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Discover our connected services, 1 of 3Turn your Volkswagen into a connected car with We Connect, 2 of 3We Connect help for Apps and digital service, 3 of 3 If you have already purchased a Service Plan customer your first two services
are already covered. Conditional Based Service (CBS) was introduced in 2002 when the new 7-series model was launched, and is now a standard feature on most new BMWs. It was designed to offer a flexible maintenance schedule for your vehicle. Rather than using fixed times and distances to determine when servicing is required, CBS gathers
information from sensors fitted around the vehicle and lets you know which components need attention. This prevents unnecessary replacement of components supported by CBS The components and maximises their use.
groups: Group 1: Sensor based items These items are monitored by physical and virtual sensors. They use variables including driving style, mileage and temperature. * Engine oil- monitored by the DSC stability control module * Rear brake pads -
Monitored by the DSC stability control module * Diesel Particulated items These items do not require physical sensors, and instead operate under fixed intervals. Remaining service life is calculated by the IDrive and based on time and distance. * Brake fluid
* Spark plugs * User interface * Instrument cluster Viewing your service requirements on the IDrive Your IDrive will notify you of service requirements, and BMW aim to provide around four weeks' notice to ensure you have plenty of time to arrange your vehicle service. The Service Menu in the your IDrive lets you check the current state and
remaining serviceable life of all components supported by CBS, using a traffic light system to help you quickly see which items need attention: Green means no service is required Yellow means the component is nearing the end of its serviceable life Red means the service deadline has been passed. 2010s diesel emissions scandal involving Volkswagen
 "Dieselgate" and "Emissionsgate" redirect here. For other diesel emissions scandals, see Diesel emissions scandal. Volkswagen emissions scandal 2010 Volkswagen emissions gate" redirect here. For other diesel emissions gate Type Emission standard
violationsCauseEngaging full emissions control only during testingParticipantsInternational Council on Clean Transportation, West Virginia University, Volkswagen Group, US EPA, other regulatorsOutcomeFines and lawsuitsFootagevwdieselinfo.com Timeline1999New US Tier 2 rules established to replace Tier 1. NOx limit decreasing from 1.0 g/mi
to 0.07 g/mi2004-2009Phase in period of diesel emissions rules2007Volkswagen suspends sales of current diesel lines awaiting technology to meet new standards. Bosch allegedly warns Volkswagen announces new Clean Diesel cars. Some cars are described in Europe as "EU4 emissions standards" to 0.07 g/mi2004-2009Phase in period of diesel emissions rules2007Volkswagen announces new Clean Diesel cars. Some cars are described in Europe as "EU4 emissions standards" to 0.07 g/mi2004-2009Phase in period of diesel emissions rules2007Volkswagen announces new Clean Diesel cars. Some cars are described in Europe as "EU4 emissions standards" to 0.07 g/mi2004-2009Phase in period of diesel emissions rules2007Volkswagen announces new Clean Diesel cars. Some cars are described in Europe as "EU4 emissions standards" to 0.07 g/mi2004-2009Phase in period of diesel emissions rules2007Volkswagen announces new Clean Diesel cars. Some cars are described in Europe as "EU4 emissions standards" to 0.07 g/mi2004-2009Phase in period of diesel emissions rules2007Volkswagen announces new Clean Diesel cars. Some cars are described in Europe as "EU4 emissions standards" to 0.07 g/mi2004-2009Phase in period of diesel emissions rules2007Volkswagen announces new Clean Diesel cars. Some cars are described in Europe as "EU4 emissions rules2007Volkswagen announces new Clean Diesel cars."
(EU5 compliant)".[3] Cars with the test-rigging software are sold in the UK.[4]2009US Tier 2 fully in effect, Volkswagen TDI cars go on sale in US. In Europe, some models are now being described as Euro emission class 5, a change from class 4 in 2008.[3][5]2009-2015Volkswagen diesel sales in the US rebound, Clean Diesels win several
environmental awards, receive tax breaks2014International Council on Clean Transportation asks WVU CAFEE finds discrepancies showing poor on-road emissions. Results presented at public forum and published, getting attention offset finds discrepancies showing poor on-road emissions. Results presented at public forum and published, getting attention offset finds discrepancies showing poor on-road emissions.
EPA2014-2015EPA repeats tests, and contacts Volkswagen for explanation of poor real world NOx emissionsDec 2014Volkswagen orders voluntary recall of TDI cars but CARB and EPA not satisfied3 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing18 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing18 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing18 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing18 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing18 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing18 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing18 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing 18 September 2015EPA threatens to not certify 2016 diesels, Volkswagen responds by admitting software was programmed to cheat testing 18 September 2015EPA threatens threatens the september 2015EPA threatens the septemb
2015Public announcement by EPA of order to recall 2009-2015 cars 20 September 2015Volkswagen admits deception, issues public apology 21 September 2015First business day after news, Volkswagen stock down 20 percent 22 September 2015First business day after news, Volkswagen stock down 20 percent 23 September 2015First business day after news, Volkswagen stock down 20 percent 25 September 2015First business day after news, Volkswagen stock down 20 percent 26 September 2015First business day after news, Volkswagen stock down 20 percent 27 September 2015First business day after news, Volkswagen stock down 20 percent 28 September 2015First business day after news, Volkswagen stock down 20 percent 29 September 2015First business day after news, Volkswagen stock down 20 percent 20 September 2015First business day after news, Volkswagen stock down 20 percent 20 September 2
2015CEO Martin Winterkorn resigns 29 September 2015Volkswagen announces plans to refit up to 11 million vehicles affected by the emissions violations scandal 2 October 2015Volkswagen sets up an online based service on which customers can check if their car is affected based on the vehicle identification number 8 October 2015Volkswagen US
CEO Michael Horn testifies before US Congress3 November 2015Volkswagen's investigation finds that CO2 emissions and fuel consumption figures are also affected by "irregularities".[6]25 November 2015The German Federal Motor Transport Authority (KBA) approves Volkswagen fixes for 1.2, 1.6 and 2.0 diesel engines in Europe.[7][8]9 December
2015Volkswagen revises previous estimates on CO2 emissions irregularities, saying that only around 36,000 vehicles are affected.[9]9 March 2016Volkswagen announces that it will offer its US customers "substantial compensation" and car
buyback offers for nearly 500,000 2.0-litre vehicles.[11]6 Nov 2016Regulators in California discover that Audi engines were rigged to produce lower CO2.[12]11 January 2017Volkswagen agrees to plead guilty to the emissions scandal and to pay $4.3 billion in penalties. Six Volkswagen executives are charged.[13][14]3 May 2018Ex-CEO Winterkorn is
