EUROPE ....................................................................................................................................................... 4
1. French Inquiry Confirms Widespread Irregularities in Diesel Emissions Data ............................ 4
2. French Dieselgate Inquiry Accused of Cover-Up ............................................................................ 5
3. EU Countries Ratify Non-Road Machinery Emission Limits .......................................................... 6
4. EU To Introduce Limits on Truck CO₂ Emissions ........................................................................ 6
5. US Progress on Truck Fuel Efficiency Standards Increases Pressure on EU .............................. 7
6. Truck-Makers Face Record Fine for Emissions Law Collusion ..................................................... 7
7. EU Publishes Shipping Emissions Regulations for Comment ...................................................... 8
9. European Commission Proposes Non-ETS Emissions Cuts for EU Countries .......................... 9
10. London Seeks to Rescue Smog Plan from Brexit Debate .......................................................... 11
11. City Of London Puts the Brakes on New Diesel Vehicle Purchases ........................................ 12
12. EU Releases Trade Proposals on Cosmetics, Medical Devices, Cars, Chemicals ................. 13
13. Spanish Court Says Volkswagen German Parent Company Liable .......................................... 14
14. VW Escapes Cheating Fines in Germany, Payout Pressure Mounts ........................................ 14
15. Paris Says ‘Non’ to 20th Century Cars, Bolstering Koolicar, Uber ............................................. 15
16. German Parliament Debates Tax Break for Electric Car Owners ............................................ 16
18. VW Gets German Approval to Fix 460,000 Diesel Cars ............................................................ 18
19. Netherlands on Brink of Banning Sale of Fossil-Fueled Cars .................................................... 19
20. Inquiry Committee: We Are Not Done With Verheugen Yet ..................................................... 20
22. London Mayor Introduces Air Quality Alerts at Bus Stops ........................................................ 21

NORTH AMERICA.................................................................................................................................... 22
24. EPA Decision on Aircraft Emissions Creates Opportunity for EU-US Cooperation ............... 22
25. BMW’s 2017 Diesels Delayed By More Stringent EPA Emissions Tests ................................. 23
26. Tests for Latest VW TDI Diesel Fix Begin .................................................................................. 23
27. U.S. Regulators Say Fuel Efficiency Pays, Despite Cheaper Gas ........................................... 24
28. US Greenhouse Gas Emissions Rising in Transportation Sector ........................................... 26
29. Obama Administration Offers EV Charging Loan Guarantees ................................................ 26
30. Low-Speed Electric Vehicles Get Second Chance in Ontario ................................................. 27
31. Republican Platform Would Imperil EPA, Climate Action ................................................................. 28
32. House Appropriators Bar Spending on Climate Fund ........................................................................... 29
33. EPA and DOT Finalize Greenhouse Gas and Fuel Efficiency Standards for Trucks .......................... 30
34. Worst Smog Strikes California, Air Pollution Rises .............................................................................. 32
35. API: US Motor Gasoline Demand Recorded 9.7 Million B/D in July ..................................................... 33
36. Environmentalists Want Changes in California Clean Vehicle Programs ........................................... 33
37. Harley-Davidson Pays $15M to Settle EPA’s Emissions Claims ............................................................. 35
38. Renewable Natural Gas-Powered Trash Trucks Could Meet NYC Emissions Targets ................. 36
39. For 2016, Toyota Adds Its Gas-Electric Propulsion System to the RAV4 ........................................... 36
40. Lawyers: Volkswagen’s Supplier Bosch Worked “Hand-in-Glove” in Cheating Scandal .............. 37
41. Bosch to Dispute Alleged Involvement in Volkswagen Scandal .......................................................... 37
42. Investor Emissions Lawsuits Belong in Germany, VW Argues ............................................................. 38

ASIA-PACIFIC ........................................................................................................................................ 39
44. Price of Cleaner Air in China? $213 for Five Years: Study ................................................................. 41
45. China’s Urban Air Quality Improves In First Half: Ministry ............................................................... 41
46. Ships Worsen Air Pollution Over China, Killing Thousands: Study .................................................. 42
47. Chinese Polluters to Face More Business, Financing Restrictions ................................................... 43
48. China to Launch Environmental Probes in Eight More Provinces .................................................... 44
49. China Top Polluter Hebei Province Promises To Clean Up Act .......................................................... 45
50. China Urged to Bolster Clean Energy to Replace Coal ...................................................................... 46
51. China Sets Goal for Deep Cuts in Industrial Consumption ................................................................. 46
52. China Targets VOC-Emitting Industries to Reduce Pollution ............................................................. 47
53. South Korea Bans Sales of Volkswagen Cars Amid Test Frauds ..................................................... 48
54. South Korea Formulates Ambitious Plan to Promote E-Cars ............................................................ 48
55. Hyundai to Push Eco-Friendly Car Sales as Regulations Tighten ..................................................... 49
56. South Korea Increases Surcharges on Automobile Emissions ............................................................ 49
57. France’s Bollore Wins Electric Car-Sharing Project in Singapore ..................................................... 50
58. Delphi Selected by Singapore for Autonomous Vehicle Mobility-on-Demand Program ................ 50
59. Indian Court Orders Older Diesel Vehicles Off New Delhi’s Roads ................................................. 51
60. NASA Data Show Toxic Air Threat in Indian Subcontinent ............................................................. 52
61. China Puts Curbs on Shipping Emissions ............................................................................................ 53
62. China Proposing California-Like Mandates for Electric Cars ............................................................ 54
63. Most of China’s Electric-Car Startups Face Challenges .................................................................... 55
64. Coal Burning Causes Most Air Pollution Deaths in China, Transportation Also Major .................... 57
65. India Air Pollution Death Rate To Outpace China - Researcher .......................................................... 58
66. Volkswagen Korea Chief Grilled For 2nd Day ..................................................................................... 59
67. South Korea Widens Emissions Test Probe to All Foreign Car Brands ............................................. 59
68. Beijing Still Suffers High Levels of Air Pollution ............................................................................ 60
69. Japan’s ‘Environment Industry’ Hits Record Market Size .................................................................. 60
70. India’s Top Court Allows Diesel Vehicle Registrations After 1% Levy ............................................... 61
71. Diesel Vehicles Ban: Auto Industry Loses 4,000 Crore in Eight Months .......................................... 62
72. Nagaland Among 21 States Asked To Curb Air Pollution ................................................................ 63

MIDDLE EAST ...................................................................................................................................... 63
73. Israel to Raise Green Tax on Many Automobiles .................................................................................. 63
74. Israeli Government Allocates ‘Unprecedented’ Funding To Reduce Air Pollution ........................... 64

GENERAL ............................................................................................................................................... 65
75. Cloud Cover Shift Ominous Sign of Climate Change ....................................................................... 65
76. Aviation Offset Proposals Won’t Stop Emissions Hike, Says EEA ..................................................... 66
77. Hottest Ever June Marks 14th Month of Record-Breaking Temperatures ........................................... 67
78. Nations Narrow Differences but No Deal Yet on HFCs .................................................................... 68
79. Leaders Urged to Link Climate Change, Personal Health ................................................................. 69
80. Solar Plane Circles Globe in First for Clean Energy .......................................................................... 70
81. Platinum, Palladium Prices Are Rocketing ....................................................................................... 71
82. Airline Climate Deal Likely to Cover Most Emissions: U.S. ............................................................... 72
83. New Research Examines How Air Pollution Is Melting Earth’s Third Pole ........................................ 73
EUROPE

1. French Inquiry Confirms Widespread Irregularities in Diesel Emissions Data

French investigators have found a large number of diesel cars emit much higher levels of pollution than their European manufacturers claim. The claims were revealed by France’s environment ministry after a 10-month investigation ordered following the “Dieselgate” scandal over Volkswagen’s use of software to cheat emissions tests.

According to the independent committee’s report, around a third of the 86 diesel vehicles tested produced levels of nitrogen oxides (NOx) well above European limits. The results echo similar findings in tests by the UK’s Department for Transport.

The worst offenders were the Fiat 500X, Volvo V40, the Renault Talisman and Espace models, the Nissan Qashqai and the Ford Kuga, Opel Astra and Mokka.

The experts said they could not categorically state whether any carmaker had used software to cheat the emissions tests as they had no access to the computer programs used by the manufacturers. “The commission cannot, therefore, make any definitive statement on the presence or absence of ‘cheating’ software in the vehicles tested,” it reported.

The report found the Renault Talisman recorded 57.6mg NOx per kilometer in lab tests against a real world figure of 926.1mg/km. The worst offender, the Fiat 500X, was found to emit 1,354mg/km as opposed to 68.2mg/km, or almost 17 times the legal limit.

However, French media was skeptical the government would sanction Renault, a partially state-owned company.

In January, when the first draft of the report was revealed, Renault promised to draw up a “technical plan” to reduce its vehicles’ emissions. Renault executive vice-president of sales and marketing, Thierry Koskas, insisted then: “Renault has not cheated.”

In a statement, Ségolène Royal said: “This is a question of confidence. The manufacturers will be made to face up to their responsibilities because air pollution is a serious problem over which we cannot procrastinate or take lightly.”

The call by the French commission investigating Dieselgate to strengthen the systems for approving cars has been welcomed by Transport & Environment, but the organization said this will only have an effect on new models many years from now. We have an air pollution crisis killing hundreds of thousands of people each year in Europe’s cities and we need action today, the sustainable transport group said.

The legality of many of the cars that have been tested is highly questionable. At normal temperatures these cars are producing huge amounts of nitrogen oxides because the exhaust systems designed to control the pollution are being switched off when they should operate under “normal driving conditions”. Authorities in France, Germany, Italy and the UK must rigorously enforce the law and insist manufacturers recall and repair vehicles with excessive emissions.

Greg Archer, clean vehicles director at Transport and Environment, said: “The results released today by the Royal Commission show the majority of diesel cars are illegally producing sky-high
levels of pollution when they are not in hot laboratories. Some of the test results for individual
models are shocking including the Fiat 500x, Renault Talisman, Alfa Romeo Giulietta, BMW 116,
Ford C-max, Opel Zafira and many others.”

Archer concluded: “Citizens’ health is too important for governments to cover up for carmakers
which are blatantly flouting the law.”

2. French Dieselgate Inquiry Accused of Cover-Up

The French government has been accused of withholding information that would help show
whether Renault cars have emissions defeat devices that enable them to produce lower
emissions during test conditions.

Last year, following the Volkswagen emissions scandal, the French environment ministry
announced it would measure emissions across 100 randomly selected cars and create an
independent commission to analyze the results. Preliminary conclusions for a sample of 52 cars
were published in April 2016, followed by the final report in August.

However, speaking to the press, a member of the independent commission said that a number of
findings were not made public by the French government. For example, one of the Renault Captur
Models examined for the inquiry activated its NOx adsorber – a device commonly used to trap
and eliminate the pollutant in vehicles – more frequently while tested, allowing it to generate lower
emissions than it would under normal driving conditions.

Whether this was made possible by a VW-style defeat device will only be determined by the
results of an ongoing probe into the cars’ computers by the French anti-fraud office DGCCRF, the
source said, speaking under condition of anonymity.

The source suggested that the lack of transparency over certain results may have been an attempt
by the French government to protect Renault, which is a strategic employer in the country, and is
20% state owned. Although they said that it was unclear whether a link existed. But the source
added: “With all the tests performed on Renault cars, one would think there would be more
feedback on them yet the report has been presented in a way that doesn’t focus on them.”

French authorities initially shared all the test findings with members of the commission but later
on transparency became an issue, the source said. “As soon as the investigation moved into
sensitive areas, accessing the results became harder. This was an issue with both the April and
August reports.”

When asked why certain information was being withheld, the French government told commission
members that it was an issue of confidentiality because it was “sensitive information”, the source
added.

Jos Dings, executive director at NGO Transport and Environment, said: “The whole point of this
commission was to get to the bottom of things, not to keep findings away from public scrutiny.
Minister Royal must come clean and disclose the full findings of her inquiry.” Dings said that
France was not the only EU country suspected of trying to protect its national carmakers and
called for a watchdog to be set up at the EU level to fight against conflicts of interest in each
member state.
3. EU Countries Ratify Non-Road Machinery Emission Limits

On July 18th, European Union member countries ratified a bloc-wide regulation that sets limits on emissions of a number of air pollutants from non-road mobile machinery, a category that includes equipment from lawn mowers to combine harvesters. Under the regulation, new models of non-road mobile machinery must comply with the emissions limits between 2018 and 2020, as a condition of access to the EU market. The regulation sets limits on emissions of carbon monoxide, hydrocarbons, nitrogen oxides and particulate matter.

Other machinery and equipment covered by the regulation includes bulldozers, chain saws, excavators, generator sets, as well as barges, rail cars and railway locomotives.

The regulation will replace a 1997 EU Directive (97/68/EC) and sets emission limits for machinery that are similar to those that apply in Japan and the U.S.

The Council of the EU said in a statement that the regulation will “reduce pollutant emissions progressively from new engines of non-road machinery” and “result in a very significant reduction” in pollutant emissions. The council did not quantify the reduction.

EU agriculture ministers at a meeting in Brussels approved the regulation as a formality, clearing the way for publication of the regulation in the EU Official Journal. The European Parliament gave its approval July 5.

4. EU To Introduce Limits on Truck CO2 Emissions

The European Union has introduced a limit of 95 grams of CO2 per kilometer (g/km) by 2021 for cars and vans but has so far not done the same for trucks, although they are responsible for around a quarter of road transport emissions and that share of emissions could increase by 2030, according to the Commission. "The Commission will, therefore, speed up analytical work on design options for standards for heavy duty vehicles and will launch a public consultation to prepare the ground for a legislative proposal," a new document says.

The document contains a list of proposals to lower the CO2 footprint of transport, including a "legislative proposal to set fuel efficiency standards for heavy duty vehicles" and a revision of emissions standards for cars and vans post-2020.

Some European nations had called for the EU to introduce limits on the amount of CO2 emitted by trucks, which pump out a large proportion of CO2 emissions but only account for a small fraction of vehicles on the road. The industry, which includes manufacturers Daimler, Renault and Volkswagen, has typically resisted introducing targets for trucks on the grounds that their different shapes and sizes make a "one-size-fits-all" approach to limiting CO2 emissions difficult and fuel efficiency has already helped lower their carbon footprint.

Europe has lagged behind other countries such as the United States, China, Japan and Canada which have already introduced fuel efficiency standards for trucks.

The U.S. standards on truck emissions could lead to a 33 percent reduction of fuel consumption rates from 2010 levels, according to researchers.

To prepare the ground for the new limits the Commission will propose a law on the certification of CO2 emissions and fuel consumption of new trucks - namely a CO2 test procedure - as well as a
law on monitoring and reporting lorries' fuel consumption. The fuel efficiency targets will initially only be for engines.

"Over time this will be expanded subsequently to all categories based on the full monitoring data," the document says.

5. US Progress on Truck Fuel Efficiency Standards Increases Pressure on EU

EU policy-makers face mounting pressure to fast-track fuel efficiency targets for heavy duty vehicles to ensure Europe's truck manufacturing industry remains competitive. On 16 August, the US Environmental Protection Agency (EPA) announced the second phase of a new regulatory benchmark for medium- and heavy-duty vehicles to improve fuel efficiency and cut emissions. (See story below.) The vehicle and engine performance standards, which would be phased in between 2021 to 2027, apply to semi-trucks, large pick-up trucks and vans, as well as all types and sizes of buses and work trucks.

Concerns are now growing that the EU is falling behind the rest of the world in demonstrating similar leadership on cleaner, fuel-efficient trucks.

Emissions from lorries, buses and coaches represent around a quarter of Europe's road transport CO2 emissions and are set to increase by up to 10% between 2010 and 2030. But unlike cars or vans, the EU does not have fuel efficiency standards or a carbon dioxide monitoring scheme for them.

Last month the Commission stated in its European Strategy for Low-Emission Mobility that it would "speed up" work on design options for emission standards for lorries, buses and coaches, and launch a public consultation in preparation for drawing up new proposals. "In order to be able to make swift progress, different options for standards will be considered, including for engines only or for the whole vehicles, with the objective of curbing emissions well before 2030," the strategy said.

However, targets are not expected to be introduced until after 2020 and given the average lifetime of a lorry is about 10 years, vehicles sold in 2020 will still be on European roads in 2030. NGO Transport & Environment (T&E) has urged the Commission to rethink its strategy, saying that the US regulations represent a "wake-up call".

Stef Cornelis, cleaner and safer trucks officer at T&E, said: "This is as much about environmental leadership as about innovation. "If the EU wants to remain a world leader in truck manufacturing, then the European Commission should table a fuel efficiency standard for trucks in 2017 with a more ambitious 2025 target than the American phase II target."

6. Truck-Makers Face Record Fine for Emissions Law Collusion

Volvo/Renault, Daimler, Iveco, and DAF have been collectively fined a record €2.93 billion for their part in an organized cartel in which the truck-makers colluded on pricing and their compliance with new emission rules.

MAN and Scania were also part of the European Commission's investigation – the former was excused a fine for blowing the whistle on the others, whilst the investigation into the latter continues after it failed to settle.
The other four all acknowledged their involvement and agreed to settle the case.

The manufacturers colluded for 14 years (from 1997 until 2011), a period covering four generations of engine standards – from Euro III to Euro VI. The standards regulate air pollutants from vehicles such as NOx; they don’t cover fuel consumption or carbon emissions.

Discussions between the companies – initially at the “fringes of trade fairs, and later electronically – involved the timing for the introduction of new emissions technologies as the Euro standards became stricter, as well as the passing of costs on to customers. They also colluded on “gross list” prices, which are the basis for pricing in the sector.

Campaigners said the case bears a “sad resemblance” to the diesel emissions scandal. However, the companies have been found guilty of collusion on emissions regulations rather than evasion. The Commission noted that the cartel “was not aimed at avoiding or manipulating compliance with the new emission standards”. There was no evidence of links between the groups and “defeat devices”.

The settlements are based on the Antitrust Regulation 1/2003. Commissioner for competition, Margrethe Vestager, said the ruling is a “clear message that cartels are not accepted”.

NGO Transport & Environment (T&E) argued that the companies had been let off far too lightly. T&E estimated the fines amount to €850 per vehicle. However, Euro VI trucks, for example, were sold at an industry-wide premium of €10,000, rather than the €2,000 estimated by the International Council on Clean Transportation.

Following this verdict truck-makers need to change, but so too do regulators by creating competition on environmental performance, said T&E executive director Jos Dings. Introducing fuel economy standards is one key way of doing that, he added.

7. EU Publishes Shipping Emissions Regulations for Comment

On July 28th and 29th, the European Commission published four draft European Union regulations on monitoring and reporting greenhouse gas emissions from ships, and called for comments on the drafts to be submitted during a four-week period. The regulations include technical rules relating to an EU law on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport (Regulation (EU) 2015/757), which was finalized in 2015.

Under the monitoring and reporting law, shipping companies operating vessels of more than 5,000 gross tons that dock at EU ports must keep track of their carbon dioxide emissions, and submit reports to the European Commission, the EU’s executive arm as of Jan. 1, 2018. The first reports are due April 30, 2019.

The EU law does not oblige shipping companies to take any steps to reduce emissions, though it is seen as an initial step to requiring emissions cuts from ships. The EU monitoring requirements are similar to International Maritime Organization measures agreed to in April.

The four EU draft technical regulations would set out requirements on verification bodies that would check shipping emissions reports, specify templates for shippers' emissions reports, provide rules on the calculation of cargo loads, and provide methodologies for the calculation of emissions from ships.
Following the period during which comments can be submitted, the commission would be able to adopt the draft regulations on reporting templates and cargo loads on the basis of approval from a regulatory committee. The draft regulations on verification and on calculation methodologies could be adopted unless the European Parliament or EU member states object.

Comments on the draft regulations can be submitted through Aug. 25, except the draft regulation on verification, which is open for comments through Aug. 26.

8. European Parliament Lawmakers Back Emissions Ceilings Law


The NEC Directive sets ceilings for emissions of the main pollutants that cause acid rain: ammonia, fine particulate matter (PM-2.5), nitrogen oxides, non-methane volatile organic compounds and sulfur dioxide on a country-by-country basis for the 28 EU members. The update would specify limits for the pollutants to be achieved by 2020 in line with ceilings the EU agreed to in 2012 under the Gothenburg Protocol to the United Nations Convention on Long-Range Transboundary Air Pollution.

Going further than Gothenburg, the update also specifies 2030 national emissions limits for the pollutants. The 2030 limits vary for each EU country but have been calculated as equivalent to a 49.6 percent cut in premature mortality from air pollution compared to the current level of about 400,000 early deaths annually in the EU.

The environment committee's approval of the updated NEC Directive was a formality after an end of June provisional agreement on the law between negotiators from the European Parliament and the Council of the EU, which represents the governments of member countries.

9. European Commission Proposes Non-ETS Emissions Cuts for EU Countries

European Union countries would be required to cut greenhouse gas emissions from the sectors of their economies not covered by emissions trading by up to 40 percent by 2030 compared to 2005, under a draft regulation the European Commission published on July 20th.

In addition, under a separate regulation the commission put forward, EU countries also would be obliged to keep their net emissions from land-use, land-use change and forestry (LULUCF) activities at or below zero.

Both regulations would apply to the 2021–2030 period.

The reductions under the first proposal, known as the effort-sharing regulation, would apply to EU countries differently based on their wealth: the richest countries, Luxembourg and Sweden, would be expected to cut emissions by 40 percent; the poorest, Bulgaria, would be obliged to make no cuts, and Romania would be required to make a 2 percent cut.

The reductions would add up to an overall EU reduction of 30 percent from agriculture, buildings, land use, transport and waste management—the main sectors of the economy not covered by
the EU emissions trading system (ETS). Non-ETS sectors are responsible for about 60 percent of total EU greenhouse gas emissions.

When combined with cuts made by heavy industry and energy generation, which are included in the ETS, the reductions that the commission proposed July 20 would add up to an overall cut of 40 percent by 2030 compared to 1990, which the EU pledged as part of the December 2015 Paris climate change accord.

Maros Sefcovic, European Commission vice president for energy union, said the EU was “moving towards a society that is low in carbon and rich in opportunity,” and the commission’s proposals “will firmly anchor in the legislation” its commitments made as part of the Paris Agreement.

