend, revise, or rescind its final rule on methane emissions from new or modified oil and gas sources as well as final rules on carbon emissions from new or modified power plants and from existing power plants.

“By his signature today, the president is rejecting the narrative that this country cannot be both pro-energy and pro-environment,” EPA Administrator Scott Pruitt said at the signing event. “We have done that throughout our history. We can actually achieve good jobs, good growth, and pro-energy policies at the same time we protect our environment.”

Pruitt said Trump’s order “also sets a pathway forward on a journey to say we’re no longer going to have regulatory assault on any given sector of our economy.” He said, “That’s going to end by the signing of this executive order. We’re not going to allow regulations here at EPA to pick winners and losers.”

Pruitt added, “Finally, we’re going to play within the rules. EPA should pass rules that are in the framework that Congress established.”

Also at the signing, Sec. of Energy Rick Perry said, “This executive order is a rejection of the belief that the path forward on energy is through additional federal regulations. Mr. President, you understand that the path forward is through American ingenuity and entrepreneurship.”

Perry said in his first few weeks in charge of the US Department of Energy, he has met with a wide variety of energy stakeholders who have shown him a tremendous focus on increased innovation and exploring new opportunities. “But I’ve also seen the down-side of poorly designed government policies that have resulted in distorted markets and a weakening of the American energy portfolio,” Perry said. “We’ve seen our power grid reliability tested because our fuel diversity has been diminished in order to benefit one technology over another. We’ve seen where the regulatory review process has been gummed up to the point that investors look everywhere else for opportunities.”

Perry added, “How we use our resources for our benefit and for the world’s benefit is the decision and opportunity before us. The executive order will begin the process that begins to unravel the red tape that’s keeping investment on the sidelines and innovation stymied.”

Also on hand, Vice-President Michael R. Pence said, “Everyone here knows the truth: Affordable, reliable energy powers the American economy. President Trump is committed to an all-of-the-above energy policy that gives the American people and American businesses the power to innovate and to thrive.”

The executive order also will rescind the Council on Environmental Quality’s Aug. 1, 2015, National Environmental Policy Act guidance document for federal agencies relating to greenhouse gases, the Social Cost of Greenhouse Gases and other technical and supporting documents, and the Nov. 3, 2015, presidential memorandum on mitigation of impacts from development of natural resources.

Officials from oil and gas trade associations and other business groups reacted positively to Trump’s executive order.

ASIA-PACIFIC

43. China Considers Easing Required Ratio for New Energy Auto Output

A Chinese regulator is considering amending a proposed rule that requires automakers to boost production of new energy vehicles starting from next year, easing pressure on manufacturers to increase output of such automobiles while overall auto demand growth slows.

The Ministry of Industry and Information Technology rolled out a proposal in September to put in place a new alternative energy vehicle credit program that requires automakers to obtain 8 percent of credits coming from production of such vehicles starting from 2018, according to a draft of the rule. Based on the credit calculation method, average production of new energy vehicles last year may have contributed only about 3 percent of the score required, 5 percentage points short, according to the China Association of Automobile Manufacturers.

The ministry is considering either lowering the credit requirement in percentage terms or delaying the implementation date, Miao Wei, minister of MIIT, said in a press interview in Beijing March 5. “We are still working on the regulation,” Miao said on the sideline of the National People’s Congress gathering. “It may be finalized around May or June. “

Automakers including Volkswagen AG and General Motors Co. aim to boost production of new-energy vehicles in the world’s largest auto market in an effort to meet stringent emissions and fuel-economy standards as well as the proposed minimum quota of eco-friendly cars. Companies that don’t meet the proposed requirement for automakers to produce the specific quota of zero- and low-emission vehicles may have to pay fines or buy credits from those that have exceeded the minimum. A possible relaxation of the requirement would help automakers buy more time to expand production of such vehicles.

Electric vehicle sales plunged in China in January after the government cut subsidies by more than a fifth starting this year, raising the question of whether the country can sustain demand for eco-friendly cars without generous grants. Sales of new-energy vehicles, the term China uses to refer to all-electric vehicles, plug-in hybrids and fuel-cell cars, dropped 74 percent in January from a year earlier to 5,682 units, according to data released by the auto association.

"We are glad to hear that our proposal is under consideration by Minister Miao," said Xu Yanhua, deputy secretary-general of the China Association of Automobile Manufacturers. "But that does not mean it will be finalized in this way. This is a good development. At least it is being considered."

44. Toyota Hybrids Stage Comeback as China Electric Car Sales Falter

For years, Toyota Motor Corp.'s lineup of hybrid gas and electric powered cars faced a great wall of indifference in China. Taxes on imported components drove up the price of franchise brands like the Prius way beyond the budgets of most car buyers, while the government steered subsidies to plug-in electric vehicles.

That may now change. The Japanese automaker's decision to localize its production of powertrain components such as battery packs and motors in 2015 has allowed it to introduce hybrid versions of its Corolla and Levin brands at the same price as their gas-engine counterparts.

On top of that, the Chinese government is now elevating the importance role of hybrids in its push to hit aggressive emission targets by 2020. Toyota sees an opportunity. Deliveries of combined gasoline-electric cars more than tripled to a record 111,981 units in 2016 from a year earlier, according to market researcher LMC Automotive. About two-thirds of the sales were from Toyota's Levin and Corolla hybrids, whose key components have been locally available since 2015.