 indicted on fraud and conspiracy charges in the US[15]18 June 2018In connection with the case, Audi CEO Rupert Stadler is arrested in Germany to resolve civil claims over duty to oversight (Verletzung der Aufsichtspflicht in Unternehmen)[17]14 March 2019US SEC alleges that
Volkswagen AG, Martin Winterkorn, et al. defrauded investors and files suit in N.D. Cal.[18]15 April 2019Winterkorn and four other executives are charged by prosecutors in Munich, Germany.[20]24 September 2019Pötsch, Diess, and Winterkorn are
charged with stock market manipulation by prosecutors in Germany.[21]14 January 2020Six additional individuals are charged by prosecutors in Braunschweig, Germany.[22] The Volkswagen emissions scandal, sometimes known as Dieselgate[23][24] or Emissionsgate,[25][24] began in September 2015, when the United States Environmental
Protection Agency (EPA) issued a notice of violation of the Clean Air Act to German automaker Volkswagen had intentionally programmed turbocharged direct injection (TDI) diesel engines to activate their emissions controls only during laboratory emissions testing, which caused the vehicles' NOx
output to meet US standards during regulatory testing, while they emitted up to 40 times more NOx in real-world driving.[27] Volkswagen deployed this software in about 11 million cars worldwide, including 500,000 in the United States, in model years 2009 through 2015.[28][29][30][31] Background Introduction In 2014, the California Air
Resources Board (CARB) commissioned from the International Council on Clean Transportation (ICCT) a study on emissions discrepancies between European and US models of vehicles, summing up the data on 15 vehicles from three sources. Among those recruited to this task was a group of five scientists at the West Virginia University Center for
 Alternative Fuels Engines and Emissions (CAFEE), who used a Japanese on-board emission testing system and detected additional emissions during live road tests on two out of three diesel cars. [32][33] ICCT also purchased data from two other sources. The new road testing data and the purchased data were generated using Portable Emissions
Measurement Systems (PEMS) developed by multiple individuals in the mid-late 1990s and published in May 2014.[34][35][36] Regulators in multiple countries began to investigate Volkswagen, [37] and its stock price fell in value by a third in the days immediately after the news. Volkswagen Group CEO Martin Winterkorn resigned, and the head of
brand development Heinz-Jakob Neusser, Audi research and development head Ulrich Hackenberg, and Porsche research and development head Ulrich Hackenberg, and Porsche research and development head Wolfgang Hatz were suspended. Volkswagen announced plans in April 2016 to spend €16.2 billion (US$18.32 billion at April 2016 exchange rates)[38] on rectifying the emissions issues, and planned to refit
the affected vehicles as part of a recall campaign. In January 2017, Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts, which drew on the results of an investigation Volkswagen pleaded guilty to criminal charges and signed an agreed Statement of Facts and Statement of S
diesel models could not pass US emissions tests without them, and deliberately sought to conceal their use.[39] In April 2017, a US federal judge ordered Volkswagen to pay a $2.8 billion criminal fine for "rigging diesel-powered vehicles to cheat on government emissions tests". The "unprecedented" plea deal formalized the punishment which
Volkswagen had agreed to.[40] Winterkorn was charged in the United States with fraud and conspiracy on 3 May 2018.[15] As of 1 June 2020[update], the scandal had cost VW $33.3 billion in fines, penalties, financial settlements and buyback costs.[41] Various government and civil actions are currently undergoing in the U.S., as well as the
 European Union, where most of the affected vehicles are located; while they remain legal to drive there, consumers groups and governments seek to make sure Volkswagen has compensated these owners appropriately as they had to do in the United States. The scandal raised awareness over the higher levels of pollution emitted by all diesel-powered
vehicles from a wide range of car makers, which under real-world driving conditions exceeded legal emission scandals. A discussion was sparked
on the topic of software-controlled machinery being generally prone to cheating, and a way out would be to open source the software for public scrutiny.[45][46][47] Volkswagen Diesel anti-pollution system In general, three-way catalytic converter technology, which has been very effective since the early 1980s at reducing nitrogen oxide (NOx) in
petrol engine exhaust, does not work well for diesel vehicles, which emit 20 times more NOx unless somehow treated. [48] To deal with this fact, in 2005 some managers at Volkswagen intended to purchase the rights to Mercedes' bulky, expensive, high maintenance "Selective catalytic reduction," urea-based exhaust BlueTec treatment system for
ADAC failed a NOx-test based on government standards.[52] Nonetheless, Volkswagen promoted the technological miracle of fast, cheap, and green diesel vehicles - but the impression projected to outsiders did not reflect the reality.[48][53] In reality, the system failed to combine lower fuel consumption with compliant NOx emissions, and
Volkswagen chose around 2006[54] to program the Engine Control Unit (ECU) to switch from lower fuel consumption and high NOx emissions to low-emissions to low-
standards when being tested, constituting a defeat device. [50] [55] In 2015 the news magazine Der Spiegel reported that at least 30 people at management level in Volkswagen knew about the deceit for years, which volkswagen knew about the deceit 
turbocharged direct injection (TDI) diesel engines to a common-rail fuel injectors and higher injection system. This system allows for higher-precision fuel delivery using electronically controlled fuel injectors and higher injection pressure, theoretically leading to better fuel atomization, better air/fuel ratio control, and by extension, better control of emissions.[57][58][3]
[4][59] Volkswagen described the diesel engines as being as clean as or cleaner than US and Californian requirements, while providing good fuel economy provided by its diesel fleet, in 2014 Volkswagen was registered with an impressive Corporate Average Fuel Economy (CAFE) of 34 mpg-US
 (6.9 L/100 km; 41 mpg-imp).[62] The low emissions levels of Volkswagen vehicles tested with the defeat device in operation enabled the company to receive green car subsidies and tax exemptions in the US.[63] The 2009 Volkswagen Jetta Diesel Sedan was awarded Green Car of the Year. The award was rescinded in early October 2015. Volkswagen
TDITruthandDare.com Clean Diesel campaign[64][65][66][67] advertised on the Volkswagen Research and Development building in Wolfsburg Diesel exhaust fluid (DEF) known as BlueTec technology Early warnings 1998- In 1998, a Swedish researcher criticized the
New European Driving Cycle standard for allowing large emission differences between test and reality. [68] The Washington Post also reported that in the late 1990s, EPA engineers at Virginia Testing Laboratory had built a system called ROVER, designed to test a car's emissions on the road. The project was shut down in 2001, despite preliminary
tests indicating gaps between emissions from lab tests and real world tests of about 10 to 20 percent. [69] In 2011, the European Commission's Joint Research Centre published a report which found that all tested diesel vehicles emitted 0.62 ± 0.19 g/km, which substantially exceeded
the respective Euro 3-5 emission limit.[70] In 2013, the research center then warned: Sensors and electronic components in modern light-duty vehicles are capable of 'detecting' the start of an emissions test in the laboratory (e.g., based on acceleration sensors or not-driven/not-rotating wheels).