But critics said the European Commission introduced loopholes for decarbonization into the EU architecture that would lessen emissions reductions through 2030. Forest conservation advocacy group Fern said exploiting the loopholes would reduce “the EU's headlined, ‘at least 40 percent’ reduction target down to less than 39 percent.”

The commission said, however, that proposed “flexibilities” would allow some wealthier EU countries to use surplus ETS allowances to meet their non-ETS targets and all countries to use credits related to carbon sinks.

According to the proposal, Austria, Belgium, Denmark, Finland, Malta, the Netherlands and Sweden would be able to opt to use as offsets ETS credits equivalent to 2 percent of their 2005 greenhouse gas emissions, while Ireland and Luxembourg would be able to bring in ETS credits equal to 4 percent of their 2005 emissions.

Allowing countries to offset some of their non-ETS emissions by accounting for carbon sinks “recognizes that there is a lower mitigation potential for emissions from the agriculture sector,” the commission said. Countries that are more reliant on agriculture would be able to make greater use of carbon sinks, it added.

The European Parliament and EU countries represented in the Council of the European Union must agree to both regulations before they can be finalized.

Besides the two regulations, the commission opened two public consultations on low-carbon transport July 20. The EU has a non-binding goal from 2011 that the bloc's transportation emissions should be 60 percent lower than their 1990 levels by 2050.

The consultations, which are open through Oct. 28, call for comments on tightening carbon dioxide emissions limits after 2020 for cars and vans, and on monitoring fuel economy and carbon emissions of heavy vehicles, including trucks and buses.

The measure on fuel economy of heavy vehicles originally was planned for publication in 2015. Unlike the U.S., which put in place a greenhouse gas emissions standard for heavy-duty vehicles in 2011, the EU has no harmonized measure for truck carbon dioxide emissions. (See story above.)

Jos Dings, director of advocacy group Transport & Environment, said additional EU measures on cars, vans and heavy vehicles would “not only tackle climate change, but also address energy dependence, cut energy bills and create jobs.” Measures to decarbonize road transport, however,
should be complemented by measures on other transport modes, because “emissions from planes and ships must not be allowed to replace those cut from vehicles,” Dings said.

Following are the proposed country-specific targets for EU nations to limit greenhouse gases in 2030 compared with 2005, the ETS flexibility toward non-ETS goals and the forestry flexibility:

<table>
<thead>
<tr>
<th>Country</th>
<th>2030 target versus 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>-36%</td>
</tr>
<tr>
<td>Belgium</td>
<td>-35%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>-0%</td>
</tr>
<tr>
<td>Croatia</td>
<td>-7%</td>
</tr>
<tr>
<td>Cyprus</td>
<td>-24%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>-14%</td>
</tr>
<tr>
<td>Denmark</td>
<td>-39%</td>
</tr>
<tr>
<td>Estonia</td>
<td>-13%</td>
</tr>
<tr>
<td>Finland</td>
<td>-39%</td>
</tr>
<tr>
<td>France</td>
<td>-37%</td>
</tr>
<tr>
<td>Germany</td>
<td>-38%</td>
</tr>
<tr>
<td>Greece</td>
<td>-16%</td>
</tr>
<tr>
<td>Hungary</td>
<td>-7%</td>
</tr>
<tr>
<td>Ireland</td>
<td>-30%</td>
</tr>
<tr>
<td>Italy</td>
<td>-33%</td>
</tr>
<tr>
<td>Latvia</td>
<td>-6%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>-9%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>-40%</td>
</tr>
<tr>
<td>Malta</td>
<td>-19%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>-36%</td>
</tr>
<tr>
<td>Poland</td>
<td>-7%</td>
</tr>
<tr>
<td>Portugal</td>
<td>-17%</td>
</tr>
<tr>
<td>Romania</td>
<td>-2%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>-12%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>-15%</td>
</tr>
<tr>
<td>Spain</td>
<td>-26%</td>
</tr>
<tr>
<td>Sweden</td>
<td>-40%</td>
</tr>
<tr>
<td>U.K.</td>
<td>-37%</td>
</tr>
</tbody>
</table>

10. London Seeks to Rescue Smog Plan from Brexit Debate

London Mayor Sadiq Khan sought to keep pollution on the U.K. political agenda, introducing plans to penalize the dirtiest cars and demanding a say on how the nation will untie itself from the European Union.

Britain has been in breach of EU air quality rules for years and has said it is unlikely to meet the 2010 standard until at least 2025. Khan, who took office in May after campaigning on green issues, is concerned pollution will slip as a priority as the national government focuses on leaving the bloc following a June 23 referendum on the issue.

Khan said he will “actively intervene” in a new lawsuit brought by an environmental group seeking to force ministers into quicker action. Speaking on the 60th anniversary of the clean air act, brought in after “pea-souper” smogs, Khan said he is working on a number of measures that will cut down on diesel exhaust fumes across the capital. He urged the national government to help.
“Leaving the EU should not be the first step of us going back to being known as the dirty man of Europe,” Khan said at an event in London on July 5th. The next government, he said, should “put in place the strongest possible legal protections to ensure the existing legal limits are retained and not undone by Brexit.”

The U.K. has worked to block the EU from tightening its pollution laws, spending about 100,000 pounds ($132,000) unsuccessfully defending itself against environmental group ClientEarth, which sued ministers over their failure to meet legal pollution limits.

A loophole in EU pollution standards for diesel cars means many cities, including London, are engulfed in unhealthy levels of nitrogen dioxide, despite a 2010 deadline to bring air quality to healthy levels. The U.K.’s exit from the EU means the country would avoid hefty fines from the European Court of Justice, said Alan Andrews, a lawyer for ClientEarth.

EU limits are falling behind the World Health Organization’s recommended guidelines, said James Thornton, chief executive officer of ClientEarth. He urged the U.K. to use its independence to improve its air quality laws beyond levels in the EU. “There were a lot of people for Brexit who kept saying we can do better,” Thornton said. “The clean air law is one that we can do. What we need is some visionary politicians like the mayor after Brexit to ensure our environmental health continues to be protected.”

A spokeswoman for the U.K.’s Department for Environment, Food and Rural Affairs, said air quality was a priority for the government. “We welcome the Mayor of London’s commitment to improving air quality in the capital and Ministers will be meeting with him shortly to discuss how we can work together,” she said in an e-mailed statement.

Khan's main proposal is dubbed T-Charge, which would apply a fee of 10 pounds on the most polluting vehicles entering central London. He also is seeking to extend the city's planned Ultra-Low Emission Zone to include the North and South Circular roads.

In addition, he proposed:

- extending the Ultra-Low Emission Zone beyond the city center in 2020;
- starting the zone in central London in 2019, a year earlier than planned;
- introducing cleaner buses on the most polluted routes;
- developing a national program for scrapping diesel vehicles; and
- requiring all double-decker buses to comply with the low-emissions zone by 2019, a year earlier than planned.

London suffers some of the worst pollution in Europe, causing almost 10,000 premature deaths a year, according to research by the Environmental Research Group at King's College London.

The Mayor has also pledged £11 million in funding for five ‘low emission neighborhood’ projects across the capital, designed to help reduce air pollution. £5m of the funding will be delivered by Transport for London, whilst the remaining £6m will come from the boroughs.

11. City Of London Puts the Brakes on New Diesel Vehicle Purchases
The City of London Corporation has banned the purchase or hire of diesel vehicles for its business. The public authority, which has a fleet of more than 300 vehicles, announced it will now no longer lease or purchase diesel models when older models need replacing.

Chris Bell, head of procurement at the City of London Corporation, said the move underlined how the organization takes air quality “extremely seriously”. “This agreement is a major step forward in our drive to protect the millions of London tourists, workers and residents from air pollution,” he said in a statement. “We are taking responsibility for the cleanliness of our fleet and encouraging the use of low and zero emission vehicles with our partners.”

The authority said it has reduced the NOx emissions from its vehicles by over 40 per cent and PM10 emissions by over 50 per cent since 2009, largely through a reduction of the size of its fleet and the purchase of newer and cleaner vehicles.

It added it is encouraging businesses to cut back on deliveries in the Square Mile and is promoting the use of hybrid electric cars.

However, the Corporation said it will continue to use types of vehicles that do not have a non-diesel alternative - such as tractors - until a clean alternative becomes available on the market.

The policy was backed by Clean Air in London founder Simon Birkett, who said the City of London is showing to Mayor Sadiq Khan and others in local and regional government that it is possible to effectively ban diesel vehicles. “It’s no longer ‘if’ but ‘where’ and ‘when’ diesel will be banned,” he told BusinessGreen, adding that such bans should be supported by a massive investment in active travel and public transport.

**12. EU Releases Trade Proposals on Cosmetics, Medical Devices, Cars, Chemicals**

New European Union proposals in trade talks with the U.S. are aimed at simplifying technical regulations in the cosmetics, medical devices, cars, chemicals and textiles sectors, the European Commission said July 14. The proposals set out the EU’s position on regulatory cooperation in these sectors in the Transatlantic Trade and Investment Partnership (TTIP) talks, which are aimed at cutting red tape for companies operating in both markets and helping regulators by eliminating duplicative inspections.

The commission also published proposals on climate protection, energy and raw materials, financial services market access and institutional cooperation.

Release of the proposals during negotiations marks a departure from the commission’s policy of publishing texts sometimes weeks after presentation. The U.S. doesn’t release its proposals but has published detailed objectives of TTIP goals.

Release of the documents follows a leak of a purported proposal on energy and raw materials, which the commission said wasn't what would be presented to U.S. negotiators.

The energy proposal contains the same language as in the leaked text. It said, “the Parties must agree on a legally binding commitment to eliminate all existing restrictions on the export of natural gas” in trade between them. Environmental groups, which had criticized the leak, said the language would lead to greater dependency on a climate-disrupting fossil fuel and more hydraulic fracturing.
Other provisions in the energy chapter would establish a consultation mechanism to prevent or react to disruptions of energy supplies to any TTIP party. The chapter also urges cooperation on energy and raw materials to reduce or eliminate trade- and investment-distorting measures in non-TTIP countries.

The climate proposal seeks to safeguard environmental standards by promoting green goods trade and “progressively” phasing out fossil fuel subsidies.

The EU urged U.S. officials to cooperate and exchange information regarding: energy efficiency, sustainable development, deforestation and emissions monitoring. The proposal acknowledges the 2015 Paris climate change accord's importance and urges the parties to cooperate with the United Nations Framework Convention on Climate Change and the Montreal Protocol on Substances that Deplete the Ozone Layer. The Paris Agreement was reached last December and calls for global action to mitigate carbon emissions.

The EU also called on parties to cut tariffs on environmental products—such as solar panels, water filters, electric motors and hydraulic turbines—by implementing the Environmental Goods Agreement.

The motor vehicles proposal sets out terms for EU and U.S. officials to issue new regulations for the automotive sector in a cooperative and transparent manner. The proposal seeks to ensure high regulatory levels for vehicle safety and environmental protection while aligning cross-Atlantic technical requirements, regulations and administrative measures with the 1998 agreement of the World Forum for Harmonization of Vehicle Regulations.

The U.S. accounts for 18 percent of all EU vehicle exports and more than 12 percent of all cars imported to the EU come from the U.S., according to European Union trade statistics. The EU Trade Commission estimated that reduced trade barriers could increase bilateral EU-U.S. trade in the automotive sector by 70 percent to 350 percent during the next decade.

13. Spanish Court Says Volkswagen German Parent Company Liable

Spain's High Court said Volkswagen's parent company, based in Germany, would be liable to answer any charges over emissions fraud, rather than its Spanish affiliates. The carmaker had said the Spanish probe, accusing it of fraud in relation to exhaust emissions and pollution from its diesel engines, should be directed at its Spanish affiliates Seat, Volkswagen-Audi España and Volkswagen Navarra.

The court opened initial proceedings against VW in October, with around 700,000 diesel vehicles in Spain, mostly VW and Seat models, believed to be affected.

14. VW Escapes Cheating Fines in Germany, Payout Pressure Mounts

Volkswagen AG is set to avoid fines from the German Transport Ministry after falsifying emissions test results for years, despite growing public ire over the lack of compensation for European owners of tainted vehicles. It is sufficient for Volkswagen to fix diesel vehicles in Germany so that they meet legal requirements, Transport Ministry spokesman Ingo Strater said July 6. Meanwhile, Bild, Germany's most-read newspaper, took Volkswagen to task for failing to compensate the 2.4 million affected owners in its home country amid growing discontent after Chief Executive Officer Matthias Mueller rejected compensation in Europe.
“It's not acceptable that the government doesn't take any real consequences from the emissions scandal and gives a blank check for tricks and deceptions,” said Oliver Krischer, a member of Germany’s Bundestag from the opposition Green Party who is leading a parliamentary investigation committee. “It needs to be explained why companies in Germany don't pay fines. It's also not OK that European drivers are treated worse than American VW drivers.”

While Volkswagen is paying affected U.S. owners as much as $10,000 each as part of a $15.3 billion settlement, Germany has taken a far softer stance over the manufacturer rigging vehicles to turn on full pollution controls only during official tests. Germany, which is closely tied to Volkswagen via the state of Lower Saxony’s 20 percent stake and the political influence of the automaker giant, approved a low-cost fix that consists of a software upgrade and in some case a piece of pipe with mesh on one end.

Instead of payments, “German customers get a letter and an appointment at the workshop to fix the cheating diesels,” Bild wrote in story published July 6. “Are German customers second class?” Volkswagen declined to comment beyond Müller's comments in the newspaper interview.

The reasons for the wide disparity in the handling of the crisis stems from equally large differences in legal and regulatory structures between the U.S. and the European Union. The lack of class-action lawsuits is a major disadvantage for European consumers, undermining their leverage in negotiations. Europe also doesn't clearly ban switch-off devices—the bit of software at the heart of the scandal—and allows them to be used if they help protect the engine.

In addition, Germany has been at pains to show emissions issues go beyond Volkswagen, strong arming automakers in April to upgrade 630,000 vehicles to fix temperature-control setups that pushed the boundaries of regulation. It also tried to put pressure on Fiat Chrysler Automobiles NV but was brushed off by Italy, which has authority over the company's European vehicles.

“There’s an attempt to protect Volkswagen to a degree, as Volkswagen could be pushed to a breaking point if the same criteria applied in Germany as in the U.S.,” said Stefan Bratzel, director of the Center of Automotive Management at the University of Applied Sciences in Bergisch Gladbach, Germany. “The Transport Ministry is also damaged by the whole affair, so they want it to go away.”

15. Paris Says ‘Non’ to 20th Century Cars, Bolstering Koolicar, Uber

Paris is taking old vehicles off its streets starting July 1. In a move to cut pollution, the French capital is banning cars that have passed the 20-year mark, leaving many Parisians looking for alternatives, from low-cost new vehicles to car-sharing and taxi-hailing apps such as Heetch, Drivy, Koolicar and Uber.

Paris, a laggard on air quality compared to other European cities, is barring cars registered before October 1997 and motorcycles registered before June 1999. The goal is to remove vehicles that contribute around 5 percent of polluting emissions linked to diseases such as asthma. By 2020, only cars registered after 2010 will be allowed on Parisian streets.

The ban adds to scrapping incentives set up by the state. Car owners get up to 3,700 euros ($4,109) if they acquire a new, low-pollution vehicle and scrap their old diesel model that is more than 10 years old. France also has an “ecological bonus” paid to buyers of “clean” vehicles. Buying an electric car can increase the aid to 10,000 euros.
In London, the new mayor Sadiq Khan announced plans to extend the city's ultra-low emissions zone, where vehicles that do not conform with emissions standards have to pay tolls. In the U.S., New York and four other states are exploring ways to put a price on the air pollution from vehicles, including new taxes, tolls or a pollution-trading system.

In France, less than 1.5 percent of all registered vehicles will be hit by the ban in the region around Paris. The ban will be in effect on weekdays, from 8 a.m. to 8 p.m., and will not apply to collectors of antique cars.

People with small budgets will likely turn to public transportation. Renting an urban car from Koolicar for six hours to ride 20 kilometers (12.4 miles) costs 18 euros, including fuel. A trip with the taxi-hailing app Uber would cost around 35 euros. A round-trip metro ticket costs 3.6 euros. Paris also offers public-transport incentives to people who scrap their old cars.

Individuals using old cars could face a fine of 35 euros from Oct. 1, and of 68 euros beginning in 2017, according to French daily Le Monde.

**16. German Parliament Debates Tax Break for Electric Car Owners**

The upper house of the German Parliament, the Bundesrat, approved in a first reading July 8 a bill that would amend the country's Motor Vehicle Tax Act to extend to a full decade the length of time owners of electric cars could claim an annual tax exemption.

The lower house, the Bundestag, will discuss the bill in the fall when it reconvenes following the summer parliamentary recess. If the Bundestag passes the measure, it will return to the Bundesrat for a second reading. If passed by the Bundesrat, the bill would take effect retroactively to Jan. 1, 2016, after being signed into law by the federal president.
The bill forms part of a wider 1 billion euro ($1.1 billion) package of measures to increase e-mobility in Germany by having 1 million electric cars on the road by 2020 and reduce carbon emissions in the country's transport sector.

It would extend the period of time a car owner could exempt his or her electric car from taxes from the current five years to the first 10 years of ownership.

Another component of the electric car package, a subsidy directive to boost sales of the cars by allowing consumers to apply for a 3,000 euro rebate for a new hybrid and a 4,000 euro rebate for a new electric car, began July 2. These subsidies, which did not require parliamentary approval, can be applied to electric cars costing less than 60,000 euro and take effect retroactively from May 18. According to the government, 600 million euros have been set aside for the rebates and is expected to last at the longest through 2019.

The third component of the electric car package is a directive to subsidize the construction of the charging infrastructure for electric cars with 300 million euro. That program is scheduled to go into effect sometime in 2017.

Critics said the measures are insufficient if the government wants to reach its goal of 1 million electric cars by 2020 given time constraints and the volume of subsidies, which will likely finance the purchase of only up to 300,000 or 400,000 electric cars.


New diesel cars are still emitting many times the official limit for polluting nitrogen oxides when driven on the road, almost a year after the Volkswagen emissions scandal broke. Renault, Mercedes-Benz, Mazda and Hyundai have all launched diesel models in 2016 with NOx emissions that are far higher than the official lab-based test when driven in real-world conditions, according to tests by Emissions Analytics (EA), a company whose data is used by the manufacturers of most cars sold in Europe.

Ironically, the only new model to meet the limit when on the road was a Volkswagen Tiguan.

Diesel cars must pass lab-based tests for NOx emissions but most cars perform far worse in the real world and in 2015 Volkswagen was caught using software to cheat the tests. Previous EA analysis showed 97% of diesels launched since 2009 exceeded the lab limit.

NOx pollution is a serious public health problem, causing the early deaths of 23,500 people a year in the UK alone. New research recently presented suggests the air pollution crisis in UK cities has not been tackled because politicians prioritize economic growth and road safety instead.

The EU has tightened emissions regulations and, from September 2017, diesels that emit more than double the lab limit for NOx on the road will be banned from sale.

The Emissions Analytics’ road test is very similar to the new test the EU is implementing and it found that 2016 Renault Megane (1.5l engine) and Espace (1.6l) diesel models emitted more than 12 times the NOx lab limit in real-world driving.

A Mercedes Benz CLA (2.1l) diesel emitted 8-12 times the limit on the road, while a Mazda 3 (1.5l) and Hyundai Sante Fe (2.2l) emitted 6-8 times the limit. Until the testing regime changes in
2017, it is legal to sell such high emitters. In contrast to the other vehicles, the road emissions of the Volkswagen Tiguan (2.0l) met the lab limit for new cars.

“Diesels can be clean,” said Nick Molden, the EA’s chief executive. “It is about getting a [regulatory] system that forces deployment of the technology.”

Molden said the continued sale of highly polluting diesels reflected the struggle of some manufacturers to catch up and implement the emissions-reducing technology. Other carmakers, he said, have the technology in their cars already but are calibrating their engines to maximize fuel efficiency, at the expense of high NOx emissions.

But some, such as VW, had already delivered on the most recent standard, called Euro 6, Molden said. “There is a massive irony, given that VW are the ones that have been caught. But their Euro 6 cars from the get-go have been very clean and they came in before ‘Dieselgate’ blew. It is an even bigger irony than it first looks - they had already cleaned themselves up before they got found out.”

Julia Poliscanova, from the campaign group Transport and Environment, said: “The current regulatory climate in Europe sees testing authorities protecting carmakers and allowing polluting vehicles to be sold, even after Dieselgate.”

“New on-road tests after 2017 will help and are the only way to measure accurate real-world emissions,” she said. “But more action is necessary. In the short term governments must stand up for their citizens’ health and order mandatory recalls to bring illegally dirty cars in compliance.

“In the long term, more independent oversight, transparency and robust testing over vehicles' lifetimes are necessary for Europeans to finally enjoy the cleaner air promised to them almost 10 years ago.”

Tamzen Isacsson, from the UK trade body The Society of Motor Manufacturers and Traders (SMMT), said: “We can’t comment on results from non-official tests where the robustness or methodology is unclear. However, SMMT and industry acknowledge the need for reform of the EU test process. “We support the introduction next year of a more onerous lab test that better reflects real world driving, together with an on-road Real Driving Emissions (RDE) test. This will be the world’s toughest emissions testing regime.”

Molden said the new regime in 2017 would probably mean diesels at the smaller end of the range would no longer be sold: “Some of these cars will be discontinued because the after-treatment system will just be too expensive as a proportion of the total price to work commercially. But from mid-sized cars upwards it can be done. We are talking about adding hundreds of pounds per [car], not thousands.”

18. VW Gets German Approval to Fix 460,000 Diesel Cars

Volkswagen AG received German regulatory approval to carry out technical fixes on 460,000 diesel cars fitted with software that cheats emissions tests. The approval from the Federal Motor Transport Authority applies to models with 1.2-liter EA189 engines including Volkswagen Polo and Seat Ibiza, the German carmaker said in an August 14th statement. Germany's approval is valid for countries throughout Europe.
Volkswagen embarked on one of the biggest recalls in automotive history last year with 8.5 million affected cars in Europe after a U.S. investigation found software to cheat emissions tests in the EA189 engine. German regulators have cleared about 4.5 million vehicles in a process Volkswagen expects to complete by the end of this year, VW brand chief Herbert Diess told N-TV earlier this month.