President Xi Jinping's administration wants 5 million "new-energy vehicles"—either fully electric, plug-in hybrids or fuel-cell vehicles—hitting the roads by 2020 to reduce tailpipe emissions and a national reliance on imported oil. Central and local governments have spent 15 billion yuan (\$2.3 billion) subsidizing new-energy vehicle makers since 2009, according to state-run China Central Television.

Carmakers will have to cut gas consumption by 26 percent from the 2015 level to meet the government's target of 5 liters per 100 kilometers by 2020. To get there, the Chinese government last year elevated the role of hybrids by setting its first sales targets for the segment. The aim is to have hybrids account for 8 percent of total passenger vehicle sales by 2020 and rise to 20 percent by 2025, according to the Technology Roadmap for Energy Saving and New Energy Vehicles, drafted for the Ministry of Industry and Information Technology.

Before last year, Toyota and Honda Motor Co. were the only carmakers selling hybrids in China, delivering a total of 36,540 units in 2015. After local production of key components, Toyota sold more than 70,000 units of Levin and Corolla compact sedans, which consumes 4.2 liters of gasoline per 100 kilometers, in 2016.

That same year, at least five automakers added conventional hybrids to their lineups in China, including General Motors' Chevrolet Malibu XL, as well as the Ford Mondeo and Nissan Murano.

Yet unlike Toyota, other hybrid makers with no local production face a 25 percent customs tax on imported cars and components.

Chinese carmakers are also developing their own hybrid cars. Zhejiang Geely Holding Group Co., owner of Volvo Cars, late last year introduced the Emgrand EC7 hybrid, whose powertrain was jointly developed with Hunan Corun New Energy Co., a supplier to Toyota. Anhui Jianghuai

Automobile Group Corp also unveiled in Shanghai a hybrid version of its new flagship crossover S7, the carmaker's first conventional hybrid model.

Geely and Corun said they will share the hybrid powertrain technologies, dubbed CHS as in China Hybrid System, with other companies that want to develop gas-electric vehicles. Chongqing Changan Automobile Co. and Kunming Yunnei Power Co. have already joined the technological alliance.

45. Toyota China Supplier Corun Sees Swing to Profit on Hybrid Sales

Hunan Corun New Energy Co., a supplier of batteries used in gasoline-electric vehicles, said it expects to swing to profit this year on demand from Toyota Motor Corp. and after China slashed subsidies for electric buses, making hybrids more attractive as an alternative.

Orders from Toyota have risen, driven by the popularity of its Levin hybrids, Corun Chairman Zhong Faping said in an interview in Beijing. The crackdown last year on fraud in electric bus funding, followed by a cut of more than two-thirds in government subsidies, also have boosted demand for hybrid motors, batteries and control systems made by the Changsha, China-based company, he said, without being more specific.

"Bus operators are more willing to buy hybrid buses as they're cheap and don't need charging," Zhong said. "Demand has been rising robustly, especially after the government's crackdown last year on subsidy fraud."

Long out of favor with China's policy makers, hybrid vehicles that run primarily on gasoline backed up by a small electric motor have been excluded from generous subsidies earmarked for fully electric autos and plug-in hybrids. That appeared to change last year after the government set its first sales targets for conventional hybrids, emphasizing the importance of such energy-saving vehicles.

Regulators are drawing up detailed policies to promote the use of conventional hybrids, Zhong said without elaborating. A delegate to the National People's Congress, Zhong has been proposing for the past 15 years that the government put conventional hybrids on an equal footing as plug-in electric cars, arguing that they are the "most pragmatic" way to lowering emissions and fuel consumption.

"The transition from traditional fossil energy to new energy is not as quick as some people imagined," said Zhong, who founded Corun in 1998 after quitting his job as a researcher at the Chinese Academy of Sciences.

Corun may post a loss of about 210 million yuan (\$30 million) last year due to expenses from expanding its production capacity, the company said in a preliminary earnings statement in January. That would be Corun's third annual loss in five years.

To expand overseas, Corun is talking to automakers in countries including Pakistan, Brazil and Indonesia, with orders from these markets expected to boost Corun's profit starting from next year, Zhong said.

46. Toyota Brings Mirai to China to Protect Fuel-Cell Car Lead

Toyota Motor Corp. is bringing its Mirai fuel-cell vehicle to China as it strives to protect its lead in the technology amid challenges from Hyundai Motor Co. and Honda Motor Co. Toyota put the model on display ahead of the Shanghai auto show at an event in the city April 18. The company will initially introduce Mirai sedans for demonstration tests starting from October and will also build a hydrogen station at its research and development base in Changshu, Jiangsu province, according to a statement. Toyota will also conduct promotional activities to gauge Chinese demand for the car.

The Mirai has been the world's most popular hydrogen-powered vehicle, with about 3,000 units sold since its introduction in late 2014. Toyota seeks to sell that many over the course of this year and 10 times that number by 2020. By contrast, Hyundai has sold about 700 Tucson Fuel Cell sport utility vehicles since 2013. Honda only offers its Clarity for lease and has delivered about 130 units since entering the market a year ago.

Toyota's supremacy is far from assured. Hyundai has revealed two new fuel-cell concepts in as many months, unveiling the Future Eco SUV at the Geneva motor show in March and then the GV80 SUV under its Genesis luxury brand at the New York Auto Show. The Korean company also plans to field fuel-cell models through its subsidiary Kia by 2020.

Honda has partnered with General Motors Co. to build fuel-cell systems for future models from both marques. Like Toyota, Honda sees hydrogen as the long-term solution for environmentally friendly vehicles and has said it could put the technology in an SUV like its Pilot line.