laboratory, if a predefined test mode is activated. Detecting emissions tests is problematic from the perspective of emissions control systems with the purpose of either enhancing the effectiveness of these systems during emissions
testing or reducing the effectiveness of these systems under normal vehicle operation and use. While the use of defeat devices is generally prohibited, exceptions exist in cases where it is necessary to protect the engine against damage and to ensure safe vehicle operation (EC, 2007). These exceptions exist in cases where it is necessary to protect the engine against damage and to ensure safe vehicle operation (EC, 2007).
together with the currently applied test procedure, for tailoring the emissions performance [...].[71] The European Governments could not agree upon who was responsible for taking action.[72] In the United Kingdom, the Department for Transport received a report from the International Council on Clean Transportation
(ICCT) in October 2014, which stated there was a "real world nitrogen oxides compliance issue" with diesel passenger cars.[73] The UK's DEFRA research indicated a significant reduction in NOx and particulate matter from 1983 to 2014. Respirable suspended particles with a diameter of 10 micrometres - also known as PM10 (including diesel
particulates) - halved since 1996 despite the increased number and size of diesel cars in the UK.[74] European discrepancies, 2014 The independent body International Council on Clean Transportation (ICCT) commissioned a study in 2014 and obtained data on 15 vehicles from three sources. John German, co-lead of the US branch of ICCT, said the
idea for the "very ordinary" test came from Peter Mock, managing director ICCT in Europe. Mr. German said they chose to put US vehicles through on-the-road tests because their emissions regulations are more stringent than those in the European Union. The ICCT expected the cars to pass, and thought they would be able to use the results to
demonstrate to Europeans that it was possible to run diesel cars with cleaner emissions. The study found emissions discrepancies in a BMW X5. They wanted to test a Mercedes as well, but could not obtain one. [36] [75] [76] Emission testing, US 2014 A group of scientists at West Virginia
University submitted a proposal to ICCT, and John German awarded them a US$50,000 grant for a study to conduct tests on three diesel cars: a Volkswagen Passat, a Volkswagen Jetta, and a BMW X5.[34][77][78][75] ICCT also purchased data from Emissions Analytics, a UK-based emissions consultancy, and from stakeholders in the Real Driving
Emissions - Light Duty Vehicle working group in charge of amending Euro 6 regulations. [34] In early 2014, two professors and two students began testing emissions from the three vehicles under road conditions, using a portable emissions measurement system, making it possible to collect real world driving emissions data, for comparison with
laboratory dynamometer testing.[36] The three vehicles were all certified at a California Air Resources Board facility before the tests[36] as falling below the emissions limits when using the standard laboratory testing protocols.[35][79] They put 2,400 kilometres (1,500 mi) on the Jetta and X5. For their final test, they wanted to put even more
mileage on the Passat and drove it from Los Angeles to Seattle and back again, virtually the entire West Coast of the United States, [75] over 3,200 kilometres (2,000 mi). [36] The BMW was "at or below the standard ... with exception of rural-up/downhill driving conditions". [35] But the researchers found that under real-world driving conditions the
Jetta exceeded US emissions limits "by a factor of 15 to 35" while the Passat exceeded the limit "by a factor of 5 to 20".[35][78] The emissions far exceeded legal limits set by both European and US standards. One of the testers said, "... we did so much testing that we couldn't repeatedly be doing the same mistake again and again."[80][81] John
 German said the deceit required more effort than merely adding some code to the engine software, as the code would also have to be validated.[80] The US test results confirmed their findings in a study they presented to the EPA and
CARB in May 2014.[82][83] In May 2014 Colorado's RapidScreen real-world emissions test data reinforced the suspected abnormally high emissions levels.[84] After a year-long investigation, an international team of investigators identified the defeat device as a piece of code labelled "acoustic condition" which activated emissions-curbing systems
when the car's computer identified it was undergoing a test.[85] Underlying U.S. and EU emission standard or the California LEV-II ULEV standard.[86] Either standard requires that nitrogen oxide emissions not
exceed 0.043 grams per kilometre (0.07 g/mi) for engines at full useful life which is defined as either 190,000 mi) or 240,000 mi) or 240,000
contemporary European standards known as Euro 5 (2008 "EU5 compliant",[3] 2009[5]-2014 models) and Euro 6 (2015 models) only limit nitrogen oxide emissions to 0.18 grams per kilometre (0.29 g/mi) and 0.08 grams per kilometre (0.13 g/mi) respectively. [88][89] Defeat devices are forbidden in the EU. [90] The use of a defeat device is subject to a
penalty.[89] NOx numbers for Volkswagen Passat and Jetta[35] See note Car EPA (United States) Euro5 Euro6 Comment Limit Register Measurement201x Vehicle A Volkswagen Jetta[77] 0.043 g/km 0.022 g/km 0.01-1.5 g/km 0.18 g/km[89] 0.62 ± 0.19 g/km[70] 0.08 g/km[89] lean-NOx
trap (LNT) (Vehicle A) Vehicle B Volkswagen Passat[77] 0.043 g/km 0.016 g/km 0.34-0.67 g/km 0.043 g/km 0.043 g/km 0.043 g/km 0.043 g/km 0.046 g
 European city dwellers are exposed to unhealthy levels of nitrogen dioxide. In London, where diesel road traffic is responsible for 40 percent of NOx emissions, air pollution causes more than 3,000 deaths a year.[91] A Channel 4 documentary in January 2015 referred to the UK government moving to a CO2 emission band system for road tax, which
favoured diesel power, as the "great car con", with Barry Gardiner MP, former member of the Blair government, stating that the policy, which lowered CO2 emissions yet increased NOx pollution, was a mistake.[92] EPA Notice of Violation, 2015 On 18 September 2015, the US EPA served a Notice of Violation (NOV) on Volkswagen Group alleging
that approximately 480,000 Volkswagen and Audi automobiles equipped with 2-litre TDI engines, and sold in the US between 2009 and 2015, had an emissions-compliance "defeat device" installed.[93][94] A Notice of Violation is a notification to the recipient that the EPA believes it has committed violations and is not a final determination of liability.