19. **Netherlands on Brink of Banning Sale of Fossil-Fueled Cars**

Europe appears poised to continue its move towards cutting fossil fuel use as the Netherlands joins a host of nations looking to pass innovative green energy laws. The Dutch government has set a date for parliament to host a roundtable discussion that could see the sale of petrol- and diesel-fueled cars banned by 2025.

If the measures proposed by the Labor Party in March are finally passed, it would join Norway and Denmark in making a concerted move to develop its electric car industry.

It comes after Germany saw all of its power supplied by renewable energies such as solar and wind power on one day in May as the economic powerhouse continues to phase out nuclear energy and fossil fuels.

And outside Europe, both India and China have demanded that citizens use their cars on alternate days only to reduce the exhaust fume production which is causing serious health problems for the populations of both nations.

The consensus-oriented parties of the Netherlands are set to consider a total ban on petrol and diesel cars in a debate on 13 October.

Richard Smokers, principle adviser in sustainable transport at TNO, said the Dutch government was committed to meeting the Paris climate change agreement to reduce greenhouse emissions to 80 per cent less than the 1990 level. The plan requires the majority of passenger cars to be run on CO2-free energy by 2050.

"Dutch cities still have some problems to meet existing EU air quality standards and have formulated ambitions to improve air quality beyond these standards," he told reporters, adding that the government had at the same time been reluctant to implement strict policies on the environment. "The current government embraces long term targets and strives at meeting EU requirements, but is hesitant about proposing 'strong' policy measures. "Instead it prefers to facilitate and stimulate initiatives from stakeholders in society."

If the law to ban the sale of new fossil-fuel cars by 2025 passes, a significant move will have been made towards phasing out all petrol and diesel cars by 2035, added Dr Smokers.

His words come after Jan Vos, a member of the country's Labor Party, hailed the success of the proposed ban in passing through the Netherlands's lower parliament. "We need to phase out CO2 emissions and we need to change our pattern of using fossil fuels if we want to save the Earth," he told media site Yale Climate Connections. He added that electric cars needed to be affordable. "Transportation with your own car shouldn't be something that only rich people can afford."

But a spokesperson for the Netherlands's Department for Climate, Air and Energy said the law was not guaranteed to pass after discussions are resumed in October. "The proposal is being considered, but there is still opposition to it."
According to Quartz, sales of electric cars have surged in the Netherlands with an all-time high last December. Meanwhile, the country has one of the lowest levels of CO2 emissions from new cars in the European Union.

Elsewhere in Europe, Norway has hit its target of selling 50,000 electric cars three years ahead of its own target, in part owing to strong financial incentives to purchase the more environmentally friendly model. Electric vehicles have been exempted from VAT and purchase tax, which would otherwise add 50 per cent to the cost of the vehicle, under new Norwegian laws.

Denmark, meanwhile, produced so much electricity from wind power in July last year that it was able to sell its excess to Germany, Norway and Sweden.

In the UK, however, Theresa May has closed the Department for Energy and Climate Change and merged it into a new Department for Business, Energy and Industrial Strategy.

20. Inquiry Committee: We Are Not Done With Verheugen Yet

"Former Commissioner Günter Verheugen did not bring clarity to the issue at his appearance before the inquiry committee on car emissions today. Specifically, he did not explain why EU legislation on emissions was pushed through in 2007 when it was clearly known that real world driving car emissions vastly differ from those in laboratory conditions, to the detriment of public health and the environment,” said the EPP Group Spokesman in the Inquiry Committee, Krišjānis Kariņš MEP, after the hearing in the Inquiry Committee on Emission Measurements in the Automotive Sector (EMIS) today.

After rejecting two previous invitations, former European Commissioner for Industry Günter Verheugen finally appeared before the EMIS Committee. Verheugen was the legislative father of the problematic directives and regulations on car emissions exposed by the VW scandal and he has more answers to give.

“Verheugen did not provide a sufficient answer as to why there was no response to possible cheating by light duty vehicle producers following findings on truck manufacturers using defeat devices in the market in the United States back in 1998,” said Krišjānis Kariņš.

It has also become apparent that several other people in the European institutions are responsible for having put in place the controversial piece of legislation that made it possible for car manufacturers to cheat. The result was higher emissions of NOx than allowed in the legislation.

"Given that S&D Group MEPs from car-producing regions in Germany were moving this legislation forward with the former German Industry Commissioner Verheugen for years, it would be fruitful to invite both Bernd Lange MEP (S&D) and Matthias Groote MEP (S&D) to the EMIS Committee,” Krišjānis Kariņš concluded.


If businesses are to be hit with new regulation to combat poor air quality in London, proposals for a new diesel vehicle scrappage scheme, and another boiler scrappage scheme, are the sensible way forward, according to the Builders Merchants’ Federation (BMF). The BMF was responding to a consultation by Mayor of London Sadiq Khan, seeking views on proposals to improve public health by cleaning up London's air quality.
The possibility of government help to fund a scrappage scheme - or other similar incentive - has direct implications for all merchants. The idea is to pay vehicle owners part of the cost of replacing vehicles (likely to be diesel engines) with a less-polluting one.

At this early stage, it is not known if any such offer would be only for cars and vans, or would also include lorries. The BMF said it strongly agrees and would welcome action to replace older, polluting vehicles with cleaner, modern equivalents.

John Newcomb, BMF managing director, said: "Prior to being elected, Sadiq Khan repeatedly pledged to be a very 'business friendly' Mayor. The current London Boiler Cashback Scheme is working well. Mr. Khan would do well to repeat and enhance it with another offer to tackle fuel poverty, reduce carbon emissions, cut energy bills and make homes cozier. Plumbing and heating merchants we represent stand ready to help him."

Tackling air pollution in London is a public health priority, as the equivalent of 9,416 people die early each year due to long-term exposure to air pollution.

In his consultation, Sadiq Khan set out several possible options including:

- A new £10 per day Emissions Surcharge, on top of the Congestion Charge, on the most polluting vehicles in London, from as early as next year
- The central London Ultra-Low Emission Zone starting in 2019, one year earlier than planned
- Extending the Ultra-Low Emission Zone beyond central London from 2020 to the North and South Circular Roads (motorcycles, cars & vans) and London-wide (lorries, buses & coaches).

The consultation coincides with the 60th anniversary of the Clean Air Act 1956, and Sadiq Khan said a further more detailed consultation exercise will take place later this year.

**22. London Mayor Introduces Air Quality Alerts at Bus Stops**

London Mayor Sadiq Khan said he will bring in toxic air warnings at bus stops as part of a public health drive to reduce the effects of the capital's air pollution. Starting August 15th, the alerts will be displayed on 2,500 signs at bus stops around the city to warn Londoners of episodes of "high" or "very high" air pollution, Khan's office said August 4 in an e-mailed statement. They will also be displayed on electronic signs at the entrances to all 270 London Underground subway stations, and on 140 roadside dot-matrix signs.

Elected in May, Khan has made tackling air pollution a priority. He promised to extend an Ultra-Low Emission Zone, increase the congestion charge in central London for the most polluting vehicles and introduce a program to scrap diesel vehicles. A report in February by the Royal College of Physicians found that about 40,000 people die a year in the U.K. because of exposure to outdoor air pollution.

London has been in breach of European air quality limits for years, and under plans inherited by Khan, the capital wasn't projected to meet guidelines for 2010 until 2025 at the earliest. The new warnings will tell people whether they should consider walking, cycling or seek other public transport and let asthma sufferers know they have need to use their inhaler more often.

Electric vehicle adoption has accelerated in recent years, with growth seen in Europe and China. Sales in 2015 were estimated to be 424,000 vehicles, according to Bloomberg New Energy Finance. The research unit forecasts that electric vehicles will reach 20 percent of new light-duty vehicle sales globally by 2030.

“The crossover point is definitely feasible by 2020, and we expect the number of EV charging stations to accelerate further as EV adoption rises,” said Colin McKerracher, head of advanced transport analysis at Bloomberg New Energy Finance. “However, it's worth noting that the throughput—the number of cars that can be refueled in an hour—of an average petrol station is significantly higher than that of an EV charging station.”

Nissan's figures assume a steady decline in petrol stations in the U.K. About three quarters have been shut down in the last 40 years, the automaker said. By the end of 2015, there were 8,472 fuel stations in the U.K., down from 37,539 in 1970. The Japanese automaker has a range of electric cars such as the Leaf and e-NV200 options.

NORTH AMERICA

24. EPA Decision on Aircraft Emissions Creates Opportunity for EU-US Cooperation

On July 25th the EPA declared that GHG emissions from “certain types” of aircraft engines contribute to climate change. According to the EPA, large commercial jets account for 11% of total emissions from the global transportation sector and aircraft emissions are expected to grow by 50% by 2050 as demand for air travel increases.

The ruling marks a milestone for the EPA as it looks to draw up a new international aircraft CO2 standard that would be “at least as stringent” as the standard being developed by the United Nations’ International Civil Aviation Organization (ICAO), which is expected to be adopted in 2017.
The proposed ICAO agreement, supported by the US and 22 other countries, calls for a 4% reduction in fuel consumption in new commercial aircraft built after 2028 and from aircraft currently in production delivered after 2023.

Airlines for Europe (A4E), which represents various European aviation operators, has already urged governments to support the proposed ICAO standard. However there are concerns that the standard will have limited impact due to advances in fuel efficiency for new generation aircraft.

On a positive note, the prospect of a new EPA standard could pave the way for the US and EU regulatory bodies to work together and adopt a bilateral approach for tougher action on aircraft emissions.

According to NGO Transport and Environment (T&E), one option for the EPA is to introduce a more effective US standard that would apply not only to US-built aircraft, but other aircraft sold to US registered airlines.

T&E aviation director Bill Hemmings said: “We now have the real possibility of the EU and the US cooperating to fix the deeply-flawed UN aviation efficiency standard. The European transport commissioner Violeta Bulc should grab this opportunity with both hands.”

Despite the EU playing a central role in brokering the ICAO agreement to cap C02 emissions from aircraft, aviation hardly merited a mention in the European Commission’s Low-Emission Mobility strategy published earlier this month. The strategy, which announced new CO2 standards for cars and vans, failed to deliver any concrete proposals for tackling aviation emissions.

25. BMW's 2017 Diesels Delayed By More Stringent EPA Emissions Tests

The EPA’s crackdown on diesels has delayed the certification and sale of four BMW models. BMW confirmed it is still awaiting production certification of all 2017 diesels and would not say how long this would take.

“In light of recent events, agencies are taking longer to certify diesel models for the U.S., but there has been no indication that BMW’s diesel models do not meet all requisite emission standards or that there is a defeat device in the vehicle,” BMW said in a statement.

The affected 2017 models are the 328d sedan, the 328d Sports Wagon, and the X3 xDrive28d and X5 xDrive35d crossovers. A spokesman said production will begin “once homologation has been finalized.”

The EPA would not specifically confirm delaying BMW’s models. But the agency did confirm in an email: “It is true that diesel vehicles are getting extra scrutiny and that has extended the certification process longer than normal. In general, manufacturers have been supportive of this additional testing and have adjusted their timing to account for the additional test duration.”

Regulators are subjecting diesels to additional testing because of the ongoing scandal over Volkswagen diesels.

26. Tests for Latest VW TDI Diesel Fix Begin

The California Air Resources Board (CARB) and Volkswagen will begin testing software and hardware solutions for 2.0-liter diesel-engined VW and Audi vehicles, Reuters reports.
As part of the historic $15 billion settlement with U.S. authorities, Volkswagen will buy back at least 85 percent of the remaining 482,000 2.0-liter TDI diesel cars -- four VW models and one Audi -- starting this fall, but it plans to repair the rest. Earlier in the year, the EPA and CARB rejected Volkswagen's proposed technical solutions for the 2.0-liter models, recalls for which began in Europe at the start of the year with most cars receiving just a software update.

However, VW has faced an uphill battle to engineer a technical solution for the U.S. due to more stringent environmental regulations; the outcome of months of negotiations with U.S. authorities so far has been an agreement to buy back over 400,000 vehicles and develop a fix for the rest, if possible.

Volkswagen incurred another large fine in the wake of the diesel emissions-cheating scandal, with the state of Washington issuing a $176 million fine.

CARB chief Mary Nichols told reporters that VW officials now believe a combination of software and hardware fixes could be developed for the three generations of 2.0-liter VW diesels, produced from 2009 through 2016.

“They brought in a whole new team of people to work on various aspects of this,” Nichols said in an interview with Reuters. "There’s just a greater sense that we’re dealing with people who have access to the decision makers in Germany and who understand their credibility is on the line."

The 2015 and 2016 model-year VW and Audi vehicles are a priority for VW in part because a large number of new, unsold vehicles sit at VW dealers awaiting a fix. While older diesel vehicles can be bought back easily if their owners choose to part with them, the brand-new unsold vehicles represent a separate and more costly headache for the automaker, which first hinted it plans to compensate VW dealers last month. It is expected that the majority of the cars that will be repaired are unsold VW and Audi models languishing in dealer inventories.

While VW developed a "flow transformer" device for a number of 2.0-liter diesels in Europe, industry analysts long suspected U.S. models would require more complex hardware and software measures, possibly including the installation of urea systems like those used by larger diesels to meet emissions targets. It is not known at this time whether VW is still contemplating the addition of urea tanks to a portion of the affected 2.0-liter diesel models; company executives indicated such a retrofit would be prohibitively expensive for the automaker.

CARB recently rejected a proposed fix for 3.0-liter TDI models from the VW, Audi and Porsche brands for a separate type of emissions issue not addressed in the settlement reached and pre-approved in the last few weeks. VW had expected a simple fix for those 85,000 vehicles but failed to gain CARB approval.

27. U.S. Regulators Say Fuel Efficiency Pays, Despite Cheaper Gas

Automakers have the technology to meet aggressive mandates to hike fuel efficiency by 2025, but the fleet-wide improvement will not be as great as the Obama administration once forecast because buyers are switching to pickup trucks and SUVs, federal regulators said recently.

The report by the U.S. Environmental Protection Agency, the National Highway Traffic Safety Administration and the California Air Resources Board will frame a debate with the auto industry that will be decided in 2018 by the next president.
Administration officials said the key finding of their analysis is that automakers can comply with the mandates using known technology, and deliver benefits in terms of fuel savings and greenhouse emissions cuts that outweigh the estimated $894 to $1,245 per vehicle in costs.

Automakers are sounding alarms that low gas prices make the Obama administration's mandates to cut vehicle greenhouse gas emissions untenable in their current form.

Trucks, which generate the bulk of the profits earned by Detroit's three, unionized automakers, are the key. When the president's administration first outlined its goal of boosting average fleet fuel economy to 54.5 miles per gallon, regulators forecast that 67 percent of vehicles sold in 2025 would be cars. Since then, gasoline prices have plummeted and truck sales have surged. The agencies now forecast cars will be between 48 percent and 62 percent of the mix.

Regulators now estimate the fleet will average 50 to 52.6 mpg in 2025.

"Given changes in the market landscape, it will be a daunting challenge to meet the very aggressive requirements of the 2022-2025 federal fuel economy and greenhouse gas rule," said Gloria Bergquist, a spokeswoman for the Alliance of Automobile Manufacturers.

The report may give automakers some ammunition to try to win changes to the rules.

Because of lower gas prices, the EPA now forecasts owners will need around 5 years for gas savings to match higher vehicle prices, compared with an earlier estimate of about 3.5 years.

However, the assessment also finds that battery costs are lower today than they were originally anticipated to be 10 years from now, suggesting hybrid or electric vehicles could be more affordable.

Dan Becker, director of the Safe Climate Campaign, urged regulators to toughen the rules to achieve the original 54.5 miles per gallon fleet-wide target. "We can't accept backsliding or loopholes that undermine their success just to put more gas-guzzlers on the road," he said.

Automakers are not required to achieve the target average. Instead, the government's complex scorekeeping system allows them to hit different targets for different sizes of vehicles -- with larger trucks and SUVs allowed to achieve lower targets than small cars.

In addition, the NHTSA and EPA don't agree on some key assumptions:

- For example, the EPA assumes that California's zero emission vehicle mandates will be in place. These require that 15 percent of the fleets automakers sell to have zero emissions in that state by 2025. The NHTSA analysis does not assume that automakers will comply with the California mandate.
- The NHTSA assumes about 14 percent of vehicles sold in 2025 will need to be full hybrids - those with a significant battery pack - to meet the standards, while EPA thinks 3 percent would be sufficient.

Both forecasts expect improvements in gasoline engines will provide most of the increase in mileage, and compliance with 2025 fuel targets can be reached even if only 3 percent of vehicles are electric.
Cars and light trucks account for 42 percent of total U.S. oil consumption, or about 8 million barrels a day. Regulators also plan to finalize rules to boost the fuel efficiency of medium and heavy duty trucks through 2027 later this year.

28. US Greenhouse Gas Emissions Rising in Transportation Sector

For the 25-year period between 1990 and 2014, U.S. greenhouse gas (GHG) emissions from the transportation sector rose from 24.4% of total GHG emissions to 26.6%. In contrast, emissions from the industrial sector fell from 35.6% of total emissions to 29.4%. Emissions in the commercial, residential and agricultural sectors also rose during the period.

The rise in GHG emissions was not spread evenly throughout the transportation sector. Emissions from cars and light trucks fell from 63.8% of total sector emissions to 60.7%. Commercial aircraft cut emissions from 7.1% of the sector total to 6.4%, measured on domestic flights only. Medium-and heavy-duty trucks, however, posted an increase in sector emissions from 14.9% in 1990 to 22.5% in 2014.

The data were reported by University of Michigan Transportation Research Institute researchers Michael Sivak and Brandon Schoettle.

GHG emissions from cars and light trucks also rose as a percentage of total emissions, from 15.6% in 1990 to 16.1% in 2014. And as a percentage of all GHG emissions, medium- and heavy-duty truck emissions rose from 3.6% of the 1990 total to 6.0% of the total in 2014.

Sivak and Schoettle highlighted two main implications of this study. First, because of the major progress in reducing emissions from industry during the period examined, we can expect an increased emphasis on reducing emissions from the other economic sectors, including transportation. Second, because of the large increase in the contribution of medium- and heavy-duty trucks to total emissions, we can expect an increased emphasis on reducing emissions from these classes of vehicles.

A few additional observations: in 1990, coal generated more than 50% of U.S. electricity compared with just 32% this year. Natural gas, which emits roughly half as much GHG as coal, has jumped from around 12% of power generation to 33% in the same period. According to the U.S. Energy Information Administration, coal-fired generation’s share of total U.S. electricity generation plummeted from 39% in 2014 to 28% in the first four months of 2016.

Low prices for crude oil and gasoline are working against the transportation industry’s efforts to reduce GHG emissions. Large sport utility vehicles and full-size pickups are selling at high levels, and although they operate more cleanly than in the past, they simply burn more fuel.

29. Obama Administration Offers EV Charging Loan Guarantees

The White House said it was expanding a federal loan guarantee program to include companies building electric vehicle (EV) charging stations, part of a broader effort to boost EV sales. The U.S. Energy Department issued a notice clarifying that charging facilities, including hardware and software, are now an eligible technology. The program can provide up to $4.5 billion in loan guarantees for renewable energy and energy efficiency projects.
The Energy Department said EV charging stations could be considered efficient electrical transmission or distribution technologies, which make them eligible for a specific loan guarantee program.

The Obama administration also unveiled a partnership with nearly 50 automakers, utilities, states and electric vehicle charging companies to get more EVs and charging stations. Tesla Motors Inc, General Motors Co, Ford Motor Co, Nissan Motor Co, BMW AG, Daimler AG, Duke Energy Corp and Consolidated Edison Inc are among the companies joining the effort to boost EV charging.

The White House touted the fact that the number of EV charging stations has risen from 500 in 2008 to more than 16,000 today, as electric battery costs have fallen more than 70 percent.

"There's a lot more to do in this space," said Brian Deese, a White House senior adviser, in a call with reporters.

The White House also urged state and local governments to work with the federal government to buy discounted electric vehicle fleets. In the current fiscal year, the U.S. government plans to purchase more than 500 plug-in hybrid electric vehicles or EVs.

But U.S. electric vehicle sales have not met many early expectations. U.S. Energy Secretary Ernest Moniz said in January said EV sales fell well below President Barack Obama's goal of reaching 1 million by 2015. Moniz told reporters in January that the country may hit the figure in three to four years with continuing improvements in battery technology, but low gasoline prices have had a negative impact on sales.

In August 2008, Obama set a goal of getting 1 million plug-in electric vehicles on the roads by 2015. Only about 475,000 electric cars have been sold in the United States since then. There are about 250 million cars and trucks on U.S. roads.

The White House has repeatedly proposed efforts to boost EV sales including hiking the electric vehicle tax credit and converting it to a point of sale rebate, but Congress didn't approve.

30. Low-Speed Electric Vehicles Get Second Chance in Ontario

Ontario is proposing to revive a pilot project to allow the use of low-speed electric vehicles on certain low-speed roads following requests from the province’s auto industry. The project would allow the use of fully electric low-speed vehicles, with a maximum speed of 40 kilometers per hour, that can be recharged through a standard electrical outlet, in provincial parks and lands and in municipalities that pass bylaws to permit their use, the Ministry of Transportation said. The project would be part of Ontario's efforts to create a regulatory environment that promotes environmentally friendly vehicle technologies to reduce air pollution and reduce reliance on fossil fuels, the ministry said in a notice published July 21 on the Environmental Registry.

“The length of the pilot will be at least five years to ensure sufficient time to effectively monitor and evaluate the pilot results,” it said.

The proposal is open to public comment through Sept. 4.

There was limited interest and participation in a previous five-year pilot project that ended Dec. 31, 2014, but the concept was revived in response to requests from industry representatives, it said.
31. Republican Platform Would Imperil EPA, Climate Action

Signature elements of President Barack Obama's climate change strategy, ranging from rules to curb emissions from power plants to international agreements to combat the problem, would be gutted under the Republican Party's 2016 platform.

The platform, released on July 18th, calls for the U.S. Environmental Protection Agency to be transformed into an independent commission, endorses an “immediate halt” to United Nations efforts on climate change, condemns any calls for a carbon tax and pledges to do away with regulatory efforts to clarify the scope of the Clean Water Act.