China is a fitting battleground. Tightening environmental regulations to clean up the air are pressuring automakers to push the boundaries of zero-emission vehicle development. The stakes are particular high for Hyundai, which counts China as its top market.

47. China Claims Slow, Steady Air Quality Improvements

China has seen improvements in air quality in most key areas three years after launching a national action plan, the Ministry of Environmental Protection announced March 9. Since late 2013, average annual concentrations of small particulate matter pollution—particles 2.5 microns or smaller (PM-2.5)—fell more than 30 percent in the control areas around Shanghai and in the Pearl River Delta in South China. Progress was seen, but less so at 18 percent, around the capital of Beijing, said Chen Jining, head of the MEP.

Rapid expansion of vehicle use, the increasing use of distributed coal—or small, often poor-quality coal bricks—for home heating and cooking in certain areas around Beijing, and a still-heavy reliance on coal-fired power and heavy industry in the region, have fueled the winter air pollution problems around Beijing, he said.

“Winter air pollution prevention and control measures need to be further strengthened,” Chen said at an annual press conference during meetings of the National People's Congress in Beijing. “This is the main difficulty and weakness of our current air-pollution controls.”

48. Beijing Still Years Away From Blue Skies Even With Improved Air

As Chinese Premier Li Keqiang welcomed delegates to Beijing for the annual meeting of the legislature recently, he vowed to “make our skies blue again,” raising hopes for residents who started the year under a blanket of smog and have wheezed through periodic bouts of pollution since then.

Researchers and environmentalists say residents may need to be patient—10 years or longer, according to estimates, before Li's aspiration becomes a reality.

As Li outlined his plan in his annual work report at the opening of the National People's Congress March 5, skies over the nation's capital were indeed fairly clear, helped by a slight breeze and what Chinese media refers to as "NPC blue," mostly clean air during the 10-day stretch when thousands of lawmakers from around the country converge on Beijing.

Three years after China announced a "war on pollution" at an earlier legislative session, progress has been steady but slow. Last year in Beijing, for example, average concentrations of PM-2.5—small particles that pose the greatest risk to human health—fell almost 10 percent, the biggest annual decrease in the past four years. Still, the annual average remains more than seven times the World Health Organization's recommended level.

Based on the pace of reduction in pollution between 2013 and 2016, Beijing will still need about a decade before it can enjoy blue skies, Greenpeace East Asia forecasts. The problem isn't in Beijing alone. About 74 percent of 366 cities monitored fell short of official air quality standards, according to Greenpeace data.

Despite new initiatives announced by Premier Li to combat smog, the struggle is complicated by the tension between competing goals of environmental protection and economic growth, which hit the slowest pace since 1990.

Even with increased attention and environmental inspections, however, many firms still take risks to violate air-pollution reduction measures. More than 500 companies and construction sites were punished for their violations, China Central Television reported in January.

"The cost of breaking rules is lower than following them," leading companies to pollute, said Ma Jun, founder and director of the Beijing-based Institute of Public & Environmental Affairs. Also, despite new environmental performance measures for local officials, many still favor economic targets as long as there's no big environmental problem, Ma said.

Pollution is also a touchy political issue at NPC ahead of a Communist Party leadership shuffle toward the end of the year, and officials are seeking stability above all else. Authorities are sensitive to calls for action following a 2013 documentary, "Under the Dome," about the consequences to China from smog that was viewed by more than 100 million people in a matter of days before it was censored.

Among Premier Li's initiatives, the nation will start 24-hour online monitoring of all key sources of industrial pollution. The legislature will set a clear deadline by which companies must meet discharge standards and shut down those companies that fail to meet standards after the deadline, according to the plan.

Premier Li said China will suspend or delay construction on or eliminate at least 50 gigawatts of coal-fired power to ease overcapacity risks and make room for clean energy to develop. The nation will shut down all small coal-fired furnaces in established districts of cities at the prefecture level and above, Li said.

Coal still accounted for about 60 percent of China's total energy consumption in 2016. The share of non-fossil fuels rose about 2.3 percentage points to 14.3 percent, the government said last

year. The world's biggest carbon emitter, China has said it plans to invest 2.5 trillion yuan (\$362 billion) in renewable energy through 2020, helping create 13 million jobs.

49. China to Establish Air Pollution Research Fund

China will establish a special fund to direct scientific research toward fighting air pollution. Without going into detail, Premier Li Keqiang said March 15 that "special conditions" contribute to northern China's heavy air pollution.

While the government will do more to reduce emissions caused by coal-fired power plants, vehicle exhaust and dust, other lesser-known factors must be studied to make combating the problem more effective, Li said at the close of the annual National People's Congress (NPC) meetings in Beijing.

In his government work report delivered before the full membership of the NPC—comparable to a U.S. president's State of the Union address—the premier outlined five actions the government would take over the rest of the year to reduce air pollution.

Those actions include reducing emissions by installing electricity and natural gas in 3 million homes that use small, often poor-quality coal bricks for home heating as well as upgrading coal-burning plants to reduce emissions, particularly in the eastern coastal areas where most of the country's population lives.

Other actions include:

- •Further expanding 24-hour real time monitoring of emissions of key heavy industries;
- •Further reducing the number of older vehicles on the nation's roads and improving emissions and fuel standards nationwide;
- •Further coordinating emergency response and air pollution control measures during heavy air pollution periods, which are now mainly in the winter heating months; and
- •Increasing enforcement actions and investigations into pollution violations.

"In the future, blue skies will not and should not be a luxury," Li said.