[95][96] Volkswagen's "defeat device" is specially-written engine-management-unit firmware that detects "the position of the engine's operation, and barometric pressure"[97] when positioned on a dynamometer using the FTP-75 test schedule. [98] These criteria very closely match the EPA's required
 emissions testing protocol[97] which allowed the vehicle to comply with emissions regulations by properly activating all emissions control during testing. The EPA's NOV alleged that under normal driving conditions, the software suppressed the emissions controls, allowing better fuel economy, at the expense of emitting up to 40 times more nitrogen
oxides than allowed by law.[93][99] Intelligence agencies, 2015 In February 2017, Der Spiegel reported that in February 2015, ex Israeli diplomat Avi Primor had shown Ferdinand Piëch, then Volkswagen chairman of the board at the time, a document in which US agencies warned CEO Martin Winterkorn early about the manipulation. During this
meeting at the end of February 2015, Primor introduced Piëch to his friend Yuval Diskin, who after retiring from directing the Israeli secret service of the Interior Shin Bet, had founded a cybersecurity company. Shin Bet apparently knew about the scandal early. Primor confirmed that the meeting took place, but both Primor and Diskin denied tipping
off Piech. In early March 2017, Piech asked Winterkorn whether there had been a warning by US agencies, which Winterkorn denied.[100][101][102][103] Volkswagen AG CEO Martin Winterkorn in March 2015 According to the EPA, Volkswagen had insisted for a year before
conference on green transportation in Pacific Grove, California, where an unnamed company representative approached Christopher Grundler, director of the EPA Office of Transportation and Air Quality, and surprised him by informally admitting that the company had been deceiving regulators.[107] A CARB official was standing next to Grundler at
the time.[107] Formal acknowledgement of the deception was made by Volkswagen executives in Germany and the United States to EPA and California officials during a 3 September conference call, during which Volkswagen executives in Germany and the United States to EPA and California officials during a 3 September conference call, during which Volkswagen executives in Germany and the United States to EPA and California officials during a 3 September conference call, during which Volkswagen executives in Germany and the United States to EPA and California officials during a 3 September conference call, during which Volkswagen executives in Germany and the United States to EPA and California officials during a 3 September conference call, during which Volkswagen executives in Germany and the United States to EPA and California officials during a 3 September conference call, during which Volkswagen executives in Germany and the United States and California officials during a 3 September conference call, during which Volkswagen executives in Germany and the United States and California officials during a 3 September conference call, during which Volkswagen executives in Germany and the United States and California officials during a 3 September conference call, during which Volkswagen executives in Germany and California officials 
circumvented US emissions tests. That admission came after the EPA threatened to withhold approval for the company's 2016 Volkswagen and Audi diesel models.[108] I am shocked by the events of the past few days. I am stunned that misconduct on such a scale was possible in the Volkswagen Group. As CEO I accept responsibility for the
irregularities. I am doing this in the interests of the company even though I am not aware of any wrongdoing on my part. Martin Winterkorn, — Former Volkswagen's CEO Martin Winterkorn resignation statement, 23 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 23 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 25 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 26 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 27 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 28 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 29 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen's CEO Martin Winterkorn resignation statement, 20 September 2015.[109] Volkswagen'
customers and the public." Winterkorn was in charge at Volkswagen from the start of 2008 to September 2015.[110] He attributed the admitted wrongdoing to "the terrible mistakes of a few people".[111] Winterkorn initially resisted calls to step down from his leadership role at VW,[112][113] but then resigned as CEO on 23 September 2015.[114]
[115][116] Volkswagen Group of America CEO Michael Horn was more direct, saying, "We've totally screwed up."[112] Horn added, "Our company was dishonest with the EPA, and the California Air Resources Board and with all of you."[113] Olaf Lies, a Volkswagen board member and economy minister of Lower Saxony, later told the BBC that the
people "who allowed this to happen, or who made the decision to install this software" acted criminally, and must be held personally accountable. He also said the board wasn't informed earlier about the problems when they were known
 about over a year ago in the United States".[117] Volkswagen announced that 11 million cars were involved in the falsified emission reports, and that over seven billion statements.[31] The newly appointed CEO of Volkswagen Mathias Müller
stated that the software was activated in only a part of those 11 million cars, which has yet to be determined. [30] The German tabloid Bild claimed that top management had been aware of the software for testing purposes and warned Volkswagen that it would be
illegal to use the software to avoid emissions compliance during normal driving.[118] Der Spiegel followed Bild with an article dated 30 September 2015 to state that some groups of people were aware of this in 2005 or 2006.[119] Süddeutsche Zeitung had similarly reported, that Heinz-Jakob Neusser, one of Volkswagen's top executives, had ignored
at least one engineer's warnings over "possibly illegal" practices in 2011.[120] On 28 September 2015, it was reported that Volkswagen had suspended Heinz-Jakob Neusser, head of brand development at its brand Audi who oversees technical development
across the Volkswagen group, and Wolfgang Hatz, research and development of the Volkswagen group.[121] On the same day it was reported that besides the internal investigation of the incidents, the supervisory board of Volkswagen had hired American law
firm Jones Day to carry out an independent investigation. [122] Computerworld suggested that a software audit trail and test logs were ways to investigate what took place when. [123] In February 2016 Volkswagen also contracted three public relations firms (Kekst in the United States, Hering Schuppener in Germany, Finsbury in Britain), in addition
to its usual US-retained firm Edelman.[124] To further help deal with the scandal, Volkswagen hired ex-FBI director Louis Freeh, alongside former German constitutional judge Christine Hohmann-Dennhardt previously employed by Daimler, and as of 2016 on Volkswagen's board as its director of integrity and legal affairs.[125] Other irregularities,
November 2015 CO2 emissions On 3 November 2015, Volkswagen revealed that its internal investigation found that CO2 emissions and fuel consumption figures were also affected by "irregularities". These new issues, first estimated to cost up to €2 billion to repair, involved mainly diesel, but also some petrol models, with initial estimates suggesting
that approximately 800,000 vehicles equipped with 1.4, 1.6 and 2.0 litre motors from VW, Skoda, Audi and SEAT might be affected. [6] On 9 December 2015, Volkswagen revised these estimates, saying that only around 36,000 vehicles are affected by the irregularities, while also affirming that it had found no evidence of unlawful changing of CO2
emissions data.[9] The news prompted a 7.3 percent increase in Volkswagen preference shares on the same day.[9][126] In November 2016, California regulators claimed to have discovered software installed on some Audi models that allowed the manufacturer to cheat CO2 emissions during standard testing, thereby also masking the cars'
contribution to global warming.[12] 3.0 litre TDI emissions On 20 November 2015, the EPA said Volkswagen officials told the agency that all 3.0-litre TDI diesel engines sold in the US from 2009 through 2015 were also fitted with emissions-cheating software, in the form of "alternate exhaust control devices". These are prohibited in the United States
however the software is legal in Europe.[127] Volkswagen acknowledges these devices' existence, but maintains that they were not installed with a "forbidden purpose".[126] On 4 January 2016, the US Department of Justice filed a complaint in a federal court against VW, alleging that the respective 3.0-litre diesel engines meet the legal emission
requirements in only a "temperature conditioning" mode that is automatically switched on during testing conditions, while at "all other times, including during normal vehicle operation, the vehicles operate in a 'normal mode' that permits NOx emissions of up to nine times the federal standard".[128] The complaint covers around 85,000 3.0 litre
 diesel vehicles sold in the United States since 2009, including the Volkswagen Touareg, Porsche Cayenne, Audi A6 Quattro, Audi A7 Quattro, Audi A8 Quattro, Audi Q7 models List of affected vehicles and generation of engine[129][130] Brand Model Model Years Generation of Engine
Audi A1 2010-2014 1 A3 2009-2013 Volkswagen Beetle Convertible Golf 4-Door 2010-2014 Jetta SportWagen Beetle Convertible Golf 4-Door
Door Golf SportWagen Jetta Passat Touareg 2009-2012 3 Audi Q7 2009-2015 Volkswagen Touareg 2013-2016 A7 A8 A8L Q5 Q7 2013-2015 *Initial Modification Vehicle recall and consequences On 29 September 2015, Volkswagen announced plans to refit up to 11 million affected vehicles, fitted with
Volkswagen's EA 189 diesel engines, including 5 million at Volkswagen brand, 2.1 million at Audi, 1.2 million at Skoda and 1.8 million vehicles are affected. In Europe alone, a total of 8 million vehicles are affected. In Europe alone, a total of 8 million vehicles are affected. In Europe alone, a total of 8 million vehicles will have to be recalled, followed by
the UK, with 1.2 million. In France, 984,064 vehicles were affected, in Austria around 360,000, while in the Czech Republic 148,000 vehicles were involved (of which 101,000 were Škodas). In Portugal, Volkswagen said it had sold 94,400 vehicles were involved (of which 101,000 were Škodas).