“Climate change is far from this nation's most pressing national security issue,” the platform stated, referring to statements made in 2015 by Obama. “We propose to shift responsibility for environmental regulation from the federal bureaucracy to the states and to transform the EPA into an independent bipartisan commission, similar to the Nuclear Regulatory Commission.”

Other tenets of the platform would bar the EPA from regulating carbon dioxide, push for an overhaul of the Endangered Species Act “so it can no longer invite frivolous lawsuits, thwart sorely needed projects, kill jobs, and strangle growth” and encourage continued development of the “abundant, clean, affordable, reliable domestic energy resource” of coal.

The document aligns closely with Republican nominee Donald Trump's public positions on a host of energy and environmental issues.

Many of the themes of the 2016 platform also appeared in the 2012 versions, especially those of overregulation by the EPA and calls for an all-of-the-above energy strategy.

Climate change appears in the 2016 document four times compared to just once in the 2012 version. The newer platform says conclusions about the severity of the problem must be based on unbiased science. “Information concerning a changing climate, especially projections into the long-range future, must be based on dispassionate analysis of hard data,” the platform states. “We will enforce that standard throughout the executive branch, among civil servants and presidential appointees alike.”

Republicans were especially critical of the UN's Intergovernmental Panel on Climate Change, which the platform describes as “a political mechanism, not an unbiased scientific institution.”

The document also calls for no additional funding to go to the UN's Framework Convention on Climate Change or the Green Climate Fund, which aims to help developing countries adapt to climate impacts and mitigate their greenhouse gas emissions.

International agreements, such as the Paris Agreement, “represent only the personal commitments of their signatories” because they were not submitted to the U.S. Senate for ratification, according to the platform.

Certain renewable energy sources received praise in the party's platform—provided their development comes through private sector investment. “We support the development of all forms of energy that are marketable in a free economy without subsidies, including coal, oil, natural gas, nuclear power and hydropower,” it said. “We encourage the cost-effective development of
renewable energy sources—wind, solar, biomass, biofuel, geothermal and tidal energy—by private capital.”

The document rejects federal attempts to regulate hydraulic fracturing, backs efforts to speed the approval of liquefied natural gas export facilities and supports the construction of the Keystone XL oil pipeline, which the Obama administration rejected in November 2015.

Any effort to put a price on carbon dioxide emissions was flatly rejected in favor of continued development of carbon capture and sequestration technologies. “We oppose any carbon tax,” the platform stated. “It would increase energy prices across the board, hitting hardest at the families who are already struggling to pay their bills.”

Republicans leveled especially acute criticism of the EPA in the platform—both for ongoing regulatory efforts and the agency itself. The Clean Power Plan, the centerpiece of the agency’s domestic climate change efforts, would be done away with completely under the platform.

The document calls for an end to so-called “sue-and-settle” cases in which federal agencies agree to pursue certain executive actions to resolve litigation with interest groups.

Another section of the platform calls for “major new” federal regulations to be subject to congressional approval before they can take effect.

The Obama administration’s attempt to clarify the jurisdiction of the Clean Water Act—frequently called the waters of the U.S. regulation—is described as a “travesty.” “We must never allow federal agencies to seize control of state waters, watersheds or groundwater,” the platform said. “State waters, watersheds and groundwater must be the purview of the sovereign states.”

### 32. House Appropriators Bar Spending on Climate Fund

President Barack Obama’s Green Climate Fund was in the cross hairs once again on July 12th as House appropriators moved to prohibit any U.S. contribution to an effort to help developing nations address climate change impacts. Republicans on the House Appropriations Committee included the restriction in the fiscal year 2017 State Department spending bill, which the committee passed by voice vote.

The prohibition now in the House version of the FY 2017 State, Foreign Operations, and Related Programs spending bill stands in stark contrast to the Senate version of the spending measure, which specifically authorizes a $500 million U.S. contribution to the Green Climate Fund.

The Green Climate Fund helps developing countries adapt to climate impacts and mitigate their greenhouse gas emissions; it has received more than $10 billion in international support, mostly from richer, developed nations.

Democrats on the House Appropriations panel attempted to strike the language and restore the funding contribution. But an amendment to do so offered at the July 12 markup by Rep. Betty McCollum (D-Minn) was rejected on a 19-29 vote.

Ultimately the fate of the $500 million U.S. contribution will likely be determined in end-of-year talks between Obama and congressional appropriators.
The U.S. in 2014 pledged a total of $3 billion over four years to the climate fund in hopes of getting developing nations to sign on to a global climate deal. That deal was reached in Paris in December, when nearly 200 nations reached the first global deal to include actions to address greenhouse gas emissions from developed and developing nations alike.

33. EPA and DOT Finalize Greenhouse Gas and Fuel Efficiency Standards for Trucks

The U.S. Environmental Protection Agency (EPA) and the U.S. Department of Transportation’s National Highway Traffic Safety Administration (NHTSA) jointly finalized standards for medium- and heavy-duty vehicles that will improve fuel efficiency and cut carbon pollution, while bolstering energy security and spurring manufacturing innovation. The final phase two standards were called for by President Obama’s Climate Action Plan, and respond to the President’s directive in early 2014 to develop new standards that run into the next decade.

The final phase two program promotes a new generation of cleaner, more fuel-efficient trucks by encouraging the wider application of currently available technologies and the development of new and advanced cost-effective technologies through model year 2027. The final standards are expected to lower CO2 emissions by approximately 1.1 billion metric tons, save vehicle owners fuel costs of about $170 billion, and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program. Overall, the program will provide $230 billion in net benefits to society, including benefits to our climate and the public health of Americans. These benefits outweigh costs by about an 8-to-1 ratio.

The final standards are cost effective for consumers and businesses, delivering favorable payback periods for truck owners. The buyer of a new long-haul truck in 2027 would recoup the investment in fuel-efficient technology in less than two years through fuel savings.

“The actions we take today on climate change will help lessen the impacts on future generations,” said EPA Administrator Gina McCarthy. “This next phase of standards for heavy- and medium-duty vehicles will significantly reduce greenhouse gas emissions while driving innovation, and will ensure that the United States continues to lead the world in developing fuel-efficient technologies through the next decade and beyond.”

“Today’s ambitious but achievable announcement is a huge win for the American people, giving us cleaner air, more money saved at the pump, and real benefits for consumers across the supply chain,” said Transportation Secretary Anthony Foxx. “Today’s action preserves flexibility for manufacturers to deliver on these objectives through a range of innovations and technology pathways.”

Heavy-duty trucks are the second largest segment and collectively make up the biggest increase in the U.S. transportation sector in terms of emissions and energy use. These vehicles currently account for about 20 percent of GHG emissions and oil use in the U.S. transportation sector. Globally, GHG emissions from heavy-duty vehicles are growing rapidly and are expected to surpass emissions from passenger vehicles by 2030. Through the Paris climate agreement and discussions with other countries, the United States is working with other major economies to encourage progress on fuel economy standards, and reduce greenhouse gas emissions that will improve global energy and climate security by reducing our reliance on oil.

The product of four years of extensive testing and research and outreach to industry, environmental organizations, labor unions, and other stakeholders, the vehicle and engine performance standards would cover model years 2021-2027, and apply to semi-trucks, large...
pickup trucks and vans, and all types and sizes of buses and work trucks. These standards will result in significant GHG emissions reductions and fuel efficiency improvements across all of these vehicle types. For example, when the standards are fully phased in, tractors in a tractor-trailer will achieve up to 25 percent lower CO2 emissions and fuel consumption than an equivalent tractor in 2018.

The agencies are also finalizing fuel-efficiency and GHG standards for trailers for the first time. The EPA trailer standards, which exclude certain categories such as mobile homes, will begin to take effect in model year 2018 for certain trailers, while NHTSA’s standards will take effect as of 2021, with credits available for voluntary participation before then. Cost effective technologies for trailers – including aerodynamic devices, light weight construction and self-inflating tires – can significantly reduce total fuel consumption by tractor-trailers, while paying back the owners in less than two years due to the fuel saved. Recognizing that many trailer manufacturers are small businesses, the program includes provisions that reduce burden, such as a one-year delay in initial standards for small businesses and simplified certification requirements.

Compared to the proposal, the final program:

- Achieves 10 percent more GHG and fuel consumption reductions;
- Has more robust compliance provisions, including improved test procedures, enhanced enforcement audits and protection against defeat devices;
- Includes more stringent diesel engine standards
- Improves the vocational vehicle program with a regulatory structure better tailored to match the right technology for the job;
- Maintains the structure and incremental phase-in of the proposed standards, allowing manufacturers to choose their own technology mix and giving them the lead time needed to ensure those technologies are reliable and durable.

NHTSA and EPA have worked together to harmonize their standards under this program. The agencies have worked closely with the State of California’s Air Resources Board in developing and finalizing the standards. All three agencies are committed to the goal of setting harmonized national standards. Throughout every stage of development, this work has benefited from a collaborative dialogue with industry, labor and environmental organizations. For example, this feedback has improved the agencies’ ability to measure industry performance and enforce compliance for both full vehicle and engine standards.

The final rulemaking builds on the fuel efficiency and GHG emissions standards already in place for model years 2014-2018, which alone will result in CO2 emissions reductions of 270 million metric tons and save vehicle owners more than $50 billion in fuel costs. Truck sales were up in model years 2014 and 2015, the years covered under the first round of truck standards.
The rule also builds on standards that the Administration has put in place for light-duty vehicles, which are projected to reduce carbon pollution by billions of tons of over the lifetime of vehicles sold, and will save consumers money at the pump.

**34. Worst Smog Strikes California, Air Pollution Rises**

Downtown LA with Smog

The worst smog in years hit the Southern California air due to emissions from vehicles.

Dominant high pressure has left Southern California stuck under the smoggiest summer skies since 2009 this year. According to a report published in the LA Times, the South Coast basin has seen only 5 days since June 1st when the air didn't violate federal health standards.

Speaking to the LA Times, Philip Fine, deputy executive officer for the South Coast air district, blamed the weather pattern for the spike in bad air days, citing "some of the strongest, most persistent pollution-trapping inversion layers in years." The prevailing pattern this summer has been stagnant high pressure centered over Southern California, which has not only exacerbated the drought, but paved the way for decreasing air quality as well.

This year's massive wildfires are another piece in the puzzle, as smoke joins ozone in the stagnant air mass, driving up particulate matter readings as well. This is bad news for individuals with sensitive respiratory systems, as ozone acts as an irritant to the lining of the lungs, and paves the way for particulate matter to trigger breathing problems. The South Coast Air Quality Management District issued an advisory for smoke from the Pilot Fire, burning in San Bernardino National Forest, saying they expected air quality to remain at unhealthy levels into the weekend.

The Times report puts 91 days on the unhealthy list so far this year, compared to 67 over the same period last year. Only 4 days in July ranked in the healthy range on the air quality index, and July 31st was the only 'healthy' day that month. So far, August has given more of the same, with every day up to the 11th exceeding the federal standard for ozone.

"It's disgusting," resident Garry Attridge told the LA Times, "The air is so thick you can almost taste it." Attridge is one of many residents suffering the effects of the poor air quality, with a scratchy, sore throat and more frequent need for his asthma inhaler. The report also cited local health care providers seeing an increase in emergency room admissions, with the swell in the number of patients including asthma sufferers and elderly patients with chronic illnesses.

A forecast surge in moisture over the Desert Southwest next week may bring some relief to the region, as an upper-level disturbance works to erode the area of high pressure and finally allow some showers in to clear the air.
35. API: US Motor Gasoline Demand Recorded 9.7 Million B/D in July

Total motor gasoline deliveries, a measure of consumer demand, increased 2.4% from July 2015 to average nearly 9.7 million b/d, according to data from the American Petroleum Institute. Compared with June, total motor gasoline deliveries increased 0.3%. For year-to-date, total motor gasoline deliveries increased 2.5% compared with year-to-date 2015.

“Gasoline deliveries...hit their highest level on record in July,” said Erica Bowman, API chief economist. “With this indication of increased demand, it’s clear that consumers have continued to benefit from lower gasoline prices at the pump.”

Total petroleum deliveries in July moved up 0.8% from July 2015 to average 20.1 million b/d, marking the highest July deliveries in 9 years. Compared with June, total US petroleum deliveries increased slightly by less than 0.1%. For year-to-date, total US petroleum deliveries moved up 1.1% compared with the same period last year.

Crude oil production was down from the prior month, the prior year, and the prior year-to-date as production continued to slow and reached its lowest output level for any month since March 2014. Crude oil production decreased 1.9% from June, and was down 10% from July 2015 to average 8.5 million b/d in July.

US total petroleum imports in July averaged just below 10.5 million b/d, up 6.8% from the prior month and up 9.9% from the prior year, but was the 4th lowest total petroleum imports for the month of July in 19 years, since 1997.

At 10.2 million b/d, gasoline production for the month of July reached its highest level for any month on record. This was up by 1.9% from the prior year, and up 1.3% from the prior month. For year-to-date, gasoline production increased by 1.9% compared to the same period last year and was the highest year-to-date on record.

Refinery gross inputs moved down 0.7% from July 2015, but remained the second highest inputs for the month of July, averaging 17.1 million b/d. Compared to June 2016, refinery gross inputs were up 1.9%.

36. Environmentalists Want Changes in California Clean Vehicle Programs

While California’s clean vehicle programs have put it far in the lead for electric car sales, alarms are being sounded about them weakening and hurting future sales. Environment groups – and Tesla CEO Elon Musk – say that California’s Zero Emission Vehicle program won’t come close to hitting Gov. Jerry Brown’s goals of having at least 1.5 million emissions-free vehicles on roads by 2025.

California has seen about 223,700 all-electric cars and plug-in hybrids sold in the state since late 2010, which makes for 46 percent of plug-in electrified vehicles sold in the U.S. Yet it’s less than one percent of all cars registered in California.

Environmental group Natural Resources Defense Council says the state will only be seeing sales of about one million clean cars by 2025, one third less than the governor’s goal. NRDC would also like to see the ZEV program tweaked, but not in a way that benefits Tesla Motors more than it places more PEVs on California roads. “The program is in dire need of a tune-up,” said Simon
Mui, director of the Natural Resources Defense Council’s clean-vehicle efforts in California. “It won’t be delivering as many vehicles as the state wants.”

Tesla has benefited greatly from the ZEV program. In the first quarter of this year alone, it made $57 million from selling ZEV credits to other carmakers. As Tesla prepares to increase production at its Fremont, Calif., plant to one million cars per year by 2020, other automakers can buy more credits from Tesla and build as many gas-powered cars as they want to.

“One automaker, like Tesla, could generate so many credits that nobody else would have to do much of anything,” Mui said. “You could see Tesla very easily blowing the requirement out of the water.”

CARB is aware of the concerns and is considering making changes. The agency will be discussing the ZEV program’s future at a hearing in December.

Assemblywoman Autumn Burke, D-Inglewood, introduced legislation this month that would have forced every automaker to ensure that by 2025, at least 15 percent of all cars they sold in California would produce no emissions. Burke’s bill was heavily opposed by automakers and died out.

“With just a week and a half to move the bill through, there just wasn’t enough time to overcome the opposition,” Allison Ruff, a spokeswoman for Assemblywoman Burke told Reuters. Proponents had promised to allow for the thorough examination and debate the topic merits, but Ruff said strong opposition came from a variety of groups including the Western States Petroleum Association,” which represents oil companies.

Other critics warned that any omission of plug-in hybrids benefits companies such as Tesla at the expense of others trying to innovate by other means than just battery-electric vehicles.

Burke plans to meet with stakeholders and introduce a new version of the bill in 2017, Ruff said.

Other proposals have focused on the way CARB calculates the credits. Some ZEV advocates are concerned that credits for plug-in hybrids will be going away and only all-electric and fuel-cell vehicles will qualify.

Automakers are more concerned with California’s popular clean-vehicle rebate program fading away. The popular incentive program featuring carpool lane (HOV) bumper stickers ran out of funding in June, and so far hasn’t been renewed in Sacramento.

John Bozzella, CEO of the lobbying group Global Automakers, thinks the state should be allocating more rebates to buy clean cars. He would like to see the state allocate more stickers allowing people to drive solo on California’s carpool lanes while driving an all-electric, plug-in hybrid, or fuel-cell vehicle.

“While we’re focused on the nuts and bolts of the ZEV mandate, I get concerned that we’re losing sight of the bigger picture,” Bozzella said. “It’s not enough to count credits. We need to build markets.”

CARB still sees its program essential for moving ZEV adoption forward. It’s been recognized by seven other states that have agreed to adopt the ZEV program. “The fundamental goal of our
regulation is to encourage innovation in electric vehicles, and that is happening,” said Joshua Cunningham, chief of sustainable transportation technology for the board.

37. Harley-Davidson Pays $15M to Settle EPA's Emissions Claims

Harley-Davidson has agreed to pay a multimillion-dollar fine and fund environmental remediation efforts after allegedly selling aftermarket devices that allowed motorcyclists to cheat U.S. emissions standards. The Milwaukee-based manufacturer will pay a $12 million civil penalty and $3 million toward environmental efforts in a deal with the Environmental Protection Agency after the agency accused the company of selling about 340,000 "super tuners" that bolstered power but also raised harmful emissions.

The company agreed to offer to buy back all of the devices, cease selling the tuners and destroy them.

Harley-Davidson shares (HOG) dove more than 7% after the news was released but quickly recovered and were down only 2% to $53.38 by noon.

"Given Harley-Davidson’s prominence in the industry, this is a very significant step toward our goal of stopping the sale of illegal aftermarket defeat devices that cause harmful pollution on our roads and in our communities," said Assistant Attorney General John C. Cruden, head of the Justice Department's Environment and Natural Resources Division, in a statement.

"Anyone else who manufactures, sells, or installs these types of illegal products should take heed of Harley-Davidson’s corrective actions and immediately stop violating the law."

Harley said it sought to settle the matter quickly rather than engage in a drawn-out fight.

“This settlement is not an admission of liability but instead represents a good-faith compromise with the EPA on areas of law we interpret differently, particularly EPA’s assertion that it is illegal for anyone to modify a certified vehicle even if it will be used solely for off-road/closed-course competition,” said Ed Moreland, Harley-Davidson’s government affairs director, in a statement.

"For more than two decades, we have sold this product under an accepted regulatory approach that permitted the sale of competition-only parts. In our view, it is and was legal to use in race conditions in the U.S."

The super tuners allegedly violate U.S. regulators' prohibition on "defeat devices," which enable vehicles to spurn emissions standards. German automaker Volkswagen Group violated those same standards by installing software on 11 million diesel vehicles worldwide. Harley's case involved aftermarket parts on a much smaller scale.

Harley also sold more than 12,000 motorcycles without EPA pollution certification in model years 2006 through 2008, according to the agency. It must ensure that all future bikes will have secured the necessary EPA approvals.

To rectify air pollution caused by the super tuners, Harley must partner with an independent company to provide cleaner-burning stoves to certain communities to replace conventional woodstoves.
New York City could meet its aggressive greenhouse gas reduction goal by bringing in renewable natural gas-powered trash trucks, according to a New York Times opinion piece. Mayor Bill de Blasio of New York has set clear, aggressive goals for reducing emissions that would make the city a national leader in mitigating climate change. It came from last year’s Paris climate agreement, after which the mayor pledged to include cutting emissions from the city’s vehicle fleets by 50 percent by 2025, and by 80 percent by 2035.

Other decisions now in the works could block the city from meeting its climate change targets, according to a guest column in the New York Times. Robert Catell, a former chairman of the electricity and natural gas delivery company National Grid, US, and Joanna Underwood, chairwoman of the environmental organization Energy Vision, think that the solution can come from bringing in renewable natural gas-powered refuse trucks. But the city has plans in place to buy 340 new refuse trucks this year, with at least 300 of them powered by traditional diesel fuel. With a service life of seven years for these trucks, that would put the city’s emissions goal out of reach.

The city does have a goal to reduce fleet emission by 11 percent by operating more than half its vehicles at least partly on non-petroleum fuels, including hybrid and all-electric vehicles. Trash trucks offer a much bigger return on investment, the columnists said. Heavy-duty trash trucks, at about 5,200 vehicles, make up only a fifth of the fleet but produce more than 60 percent of its greenhouse gas emissions.

Renewable natural gas-powered trash trucks could be the solution with its carbon-free emissions. It’s been rated by the California Air Resources Board (CARB) as the lowest-carbon fuel available, according to Catell and Underwood.

Trucks and buses need to be equipped to run on natural gas engines to use RNG for power. It’s not a fossil fuel like natural gas; it’s a renewable fuel made from biogases coming from decomposing organic waste. That could be food waste or wastewater, which New York and other cities have plenty of, the columnists said.

Other cities are already going this route. The cities of Sacramento and South San Francisco, Calif., and Grand Junction, Colo., are producing RNG from local waste sources to power refuse trucks and other municipal vehicles. In Southern California, Orange County, Long Beach, Culver City, and Santa Monica have committed to using RNG in their transit buses. Santa Monica has ordered 100 buses with natural gas engines to be powered by RNG. The bus engines were recently certified by the Environmental Protection Agency and CARB, and are being used by the city for making big cuts to greenhouse gases and smog-producing chemicals.

As the foremost purveyor of hybrid vehicles, the Japanese automotive powerhouse for 2016 has finally equipped its compact RAV4 sport utility vehicle with a version of its popular gas-electric propulsion system, borrowed from the Camry Hybrid and the upscale Lexus NX 300h.

The main advantage a hybrid system has over the gasoline-only version is fuel economy. A standard gas RAV4 is EPA-rated at 24 city, 31 highway. The hybrid model doesn’t beat the highway mileage, but in town it’s rated at 34, a full 10 mpg improvement.
A companion advantage of hybrids is obviously environmental, as using less hydrocarbons reduce a vehicle's emissions. And add to that the convenience of infrequent trips to the gas station.

Interestingly, the hybrid version is peppier than the gas model, as the combination of its 2.5-liter four-cylinder and a front-and-rear pair electric motors delivers a total output of 194 horsepower compared with the standard gas version's 172.