50. Beijing Eco-Cops Score First Air Pollution Arrest

A new environmental police unit from Beijing's Public Security Bureau made its first arrest related to air-pollution violations. A manager of Beijing Huayuan Heat Supplying Co. Ltd. was arrested and charged with violating municipal emissions regulations and the company was fined 20,000 yuan (\$2,900), state-run media outlets reported March 16.

The company was found to have not properly operated equipment to remove nitrogen oxide and sulfur dioxide emissions from a 4 metric ton coal-fired boiler, and sulfur dioxide emissions levels were recorded at 10 times higher than the allowable level.

The special environmental unit of about 50 officers was launched January 18 as part of the Environment, Food and Drug Safety Corps. It previously made arrests in two illegal wastewater discharge cases, according to a report from China Environmental News, part of the Ministry of Environmental Protection.

Wang Yankui, head of the special police corps, said a special unit dedicated to investigating environmental violations will make collecting evidence and enforcement more efficient, the news agency reported.

Beijing is part of a “key air-pollution control region” under China’s 2013 Air Pollution Action Plan, and has somewhat more stringent standards than other areas.

Other cities in China, including the municipal government of Shenzhen in South China, are looking into setting up similar environmental police units and consulting with local environmental protection bureaus and other agencies. During the past year, the ministry and the Supreme People’s Court reported increasing collaboration between law enforcement and environmental bureaus.

51. Australia Launches Second Case Against Volkswagen over Emissions

An Australian government regulator announced further legal proceedings against Volkswagen over software in its vehicles that allowed them to cheat emissions tests, and the company is also facing two class actions.

The latest action by Australian Competition and Consumer Commission (ACCC), announced March 8, is against Audi companies in Germany and Australia and their German parent, Volkswagen Aktiengesellschaft. It relates to the sale of more than 12,000 Audi vehicles between 2011 and 2015 that were fitted with software that lowered nitrogen oxide emissions during laboratory testing, compared to normal driving conditions.

The ACCC is alleging that the installation of the software breached the Australian Consumer Law. It says the Audi companies engaged in misleading conduct by representing that the vehicles complied with all applicable regulatory requirements for road vehicles in Australia when this was not the case. Breaches of the Act carry a maximum penalty of A\$1.1 million (\$826,000).

In August 2016, the ACCC launched similar proceedings against Volkswagen Group Australia Pty Ltd and its German parent over the sale of more than 57,000 Volkswagen vehicles fitted with the software. Volkswagen is also facing two sets of class actions in Australia over the fitting of the software to Volkswagen, Audi and Skoda vehicles, one of which is led by law firm Maurice Blackburn.

Jason Geisker, Sydney-based class actions principal with Maurice Blackburn, welcomed the ACCC’s new intervention, saying it would add “a new level of vigor and intensity” to efforts to hold the company to account. In a March 8 statement, Geisker said Maurice Blackburn “has been astounded at the numerous procedural and technical points taken by VW in this litigation, so it is no surprise to us that the ACCC has now sued Audi AG and Audi Australia directly.”

The ACCC and class action matters will be heard jointly in the Federal Court, with hearings scheduled to start on October 30.

In a March 8 statement, Audi Australia said the ACCC proceedings would not provide any practical benefits to consumers “as the approved technical measures for the vast majority of cars affected by the voluntary recall are either already available or are imminent.” The statement said Audi Australia was reviewing the claims made by the ACCC and also defending the class action suits.

A spokesman for Volkswagen Group Australia said more than 17,000 vehicles in Australia have had rectification software installed.

52. Supreme Court Bans Sale of BS-III Compliant Vehicles from 1st April 2017

In a major setback to the Indian automotive industry, the Supreme Court banned sale of Bharat Stage III (BS-III) vehicles after March 31, 2017. The automobile industry has an unsold BS-III vehicles stock of 8.24 lakh¹ units.

Post the announcement shares of India's largest two-wheeler manufacturer Hero Motocorp shares declined by about 3% and CV manufacturer Ashok Leyland's shares dipped by 6% from its day's high.

The Supreme Court hearing mentioned that public health is more important than inventories and the sale and registration of BS-III compliant vehicles will not be permitted from 1st April 2017.

According to sources in the auto industry, there are 75,000 unsold BS-III commercial vehicles, 16,000 passenger vehicles, 40,000 three-wheelers and 6.71 lakh two-wheelers. Hero Motocorp has over 3.28 lakh units of BS-III vehicles in its inventory which is estimated to be over 1,200 crore².

President of SIAM and MD of Ashok Leyland told the press that it's unfair if registration of vehicles is not allowed. He also added that Ashok Leyland will not have any impact on company's sales and operations.

Earlier, government came out in support of the automakers, requesting the apex court to allow the companies to sell their existing stock of BS-III vehicles even after BS-IV emission norms come into force from April 1.

The industry, on March 27, conveyed to the apex court that technically and financially it was impractical to convert BS III vehicles to BS IV, also that unsold inventories would form a miniscule part of 19 crore vehicles that are already on Indian roads.

It all started with environmental activist and a lawyer MC Mehta raising the issue of air pollution in Delhi before the Supreme Court.

A bench of Justices Madan Lokur and Deepak Gupta said public health is more important than the sale of existing vehicles. India is struggling to contain rising air pollution, with smog-choked capital New Delhi ranking among the world's sootiest cities. Last year, the government announced that it would advance by four years the implementation of stricter emission standards, a move that was opposed by automakers arguing that it would hurt the industry.

Bajaj Auto Ltd., India's second-biggest motorcycle maker, supported the ban.