company will simply offer to repair the cars free of charge; a recall is required only "when a defect is identified that... could result in serious injury". As the rules violation involved enabling emission controls during testing, but turning it off under normal conditions to improve performance or fuel mileage, it has been speculated that the software
update might make cars perform less efficiently and impair fuel economy; according to VW, however, its proposed solutions will be designed to achieve legal EU emissions compliance without impairing engine performance or consumption.[134] As of September 2015[update] it was unclear whether the repair would include hardware modifications,
such as selective catalytic reduction (SCR) upgrades.[135][136] The recall was scheduled to start in January 2016, with all affected cars projected to be fixed by the end of the year. The company also announced a review of all of its brands and models, including its supercar marque Bugatti.[137] On 8 October 2015, Volkswagen US CEO Michael Horn
said in testimony before the US Congress that it could take years to repair all the cars, especially the older models, due to the required complex hardware and software changes. He said that the fixes would likely preserve fuel economy ratings but, "there might be a slight impact on performance".[138][139] On 12 October 2015, Paul Willis,
Volkswagen UK managing director, told the Commons Transport Select Committee that about 400,000 Volkswagen cars in the UK will need fuel injectors altered as well as a software fix.[59] The vehicles requiring the hardware fix are the 1.6 litre diesel models. The 1.2 litre[140] and 2.0 litre diesel models will require only a software fix.[59] On the
same day, Volkswagen announced it would overhaul its entire diesel strategy, saying that in Europe and North America it will switch "as soon as possible" to the use of selective catalytic reduction technology to improve diesel emissions. It also announced plans to accelerate the development of electric cars and plug-in hybrids, as well as petrol,
instead of diesel engines for smaller cars.[141] On 12-13 October 2015, Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters, to "rectify the issue".[142][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters in the UK started receiving notification letters.[143][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters in the UK started receiving notification letters.[143][143] Volkswagen Group vehicle drivers in the UK started receiving notification letters in the UK started receiving notification lette
engines.[144] At the beginning of October 2015, Volkswagen suggested to let car owners decide whether their cars would be recalled for handling.[145][146] However, the German Federal Motor Transport Authority (Kraftfahrt-Bundesamt, or KBA)[147] views the software as illegal,[148][149] and has ordered a full recall of all affected cars in
Germany. Volkswagen then decided to recall around 8.5 million cars in Europe, [146] about a third of all its car deliveries since 2009. [150] KBA requires Volkswagen to send a recall plan to KBA before the end of October for 2.0-litre cars, and end of November for 1.2 and 1.6-litre cars. [149] If KBA approves a plan, Volkswagen can then start handling
the cars. The German authorities require that Volkswagen remove the software and that Volkswagen ensures that emission rules are fulfilled.[145] Media estimates that the KBA procedure sets a precedent for how authorities in other countries handle the case.[150][151] On 18 November 2015, Autoblog reported that the KBA was reviewing a
Volkswagen fix for the affected 1.6 diesel engine. [152] On 25 November 2015, Volkswagen said the fix involved a minor hardware modification to the car's air intake system, alongside a software update. [153] This low-cost solution contradicted earlier speculation regarding the possible fitting of new injection nozzles and catalytic converters. [152] In
December 2015, Volkswagen said that the affected 1.2-litre and 2.0-litre diesel engines needed only a software update.[154][155] As of November 2015, the KBA had approved the fixes with the first recalls likely to begin in January 2016.[8]
 output, fuel consumption, or performance. [134] The simple fixes with inexpensive parts and software were then possible though not available when the engines were developed, because engine technology understanding and intake flow simulation capabilities had matured in the meantime, to address the burning of diesel and air mixtures via intake
flow shaping.[156] As of December 2015, due to stricter environmental legislation, fixes for US vehicles were expected to take longer to produce and be more technically complex.[134] As of February 2016, there were three sizes of affected diesel engines, and more than a dozen variations to the repairs exist, prompting Volkswagen to roll out the
recalls in waves for each cluster of vehicle; the first model to be repaired was the low-volume Volkswagen Amarok. [157] Classified as a light commercial vehicle, the Amarok pickup has a higher Euro 5 NOx emissions limit than the passenger cars that are yet to have an available approved fix. German motoring journal Auto Motor und Sport tested two
of the update by the KBA.[159] Volkswagen confirmed on 11 April 2016 that the Passat recall would be delayed as testing had revealed higher fuel consumption after
having the update applied.[161] Advertising, 2015 In France, the MediaCom media agency, which buys advertising for Volkswagen and Audi campaigns in case they would cover the emission violations.[162] Given the scale that the scandal had already
taken by that time, the threat had little effect on its coverage.[citation needed] On the occasion of German Unity Day, Volkswagen launched an ad campaign in German Sunday newspapers, that it wanted to express its joy about the 25th anniversary of German Funday newspapers, that it wanted to express its joy about the 25th anniversary of German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen launched an ad campaign in German Unity Day, Volkswagen
25 years, to give thanks for the confidence of the customers it had experienced during all this time and that it wanted to thank all its employees and trade partners in Germany, and that in one sentence, that "it would do everything to win back the confidence of its customers".[163] New orders, September 2015 In September 2015, Volkswagen's
Belgian importer, D'Ieteren, announced that it would offer free engine upgrades to 800 customers who had ordered a vehicle with a diesel engine which was likely to have been fitted with illegal software. [164][165] As of October 2015, Sales of vehicles with EA 189 engines were halted in some European countries, including Spain, Switzerland, Italy
the Netherlands, Belgium and the UK.[164][166] In the United States, Volkswagen withdrew its application for emissions certification for emission for e
quarantined some 2016-models until it would become clear that their catalysts perform the same on the road as they do in tests.[168] US Congressional Testimony, October 2015 External video Emissions Investigation Hearing, C-SPAN, 8 October 2015 On 8 October 2015, Volkswagen US CEO Michael Horn testified before the United States House
 Committee on Energy and Commerce stating: "This was not a corporate decision, from my point of view, and to my best knowledge today. This was a couple of software engineers who put this in for whatever reason... some people have made the wrong decisions in order to get away with something that will have to be found out."[169][170] The
response was widely ridiculed.[171][172] Compensation, November 2015 On 9 November 2015 On 9 November 2015 On 9 November 2015 On 9 November 2015 On 18 November 2016 in the United States would be eligible to receive US$1,000 in vouchers.[173] On 18 November
2015, Volkswagen said that approximately one quarter of the affected vehicle owners had applied to the program, which was estimated to cost at least $120 million in benefits. [174] Volkswagen America said that accepting the gift cards does not prevent owners in Canada.