Drawbacks are few. The hybrid RAV4 loses a bit of cargo-hold volume to accommodate the large battery pack. Also, the added curb weight (approximately 300 pounds) takes a slight toll on the vehicle’s handling. And the regenerative brakes, a common hybrid bugaboo, operate with a rather artificial sensation.

40. Lawyers: Volkswagen’s Supplier Bosch Worked “Hand-in-Glove” in Cheating Scandal

In the latest turn of events revolving around the massive diesel emissions scandal, Volkswagen’s supplier is reportedly found to be involved in the development of the cheating software. According to court papers, Volkswagen AG’s German auto supplier Robert Bosch GmbH has been a knowing and an active participant in the scandal that has impacted millions of cars around the world.

According to lawyers working for Volkswagen car owners in the US, court documents filed under US District Court in San Francisco revealed new allegations against the supplier. The documents suggest that the supplier played a crucial role in the decade-long scheme that has had a wide ranging impact on the automotive world at large.

The supplier was already a co-defendant in several class action lawsuits against Volkswagen in the US. The new spates of allegations that are also part of these lawsuits represent the supplier as playing a more significant part in the controversy than it was previously assumed.

Bosch supplies the computer system that controls diesel engines in Volkswagen vehicles. The German supplier is one of the largest in the industry and is considered a symbol of engineering prowess in Germany.

Even though the car owners clearly accuse it of helping Volkswagen in building the defeat device, the company doesn’t offer any response except stating that this doesn’t change the $14.7 billion settlement between the automaker and car owners. But many vehicle owners also believe that Volkswagen couldn’t have modified the cheating software to mislead regulators around the world without the help of Bosch itself.

The filing comes barely two days after it came to notice that the Department of Justice has uncovered more allegations against the company. Volkswagen is still holding preliminary talks with the Justice Department to reach a settlement of the criminal probe into the emissions scandal.

41. Bosch to Dispute Alleged Involvement in Volkswagen Scandal

Robert Bosch GmbH will contest allegations that the company played a key role in the Volkswagen diesel emissions scandal, according to a court filing by the company. In an August 22nd motion, Bosch indicated that it will fight against those claims, describing the allegations as
“wild and unfounded.” The company asked a federal district court judge to protect the reputation of 38 Bosch employees named in court documents by redacting their names and, in some instances, job titles.

“Bosch will demonstrate at the appropriate time that the plaintiffs have failed to state a claim for relief against the Bosch corporate defendants,” the company said. “The salient point for now is that the individuals whose names have been included in the amended complaints will not have an opportunity to clear their names ... publication of their names is not necessary to the progress of the case or the public's understanding of the judicial process in this case.”

The company alleged that plaintiffs “gratuitously extracted and named” every Bosch employee they could identify through various documents produced during the discovery phase of the Volkswagen litigation, even though those employees are not defendants in the litigation. The court should move to protect those employees from “particularly acute” risks to their reputation, given widespread public interest and press attention toward the Volkswagen case, by sealing the employees' names and job titles, while leaving the substance of the allegations intact for the public to review, Bosch said.

42. Investor Emissions Lawsuits Belong in Germany, VW Argues

Investor lawsuits related to the Volkswagen diesel emissions cheating scandal should be heard in Germany, not a U.S. federal district court, the automaker argued in a court filing. In a motion filed August 1, Volkswagen argued that the litigation should be dismissed because U.S. investors failed to present a valid claim under Section 10(b) of the Securities Exchange Act of 1934, which the automaker said doesn't apply to the American Depositary Receipts that were purchased by the investors. ADRs are a type of security that represents an ownership interest in shares of a foreign company.

Various investors, led by the Arkansas State Highway Employees' Retirement System, sued Volkswagen and individual Volkswagen executives for an alleged failure to disclose the company's use of illegal software that allowed diesel engine vehicles sold in the U.S. and internationally to pass emissions tests despite emitting more nitrogen oxides pollution than allowed.

The class action investor plaintiffs are seeking to recover alleged losses linked to the diesel scandal, which triggered a loss of more than $20 billion from the automaker's market value.

Volkswagen argued in its motion that the claim raised by the class action plaintiffs “exceeds the territorial reach” of Section 10(b) of the Exchange Act. The automaker cited the U.S. Supreme Court's 2010 holding that only domestic transactions in securities fall within the reach of Section 10(b) (Morrison v. Nat'I Australia Bank Ltd., 561 U.S. 247, 2010 BL 142333 (2010)).

The investor lawsuits aren't covered by the proposed $14.7 billion settlement that Volkswagen negotiated with federal regulators and class action plaintiffs representing owners and lessees of affected 2.0 liter diesel vehicles sold in the U.S.

Volkswagen also is yet to resolve claims brought by owners of 3.0 liter diesel engine vehicles, as well as individual lawsuits brought by several states and possible civil and criminal penalties that could be levied by the federal government.
Even if the U.S. District Court for the Northern District of California found that the plaintiffs have raised a valid claim against Volkswagen under federal securities law, the court should still dismiss the lawsuit because Germany is the "more appropriate" venue, Volkswagen argued.

While all litigation related to the affected Volkswagen vehicles sold in the U.S. is properly before that federal district court, any litigation relating to disclosures to investors should be conducted under German law, according to Volkswagen. The company argued it is subject to make such disclosures only pursuant to German law and isn't obligated to file any financial reports to the U.S. Securities and Exchange Commission under the reporting requirements of the Exchange Act.

About 450 private plaintiffs, including at least 90 U.S. investors, have sued Volkswagen in Germany over disclosures related to the diesel emissions scandal. That includes a lawsuit filed in June by the California State Teachers' Retirement System on behalf of the fund and other institutional investors in Volkswagen.

**ASIA-PACIFIC**


Throughout 2015, auto markets in developed countries outperformed those of developing countries in terms of sales growth. According to media reports, global auto markets’ sales only increased by 2% year-on-year, the lowest growth rate since 2009. Although China continued topping the charts in terms of sales volumes, its annual growth rate only reached 4.7%. With the exception of China, the other four BRICS countries have witnessed a sales volume decline due to economic slowdown. However, in contrast, developed countries are recovering from financial crisis. European new car sales have gone up by 9.3% year-on-year, the United States also saw 6% year-on-year growth.

Against such background, Nielsen recently released the “2016 Global and China Auto Consumption Trend White Paper”, to forecast future market development trends and opportunities for global auto manufacturers as China’s economy adjusts to the “new normal”.

The survey is based on Nielsen’s global consumer confidence research and automobile demand research, polling more than 30,000 consumers in 60 countries across Asia-Pacific, Europe, Latin America, the Middle East, Africa and North America, as well as big data analysis from 40,000 consumers’ survey data throughout 20 cities in China.

**The Structural Transformation of the Global Auto Market Brings New Growth Opportunities**

Nielsen’s 2015 Global Consumer Confidence Index found that people’s willingness to spend in most of the emerging markets wasn’t affected by slower economic growth. Although the expectation of an economic decline has expanded from Western market to the Asian Pacific and Latin American markets, consumer confidence still remains robust for the fourth quarter of 2015 in India, Philippines, Indonesia, Thailand, Vietnam, China and Pakistan, which is above 103, much higher than the world average 97. The Consumer Confidence Index in Mexico, Thailand and Vietnam has significantly jumped by 3% to 5%.

Nielsen graded and ranked the automobile market's potential in emerging countries according to 7 factors comprised of overall demand potential, competition pressure, legislation environment, trade policies, technology gap, product match level, and supporting facilities. Among them, Brazil,
India, Chile, Colombia, Iran, and Indonesia are in the first group with 4 points in the ranking. Egypt, Peru, and Russia are in the second group with 3 points.

“Some emerging markets have encountered temporary economic fluctuations during the industrial structure transformation, but it didn’t negatively affect consumers’ desire to purchase cars,” said Yan Xuan, president of Nielsen Greater China. “We found that in those countries, car ownership is less than 100 units per thousand people; 70% of respondents indicated their intentions to buy a brand new or second-hand car within the next two years in Latin America, Middle East, and Asian Pacific. In the long run, those emerging countries have optimistic growth prospects.”

In addition, the worldwide consumers’ behaviors are changing significantly as well. There are ever-growing middle class, young generation, mobile and connected consumers constituting the current consumers demographics. Nielsen data showed that in emerging countries, 17% of the consumers aged from 18 to 29 are planning to buy cars, which is higher than 16% of the consumers aged from 30 to 45 and 14% of the consumers aged from 46 to 55. Among them, China, Saudi Arabia, Mexico, and Brazil top the list, with correspondingly 26%, 25%, 22% and 19% of the consumers planning to purchase vehicles.

At the same time, the Nielsen survey finds that consumers’ demand for automobiles is also changing, with high-end, compact, intelligent cars becoming more popular. The incentives to buy cars varied among consumers, with vehicle upgrade and first-time purchases being the most common reasons. In Asia Pacific and Latin America, 93% and 92% of potential car owners want to upgrade or repurchase cars when their financial situation improves, higher than that in Western markets. Those considerations also boosted demand for high-end vehicles.

Consumers from Central, Western and Southern China, Fourth Tier Cities, and New City Immigrants Drive Up Auto Consumption in China

For the last year, Chongqing, Guizhou, Hunan and Hubei have witnessed robust economic growth, which pushed up auto sales volume. The sales growth rates in Guangdong and Guangxi are above the national average level as well. In these areas, new car sales are mainly from third tier cities or below. The Nielsen survey shows that 18% of respondents intend to buy new cars in the next 12 months. The figure rose to 20% in fourth tier cities.

As the urbanization drive in China goes on, the country has seen a significant percentage of the population moving from the countryside to cities. When those new city immigrants become settled and wealthier, they will consider buying cars.

Electric and Hybrid Cars Are More Acceptable To Chinese Consumers

Nielsen found Chinese consumers are accepting of the forward-looking technologies. About 8% of the respondents said they would like to buy electric cars, compared to less than 1% in 2012. People’s willingness to buy hybrid cars has also jumped to 14% from 2% in 2012. Although most of the consumers were not familiar with smart cars (76%), 23% of them showed interest in possessing one and 15% are very interested.

Nielsen found that the consumers who are more willing to try new energy and smart cars were initially from mega cities like Beijing, Shanghai, Guangzhou and Shenzhen or the second tier cities from central and western provinces. The majority of them have a household annual income between 80,000 to 500,000 yuan.
44. Price of Cleaner Air in China? $213 for Five Years: Study

Experts have calculated the cost of pollution in China for years, weighing the drag on productivity from medical costs, factory closures and traffic restrictions. Now economists say they know exactly how much consumers are willing to pay to clean their own air.

Chinese consumers are willing to pay $5.46 on average to remove each microgram of pollutant per cubic meter of air, according a new paper by environmental economists Koichiro Ito from the University of Chicago and Shuang Zhang of the University of Colorado at Boulder. That works out to spending about $213 over five years, according to their study tracking air purifier buying habits in 81 Chinese cities over seven years.

Pollution in Beijing and other large cities regularly triggers health warnings and occasionally soars to “hazardous” levels when particles smaller than 2.5 micrometers in diameter—PM-2.5—reach concentrations above 250 micrograms per cubic meter. The study reflects rising concern about breathing clean air as shown by more purchases of air purifiers, many of them imported, by wealthy and increasingly middle-class consumers.

“Having a barometer for people's willingness to pay for clean air can help leaders determine which policies are most effective in improving welfare,” Ito, an assistant professor at the Harris School of Public Policy, said in a research summary. “It sheds light on the degree to which citizens prioritize economic growth over environmental regulations—a subject of constant debate and importance in emerging economies.”

Average top-of-the-line models can cost hundreds of dollars each, and wealthier Chinese in more polluted areas are more willing to pay more for clean air, the researchers said.

Pinning down how much consumers are willing to pay to breathe clean air has important policy implications for emerging economies, where striking a balance between economic development and environmental protection has proved a crucial task, Ito and Zhang write in their working paper published by the National Bureau of Economic Research.

45. China's Urban Air Quality Improves In First Half: Ministry

Air quality in China's largest cities continued to improve during the first six months of 2016, the country's environment ministry said recently. China's largest 338 cities enjoyed more clean air days in the first half compared with the same period of 2015, the ministry said on its website. It said 76.7 percent of January-June days had clean air, an increase of four percentage points from a year earlier.

In the capital Beijing, levels of PM 2.5 - dangerous tiny pollutants - fell 17.9 percent from a year earlier, the ministry said. Concentrations of PM 2.5 averaged 64 micrograms per cubic meter in the first half, significantly higher than the official state standard of 35 micrograms, and the World Health Organization's guideline of an annual average of no more than 10 micrograms.

The ministry did not provide reasons for the improvement in air quality, but it follows increased measures to crack down on polluters and coal use, as well as efforts to tackle overcapacity in the heavily polluting steel sector. A slowdown in economic growth has also likely contributed.

Of the country's 10 most polluted cities in the first half, six were in the industrial northern province of Hebei, down from seven at the end of 2015. At the end of last year, the government launched
a two-month probe of the province, one of the country’s most polluted regions, and found that firms had engaged in "fraudulent activities" and were flouting orders not to expand industrial capacity.

On July 8, the environment ministry said it had fined several state-owned polluters in May for exceeding emission limits. A subsidiary of oil giant PetroChina Co Ltd in the northeastern city of Dalian was fined 2.9 million yuan ($433,710) it said.

The annual average concentration of small particulate matter (PM-2.5)—which tends to cause more adverse health impacts than larger particles—was reduced by 23.6 percent in 74 major cities by the end of 2015 compared to 2013, when an air pollution action plan focusing on key urban regions around Beijing, Shanghai and the Pearl River Delta area in South China's Guangdong province was launched.

But the review of the air pollution action plan released by the Ministry of Environmental Protection July 6 had mixed results. Cities primarily in northern China are still having prominent winter air pollution problems and some areas have seen increased annual average concentrations of large particulate matter (PM-10). But in the 74 cities overall, annual average concentrations of PM-10 dropped by 10.3 percent, according to the review.

Beijing, Tianjin and Hebei province and some surrounding areas included in the key air pollution control area for that region under the action plan accounted for 44 percent of the heaviest air pollution days, according to the review.

However, air quality worsened year-on-year in 103 cities from April to June, nearly 30 percent of those monitored, Greenpeace said. It cited pollution data collated from China's environmental protection ministry, which now makes live figures available each day.

"It is now clearer than ever that air pollution and coal-burning heavy industry are directly connected," said Greenpeace's East Asia climate and energy campaigner Dong Liansai.

China's financial hub Shanghai saw its average PM2.5 level rise 6.1 percent to 48.4 micrograms per cubic meter in the April-June period, in comparison with the same period in 2015. But Beijing saw its PM2.5 level drop 6.9 percent to 59.2 micrograms per cubic meter in the same period, year-on-year.

**46. Ships Worsen Air Pollution Over China, Killing Thousands: Study**

A boom in shipping is aggravating air pollution in China and other nations in East Asia, causing thousands of deaths a year in a region with eight of the world's 10 biggest container ports, scientists said on Monday. Often overlooked compared to cars and factories that are far bigger causes of smog, ship traffic has more than doubled off East Asia since 2005 and some pollution from the fuel oil of ships wafts inland, they said.

The Chinese-led study estimated that sulfur dioxide, which generates acid rain, and other pollution from ships caused an estimated 24,000 premature deaths a year in East Asia, mainly from heart and lung diseases and cancer.

About three-quarters of deaths were in China, and others mainly in Japan, Taiwan, Hong Kong, Macau and South Korea, according to the study published in the Journal Nature Climate Change based on satellite data tracking almost 19,000 vessels.
The death toll is a tiny though rising share of an estimated one million deaths caused annually by air pollution in East Asia, the study found. Given many uncertainties, the number of deaths could be as low as 14,500 or as high as 37,500, it said.

"A few years ago in East Asia the levels of shipping just weren't that large. Now they're huge," Drew Shindell, one of the authors at Duke University in the United States, told reporters of reasons for the study.

China, where Shanghai is the world's busiest container port, will start demanding cleaner fuels for ships in coastal regions from 2019. China has thousands of protests every year sparked by concerns about environmental degradation.

North America and parts of Europe already require that ships operating close to land use more costly, less polluting fuel with a sulfur content below 0.1 percent. The U.S. Environmental Protection Agency expects the North American controls will prevent 14,000 premature deaths a year by 2020.

Worldwide, the U.N.'s International Maritime Organization (IMO) plans to cut the sulfur limit for ships' fuel to 0.5 percent from 2020 from a current 3.5 percent.

The curbs could be delayed to 2025 if member states decide that refineries are unable to adapt in time. An IMO spokeswoman in London said a decision is due in October.

Monday's study also found that emissions of carbon dioxide, the main man-made greenhouse gas, from shipping off East Asia had doubled in less than a decade to 16 percent of the global total from the industry in 2013.

Other air pollutants from ships have a cooling effect on global climate, however, by reflecting sunlight into space. The cooling is likely to predominate for about another eight years before warming takes over, it said.

47. Chinese Polluters to Face More Business, Financing Restrictions

Chinese firms guilty of exceeding emissions limits or building plants without environmental permits will face tougher punishments including credit bans and land use restrictions, the country's environmental ministry has announced. China has been cracking down on polluting enterprises, raising fines and threatening criminal action against persistent offenders, but regulators have long struggled to impose rules on powerful industrial enterprises and local governments anxious to protect revenue and jobs.

The country has sought to beef up its traditionally underpowered environment ministry and spread the burden of enforcement to other agencies, including dedicated courts, police authorities and financial regulators.

The Ministry of Environmental Protection said in a notice published on its website that it has signed a cooperation agreement with 30 government departments, including the central bank, to broaden the range of punishments for offenders as well as improve information sharing. The 31 government departments will draw up a blacklist of offenders in order to create a "united punishment mechanism", the ministry's official publication, China Environmental News, said.
Businesses or individuals that have seriously violated environmental rules would not be able to apply for new land, safety or business permits, and would not be able to get their products certified by customs. Preferential tax policies could be canceled, and firms would also face restrictions when issuing bonds or making use of other financing tools. Some could also be restricted or banned from entering the market.

The announcement comes amid a series of measures meant to strengthen environmental law enforcement, including moves to give the ministry more oversight of environmental protection bureaus at the provincial and local levels to curb protectionism by local officials.

It followed a July 1 announcement by the China Securities Regulatory Commission that companies with significant environmental problems within the past three years will not be allowed to apply for initial public offerings on China's stock exchanges in Shanghai and Shenzhen.

China recently approved a "lifetime responsibility" system for government officials, which addresses in part environmental problems under the watch of officials, and can lead to punishment even of retired officials. Several locales are starting to implement regulations on lifetime responsibility specifically for environmental problems.

The ministry also pressed ahead with an agenda for reform of how environmental impact assessments are conducted, with a 13th Five-Year Plan (2016–2020) implementation scheme for environmental impact assessments released July 19.

Eleven provinces proposed putting provincial and local environmental protection bureaus more directly under control of the central government Ministry of Environmental Protection by the end of 2018, President Xi Jinping said in a July 22 speech.

"Environmental enforcement needs to be enhanced, but if they can be assisted by other stakeholders and other powerful departments, especially investors, banks and stock market regulators, it can provide a big help," said Ma Jun, director of the Institute for Public and Environmental Affairs, which campaigns against pollution.

**48. China to Launch Environmental Probes in Eight More Provinces**

China will send inspection teams to eight more provinces and regions to see how well they are complying with state environment rules and fighting the country's war on pollution, the environment ministry said.

Beijing has identified local governments as one of the key battlegrounds in its nationwide anti-pollution efforts, with many accused of turning a blind eye to environmental violations in a bid to protect valuable sources of revenue and jobs.

The latest round of inspections will cover the huge coal-producing regions such as Inner Mongolia and Ningxia in the northwest, the old northeastern industrial heartland of Heilongjiang and the poor rural regions of Yunnan and Guangxi in the southwest.

Earlier this year, the Ministry of Environmental Protection (MEP) was given additional powers to send inspection teams anywhere in the country and demand meetings with senior local officials as part of its efforts to root out polluters. It was only the second Chinese agency to be granted such authority.
"We talk about local government interference in environmental enforcement and these central government investigations can address this problem at the source," said Ma Jun, director of the Institute of Public and Environmental Affairs, which campaigns on pollution issues in China.

At the end of last year, the government launched a two-month probe of northern Hebei province, one of the country's most polluted regions, and found that firms had engaged in "fraudulent activities" and were flouting orders not to expand industrial capacity. (See story below.)

The ministry said it had strengthened the way it enforces its rules in a number of regions, and total fines had reached more than 45.3 million yuan in May alone. A total of 230 plants were ordered to stop production over the period. "We need to recognize the progress made and this is definitely higher than before, but on the other hand, it is still not enough, and is still cheaper than the cost of compliance," Ma said. "We also don't know if in reality the fine will be paid. Many of them are the darlings of local government, which gives them protection," he said.

49. China Top Polluter Hebei Province Promises To Clean Up Act

Residents on their bicycles and electric bikes wait for the traffic at an intersection amid heavy smog in Shijiazhuang, Hebei province, China, December 10, 2015.

Northern China's Hebei, home to seven of the country's 10 smoggiest cities, has pledged to double up its efforts to tackle hazardous pollution following an environment ministry report accusing the province of failing to rein in law-breaking industries.

Hebei, which surrounds the capital Beijing and is responsible for about a quarter of China's total steel output, is one of the front lines in a "war on pollution" designed to head off growing public disquiet about the environmental impact of three decades of untrammeled industrial growth.

In May, the Ministry of Environmental Protection (MEP) said steelmakers and coal-fired power generators in Hebei were violating state guidelines by continuing to expand, while some local firms were also involved in "fraudulent practices" aimed at circumventing pollution rules.

The ministry identified a total of 47 problems during a two month inspection tour of the province beginning at the end of last year, and said the environment in some districts of Hebei had continued to deteriorate.

In a detailed response published on its official website, the Hebei government said
recently that it would work to "put environmental protection in a more prominent position" and set up an implementation team to rectify the problems highlighted in the MEP report.

It promised to dismiss and punish local government officials responsible for illegal steel production and step up efforts to replace the consumption of coal with cleaner natural gas.

The province promised in 2014 to cut coal consumption by 40 million tons and shed as much as 60 million tons of steelmaking capacity by 2017.

It also aims to cut concentrations of small airborne particles known as PM2.5 to an average of around 67 micrograms per cubic meter over the period, down from 77 micrograms in 2015.