Lawyer Harish Salve, acting as a friend of the court, argued that auto companies were given adequate time to shift to BS-IV norms but made no effort to reduce production of BS-III vehicles before the deadline. Instead, they raised production in the last three months, he said. SIAM said that the higher output was meant to meet an annual cyclical increase in demand.

¹ 1 lakh = 100,000 units

² 1 crore = 10 million = 100 lakh

53. Audit Finds Many Vehicles Flouting Emission Norms in Delhi

Delhi has lakhs of vehicles plying without the mandatory 'pollution under control' certificates while the city's emission testing centers are enormously understaffed, an environmental pollution audit has found. The blatant violations, that potentially imperil the health of millions, have put the spotlight on around 970 centers in the city, that are certified to check the emission content of around 70 lakh vehicles in the city. The audit report has been submitted to the Supreme Court.

EPCA or Environmental Pollution - Prevention and Control is a Supreme Court-appointed body. As per Central Motor Vehicles Rules, 1989, every BS-III emission-compliant motor vehicle needs to go for a pollution test every three months while BS-IV vehicles have to take the test annually.

According to estimates of EPCA, every quarter there should be around 59 lakh PUC tests in Delhi, but "the period of November 2016 to January 2017 (3 months) shows tests of only 13.7 lakh vehicles", which works out to a compliance rate of 23.2 per cent.

"A large number of vehicles in Delhi remain outside the PUC testing network," the report states, adding that even among the vehicles turning up for tests, the failure rate is extremely low and that the existing norms cannot even identify at least 15 to 20 per cent grossly polluting vehicles in the on-road fleet.

"Nearly all vehicles pass the tests. Due to poor recording of failed tests and due to very lax norms the overall failure rate in Delhi is 4.69 per cent. For the diesel vehicles tested, the failure rate stands at 1.68 per cent, compared to 5.18 per cent for petrol vehicles," it says.

A serious flaw is the fact that failed tests are not recorded as vehicle owners refuse to pay the test fee if their vehicles fail. As a result, the pass-fail data compiled by the transport departments show very poor failure rate. "It is therefore, important to mandate advance payment of fees before the test is conducted and the software should be changed accordingly to plug this loophole," the audit says.

According to the report, the current PUC norms are so weak, especially for the pre-BS IV vehicles that dominate the on-road fleet, that not only do most vehicles pass the test, but a great part of them actually pass with as high as an 80 per cent margin from the norm.

As per the law, a vehicle found not carrying a valid PUC Certificate is liable to be prosecuted under Section 190(2) of the Motor Vehicles Act.

"The overall assessment has revealed that there are serious quality concerns in the way PUC tests are conducted and equipment are maintained in numerous PUC centers across the NCR region.

"In Delhi alone there are 971 centers but the transport department has only 28 inspectors and among them only one inspector is available for actual on ground inspection of so many stations," the report observes.

A similar analysis has not been possible for Haryana and Uttar Pradesh, many towns of which fall in the National Capital Region, as the data is purely manual and complete data for all centers with adequate detail are not available, the EPCA said.

It has recommended making annual vehicle insurance policy mandatory and conditional with PUC certification, pending which this program can "barely make any difference" to the air quality.

54. Delhi Air Pollution: Secondary Pollutants Bigger Threat, Warns EPCA

The Environment Pollution Control Authority (EPCA) has warned in its draft comprehensive action plan that secondary particulate matter, particles that are born out of the primary source air pollutants, pose as an additional threat to Delhi's air. "A study by IIT Kanpur has revealed that primary pollutants like NO₂ and SO₂ undergo complex reactions in the atmosphere and form secondary particulate matter such as sulfates, nitrates and organic aerosols which are equally deadly," said EPCA.

Less than 1 micron in size (PM 1) these particles can go deep inside our lungs and trigger lung and heart problems. Secondary particulates form nearly 25% of Delhi's PM 2.5 load.

The Global Burden of Diseases estimates for 2017 have shown that early deaths related to PM 2.5 in India are the second highest in the world.

"These particles could delay the rains or even disperse the rains depriving the city of showers," said Abhijit Chatterjee, atmospheric scientist of Bose Institute in Kolkata.

"Triggers such as high solar radiation and high relative humidity help primary particles to graduate into secondary ones," said Sachchida Nand Tripathi, coordinator of the Centre for Environmental Science and Engineering in IIT Kanpur.

EPCA's draft action plan has suggested stronger control over primary sources such as traffic, industry and open burning to arrest these particulates.

"Till date we were speaking about primary pollutants. EPCA's action plan has highlighted this additional problem. We need stronger actions to arrest both," said Anumita Roychowdhury, executive director, Centre for Science and Environment in Delhi.

55. South Korea to Introduce Real-World Diesel Emissions Tests

South Korea will implement a new on-the-road emissions test for new diesel passenger vehicles sold in the country later this year, replacing the type of laboratory tests that were at the heart of the global "dieselgate" scandal, and which have been found to consistently understate actual pollution.

The National Institute of Environmental Research (NIER), under the Ministry of Environment, said April 4 that it will begin using a portable diesel exhaust gas measurement device in September. The technology will analyze pollutants while testing on outdoor roads rather than at indoor laboratories.

The testing could be the first of its kind being used to determine a diesel vehicle model's official emissions level, NIER said.

Diesel vehicles account for 29 percent of the sources of fine particulate matter (PM-2.5) pollution in Korean cities, according to the Ministry of Land, Infrastructure and Transport. And nearly 42 percent of all vehicles on South Korean roads are diesel-powered, the ministry said.