from filing lawsuits.[176] Volkswagen also created a claims fund, managed by the well-known mediation attorney Kenneth Feinberg, which will offer full compensation packages (in the form of cash, buy-backs, repairs or replacement cars) to the approximately 600,000 United States owners affected by the scandal.[177] Despite earlier hints to the
contrary, in December 2015 Volkswagen CEO Matthias Müller said that customers outside the US and Canada should also expect some type of compensation package; "we are working on an attractive package, let's call it compensation package; "we are working on an attractive package, let's call it compensation package; "we are working on an attractive package, let's call it compensation package, let's call it compensation, for reduction in residual values in our cars".[178][179] However, on 11 January 2016, a Volkswagen spokesman
said "there won't be compensation. All the indications are that residual values are unaffected";[180] the compensate European drivers as well,[181] blamed the confusion on "a slight mistranslation".[180] E.U. commissioner Elżbieta Bieńkowska said Volkswagen was treating European
consumers unfairly, and Volkswagen responded that the situation in US and Canadian markets, where confidence in diesel technology was "severely shaken" and clients needed to wait longer for an engine fix due to tougher emissions standards, was not "automatically comparable" with other markets. [181] On 21 April 2016, the federal district court
for the Northern District of California, which was appointed in December 2015 to oversee almost all of the US litigation, including claims filed by vehicle owners and buy back nearly 500,000 2.0-litre vehicles as part of a settlement in North
America.[11] The court appointed former FBI Director Robert Mueller as a mediator to oversee the negotiations between claimants, regulators, and Volkswagen, to produce a final "consent decree" by late June 2016.[182][183] European actions, 2015-2020 Following its admission and recall plans in the United States, Volkswagen also started to
establish similar plans in the European Union, where it was estimated that 8.5 million of the 11 million diesel vehicles affected by the scandal were located. The European Union, where it was estimated that 8.5 million of the 11 million diesel vehicles affected by the scandal were located. The European Union warned Volkswagen in 2018 that it did not believe it was moving fast enough to issue repairs on the recalled cars, provide consumers with appropriate information on what a scandal were located.
steps Volkswagen was doing to resolve the problem, and what compensation they were offering affected consumers. [184] Volkswagen agreed to a €1 billion fine imposed by Germany, over 60,000 civil lawsuits of various degrees representing
about 450,000 citizens were filed from 2015 through 2019 by Volkswagen owners, seeking similar compensation as Volkswagen had given to United States drivers. A case led by the Federation of German Consumer Organizations (VZBV) was brought against Volkswagen had given to United States drivers. A case led by the Federation of German Consumer Organizations (VZBV) was brought against Volkswagen had given to United States drivers. A case led by the Federation of German Consumer Organizations (VZBV) was brought against Volkswagen had given to United States drivers.
 argued that where the United States had banned the affected cars, no EU member state had banned the affected vehicle, and thus there was no basis for any compensation. However, Judge Michael Neef rejected a summary judgement for Volkswagen in September 2019, allowing what was anticipated to be a multi-year case to go forward.[186][187]
Volkswagen had settled with VZBV for about €830 million - providing between €1,350 and €6,257 to approximately 260,000 Volkswagen owners through the VZBV - in February 2020.[188] Many consumers were angered over this settlement, representing only a fraction of what Volkswagen had paid to United States' owners. One of the other civil
cases, serving as a template for those not covered by the VZBV case, had reached the Federal Court of Justice, Germany's highest court, and in May 2020, ruled that the consumer was entitled to the full market value of the car, several times larger than what the settlement would have offered. It is unclear how much Volkswagen will own from a result
of the remaining civil lawsuits.[189][190] A similar class-action suit against Volkswagen representing more than 91,000 owners is currently underway in the United Kingdom, seeking greater compensation for being sold vehicles known by Volkswagen to be defective. The High Court of Justice had giving preliminary findings in the case in April 2020
that there is a likelihood that Volkswagen did sell vehicles with a "defeat device" and attempted to abuse the process, allowing the trial to go forward.[191] Consequences Distribution of estimated actual excess Volkswagen light duty diesel vehicle NOx emissions summed over 2008 through 2015 (kg per km2).[192] The median value of emissions is
used for each year. Emission density peaks at 446 kg per km2 [192] Annual excess Volkswagen light duty diesel vehicle NOx emissions. Results from 2016 onward (red) are forecast based on the existing in-use vehicle fleet assuming no new sales
of non-compliant vehicles from September 2015 and no retrofitting (used to calculate the benefit of a return to compliance).[192] The shaded region indicates the 95 percent confidence interval. The discontinuity is due to the difference in the baseline for past (based on FTP-75 drive cycle measurements) and future (based on a return to regulatory
limit) emissions.[192] Health consequences Further information: Diesel exhaust Deaths A peer-reviewed study published in Environmental Research Letters estimated that approximately 59 premature deaths will be caused by the excess pollution produced between 2008 and 2015 by vehicles equipped with the defeat device in the United States, the
majority due to particulate pollution (87 percent) with the remainder due to ozone (13 percent) with the remainder due to ozone (14 percent) with the remainder due to ozone (15 percent) with the remain
deaths in the United States related to the defeat devices based on varying assumptions.[194] A 2022 study by economists found that each cheating Volkswagen car per 1,000 cars caused a low birth weight rate increase of 1.9 percent and infant mortality rate increase by 1.7 percent.[195] Non-fatal health impacts Since NO2 is a precursor to ground-
level ozone it may cause respiratory problems "including asthma, bronchitis and emphysema".[196][197][198] Nitrogen oxides amplify the effect of fine particulate matter soot which causes heart problems, a form of air pollution estimated to kill 50,000 in the United States annually.[199] A peer-reviewed study published in Environmental Pollution
estimated that the fraudulent emissions would be associated with 45 thousand disability-adjusted life years (DALYs) and a value of life lost of at least 39 billion US dollars. [200] In June 2016, Axel Friedrich, formerly with the German equivalent of the E.P.A. and a co-founder of the International Council on Clean Transportation stated "It's not just fraud
 - it's physical assault."[201] Environmental consequences NOx also contribute to acid rain, and visibly brown clouds or smog due to both the visible nature of NO2, and the ground-level ozone. Legal and financial repercussions
Government actions Australia In October 2015, the Australian Competition and Consumer would not be investigating Volkswagen for possible violations of emissions of their vehicle and hence would not be a deciding factor in
their purchase. [203] In March 2017, the Sydney Morning Herald reported that Audi and Volkswagen issued a voluntary recall for affected cars for software updates and in some cases hardware updates and in some cases and in some cases hardware updates and in some cases hardware updates and in some