According to official 2015 data, seven of China's 10 smoggiest cities were located in Hebei, the same as 2014 despite an economic downturn and a campaign to cut industrial capacity.

50. China Urged to Bolster Clean Energy to Replace Coal

China is being urged by academics to step up efforts in the next couple of years to replace coal with cleaner energy to fight air pollution, with the group even saying some parts of the country should use natural gas in power generation.

The nation should actively develop renewable energy, nuclear power and natural gas, while at the same time curbing an increase in coal use, according to an assessment of an air pollution prevention plan conducted by 50 academics from the Chinese Academy of Engineering and posted July 6 on the website of the Ministry of Environmental Protection.

As part of the effort, natural gas supplies should be increased to Beijing, Tianjin and the province of Hebei to help replace coal with the cleaner fuel in the production of power and other industrial uses, according to the statement. Four districts in Beijing that still rely on coal-fired boilers for winter heating should phase out the fuel and use natural gas instead, it said.

Although the concentration of pollutants in Chinese cities has fallen since 2013, heavy smog in winter remains prominent, according to the report. Public anger has prompted the government to issue more measures to tackle pollution.

51. China Sets Goal for Deep Cuts in Industrial Consumption

China announced an ambitious goal of cutting about a fifth of energy and water consumption from industries nationwide in less than four years, and making a similar dent in major pollutants and greenhouse gases. The plan calls for reducing energy consumption at major companies by 18 percent, carbon emissions by 22 percent, water consumption by 22 percent and key pollutants by 20 percent by 2020 compared to 2015 levels, the Ministry of Industry and Information Technology announced July 18.

The key pollutants are sulfur dioxide and nitrogen oxide in air, and chemical oxygen demand levels and ammonia nitrogen in water. The cuts would be part of China's efforts to establish a nationwide "green industrial structure" by 2020, the government said.

The targets are expected to be more closely watched in key air and water pollution control areas such as the regions surrounding Beijing, Shanghai and the Pearl River Delta in South China and the Yangtze River Economic Belt, according to the ministry.
The plan also includes 2020 targets to increase recycling of electronic waste products from 400 million metric tons to 690 million metric tons, and recycling of tires from 5.5 million metric tons to 8.5 million metric tons.

It also calls for nearly doubling the industrial value of “green industries” from 5.3 trillion yuan ($792 billion) to 10 trillion yuan ($1.4 trillion).

Industry-specific goals include reducing energy consumption for cement production, aluminum, oil refining, and paper-making, and expanding resource recycling targets for scrap iron, steel and other metals industries.

In China, major planning documents like this are usually followed by more detailed implementation measures for specific industries, and announcements of pilot projects to assist in the rollout.

**52. China Targets VOC-Emitting Industries to Reduce Pollution**

China will require 11 industries to replace raw materials or change their production techniques to cut volatile organic compound pollution by 3.3 million metric tons by 2018 compared with 2015 levels, according to an action plan the Ministry of Industry and Information Technology and the Ministry of Finance issued July 29.

Total consumption of volatile organic compounds (VOCs) such as benzene, toluene and xylene will be cut by 20 percent to 80 percent, depending on whether products contain low or high levels of VOCs, by 2018 compared to 2015, according to the plan's technical guidelines.

The pesticide, coating, adhesive and ink industries are required to look for alternative raw materials that contain low VOC levels. The seven other industries—oil and petrochemical refining, rubber, packaging and printing, shoe producers, synthetic leather, furniture and automakers—are required to improve their production techniques to reduce VOC emissions.

“Reduction targets were based on wide-ranging research and they are feasible to meet,” the Ministry of Industry and Information Technology said.

The ministry said it will “soon hold meetings with the industries to craft their respective roadmaps and implementation schemes” and the government expects these plans will be launched by the end of the year.

The ministry also said it will create green design evaluation standards to help with VOC replacement and reduction and the standards will be included in a future “green design products” catalog that consumers can use.

Beijing, Tianjin and Shanghai recently issued policies of charging industries for their VOC emissions. Hebei province, which surrounds Beijing, started charging paper making and publishing companies VOC fees in February.

China also is pushing for the provinces of Guangdong, Shandong, Jiangsu, Zhejiang and Fujian to do the most to curb VOC emissions as they are the biggest sources of the pollutant. A VOC control policy for the shipping container industry in Guangdong, one of the world’s biggest ports, will go into effect July 1, 2017.
53. South Korea Bans Sales of Volkswagen Cars Amid Test Frauds

The South Korean government banned sales and revoked certifications of 80 car models manufactured by Audi Volkswagen Korea amid test frauds in a bid to get sales permission, local media reported. The South Korean Environment Ministry separately imposed a fine worth 17.8 billion won ($16 million) on the automaker as a probe into the company proved the company cheating, Yonhap agency said.

According to the news outlet, a total of 209,000 Audi and Volkswagen cars have been affected by certification recall.

In September 2015, the German automaker admitted that it had installed software in their vehicles to falsify emission tests. The company later clarified that an estimated 11 million diesel-engine cars worldwide were emitting up to 20 times more greenhouse gas than showed in the tests.

In January, the South Korean Environment Ministry filed complaint against Volkswagen’s branch office on the accusations that it violated the national Clean Air Conservation Act by fabricating emission and noise level reports and launched investigation.

54. South Korea Formulates Ambitious Plan to Promote E-Cars

South Korea will push to make electric car batteries run longer, build a network of charging stations and make e-car purchases and ownership more affordable, the Ministry of Trade, Industry and Energy said. The plan includes development—beginning this year—of an e-car battery with energy density high enough to more than double the travel distance on a charge to 400 kilometers (248.5 miles).

By 2020, high-speed charging stations will become available at an average of one within a two-kilometer radius in the capital city of Seoul, with a population of 10 million, the ministry said July 7th. In addition, 30,000 slow charging stations will be strategically located at about 4,000 apartment complexes nationwide by 2020.

Starting this year, the tax surcharges paid at the time of purchasing an e-car will be reduced, and e-car drivers will see cuts in insurance premiums, expressway tolls and parking fees, the ministry said. And the standard one-time government subsidy available to e-car buyers was increased to 14 million won ($12,100) from 12 million won ($10,400), effective July 8th.

According to the ministry's data, South Korea is the world's fifth biggest car manufacturing country with 1.8 million vehicles produced in the first five months of 2016 and 1.1 million, or 61 percent, of them sold overseas. But South Korea lags behind many nations in the domestic popularity of electric cars.

According to Global EV Outlook 2016 released by the International Energy Agency, e-car country market share was 0.2 percent for South Korea in 2015, among the lowest in comparison with 15 other members of the Electric Vehicles Initiative international governmental forum.

The ministry estimates that the current and future policy programs will help increase the e-car market share in South Korea to 0.5 percent in 2017 and 5.3 percent in 2020.
The global market share of South Korean e-cars also will be boosted to match that of South Korean gasoline and diesel cars, which reached 8.5 percent based on sales by South Korea's two main car exporters, Hyundai Motor Co. and Kia Motors Corp., the government said.

**55. Hyundai to Push Eco-Friendly Car Sales as Regulations Tighten**

Hyundai Motor Co. and its affiliate Kia Motors Corp. will seek to push sales of environment-friendly vehicles as part of efforts by the South Korean automakers to meet increasingly stringent global emission standards and fuel economy requirements.

Hyundai Motor Group Chairman Chung Mong Koo, who presided over a meeting of executives heading overseas offices, directed them to expand production and sales of such vehicles globally, according to an e-mailed statement July 18th. Hyundai plans to introduce its Ioniq gasoline-electric hybrid in the U.S. and Europe, after starting sales in January in South Korea. Kia plans to sell the Niro hybrid in the U.S., Europe and China.

Chung's push for eco-friendly cars comes as Tesla Motor Inc. prepares for its debut in South Korea, where such models comprise less than 1 percent of 21 million vehicles. Automakers are expanding their lineup of alternative-energy vehicles with companies such as Toyota Motor Corp. as they come under pressure to improve fuel economy and meet increasingly stringent emission rules.

"We need to expand eco-friendly car lineup and strengthen sales, production capabilities to lead the eco-friendly car industry," Chung, who heads both Hyundai and Kia, said in the statement. Hyundai and Kia have said they plan to have 28 environment-friendly vehicles in their lineups by the end of the decade, including electric cars and hybrids.

The automaker also will accelerate the introduction of its Genesis luxury brand globally, according to the statement. Hyundai spun off its luxury marque into a stand-alone brand as it seeks to move upscale and compete against the likes of Toyota's Lexus.

Hyundai plans to start sales of the G80 midsize sedan and the bigger G90 sedan in the U.S. this year, while the G90 will be introduced in the Middle East, the company said without providing a time frame.

**56. South Korea Increases Surcharges on Automobile Emissions**

Some new automobiles in South Korea will be subject to much higher surcharges on greenhouse gas emissions that exceed statutory limits beginning next year, the Ministry of Environment said July 20.

The rate for every gram exceeding emissions limits per kilometer driven will be increased from the current 10,000 won ($8.80) to 30,000 won ($26.30) for 2017-19 and 50,000 won ($43.80) for 2020 and thereafter, the ministry said in a statement.

The surcharge program—which applies both to domestically produced and imported cars, and is levied on companies manufacturing or importing autos, not drivers—was introduced in 2014 as part of South Korea's reform of automotive pollution regulation. That regulation required automobile manufacturers and importers to choose between fuel economy-based standards and emissions-based standards.
The changes announced July 20 apply only to those who chose the emissions-based standards.

The alternative surcharge to car manufacturers and importers for not meeting fuel-economy standards will remain unchanged at 82,352 won ($72) for every kilometer falling short of the standard. The standard itself, however, is set to rise from 18.6 kilometers per liter this year to 24.3 kilometers in 2020.

The emissions surcharge increases will be implemented under an amendment of the enforcement decree of the Air Quality Preservation Act, which does not require parliamentary approval.

“This amendment will contribute to greenhouse gas emission reduction efforts in the transportation sector as a whole,” Na Jung-kyun, director-general of the ministry’s Climate and Air Quality Bureau, told reporters. The surcharge due can be reduced with emissions credits carried forward from three prior years or bought from other manufacturers and importers, according to the ministry.

“The gradual surcharge hike is designed to make reducing emissions a better option for companies than paying penalties,” Na said.

57. France's Bollore Wins Electric Car-Sharing Project in Singapore

French firm Bollore Group won an electric car-sharing project in Singapore, its first in Asia, with a fleet of 1,000 vehicles expected to operate in the densely-populated city-state by 2020, government authorities have announced. Bollore's proposal was chosen from among 13 proposals after more than a year of evaluation by government agencies under the joint leadership of Singapore's Land Transport Authority and the Economic Development Board, the city-state's transport minister, Khaw Boon Wan, said at the signing ceremony for the deal.

The first 125 electric cars are expected on the road in the middle of next year. Under the project, BlueSG, a subsidiary of Bollore, will install 2,000 charging points throughout the island by the end of the decade.

Bollore has electric vehicle-sharing operations in Paris, Bordeaux and Lyon in France, Indianapolis in the United States and Turin in Italy. The group's plans to launch a new electric car-sharing scheme in London were delayed due to incomplete contract talks with the capital's local councils.

Facing tougher environmental regulation and growing demand for less polluting cars, automakers are investing heavily in electric vehicles, but many consumers have been deterred by the limited distance they can travel on a single charge.

58. Delphi Selected by Singapore for Autonomous Vehicle Mobility-on-Demand Program

Delphi Automotive PLC has been selected by the Singapore Land Transport Authority (LTA) as a strategic partner to implement autonomous mobility concepts, recognizing Delphi's leading technologies in advanced safety and automated software.

Delphi will provide a fleet of fully autonomous vehicles and will develop a cloud-based mobility-on-demand software (AMoD) suite, opening up new potential autonomous markets for Delphi's customers. Delphi will conduct a trial of an urban, point-to-point, low-speed, autonomous,
Delphi’s AMoD development program and autonomous vehicle demonstration is part of the Singapore Autonomous Vehicle Initiative (SAVI), which was formed in 2014 to oversee and manage autonomous vehicle (AV) research, test-bedding, and the development of applications and solutions by industry partners and stakeholders.

Of particular interest to the Singapore LTA is the potential for automated driving solutions to make it easier for commuters transiting the "first mile" and "last mile" between a mass transit station and their home or work place. By addressing this need, the usage of the mass transit systems could increase; reducing overall traffic congestion and vehicle emissions.

Delphi is a recognized leader in vehicle-based safety technologies, which are the building blocks for a fully automated vehicle; including advanced sensors, software and electrical distribution. The company is using its participation in SAVI to develop new products and capabilities to serve its global customers.

Developing a true end-to-end automated vehicle ecosystem, including a cloud-servicing capability, opens a host of new business opportunities for Delphi to offer its existing and potential customers in mobility and connectivity, logistics, agriculture and mining.

Delphi’s technology solution is vehicle agnostic and can be applied in passenger cars, buses, commercial vehicles, purpose-built mobility pods and electric vehicles. AVs provide the opportunity to facilitate efficient urban and suburban vehicle sharing, autonomous bus or taxi services, logistics and long-distance truck platooning.

The Singapore LTA pilot program will last for three years with plans to transition into an operational service by 2022 timeframe. Other pilots are planned by Delphi for locations in North America and Europe in the future. For more information visit our Newsroom.

59. Indian Court Orders Older Diesel Vehicles Off New Delhi’s Roads

India’s top environmental court has ordered authorities to remove all diesel vehicles at least 10 years old off the capital city’s streets in a bid to help clean New Delhi’s polluted air. The ruling is the latest in a series of court-issued orders targeting the automotive industry’s role in polluting Delhi’s air, which the World Health Organization said in May was the world’s 11th dirtiest.
Under the order, effective immediately, the National Green Tribunal (NGT) directed the Delhi transport authority to cancel the registration of all diesel-powered vehicles produced at least 10 years ago.

New Delhi’s transport office must also provide the court with a list of vehicles losing their registration, Indian media reported, citing the tribunal’s ruling.

Experts are divided on the extent to which vehicles are responsible for Indian urban pollution, but several have called for a ban on diesel vehicles because they pollute more than petrol-fueled cars and motorcycles.

Last year, India’s Supreme Court temporarily banned the sale of large diesel cars in New Delhi. The court also has indicated that it could levy an additional tax on the sale of diesel cars, potentially hitting sales of carmakers such as Toyota Motor Corp, Mahindra & Mahindra and Tata Motors.

Previous court bans on older diesel vehicles in New Delhi have been poorly enforced, and Deepesh Rathore, a director at Emerging Markets Automotive Advisors, said this ruling was “quite unplanned and arbitrary in nature.” "While we are all concerned about badly maintained vehicles causing pollution, the solution to that is to make annual vehicle health checks mandatory," he said. "If today the NGT can do this thing without any warning, any planning or any heads-up then in five years the same can be done for petrol vehicles as well."

Rathore estimates that nearly 20 percent of future diesel vehicle sales could switch to petrol in response to the bans.

Air pollution has rocketed up the list of public concerns among India’s increasingly vocal urban middle class.

The Delhi government this year restricted cars from traveling on the roads to alternate days for a two-week period while India’s federal government introduced an additional 'green' tax on car sales in February.

60. NASA Data Show Toxic Air Threat in Indian Subcontinent

The megacity of New Delhi has tried everything from banning diesel-guzzling SUVs to taking about half the city’s cars off the streets in a fight against air pollution. Officials may yet have to do much, much more, based on NASA satellite research.

The research depicts how much sunlight is blocked by airborne particles, providing a proxy for levels of pollution. The data show parts of the Indo-Gangetic plain—stretching across northern India from eastern Pakistan on one side to Bangladesh on the other—suffer some of the planet’s worst haze in October through January after monsoon rains end in September.

On average during those months, as much as 10 times more solar beam was blocked over the plain from 2008 to 2014 compared with the U.S., signaling substantial concentrations in the air of the tiny, toxic PM-2.5 particles that damage health. While New Delhi is heaving with millions of vehicles, exhaust-pipe emissions in cities in the densely populated plain are just part of a complex picture, according to Pawan Gupta, a research scientist at Goddard Earth Sciences Technology and Research in Greenbelt, Maryland.
“During the post-monsoon season, the Indo-Gangetic plain is one of the most heavily polluted regions,” Gupta said. The burning of vegetation, for instance by farmers or for cooking, as well as a winter climate and a topography that traps pollutants, all add to the problem, he said.

A ribbon of 17 cities across or near the plain—with a combined population of about 55 million—dominates the World Health Organization's ranking of the 30 metropolises with the worst air. The chain starts with Peshawar in Pakistan and heads south and east in a shallow arc through New Delhi and onto Narayanganj in Bangladesh.

Hemmed in by the Himalayas, the region has what Gupta calls a valley-like topography that helps trap pollutants when temperatures cool.

The NASA data on so-called aerosol optical depth also show heavy pollution in pre-monsoon summer months across the plain, in some parts as much as eight times more than average readings in the U.S. That's partly because of dust billowing from the Thar Desert in northwestern India, according to G.P. Sharma, vice president of meteorology at Skymet Weather Services Pvt. in New Delhi.

The World Bank in 2013 estimated the annual cost of environmental degradation in India at $80 billion. That is an indication of the overall blow for Asia's No. 3 economy from pollution, even as companies such as Amsterdam-based Koninklijke Philips NV and Japan's Sharp Corp. see growing sales of products such as air purifiers.

New Delhi has tried banning cars with big diesel engines and experimented with periodic curbs on when vehicles can be used based on their number plates. India and Pakistan also are pursuing ambitious renewable-energy agendas to cut reliance on dirty fossil fuels. The scope of Indo-Gangetic haze signals such steps must intensify.

When WHO data for PM-2.5 is plotted, the concentrations are pretty similar across most regions, including those outside India, according to RTI's Doraiswamy. That suggests this is a regional problem and requires a coordinated strategy, he said.

“Much more needs to be done by government, business and society to achieve clean air,” said New Delhi-based Bhaskar Deol, founder of Mynergy Renewables Pvt. “While northern India's unique topography is a challenge, international experience shows that comprehensive programs tackling a wide range of pollutants can successfully solve the problem without sacrificing economic growth. “

61. China Puts Curbs on Shipping Emissions

China issued its first ever set of national standards to curb harmful emissions from the shipping industry on August 30th, as part of its attempts to reduce air pollution and meet its international pledge to fight climate change. The standards issued jointly by the Ministry of Environment (MEP) and the country's quality watchdog – the General Administration of Quality Supervision, Inspection and Quarantine – aims to cut emissions of greenhouse gasses and other particulate matter from ships with an engine capacity of over 37 kilowatts, Zou Shoumin, an environmental ministry official, said.

The shipping industry contributed 8.4 percent of the total Sulphur dioxide emissions and over 11 percent of nitrogen oxide released in 2013, data from the MEP showed.
The industry standards will be enforced in two stages, said Zou.

In the first stage, the shipping industry is required to cut emissions of PM10 and PM2.5 by about 70 percent from the levels in 2016 over the next three years by upgrading their technology and by switching to the use of low-Sulphur fuels. One-fifth of the current nitrogen oxide emissions must also be slashed over the same period, said Zou.

Sulphur dioxide emissions from shipping can be reduced by 540,000 tons each year by simply switching to more environmentally friendly fuels, the two central government agencies estimated, and it can cut 40,000 tons of harmful particulate matter per annum over the next three years.

In the second stage, ship operators need to cut another 40 percent of PM10 and PM2.5 emissions from levels in 2019 and reduce nitrogen oxide emissions by a further 20 percent from 2020 to 2022, according to the document.

However, authorities have not spelled out any penalties for operators who fail to meet the standards.

There are 172,600 ships operating in inland rivers and Chinese waters along the country's east coast, government data shows. The country has eight of the world's top ten ports, which together handle a quarter of global shipping traffic.

A study by scientists from Tsinghua University in Beijing and Duke University in the United States found that shipping-related air pollution caused between 14,500 and 37,500 deaths in the East Asian region each year, though no country-by-country breakdown was offered in the research.

Scientists involved in the study which was published in the July edition of Nature Climate Change warned that rising emissions from the shipping industry could worsen global warming in the long term if no action was taken to curb it.

**62. China Proposing California-Like Mandates for Electric Cars**

China will consider mandates that automakers produce more electric vehicles or purchase carbon credits from their peers, potentially emulating California's system and transitioning from a subsidy-driven approach to catalyzing cleaner cars. The proposed rules will mandate that certain automakers produce or import new-energy vehicles in proportion to the number of fuel-burning autos they sell, according to a draft document the National Development and Reform Commission prepared. Companies that fail to achieve carbon dioxide emission reduction targets would be required to buy credits or pay fines of as much as five times the average price of the credits, the country's top industry regulator and policy maker said on August 12th.

China has encouraged consumers to switch from fossil fuel burning vehicles to electric cars and plug-in hybrids, with the dual aim of reducing pollution and supporting companies in developing what it sees as the dominant auto technology of the future. The latest proposal was prepared after studying California's zero-emission vehicle mandate, which has gone further than any other U.S. state to promote the adoption of electric cars.

“Without question, this will be good for the industry and will promote the development of all types of clean-energy vehicles,” Ye Shengji, deputy secretary general of the China Association of Automobile Manufacturers, said on August 12th at a news conference in Beijing.
China surpassed the U.S. as the largest market for electric vehicles last year and wants sales of new-energy vehicles to exceed 3 million units a year by 2025. To encourage production and sales of such vehicles, central and local governments have spent 15 billion yuan ($2.3 billion) on subsidies since 2009, according to state-run China Central Television. The government plans to phase out subsidies after 2020.

“Given that some key automakers lack the motivation to develop new energy vehicles, there is concern that development in the industry will suffer once the fiscal policies are weakened or dropped,” the commission's draft document said. The rules would be mandatory for automakers of a minimum size and voluntary for others, it said.

63. Most of China's Electric-Car Startups Face Challenges

China's electric-vehicle industry, with 200-plus companies backed by a raft of billionaires, verges on a massive shakeout as the government imposes stricter technology standards on fledgling manufacturers and considers limiting their number to only 10. Any curbs would be aimed at weeding out the weak, said a senior executive with the state-backed auto manufacturers' association, and they may push as many as 90 percent of EV startups toward extinction, a government-linked newspaper said. So far, only two ventures have obtained approval to build cars, based on a review of National Development and Reform Commission documents. Three others say they plan to apply for permits.