Volkswagen's global scandal of cheating emissions tests, which began in the U.S., led to Korean investigations into 23 foreign automakers last year. The Ministry of Environment banned the sale of 10 models by Nissan Motor Co., BMW AG and Volkswagen AG's Porsche in January when investigators said the automakers fabricated documents related to emission tests. Last August, it blocked sales of 80 Volkswagen models, saying the automaker fabricated documents related to emissions and noise-level tests.

A 2016 survey on diesel cars found nitrogen oxide emissions in actual road tests as much as seven times higher than the indoor certification standards, NIER said. Findings in the EU and by other governments also have shown wide discrepancies between laboratory and real-world diesel emissions.

South Korea's system will be applied to diesel passenger vehicles that are introduced into the market, regardless of where they are manufactured, beginning in September. That will include new model-year versions of existing passenger vehicle models.

The emission standard for nitrogen oxides will be set at 0.168 grams per kilometer of driving compared to the current indoor-test certification of 0.08 grams per kilometer. The less-stringent standard is an acknowledgment of the real-world versus laboratory discrepancy. It is still a 70 percent reduction from the average of 0.56 grams per kilometer detected in NIER's 2016 road survey.

NIER has been running on-the-road emission evaluations around Seoul and neighboring Incheon since March in conjunction with six automakers—including GM Korea, Mercedes-Benz and Hyundai Motor—and analyzing the combined test data.

"While the outdoor road test is promising, it is a new method, so cooperation between the government and automobile manufacturers is essential for successful introduction," Kim Jeong-soo, director of the NIER's Transportation Pollution Research Center, said in a statement. "The reduction of nitrous oxides in diesel vehicles will significantly reduce the amount of fine dust."

56. South Korea Set to Double Electric Vehicle Supply Through 2020

South Korea has a plan to jump start its electric vehicle industry so that local automobile companies can respond quickly to the changing market, the country's energy minister said. Following 10,000 electric vehicle sales last year, representing 1 percent of the new car market, Korea aims to double its supply of new electric vehicles every year until 2020, putting as many as 30,000 units on local roads this year and 60,000 vehicles next year, Minister of Trade, Industry and Energy Joo Hyung-hwan said at the March 31 opening ceremony of the Seoul Motor Show.

South Korea also will expand from 20,000 chargers currently, develop batteries that will double the mileage of today's electric vehicles and introduce additional incentives such as highway toll discounts, according to Joo.

57. South Korea Provides Subsidies to Install 9,500 Electric Vehicle Chargers

South Korea will provide subsidies this year of up to 5 million won (\$4,500) each to install more than 9,500 electric vehicle chargers nationwide. The Ministry of Environment said in a statement March 20 that 9,515 subsidies were available immediately until Dec. 29 under the 2017 budget for select personal, communal and portable chargers.

The government aims for 14,000 electric vehicles to hit Korean roads in 2017, with an eventual goal of achieving 2.2 million electric, hybrid and plug-in hybrid cars, or 10 percent of registered motor vehicles, by 2020.

The new subsidies introduce support for installing chargers in communal areas and offer support for individual buyers of 3 million won per charger, a decline from 4 million won last year. Depending on the device, pre-subsidy installation costs range from 870,000 won to 9.2 million won.

The applicability for the subsidies has been tightened from last year. While all electric vehicle buyers were eligible for the subsidy as of last year, the funding will be available for installing chargers from this year only if no public chargers are available in the user's residential area.

Starting this year, subsidies are also available even without the purchase of an electric vehicle for communal areas such as apartments and business premises with more than 100 parking spaces to install a charger. "It is not easy for individuals to install and manage chargers in Korea's environment where there are many housing complexes," Lee Hyung-sup, director of the ministry's Clean Air Planning Department, said in the statement. "From this year, we plan to lower the barrier for consumers to purchase electric cars by sufficiently equipping housing complexes with charging stations."

To promote optimal charging infrastructure, the Ministry of the Environment will subsidize products using new advanced technology such as multichannel chargers, which charge more than 10 units at a time, and billing-type outlets, which are metered for precise bill estimation.

There are 2,526 charging stations nationwide, concentrated in the greater Seoul area. On the southern resort island of Jeju, which has vowed to fully ditch gas-powered cars by 2030, 322 are installed.

Over 10,000 EVs have been distributed in the country since 2011. Last week, electric vehicle maker Tesla launched its first two Korean showrooms, while GM Korea said local pre-orders for its first shipment of the Chevrolet Bolt sold out within two hours.

58. India Electric Vehicle Makers Want Subsidies Dropped for 'Mild' Hybrids

India's electric vehicles association wants the government to eliminate from its hybrid and e-car subsidy program "mild" hybrids that run completely on gasoline or diesel fuel—and yet account for most of the rebates paid under the two-year-old incentive program.

The Society of Manufacturers of Electric Vehicles said since the program began in some of its largest cities in 2015, 65 percent of the 110,000 vehicles sold under the program run on conventional fuel but contain an electric component that enables the engine to be switched off when the vehicle is coasting, braking or stopped, yet restart quickly.

Those vehicles provide few environmental gains, the organization said. By contrast, a conventional hybrid combines an internal combustion engine and a large electric battery—can run on either or both—and generally gets better mileage and has lower emissions, the group said.

The first phase of India's Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) program expires at the end of March. The second phase is expected to be rolled out nationally in the coming months.