December 2019 Volkswagen AG was fined A$125 million for making false and misleading representatives set up a special Dieselgate committee. [207] It finalized a consensus report in March 2016, for the government
to implement recommendations, with near-unanimous approval on 28 April 2016, [208] In January 2016, public broadcaster VRT reported on Opel Zafira cars having lower emissions, and the Economic Inspection of the Federal
 Government started an investigation on the request of Minister of Consumer Protection Kris Peeters. [209] Brazil As of October 2011 and 2012 and sold in Brazil were equipped with the emissions cheating software. The Brazilian Institute for the
Environment and Renewable Natural Resources (Ibama) launched an investigation, warning that Volkswagen could face fines up to R$50,000,000.[210] In September 2017, Volkswagen Brazil was ordered to pay R$1,000,000,000 to the 17,000 owners of the Amarok pickups equipped with defeat devices, as decided by the 1st Business Court of the
Court of Justice of Rio de Janeiro. The automaker may still appeal the decision. The total amount reaches R$1.092.648.000 (US$3.48 million at the September 2017 exchange rate) and each consumer will receive R$54.000 (US$3.48 million at the September 2017 exchange rate) and each consumer will receive R$1.092.648.000 (US$3.000) for moral damages. In addition, the magistrate ordered the
 Environment Canada announced that it had begun an investigation to determine if "defeat devices" were installed in Volkswagen vehicles to bypass emission control tests in Canada.[212] On 15 December 2016 an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached[213] which allowed buybacks or trade-ins based on market value on 18 September 2015 or fitting an agreement was reached and the september 2016 and the september 2016 and the september 2016 or fitting and the september 2016 or fitting and the september 2016 or fitting an agreement was reached and the september 2016 or fitting an agreement was reached and the september 2016 or fitting an agreement was reached a
emissions modification. All three options also added a cash payment between CA$5,100 and CA$8,000.[214] Ontario provincial authorities executed a search warrant at Volkswagen Canada offices in the Toronto area on 19 September 2017[215] as part of its investigation into the emissions scandal that rocked the company two years ago. The Ministry
of the Environment and Climate Change have charged Volkswagen AG with one count under the province's Environmental Protection Act, alleging the German company did not comply with Ontario emission standards. The allegations have not been proven in court.[citation needed] In July 2018, Volkswagen Group Canada announced plans for its new
Electrify Canada subsidiary to launch a network of public fast-charging stations in major cities and along major highways, starting with 32 charging stations in the four most-populated provinces: Ontario, Quebec, British Columbia and Alberta. [216] [217] On 9 December 2019, Volkswagen AG was charged with 60 counts of contravening the Canadian
Environmental Protection Act, 1999.[218] On 22 January 2020, Volkswagen pleaded guilty to all charges and was fined CA$196.5 million.[219] China In October 2015, China's General Administration of Quality Supervision, Inspection and Quarantine announced the recall of 1,946 imported Tiguan SUVs and four imported Passat B6 sedans, in order to
fix the emissions software problems. [220][221] European Union In September 2015, Government regulatory agencies and investigators initiated proceedings in France, Italy, Germany, Switzerland, Spain, the Netherlands, the Czech Republic and Romania. Several countries [vague] called for a Europe-wide investigation. [222][223][224] In October
2015 Werner Hoyer, President of the European Investment Bank (EIB) said the bank was considering recalling Volkswagen loans, and announced their own investigation into the matter. [225] On 27 October 2015, the European Parliament voted a resolution urging the bloc to establish a federal authority to oversee car-emissions, following reports in
the press that top EU environmental officials had warned, since early 2013, that manufacturers are tweaking vehicles to perform better in the lab than on the road. The resolution urged for tougher emissions tests to be fully implemented in 2017, instead of being phased in between 2017 and 2019, as had been originally planned. [226] However, the
European Commission proceeded with passing legislation that allowed the car industry an extra year before having to comply with the new "realistic" EU driving emissions test will continue to allow cars to emit more than twice the legal limit of nitrogen oxides (NOx) from 2019 and up to 50
percent more from 2021.[227] The legislation, opposed only by the Netherlands, is considered[by whom?] a great victory for the car industry, and has drawn stern critique from other MEPs. Dutch MEP Bas Eickhout referred to the new test as "a sham",[227] while liberal democrat MEP Catherine Bearder described the legislation as "a disgraceful
stitch-up by national governments, who are once again putting the interests of carmakers ahead of public health".[227] In December 2015, the EU Parliament voted to establish a special committee to investigate whether regulators and executive officials, including the European Commission, failed to oversee the car industry and its pollution testing
regimes.[228] In June 2016, documents leaked to the press indicated that in 2010, European Commission officials had been warned by their in-house science team that at least one car manufacturer was possibly using a NOx-related defeat device in order to bypass emission regulation.[229] Kathleen Van Brempt, the chair of the EU inquiry into the
scandal, found the documents "shocking" and suggested that they raised serious concerns with regard to the future of commission officials: "These documents show that there has been an astonishing collective blindness to the defeat device issue in the European commission, as well as in other EU institutions".[229] In September 2020, European
union laws changed and the European commission has the right to check car conformity to emission standards and to recall vehicles when needed. Fines can be up to €30,000 per car. [230] France Renault and Peugeot's headquarters were raided by fraud investigators in January and April 2016, respectively. As of January 2016, Renault recalled
15,000 cars for emission testing and fixing.[231][232][233] French authorities opened an inquiry in March 2016[234] into Volkswagen over the rigging of emission tests, with prosecutors investigating suspicions of "aggravated deception".[166] Germany In September 2015 former Volkswagen chief executive Martin Winterkorn resigned over the
scandal, saying he had no knowledge of the manipulation of emissions results. One week later German prosecutor clarified, it was looking into allegations of fraud from unidentified individuals, but that Winterkorn was not under formal investigation. [236] On 8 October
2015 police raided Volkswagen headquarters. [237] As of 16 October 2015, twenty investigators worked on the case, targeting "more than two, but a lot fewer than 10" Volkswagen staff. [238] As of November 2015, twenty investigators worked on the case, targeting "more than two, but a lot fewer than 10" Volkswagen staff. [238] As of November 2015, twenty investigators worked on the case, targeting "more than two, but a lot fewer than 10" Volkswagen staff. [238] As of November 2015, twenty investigators worked on the case, targeting "more than two, but a lot fewer than 10" Volkswagen staff. [238] As of November 2015, twenty investigators worked on the case, targeting "more than two, but a lot fewer than 10" Volkswagen staff. [238] As of November 2015, the Kraftfahrt-Bundesamt KBA tested 50 cars from different manufacturers.