Jack Ma, Terry Gou, Li Ka-shing and Jia Yueting are among the investors who've poured at least $2 billion into building alternative-energy vehicles as China tries to combat the smog choking its cities. Generous subsidies helped cultivate a gold-rush mentality, prompting concerns the industry is plagued by too many companies lacking the technical know-how to make electric or hybrid cars that measure up to those from Tesla Motors Inc. or General Motors Co.

“There are too many entrants in the sector, and some of them are just speculators,” said Yin Chengliang, a professor at Shanghai Jiao Tong University's Institute of Automotive Engineering. “The government has to raise the threshold. It’s bad to see irrational investments in projects with low technology levels.”

The potential cap on EV startups comes as the world's biggest auto industry grapples with overcapacity and high inventories. Carmakers are seeing pressure on their profit margins with the spread of cheap models, while stringent fuel-economy and emissions targets are set to raise costs.

China surpassed the U.S. last year to become the world's biggest market for new-energy vehicles-comprising electric vehicles, plug-in hybrids and fuel-cell cars. Domestic automakers sold 331,092 units in 2015, according to the China Association of Automobile Manufacturers.

The government's sales target is 3 million units a year by 2025--a 10-fold increase--and it's offering subsidies that can total 60 percent of an electric-car's sticker price. There currently are about 4,000 new-energy vehicle, or NEV, models in development. “It's true we're emphasizing support to develop new-energy vehicles, but should we allow everyone to go ahead?” said Dong Yang, executive vice chairman of the manufacturers' association.

The Ministry of Industry and Information Technology is considering restricting the number of startup EV makers to a maximum of 10, said Dong, who meets regularly with its officials.
count won't include traditional carmakers such as SAIC Motor Corp. and BYD Co. that are developing NEVs.

Yet even those startups getting permits have more mandates to meet before switching on their assembly lines, as the government introduces stricter quality-control measures. In a draft policy document posted for public feedback this month, the MIIT listed 17 technologies that companies intending to sell electric cars must possess in order to ensure “healthy” development of the industry. Those include a control system that determines the performance and stability of the NEV, an information system that tracks the sources and conditions of key parts, and a process for recycling or reusing batteries.

The Economic Daily, an official newspaper run by the State Council, said 90 percent of the companies currently developing EV platforms still won't meet the standards in two years. The report cited unnamed industry analysts.

One successful applicant is Beijing Electric Vehicle Co., which is controlled by BAIC Group, the state-owned manufacturer for Hyundai Motor Co. and Daimler AG's Mercedes-Benz. It will build a factory in the capital city that's capable of making 70,000 EVs a year.

The other is Hangzhou Changjiang Passenger Vehicle Co., which counts Hong Kong-traded FDG Electric Vehicles Ltd. as a major shareholder. Once on the verge of elimination, the former state-owned bus maker was revived by an infusion from FDG, which counts Li's foundation as a minority investor. Li has an estimated net worth of $31.2 billion, according to the Bloomberg Billionaires Index.

“The speed at which they're granting permission is worrying,” said Zhang Zhiyong, a Beijing-based independent auto analyst. “Many companies are constructing their manufacturing facilities, but they're blocked at the door from getting the licenses. This is a huge problem.”

The startups intending to apply for manufacturing permits include Wanxiang Group Corp., owner of Karma Automotive LLC, which announced a hybrid that uses solar power and costs more than $115,000. Its $375 million factory is planned for Hangzhou.

Another is Jia's LeEco, said Huang Hao, a Beijing-based spokesman. LeEco will invest 6 billion yuan in a factory with initial capacity for 200,000 cars a year, the company said August 10th.

The third is WM Motor, which said August 17th it raised $1 billion in an initial fundraising round with plans to introduce its first model in 2018. The company was founded last year by Freeman Shen, a former executive at Volvo Cars owner Zhejiang Geely Holding Group Co.

“It's right for MIIT to send out the signal that not everyone can get the permit,” Shen said. “The current situation is a little bit chaotic with too many unqualified companies, such as low-speed EV makers and auto-parts companies, joining in the competition.”

The government also plans to phase out subsidies after 2020, removing an incentive for startups depending on them to achieve profitability. Last year, the average EV maker produced about 3,000 cars, far below the scale required to ensure returns on investment, said Wang Cheng, an official at the China Automotive Technology and Research Center.
Burning coal has the worst health impact of any source of air pollution in China and caused 366,000 premature deaths in 2013, according to Chinese and American researchers. Coal is responsible for about 40 per cent of the PM 2.5 in China’s atmosphere, according to a study the researchers released in Beijing.

The study attributed 155,000 deaths in 2013 related to ambient PM 2.5 to industrial coal burning, and 86,500 deaths to coal burning at power plants. Fuel combustion of both coal and biomass in households was another major cause of disease that year, resulting in 177,000 deaths, the study concluded.

The researchers also found that transportation was a major cause of mortality related to PM 2.5, with 137,000 deaths attributed to it in 2013. In recent years, Chinese scientists have said that motor vehicle emissions are a leading source of air pollution in cities, although not as great as coal burning. Vehicle ownership is rising fast in China.

China consumes almost as much coal annually as all other countries combined, and coal burning in the country is the biggest source of both air pollution and greenhouse gas emissions, the leading cause of climate change. But the growth in China’s coal consumption has begun to slow. Last year, there was a slight decline in coal use compared with 2014, largely because of an economic slowdown that has been faster and deeper than many experts had expected.

In addition, the Chinese government announced plans in 2013, when popular anxiety over air pollution reached new heights, to curb coal use in three major population centers in the east. Placing limits on coal use is also consistent with pledges made by President Xi Jinping to try to reduce the effects of climate change.

The new study projected four scenarios based on different possible government policies, and each projection showed a decline in the average levels of PM 2.5 in coming years. But in the study’s executive summary, the researchers said that "despite these air pollution reductions, the overall health burden is expected to increase by 2030 as the population ages and becomes more susceptible to diseases most closely linked to air pollution."

In 2013, the Organization for Economic Cooperation and Development, based in Paris, warned that "urban air pollution is set to become the top environmental cause of mortality worldwide by 2050, ahead of dirty water and lack of sanitation." It said that as many as 3.6 million people could end up dying prematurely from air pollution each year, mostly in China and India.

The new study, Burden of Disease Attributable to Coal-Burning and Other Air Pollution Sources in China was published mid-August. The study, available in both Chinese and English, provides the first comprehensive assessment at national and provincial levels of current and future burdens of disease attributable to coal-burning and other major sources of particular matter air pollution." It is also the first report of the Global Burden of Disease — Major Air Pollution Sources (GBD MAPS), a multi-year, international collaboration of Tsinghua University, HEI, the Institute for Health Metrics and Evaluation (IHME), and the University of British Columbia.

“The GBD is the largest and most comprehensive effort to date to measure epidemiological levels and trends worldwide” said Zhou Maigeng, Deputy Director of the National Center for Chronic and Non-communicable Disease Control and Prevention of the China Center for Disease Control and
lead author of the GBD 2013 Chinese analysis published in the British medical journal *The Lancet* in October 2015. “Based on Chinese data, we found that outdoor air pollution was the 5th leading cause of premature death in China in 2013.”

**Estimates of causes of premature death from 20 top risk factors in 2013**

The new study is part of the GBD MAPS Working Group, and took advantage of enhanced satellite data and China’s ever-expanding network of air pollution monitors. The study was also the first to estimate the impact of different air pollution sources by province.

“Coal-burning was the most important contributor to ambient PM2.5, causing an estimated 366,000 premature deaths in 2013,” said Professor Wang Shuxiao of Tsinghua University, a lead investigator for the study. “Industrial sources and household solid fuel combustion, from both coal and non-coal emissions, were the largest sectoral contributors to disease burden attributable to ambient PM2.5 in China, responsible for 250,000 and 177,000 premature deaths, respectively.”

“Air pollution health burdens will continue to be a challenge, but the potential for future health benefits from further control is enormous,” added Robert O’Keefe, Vice President of the Health Effects Institute.

**65. India Air Pollution Death Rate To Outpace China - Researcher**

The increase in people dying in India from air pollution will outpace the rate of such deaths in China, as India drags its heels over environmental rules while opening more coal mines, according to the head of the Health Effects Institute. "India's situation is getting worse at a much faster speed than China," Dan Greenbaum, president of HEI, told Reuters in Beijing. "It is definitely the case because India has not taken as much action on air pollution."

HEI and a group of Chinese and Indian universities recently said that over half of world’s air pollution-related deaths were in China and India. In China, coal-fired plants have been the worst source of pollution. But India has lagged behind in implementing stringent environment policies for coal emissions.

From now until 2020, China aims to cut coal output by 500 million tons, or about 19 percent of its current annual output, and reduce emission of major pollutants in the power sector by 60 percent.
By contrast, India has just only launched an emission standard for coal-fired power plants this year.

India is also ramping up coal production as Prime Minister Narendra Modi races to meet election promises to provide electricity to a population of 1.3 billion.

"Chinese actions to control emissions from coal power plants and from industries are considerably stronger than the ones in India," Greenbaum said.

66. Volkswagen Korea Chief Grilled For 2nd Day

The South Korean prosecution once again summoned for questioning the chief of German automaker Volkswagen’s local operations on Friday, continuing its investigation of alleged irregularities committed by the automaker in the country. Johannes Thammer, the chief executive of Audi Volkswagen Korea, appeared at the Seoul Central District Prosecutors’ Office the day before to address allegations that the firm fabricated emission test results for vehicles sold in Korea.

The German automaker is charged with rigging the test results of its vehicles’ noise levels, fuel efficiency and emissions testing to obtain local government approval to sell its cars in Korea.

After undergoing questioning for about 16 hours on Thursday, the foreign executive was summoned again at about 10:30 a.m. on Friday for further investigation, the prosecution said. “First of all, I want to say that I am sorry for the situation and we will do everything, faithfully, to cooperate with the prosecutor,” Thammer told reporters in English before entering the prosecutor’s office on Thursday.

Thammer, who has been in charge of the import and sales of Volkswagen, Audi and Bentley cars in Korea since December 2012, did not comment on whether Volkswagen’s German headquarters were involved in the rigging process.

Last week, the Korean Ministry of Environment banned the local marketing and sales of 80 VW, Audi and Bentley models and handed VW’s Korean unit a fine of 17.8 billion won ($16 million).

67. South Korea Widens Emissions Test Probe to All Foreign Car Brands

South Korea expanded an investigation into the fabrication of emission and noise-level test results to all foreign car brands after fining Volkswagen AG for violations. The environment ministry started a probe on 23 foreign automakers involving 110 diesel models, Hong Dong Kon, a director at the ministry, said August 18. The results of the investigation will be announced in two to three months, Hong said.

Automakers and component suppliers worldwide are facing increased scrutiny following a spate of scandals at companies including Takata Corp., Mitsubishi Motors Corp. and Suzuki Motor Corp.

Imported cars accounted for about 15 percent of the market in South Korea as of June, and the most popular choices include diesel models made by VW, BMW AG and Daimler AG’s Mercedes-Benz. The Korea Automobile Importers and Distributors Association hasn't received details of the investigation, the group said.
A spokesman for Mercedes-Benz Korea said the automaker hasn't received a notice from the environment ministry but would cooperate with the investigation if there is a request.

It could take longer than the typical three months for VW to regain the certification required to restart sales as thorough inspections have to be carried out, the ministry has said.

**68. Beijing Still Suffers High Levels of Air Pollution**

According to the Ministry of Environmental Protection, Beijing ranked ninth among the ten cities with the worst air quality, while eight out of the 10 most polluted cities are located in Hebei. Data shows that 54.4 percent of the monitored days had excellent or good air quality in 13 cities in the region Beijing-Tianjin-Hebei, a reduction of 0.4 percentage points on last year.

According to the ministry, ozone and PM 2.5 particles were the major pollutants in Beijing.

However, the statement stresses that in general, air quality at the national level improved. Haikou, Zhuhai and Zhoushan, located mostly in the coastal areas of south and east of the country, topped the list of the ten cities with the best air quality.

Official data shows that in 2015 Beijing replaced coal burning power plants for cleaner energy, and also closed and limited the production of more than 2,000 factories.

Recently the government of the capital announced the construction of a network of ventilation corridors where a connection of parks, rivers and lakes should facilitate the flow of air and disperse the smog in the city. The aim of the Chinese authorities is to reduce pollution by 40 percent by 2020.

**69. Japan's ‘Environment Industry’ Hits Record Market Size**

High demand for fuel-efficient automotive technology and increasing clean energy deployment across the economy boosted the market size of Japan's environment-related industries to more than a trillion dollars in 2014, the government said. The 2014 market size of 105.4 trillion yen ($1.04 trillion) marked nearly twice the economic impact that environmental industries had on the Japanese economy in 2000, the Ministry of the Environment reported.

"The environment industry's position and roles in Japanese industry cannot be ignored anymore," an official at the ministry's Office of Environment Economic Policy Research told reporters on August 5th. Environment-related industries, which accounted for 6.2 percent of all Japanese business in 2000, rose to 11.1 percent in 2014, the ministry said.

More than 25 percent of the new cars sold in Japan now are powered by gas-electric hybrid engines.

Also driving energy efficiency is growth in LED light bulbs and solar power panels, and natural gas and biomass for renewable energy-based power generation, the report said.

The environment market growth is helping create more jobs, with the 2014 total rising 1.6 percentage points over 2013 to 2.56 million jobs, the ministry said. The renewable energy sector added as many as 100,000 new jobs between 2012 and 2014.
Environment product and service cross-border trade also are expanding, with 2014 exports totaling 167 trillion yen ($1.64 trillion), up 6.3 percent over 2013, with imports at 3.25 trillion yen ($33.2 billion), up 4.1 percent.

But growth of the environment-related industry has not helped all parts of Japan's economy, said Fujio Ando, a senior strategist with Chiba Bank Asset Management. Energy efficiency improvements of motor vehicles, home appliances and industrial products is cutting demand for fossil energies, and in turn discouraging producers and wholesalers from raising prices. Growing popularity of hybrid cars is forcing gas stations to shut down at a record pace in Japan, he said.

The latest results also raise questions about whether Japanese industries can continue to hone technologies to woo domestic consumers and the export market. Growth in contamination-prevention sectors, such as clean water technologies, waste management and resources recycling and reuse, showed little growth since 2010, he said.

70. India’s Top Court Allows Diesel Vehicle Registrations After 1% Levy

Large, private diesel vehicles can once again be registered in Delhi after an eight-month ban on bringing in such cars and sports utility vehicles, provided they pay a new tax. The Supreme Court of India lifted the registration ban on new vehicles with engine capacities larger than 2000cc on the condition that 1 percent of each vehicle’s price be deposited with the Central Pollution Control Board as an environmental levy.

The court removed the ban after several manufacturers, including Mercedes-Benz and Toyota, offered to deposit 1 percent of the showroom price of their vehicles as an environmental protection charge.

In its August 12th order, the court left open the question of whether smaller diesel cars should also pay this levy, and whether 1 percent of the price is a fair amount, saying these issues would be decided “at an appropriate stage.”

Last December, the Supreme Court banned new registration of large diesel vehicles in an effort to deal with air pollution. That led some manufacturers to reconsider plans for further investment in India, particularly after similar bans in other states were passed.

Mahindra’s Executive Director Pawan Goenka said the automaker is “very relieved,” while Daimler AG’s Mercedes-Benz rejected the levy’s premise that its vehicles pollute the environment.

Although the decision will pave the way for sales of large diesel sedans and sport utility vehicles to resume in one of the country’s biggest auto markets, the additional charge may discourage some buyers. Toyota had said the ban curtailed sales growth, while market leader Maruti Suzuki India Ltd. said it wasn’t in favor of additional levies.

“Hope this decision will put all controversy surrounding diesel fuel behind us,” Mahindra’s Goenka said in a statement. “We will be able to focus on the more important task of making our vehicles compliant with Bharat Stage 6 norms by April 2020.” The government in January said it will impose tighter vehicle emissions rules four years early, skipping a transitional step offered in other countries to combat worsening air pollution.
The charge will be on top of fresh levies imposed in the government’s annual budget on new passenger vehicles. The ban on diesel engines 2 liters or larger imposed in December hit sales of some models and prompted the introduction of gasoline variants and smaller diesel engines.

Mahindra has introduced smaller engines for its popular SUVs as well as new compact models with variants powered by gasoline. Local deliveries jumped 13 percent in the April-July period, compared with an 8.5 percent decline in the year-earlier period.

While Toyota’s sales expanded at a slower 1.6 percent pace, its deliveries of Innova multipurpose vehicle have climbed 38 percent with the introduction of a new version in May. The automaker this month started selling a gasoline-powered Innova Crysta.

Mercedes-Benz posted sales of 6,597 units in India in the January-June period, down 0.9 percent from a year earlier, according to statements on its website. The company has the technology to switch its entire fleet to BS 6 by 2018 and said the introduction of compatible fuel will be the “best viable option to curb pollution.”

“Lifting of ban on bigger vehicles in the national capital region is a good move because this step alone will not address the emission issue,” Abdul Majeed, partner at Price Waterhouse, said in a statement. “We need to figure out holistic solutions in the automotive sector by replacing old vehicles on the road, promoting environment friendly vehicles as well as significantly improving public transport.”

71. Diesel Vehicles Ban: Auto Industry Loses 4,000 Crore in Eight Months

The auto industry suffered a loss of Rs 4,000 crore¹ in 8 months following the ban on sale of diesel vehicles in engine capacity of 2,000cc and above in Delhi/NCR, SIAM President Vinod Dasari has said.

Speaking at the 58th Annual Session of the Automotive Component Manufacturers Association (ACMA), Dasari said it was “improper information” supplied to the courts which led to the ban on diesel vehicles. “Led by the media hype, provided with improper information, the courts decided to ban those vehicles which actually meet the standards set by the government. It is for the first time that when you meet the law you actually get penalized.” the Society of Indian Automobile Manufacturers (SIAM) president said.

He said that everyone wanted to regulate the auto industry without looking into the real cause of pollution.

The Supreme Court had on December 16, 2015 banned the registration of diesel vehicles with an engine capacity of 2000cc and above in Delhi/NCR, citing concerns with regard to increasing air pollution in the national capital.

“It’s a matter of great pride that the auto sector provides 30 million jobs and accounts for 50 per cent of the manufacturing GDP and yet it is rather sad when there is congestion, then auto industry is blamed; when there is pollution, auto industry is blamed and when there is an accident auto industry is blamed,” Dasari said.

¹ 10 million
Dasari, MD of Ashok Leyland, added: “I feel everyone wants to regulate the auto industry. Let’s take the Delhi example. Every winters when there is fog, there is a lot of media hype, lots of NGOs get involved and they blame one industry; everyone wants to blame auto industry.”

He said that less than 20 per cent pollution comes from the auto industry.

He added that the auto industry has several times asked the government to ban old vehicles if it wants to reduce pollution. “Ban vehicles that cause pollution,” Dasari said.

He further said the move to ban would not help in reducing pollution in the capital. “After all of this what happened? There is environmental cess, for vehicles that are larger than 2,000 cc, of 1 per cent. People who buy such vehicles... are they going to stop buying these due to this one per cent cess? Is that going to have an impact on Delhi pollution?” Dasari noted.

He said the auto industry needs to work on its rebuilding its image. “I see it as a challenge, this is where the auto industry and components industry will have to work together to rebuild our image to provide right kind of feedback,” Dasari said.

72. Nagaland Among 21 States Asked To Curb Air Pollution

Asking 21 states to take action against air pollution within the given deadline, the Central Pollution Control Board (CPCB) has issued a total of 31 directions under six different sections. The order asks the states to form an action plan to check fuel adulteration and public helplines in all towns for air pollution within 30 days and action for non-complying industries within 60 days. It also sets a 90-day deadline to maintain “pothole free” roads for free-flow of traffic. The directions were issued in July to 21 polluting states under Air (Prevention and Control of Pollution) Act, 1981. The states includes Nagaland, Meghalaya, Uttarakhand and Jammu and Kashmir. The cities of these states where the particulate matter increased over the last five years includes-- Jammu (J&K), Kohima (Nagaland), Rishikesh (Uttarakhand).

“CPCB in the past made several requests to the state pollution control boards to prepare effective air quality management plans in respect of non-attainment cities and towns, and make efforts to get plans implemented there for improving the air quality,” the direction pointed out.

The directions among others includes -- Retrofitting of particulate filters in diesel vehicles, when BS-5 fuel is available and installing remote sensor based Pollution Under Control (PUC) system.

It urges to launch extensive drive against open burning of bio-mass, crop residue and garbage including the burning of Solid waste by the municipalities.

Asking for upgradation in the old polluting industries, the CPCB has asked the states to identify all the brick kilns, check their fuel, close the unauthorized kilns and conversion from natural draft to induction draft. To mitigate the gaps, the CPCB directed to establish an Air Quality Management Division at state pollution control board’s headquarters within 30 days and “interact with it”.

MIDDLE EAST

73. Israel to Raise Green Tax on Many Automobiles

A new calculation of environmental tax rates on motor vehicles in Israel will increase the cost to consumers of some of the country’s most popular models when it takes effect Jan. 1, 2017. The
stricter environmental tax formula, which Israel's Tax Authority announced on July 10th, will reduce the environmental tax benefit for many of the country's smaller, more popular models by placing them in a higher polluting—and thus higher tax—category.

Car importers said the change could raise prices of some of Israel's most popular models 2 percent to 5 percent and price some hybrid cars out of the market altogether. When the revision is implemented, executive hybrid cars, for example, will move up from being rated part of pollution Group 2 to Group 3, increasing their purchase tax from 30 percent to 82 percent.

But the Tax Authority said the rate revision will prevent “erosion of car taxes stemming from changes in world standards for vehicle emissions.”

There are 15 categories under the new formula, with one being the lowest and 15 the highest. The formula was adjusted so that about half of all imported cars would fall into the midrange.

“Experience shows that updating the criteria leads Israeli car importers to import less polluting models that exist abroad but are not currently imported to Israel in order to continue reaping the tax benefits,” the Tax Authority said.