Depending on the model, cars and trucks bought under the program can save the buyer anywhere from about \$200 to slightly more than \$2,000. Some scooters and motorcycles also are eligible, with savings from about \$25 to \$450, depending on the technology used.

“The purpose of sensitizing the customer, sort of sowing the seeds of the idea, has been achieved and some 50,000-60,000 [mild hybrid] vehicles are on the road,” Sohinder Singh Gill, director of corporate affairs at the Society of Manufacturers of Electric Vehicles, told reporters. “There should be no more subsidy for mild hybrids in FAME II.”

Anumita Roychowdhury, executive director for research and advocacy at New Delhi-based Center for Science and Environment, agreed. “These mild hybrids are a marginal improvement over conventional diesel models, and are much cheaper than electric vehicles,” Roychowdhury told reporters. “Worse, this program has not worked for public transport at all. No incentives have been given to either electric buses or three-wheelers.”

AFRICA

59. Nigeria to Lower Sulfur in Fuels

Nigeria has revised her petroleum products standards with respect to sulfur concentrations in the fuels downwards; this is done mainly with due consideration to its effects on human health. The affected products are as follows;-

- AGO (Diesel) - sulfur content will now be 50ppm instead of 3000ppm,
- PMS (Petrol) -sulfur content will now be 150ppm instead of 1500ppm,
- Kerosene -sulfur content will now be 150ppm instead of 1500ppm.

All these are to take effect from July, 2017.

The local refineries are being given 3-4 years waiver to upgrade to be able to produce these grades of fuels, that is, by the year 2020.

60. ICCT Report: Roadmap for Clean Fuel and Vehicle Standards in Africa

This study³ focuses on efforts in Southern and Western Africa by the Climate and Clean Air Coalition’s Heavy-Duty Diesel Vehicles and Engines Initiative to reduce vehicles’ contribution to outdoor air pollution, and the health and climate impacts of vehicles’ emissions. The goal of this report is to provide a roadmap to support the implementation of comprehensive clean fuel and vehicle policies in Southern and Western Africa, paving the way for those countries to:

- Identify current institutional, economic, and policy barriers that have limited countries’ progress. With current regional commitments across the two regions, this report identifies factors that will likely impact the implementation of the regional agreements and proposes ways to address these obstacles.
- Take advantage of the political momentum to implement short-term actions and refine some of the policies to respond to long-term clean transportation goals, including clean air, fuel economy, compliance, and enforcement.

³ “Developing a roadmap for the adoption of clean fuel and vehicle standards in Southern and Western Africa”, ICCT, April 28, 2017

- Assess the social costs and the health and climate co-benefits associated with a regional transition to clean fuels and vehicles.

In summary, this study finds that:

- The governments' goal of 2020 for achieving 50-ppm fuels is achievable for most countries in both regions, with all countries reaching this milestone by 2025. Most countries in the region should be able to reach 10-ppm sulfur fuels by 2030.
- In addition to limiting diesel sulfur levels, all countries in Southern and Western Africa should harmonize with the AFRI-4 specifications in full, including limits on gasoline sulfur content, benzene, and aromatics.
- The African Refinery Association has an opportunity to provide a timeline for AFRI-6 standards that aim to achieve 10-ppm diesel sulfur content, to align with the goal of the Global Sulfur Strategy and enable countries to meet Euro 5/V and 6/VI vehicle emissions standards.

Two factors will likely impact the implementation of regional commitments: common fuel quality specifications and harmonized implementation timelines for importing and refining countries. The regional bodies, the Southern African Development Community and the Economic Community of West African States, are the best-suited venues for a harmonized transition, but also for discussions about countries facing obstacles—whether financial, institutional, or economic—to ensure that no country is left behind.

In countries where multiple fuel grades will be sold, there should be establishment of labeling of low- and ultra-low-sulfur grades to inform consumers.

All countries should limit vehicle imports to Euro 4/IV when AFRI-4 fuels become available, and to Euro 6/VI when AFRI-6 10-ppm fuels become available. For all vehicles in the fleet (older and newer), strong inspection and maintenance programs are needed.

The implementation of clean fuel and vehicle policies goes hand in hand with stronger compliance and enforcement; regulators should conduct regular fuel quality testing of imported fuels at the point of entry and fuels sold at retail stations, enforce minimum financial penalties for noncompliance with fuel specifications at retail services, and make fuel-quality testing and enforcement data (i.e., penalties collected) publicly available.

Decision makers should take cost-effectiveness into consideration, in addition to energy security, when determining whether to upgrade refineries or switch to imports.

GENERAL

61. The Cost of A Polluted Environment: 1.7 Million Child Deaths A Year, Says WHO

More than 1 in 4 deaths of children under 5 years of age are attributable to unhealthy environments. Every year, environmental risks – such as indoor and outdoor air pollution, second-hand smoke, unsafe water, lack of sanitation, and inadequate hygiene – take the lives of 1.7 million children under 5 years, say two new WHO reports.

The first report, *Inheriting a Sustainable World: Atlas on Children's Health and the Environment* reveals that a large portion of the most common causes of death among children aged 1 month

to 5 years – diarrhea, malaria and pneumonia – are preventable by interventions known to reduce environmental risks, such as access to safe water and clean cooking fuels.

"A polluted environment is a deadly one – particularly for young children," says Dr Margaret Chan, WHO Director-General. "Their developing organs and immune systems, and smaller bodies and airways, make them especially vulnerable to dirty air and water."