By contrast, there will be no significant change in the price of luxury cars and four-wheel drive field vehicles, which are classed in the highest of the 15 pollution categories specified in the law, making them ineligible for any tax breaks.

74. Israeli Government Allocates ‘Unprecedented’ Funding To Reduce Air Pollution

In line with global efforts to curb greenhouse gas emissions, the government has authorized a NIS 260 million air pollution reduction program as part of the country’s 2017-18 budget. Following this latest approval, the Environmental Protection Ministry’s total resources for combating air pollution will now amount to NIS 1.4 billion, an amount that Environmental Protection Minister Ze’ev Elkin described as “unprecedented.”

Among the key elements of the newest two-year plan, which focuses on transportation, are investments toward eliminating diesel trucks, subsidies for particulate filter installations and grants encouraging vehicle scrapping. According to the ministry, implementing the program will prevent hundreds of premature deaths annually and encourage economic growth.

“Air pollution is one of the most difficult problems in Israel,” said Elkin. “Israeli citizens deserve clean air. I thank the finance minister [Moshe Kahlon] for his willingness to provide support that will enable us to enact for the first time in Israel’s history a revolutionary program for the significant reduction of air pollution from transportation — bringing the state's investment in the area of reducing air pollution in the coming years to an unprecedented amount of NIS 1.4b.”

“We will continue to work toward reducing pollution and risks to residents of the country,” Elkin added.

Critical to the NIS 260m. program approved on Thursday night is the reduction of air pollution from 80,000 aging diesel cars on the road, the ministry said.

The owners of such vehicles will be able to dispose of them and receive a government grant in return. For others, the government will offer subsidies to install particulate filters that reduce about 97 percent of the contamination emanating from these heavily polluting vehicles.
Although diesel trucks and buses make up only 20% of kilometers traveled in Israel, they are responsible for 80% of the country’s vehicular air pollution, according to the ministry.

The budget will also help establish “clean air zones” within the boundaries of cities, with the first expected to be established in Haifa in January 2017, program information said.

The approved budget came eight months after December’s United Nations Conference on Climate Change – also known as the Conference of Parties (COP-21) – during which nearly 200 countries, including Israel, agreed to adopt programs for curbing greenhouse gas emissions. Prior to the conference, all participant nations submitted their Intended National Determined Contribution plans to the United Nations Framework Convention on Climate Change, the terms of which varied for each country.

Israel’s targets included a 25% reduction of its 2005 greenhouse gas emissions by 2030 – limiting residents to 7.7 tons of carbon dioxide per capita. The government’s plan also involved making renewable energy resources responsible for 17% of the country’s electricity usage by 2030, as well as reducing overall electricity consumption by the same percentage. The targets also included a 20% decrease in private vehicle usage.

### GENERAL

75. Cloud Cover Shift Ominous Sign of Climate Change

When politicians talk of climate “uncertainty,” they're often casting doubt on things that are well understood: Warming is happening and humans are responsible. When scientists talk about climate uncertainty, they're often talking about the clouds.

Clouds are tricky because they're doing two things at once. All that puffy whiteness blocks solar energy from reaching the ground, bouncing it back to space, which provides a net cooling effect. But clouds also act like a blanket, capping and trapping heat in the lower troposphere, which is where people who aren't on the International Space Station live. That ambiguity makes it difficult to simulate with desirable precision how much and how fast the planet is warming, leaving a big mystery floating lazily over our heads.

Some of that uncertainty was lifted July 11, and the news isn't good. A new study in the journal Nature analyzes almost 30 years of weather observations to show that clouds and cloudiness are changing in the way scientists would expect in a warming world.²

Continental storm tracks—think jet stream—are shifting toward the poles, leaving populous subtropical latitudes uncovered. And the clouds that are forming more often aren't the low-lying, reflective ones that cool the planet—they're the huge cottony anvils that rise high in the sky, trapping more heat.

As the pole-ward shift continues, the heat from the tropics expands farther away from the equator, which is an unsettling development for cities that are already arid in places such as the U.S.

² • Norris, J. R. et al. Nature [http://dx.doi.org/10.1038/nature18273](http://dx.doi.org/10.1038/nature18273) (2016).
southwest. Less light is reflected away from the hot middle of the Earth and heavier cloud cover toward the poles creates a thickening blanket that is warming the world.

“Cloud changes most consistently predicted by global climate models are currently occurring in nature,” the authors write. “As cloud tops rise, their greenhouse effect becomes stronger.”

Agreement Between Climate Models and Satellite Records

This graphic shows where the majority of climate models and the majority of satellite records agree on how cloudiness changed from the 1980s to the 2000s.

A couple of things make clouds such a conundrum to climate scientists. They form through processes too small to observe and their layering blocks satellite views of lower clouds and ground views of higher clouds. Satellite coverage goes back only to the late 1970s, with technologies designed for weather monitoring. The new study corrects the weather record to make sense for climate analysis.

“We don't have a climate monitoring system,” said Joel Norris, a climatologist at Scripps Institution of Oceanography and the lead author of the new paper. “It's hard to sustain a long-term climate monitoring program.” Political priorities change, budgets drop, technology evolves and climate scientists are left having to extract consistent, long-term data from measurements taken without the long term in mind.

The corrected data should help improve their confidence in cloud studies, which currently isn't very high. The 2013 science overview put out by the authoritative Intergovernmental Panel on Climate Change concluded that although independent sets of cloud observations are similar, “substantial ambiguity and therefore low confidence [remain] in the observations of global-scale cloud variability and trends.”

“This is an exciting and comprehensive study,” said Kate Marvel, a scientist at NASA's Goddard Institute for Space Studies. “But other studies have found that these things are happening, and this work provides more evidence of these effects.”

Next up for the study's authors is to untangle further how natural events, such as volcanoes, and greenhouse-led warming contribute to the cloud changes. Ultimately, greater understanding of how clouds behave will help strengthen projections of the rate and trajectory of global warming.

76. Aviation Offset Proposals Won't Stop Emissions Hike, Says EEA
Emissions from the global aviation sector will continue to rise in spite of the offset-based system proposed by the International Civil Aviation Organization (ICAO), according to the European Environment Agency (EEA).

Unlike road transport, greenhouse gas (GHG) emissions from aviation were excluded from last December’s Paris Agreement and left in the hands of ICAO. The organization plans to tackle them with a global market-based measure (GMBM) that would see the aviation sector offset GHG emissions via reductions in other sectors.

In a report on EU clean mobility this week, EEA questioned whether the controversial offsets approach, currently being discussed at ICAO, will be effective in tackling emissions. The agency warned that it expects air and noise pollution from aviation to “continue rising” even if the GMBM is adopted by ICAO member states at an assembly in September.

According to EEA’s preliminary stats, international aviation doubled GHG emissions between 1990 and 2014 and increased noise pollution levels, damaging children’s health in the process. The agency added that airlines acknowledge that measures already introduced by the sector – including cleaner, more efficient fuels – “will not be enough” to reverse this.

The EEA criticized the lack of national level tax on jet fuels that are used for international flights. It said this means passengers do not pay fully for the environmental costs flights generate.

In contrast, the EU’s environmental watchdog believes road transport fuel is already “heavily taxed” in the EU but added that fiscal incentives for diesel and company cars have pushed up sales of these vehicles and hindered air quality.

According to the EEA, passenger cars generated 44% of the EU’s overall transport GHG emissions in 2014, supported by a rise in the number of cars on the road and increasing passenger volumes. Therefore, the agency welcomed the Worldwide Harmonized Light Vehicles Test Procedure (WLTP), a set of stricter rules for the testing of fuel use and carbon emissions that will apply to all new cars and vans from 1 September 2017.

The agency’s report also covered noise pollution, where the situation is “even more challenging” than that of air pollution, it said. EEA figures from 2014 revealed hazardous noise levels lead to an annual 43,000 hospitalizations and 10,000 premature deaths in the EU but the agency claims the figures could be “significantly higher” due to incomplete reporting.

77. Hottest Ever June Marks 14th Month of Record-Breaking Temperatures
As the string of record-breaking global temperatures continues unabated, June 2016 marks the 14th consecutive month of record-breaking heat.

According to two US agencies – NASA and NOAA – June 2016 was 0.9°C hotter than the average for the 20th century, and the hottest June in the record which goes back to 1880. It broke the previous record, set in 2015, by 0.02°C.

The 14-month streak of record-breaking temperatures was the longest in the 137-year record. And it has been 40 years since the world saw a June that was below the 20th century average.

The string of record-breaking monthly temperatures began in April 2015, and was pushed along by a powerful El Niño, where a splurge of warm water spreads across the Pacific Ocean. But the effects of El Niño have receded, and the effects of global warming are clear, said NASA’s Gavin Schmidt.

“While the El Niño event in the tropical Pacific this winter gave a boost to global temperatures from October onwards, it is the underlying trend which is producing these record numbers,” he said.

NASA’s Walt Meier said the global temperatures have been exacerbated by extreme temperatures over the Arctic. Warm temperatures there are pushing up the global average, as well as causing record-low amounts of sea ice. “It has been a record year so far for global temperatures, but the record high temperatures in the Arctic over the past six months have been even more extreme,” Meier said. “This warmth as well as unusual weather patterns have led to the record-low sea ice extents so far this year.”

78. Nations Narrow Differences but No Deal Yet on HFCs

A final deal to cut global use of super-polluting hydrofluorocarbons eluded nearly 200 nations at during July 23–24 talks, but negotiators appear to be much closer to getting a historic agreement at a high-level summit to be held in October.

Developed and developing countries ended talks in Vienna July 23 closer on key issues, including a firmer funding pledge from richer nations to help developing countries find climate-friendly alternatives to HFCs, Durwood Zaelke, who tracks the talks for the Institute for Governance & Sustainable Development, told reporters.

Alternatives with a lower impact than HFCs, which have a global warming impact thousands of times that of an equivalent amount of carbon dioxide, include HFO-1234yf, which was developed jointly by Honeywell and DuPont.
The U.S. is pushing for getting a formal amendment to cut HFCs under the Montreal Protocol at October talks in Kigali, Rwanda, to prevent nearly a half-degree Celsius of warming this century.

One obstacle is opposition from India, which is not budging from its insistence that nations be given until 2031 to freeze use of HFCs; environmental groups say cuts must begin sooner, around 2020. India also has called for including energy efficiency improvements in any final amendment that essentially would allow it and other countries to count gains toward meeting any agreed-upon reductions.

Going into the talks, the North American proposal backed by the U.S. called for a 2019 freeze date—more than a decade earlier than under India's proposal—after which use of the refrigerant would begin to decline.

The U.S. Environmental Protection Agency, in a July 23 statement issued at the close of the Vienna talks, said negotiators made progress on a “substantial” simplification of baseline proposals; an agreed-upon baseline is needed to determine the years from which reductions would be measured.

Negotiators also agreed to move forward with a consolidated text that during the next few months would be used as the basis for negotiating a formal amendment to be reached at the Oct. 10–14 Rwanda summit, which will serve as the 28th Meeting of the Parties (MOP-28) to the Montreal Protocol on Substances that Deplete the Ozone Layer.

Ministers in Vienna also agreed to hold an intersessional meeting between the Vienna and Rwanda talks “to drive towards closure this year” on a final HFC phase-down amendment, according to the EPA statement. No date has been set for those talks, however.

HFCs—used as refrigerants, aerosol propellants, solvents, and fire retardants—originally were developed as alternatives to ozone-depleting chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs). But HFCs were later determined to be a potent greenhouse gases with long atmospheric lifetimes and thus a significant contributor to global warming.

A rapid phase down of HFCs and adoption of climate-friendly alternatives could avoid up to a half-degree Celsius of warming this century, or roughly one-quarter of the 2 degree Celsius global temperature goal nearly 200 nations agreed to at a December 2015 climate summit in Paris.

The Paris Agreement calls for keeping global warming to “well below” a 2 degree Celsius rise compared to pre-industrial levels and for the parties to “pursue efforts” for a 1.5 degree Celsius limit (2.7 F).

79. Leaders Urged to Link Climate Change, Personal Health

Just telling the public about global warming is unlikely to teach them much, but linking its effects directly to their health could get the message across, said speakers at a World Health Organization conference in Paris.

Climate change messages focused on the plight of polar bears or similarly distant subjects fall flat, said Maria Neira, WHO director for public health, environmental and social determinants of health. “We have to make people understand, this is about your asthma, your grandchild's
asthma,” said Neira. “There are plenty of opportunities to communicate the Paris climate argument, the 7 million lives that using dirty energy costs” every year, she said.

Simon Goff, strategic director of the WHO and the Climate and Clean Air Coalition’s Breathe Life campaign, said public health agencies and other groups trying to educate about climate change impacts can learn from successful efforts to promote actions that require people to change their behavior, such as the anti-tobacco effort and organizations fighting AIDS/HIV.

Goff said the recent U.K. Brexit vote to leave the European Union, despite an abundance of data showing the risks of that move, show that gut-level emotional appeal tends to overcome arguments based on “jargon and technical language.”

The speakers commented July 8 during WHO’s second global conference on climate and health, a two-day event to discuss how the public health community can support implementation of last year’s global Paris Agreement to respond to climate change.

French awareness about health impacts of climate change really started with a 2003 heat wave that killed 15,000 “very vulnerable and exposed” people across the country, said Benoit Vallet, director-general for health at the French Ministry of Social Affairs, Health and Women’s Rights. That event spurred the government to create a plan for dealing with extreme temperature changes, putting out region-specific information that cross-links morbidity and mortality data with temperature changes. “Information about health effects linked to [temperature] increases tells them quite a lot,” he said of French authorities and the public.

Another part of the French plan has regional health organizations and local government health officials regularly identify “fragile” people who would be quickly vulnerable to heat waves and also prepares health professionals and medical-social professionals to respond when these people need help, Vallet said.

Many doctors are not informed about “health determinants” of climate change, he said. So France’s public health agency, Sante Publique France, aims to provide a common source of such information for doctors and other health professionals, such as by including it in medical training of doctors.

In the U.S., President Barrack Obama publicly launched his Clean Power Plan to address emissions from power plants at a hospital, noted Josh Karliner, director of global projects at the U.S. nongovernmental organization Health Care Without Harm. That is important because hospitals and other health-care institutions account for about 10 percent of U.S. carbon dioxide emissions and other pollution, primarily through their energy use, and thus hospitals have to play a key part to play in reducing U.S. emissions, he said.

Vallet said 95 percent of French hospitals have signed up to a government “labeling” program in which they set out what they are doing to reduce their climate impact. “Hospitals have to be committed and exemplary to the effort to protect the environment by using less energy and emitting less CO2,” he said.

80. Solar Plane Circles Globe in First for Clean Energy

A solar-powered aircraft has successfully completed the first fuel-free flight around the world, returning to Abu Dhabi after an epic 16-month voyage that demonstrated the potential of
renewable energy. The plane, Solar Impulse 2, first took off from Abu Dhabi on March 9, 2015, beginning a journey of about 40,000 km (24,500 miles) and nearly 500 hours of flying time.

Bertrand Piccard and Andre Borschberg, the Swiss founders of the project, took turns piloting the aircraft, which has a wingspan larger than a Boeing 747 but weighs no more than an average family car. "More than an achievement in the history of aviation, Solar Impulse has made history in energy," Piccard, who piloted the plane on the last leg, told a large crowd on landing. "I'm sure that within the next 10 years we'll see electric airplanes carrying 50 passengers on short- to medium-haul flights," he said in a statement.

He said the technologies used on Solar Impulse 2 could be used on the ground in daily life to halve emissions of carbon dioxide, the main greenhouse gas blamed for climate change.

The propeller-driven aircraft's four engines are powered by energy collected from more than 17,000 solar cells built in the wings. Excess energy is stored in batteries.

Unfavorable weather at times hindered smooth flying, causing the plane to be grounded for months in some countries. In all, the plane had 16 stopovers.

The pilots also had to demonstrate the mental stamina required to tackle vast distances alone at a cruising speed of no more than 90 km (56 miles) per hour and altitudes of up to 9,000 meters (29,500 feet). "We were facing the oceans... We had to build up this mindset, not just the plane and technology," Piccard told reporters.

For the two pilots, landing back where they started is only "the beginning of the continuation" of a longer journey, said Piccard, who in 1999 became the first person to circumnavigate the globe non-stop in a hot air balloon.

Aside from continuing to promote renewable energy, they plan to launch an international council to advise governments and develop new applications for clean energy technology.

81. Platinum, Palladium Prices Are Rocketing

After underperforming gold in 2016, platinum has now overtaken the yellow metal with a year to date advance of a shade under 34%. A chunk of those gains came just the last week with the spot price climbing 6%. The precious metal was up 12.7% in July and started August with a bang to exchange hand $1,162 an ounce, making it the best monthly performance since 2012.

Sister metal palladium has enjoyed its best month for nearly a decade, soaring 21.1% in July. Its performance for the month constitutes the bulk of its gains year to date and measured from its January 12 low the metal is up an astonishing 52% or $250 an ounce trading at $717.50. From trough to peak in 2016, palladium is now even besting silver, the best performing precious metal.

Platinum and palladium prices tends to be volatile thanks in part to a highly concentrated supply environment. Together Russia and South Africa control between 70% and 80% of the world’s supply of PGMs. The structure of supply has not altered in any substantial way since the 1970s when platinum and later palladium came to the fore as an important part of the world’s automobile industry.

Palladium finds application in gasoline engines and is more exposed to the Chinese and US markets, where diesel hardly features in the passenger vehicle segment. Roughly 75% of
palladium demand is from the auto catalyst sector. Platinum loads are higher in diesel engines, but on a proportional basis the auto industry represent 50% of total demand with jewelry responsible for the bulk of the remainder.

Speculation about the impact of China’s introduction of some of the most stringent vehicle emissions regulations have also buoyed sentiment towards PGMs. While the US automobile market has seen strong growth in recent years, China's car industry, the world's largest, recorded an 18% jump in sales in June and could grow by double digits for the year to top 23 million vehicles.

**82. Airline Climate Deal Likely to Cover Most Emissions: U.S.**

A proposed climate accord for airlines is likely to attract support from enough nations to cover about 80 percent of global emissions from international flights, a senior U.S. State Department official said in an interview.

The draft agreement adopted Aug. 26 by the governing council of the United Nation’s aviation agency would initially be voluntary yet has support from nations responsible for most aviation emissions, including the U.S., China and members of the Europe Union, said the official, who spoke on the condition of anonymity because the negotiations are private.

If approved by a majority of 191 countries this fall, it would be the first global climate accord for a single industry. Airline emissions account for about 2 percent of global greenhouse gases and are forecast to more than triple over the next few decades as flights increase in Asia, Latin America and elsewhere. Airlines were not included in the Paris climate accord because delegates feared the intricacies of divvying up responsibility for international flights could derail the broader agreement.

The UN's International Civil Aviation Organization has been working for more than a decade on the accord and plans to finalize the agreement at its general assembly from Sept. 27 to Oct. 7 in Montreal.

The accord would take effect in 2020. It was brokered last week at a meeting convened by the Civil Aviation Organization's president, Olumuyiwa Benard Aliu of Nigeria, and attended by the U.S., China and more than 50 other nations. The 15-year deal seeks to cap emissions through a system requiring airlines to purchase credits to offset emissions growth beyond 2020.

The draft resolution was adopted Aug. 26 by the Civil Aviation Organization's governing council, said Anthony Philbin, a spokesman for the agency. He declined to provide details of the measure, which has not been released publicly.

Earlier versions of the agreement called for mandatory participation for some nations, based on the size of their economies and airline industries. Yet officials struggled to agree on where to draw those lines. Instead, they devised a system that would be voluntary for the first six years. Beginning in 2027, most nations would be required to participate, according to the U.S. official.

Annie Petsonk, who has tracked the effort for more than a decade for the Environmental Defense Fund lobby group in New York, said the accord's success hinges on whether it can draw enough nations to cover 80 to 90 percent of emissions.
Officials still need to finalize details of the accord. That includes how to balance responsibility between the large slow-growing airlines responsible for most current emissions and smaller carriers, mostly from developing nations, poised to grow.

83. New Research Examines How Air Pollution Is Melting Earth’s Third Pole

Mount Everest in the Himalayas, part of the Third Pole region of ice and snow (Credit: Luca Galuzzi (Lucag) CC-BY-SA-3.0)

The third-largest region of ice on the planet is located on the Tibetan Plateau and Himalaya-Hindu Kush mountains, also known as the Third Pole. As the polar regions, the glaciers in this third region are shrinking. The difference is that the Third Pole is especially vulnerable to pollution due to its close proximity to densely populated and industrialized regions. New research is shedding light on these effects and potential ways to mitigate the disappearance of glacial ice.

In Western China alone, which consists of 48,571 glaciers with an area of 51,840 sq. km (20,015 sq. miles), there has been an 18 percent decrease in its glaciers over the last 30-50 years according to a study by the Chinese Academy of Sciences’ Institute of Tibetan Plateau Research. This shrinkage is especially concerning since over a billion people in the region rely, some indirectly, on the melt water that feeds the region’s waterways, such as the Indus River.
In the new study funded by the National Natural Science Foundation of China and other institutions, researchers used a special chemical process to fingerprint the source and details of the air pollution, which can be differentiated between South Asia and East Asia. Samples of black carbon (soot) were collected throughout the Third Pole, in the air and on the ground, to determine the type of burning that produced them and where they came from.

Because black carbon is the most heavily light-absorbing component of particulate matter, it can cause temporary warming in the region by absorbing sunlight. In addition, when found atop snow and ice it can darken surfaces, which leads to the absorption of sunlight (and heat), and thus faster melting.

For the Himalayas region, the researchers found evidence of the burning of both fossil fuels and biomass, which includes plants and animal dung, coming from northern India's Indo-Gangetic Plain. Black carbon from the northern Tibetan Plateau came mostly from fossil fuel burned in China. But the researchers discovered that black carbon in the central Tibetan Plateau came primarily from biomass; meaning the daily routine of burning yak dung for cooking and home heating contributed significantly to the region's air pollution.

The information is important for creating and adjusting policies that could cut pollution sources that directly affect melting ice. In the case of the Tibetan Plateau, substituting efficient stoves and clean energy sources for yak dung could slow the rate of glacial ice melt. Policies such as China's
three-year moratorium on new coal mine approvals could also help reduce black carbon air pollution.