Harmful exposures can start in the mother's womb and increase the risk of premature birth. Additionally, when infants and preschoolers are exposed to indoor and outdoor air pollution and second-hand smoke they have an increased risk of pneumonia in childhood, and a lifelong increased risk of chronic respiratory diseases, such as asthma. Exposure to air pollution may also increase their lifelong risk of heart disease, stroke and cancer.

A companion report, Don't pollute my future! The impact of the environment on children's health, provides a comprehensive overview of the environment's impact on children's health, illustrating the scale of the challenge. Every year:

- 570 000 children under 5 years die from respiratory infections, such as pneumonia, attributable to indoor and outdoor air pollution, and second-hand smoke.
- 361 000 children under 5 years die due to diarrhea, as a result of poor access to clean water, sanitation, and hygiene.
- 270 000 children die during their first month of life from conditions, including prematurity, which could be prevented through access to clean water, sanitation, and hygiene in health facilities as well as reducing air pollution.
- 200 000 deaths of children under 5 years from malaria could be prevented through environmental actions, such as reducing breeding sites of mosquitoes or covering drinking-water storage.
- 200 000 children under 5 years die from unintentional injuries attributable to the environment, such as poisoning, falls, and drowning.

"A polluted environment results in a heavy toll on the health of our children," says Dr Maria Neira, WHO Director, Department of Public Health, Environmental and Social Determinants of Health. "Investing in the removal of environmental risks to health, such as improving water quality or using cleaner fuels, will result in massive health benefits."

For example, emerging environmental hazards, such as electronic and electrical waste (such as old mobile phones) that is improperly recycled, expose children to toxins which can lead to reduced intelligence, attention deficits, lung damage, and cancer. The generation of electronic and electrical waste is forecasted to increase by 19% between 2014 and 2018, to 50 million metric tons by 2018.

With climate change, temperatures and levels of carbon dioxide are rising, favoring pollen growth which is associated with increased rates of asthma in children. Worldwide, 11–14% of children aged 5 years and older currently report asthma symptoms and an estimated 44% of these are related to environmental exposures. Air pollution, second-hand tobacco smoke, and indoor mold and dampness make asthma more severe in children.

In households without access to basic services, such as safe water and sanitation, or that are smoky due to the use of unclean fuels, such as coal or dung for cooking and heating, children are at an increased risk of diarrhea and pneumonia.

Children are also exposed to harmful chemicals through food, water, air and products around them. Chemicals, such as fluoride, lead and mercury pesticides, persistent organic pollutants, and others in manufactured goods, eventually find their way into the food chain. And, while leaded petrol has been phased out almost entirely in all countries, lead is still widespread in paints, affecting brain development.

Reducing air pollution inside and outside households, improving safe water and sanitation and improving hygiene (including in health facilities where women give birth), protecting pregnant women from second-hand tobacco smoke, and building safer environments, can prevent children's deaths and diseases.

For example, multiple government sectors can work together to improve the following:

- Housing: Ensure clean fuel for heating and cooking, no mold or pests, and remove unsafe building materials and lead paint.
- Schools: Provide safe sanitation and hygiene, free of noise, pollution, and promote good nutrition.
- Health facilities: Ensure safe water, sanitation and hygiene, and reliable electricity.
- Urban planning: Create more green spaces, safe walking and cycling paths.
- Transport: Reduce emissions and increase public transport.
- Agriculture: Reduce the use of hazardous pesticides and no child labor.
- Industry: Manage hazardous waste and reduce the use of harmful chemicals.
- Health sector: Monitor health outcomes and educate about environmental health effects and prevention.

Under the Sustainable Development Goals (SDGs) countries are working on a set of targets to guide interventions for children's environmental health, as well as to end preventable deaths of newborns and children under five by 2030. In addition to SDG 3, which aims to ensure healthy lives and promote well-being for all, other SDGs work to improve water, sanitation and hygiene, transition to clean energy to reduce air pollution, and reverse climate change – all of which will have an impact on children's health.

62. PM2.5 Linked to Children's Hospital Admissions and Asthma Attacks

No children-specified review and meta-analysis paper about the short-term effect of fine particulate matter (PM2.5) on hospital admissions and emergency department visits for asthma has previously been published. The authors calculated more precise pooled effect estimates on this topic and evaluated the variation in effect size according to the differences in study characteristics not considered in previous studies.⁴

Two authors each independently searched PubMed and EMBASE for relevant studies in March, 2016. They conducted random effect meta-analyses and mixed-effect meta-regression analyses using retrieved summary effect estimates and 95% confidence intervals (CIs) and some characteristics of selected studies.

⁴ *J Prev Med Public Health*. 2016 Jul; 49(4):205-19. doi: 10.3961/jpmph.16.037, **Short-term Effect of Fine Particulate Matter on Children's Hospital Admissions and Emergency Department Visits for Asthma: A Systematic Review and Meta-analysis**, [Lim H¹](#), [Kwon HJ¹](#), [Lim JA¹](#), [Choi JH¹](#), [Ha M¹](#), [Hwang SS¹](#), [Choi WJ¹](#).

¹Department of Preventive Medicine, Dankook University College of Medicine, Cheonan, Korea.

The authors ultimately retrieved 26 time-series and case-crossover design studies about the short-term effect of PM_{2.5} on children's hospital admissions and emergency department visits for asthma. In the primary meta-analysis, children's hospital admissions and emergency department visits for asthma were positively associated with a short-term 10 µg/m³ increase in PM_{2.5} (relative risk, 1.048; 95% CI, 1.028 to 1.067; I²=95.7%). They also found different effect coefficients by region; the value in Asia was estimated to be lower than in North America or Europe.