German transport minister Alexander Dobrindt said that Volkswagen, Audi, Mercedes-Benz, Opel and Porsche would all adjust settings that increased emission levels such as nitrogen dioxide in some diesel cars. [240] On 16 March 2017, German authorities raided the headquarters of Audi in Bavaria and Volkswagen in Wolfsburg. [241] On 15 April
2019 Winterkorn and four other executives were charged by prosecutors in Braunschweig, Germany, [19] In August 2019, a district court ruled that only reduced emissions in the ambient temperature range of 10-32 °C (50-90 °F). [242] Audi's then
CEO Rupert Stadler was taken into German custody in June 2018 until being released in October 2018, when he was also removed from being CEO.[243] In July 2019, Stadler was charged with fraud in Munich due to the scandal.[244] Hong Kong The Hong Kong Environmental Protection Department banned the Volkswagen Caddy on 16 October
2015.[245] As of 16 October 2015 the department had also tested the Amarok and Transporter commercial diesel vehicles but found them to be free of the defeat device.[246] India As of 25 September 2015[update], the Indian government directed the Automotive Research Association of India (ARAI) to investigate whether Volkswagen's vehicles had
circumvented Indian laws and regulations on vehicle emission testing. [247] [248] On 22 September 2015 the Indian Foundation of Production process for vehicles sold in India. [249] In October the Government of India later extended its deadline for the
test results to the end of October 2015.[250] On 11 January 2017, ARAI's investigation into defeat devices was published and revealed that Volkswagen India had installed a derivation of the Software used in the U.S. to defeat emission testing procedures in all of the Volkswagen group's product range in India with EA 189 engine series. This included
1.2-L, 1.5-L, 1.6-L and 2.0-L diesel engine variants across three different brands - Audi, Skoda and Volkswagen engaged in "improper commercial taly's regulator of competition announced plans to investigate whether Volkswagen engaged in "improper commercial taly's regulator of competition announced plans to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial taly seems to investigate whether Volkswagen engaged in "improper commercial talk seems to investigate whether talk seems to investigate whether talk seems to investigate whether the volkswagen engaged in the volkswagen engaged e
practices" when promoting its affected diesel vehicles. [252] On 15 October 2015, Japan In 
There were 36 targeted cars which had been privately imported, although they were not sold through authorized resellers in Japan. [254] Netherlands In December 2016 the Dutch consumers authority ACM decided to investigate whether Dutch laws were broken and consumers misled, a report was due by June 2017. 5,000 Dutch Volkswagen owners
have signed up for a class action lawsuit. [when?] [255] Netherlands has spent billions of euros on subsidies in energy-efficient cars in the recent years. [vague] Jesse Klaver from the political party GroenLinks responded [when?] that the Netherlands must claim back money from the car manufacturers if it emerges that they have committed fraud in the
Netherlands.[256] Norway Norway's prosecutors opened a criminal investigation into possible economic crimes committed by VW.[257] In May 2016, Norway's sovereign wealth fund, the world's largest ($850 bn) and also one of the company's biggest investors, announced legal action against Volkswagen, to be filed in Germany as part of a class-
action lawsuit being prepared there. [258] Romania On 1 October 2015 the Romanian Automotive Register (RAR) stopped issuing registration documents for Volkswagen vehicles equipped with Euro 5 diesel engines. [259] South Africa On 28 September 2015, the departments of Environmental Affairs and Transport and the National Regulator for
Compulsory Specifications said they still needed to determine whether local cars had been affected by the rigging of US vehicle emissions tests. [260] South Korea As of 19 January 2016 South Korea, the world's eighth-largest diesel-car market, planned a criminal case against Volkswagen executives. [261] On 22 September 2015 South Korea.
authorities announced pollution control investigations into cars manufactured by Volkswagen and other European car-manufacturers. Park Pan-kyu, a deputy director at South Korea's environment ministry said: "If South Korea authorities find problems in the Volkswagen diesel cars, the probe could be expanded to all German diesel cars".[262] In
November 2015, after defeat devices had been found in some Volkswagen models, the Environmental agency had filed criminal charges against VW, seeking up to $48 billion in penalties. Johannes Thammer, managing of #14,100,000,000 and ordered the cars to be recalled.
director of Audi Volkswagen Korea, was placed under investigation and faced up to five years in prison and a fine of up to \omega30,000,000.[264] Volkswagen's recall plan for South Korea, submitted on 6 January 2016, was rejected by the authorities, as it failed to meet a number of key legal requirements. [261] Authorities are also reported to have
rejected a revised plan on 23 March 2016 for the same reasons. [265] In May 2016, following a wider investigation of 20 diesel-powered cars, South Korean authorities accused Nissan Qashqai, allegations which the Japanese carmaker denied. [266] In August 2019, the
government announced a ban on 8 VW Group diesel models cars for cheating emissions regulations. [267][268] Spain As of 28 October 2015, a Spanish court had opened a criminal probe against Volkswagen AG, to establish whether the company's actions broke any local laws. [269] Sweden As of 29 September 2015, Sweden's chief prosecutor was
considering starting a preliminary investigation into Volkswagen's emissions violations. [270] Switzerland On 26 September 2015 Switzerland Danned sales of Volkswagen diesel cars, marking the most severe step taken so far by a government in reaction to the emissions crisis. [271] United Kingdom The Department for Transport announced on 24
September 2015 that it would begin re-testing cars from a variety of manufacturers to ensure the use of "defeat devices" was not industry wide. [272] The UK Parliamentary Transport Select Committee opened an enquiry into Volkswagen Emissions Violations with evidence sessions on 12 October 2015 and 25 January 2016. The Select Committee
published a letter from Paul Willis, managing director of Volkswagen Group UK Ltd of 21 December 2015 stating: "In very simple terms, the software did amend the NOx characteristics in testing".[273] A report on "real world" tests commissioned
by the Government published in April 2016 showed emissions from 37 diesel engines up to 14 times higher than had been claimed, with every vehicle exceeding the legal limit of nitrogen oxide emissions from 37 diesel engines up to 14 times higher than had been claimed, with every vehicle exceeding the legal limit of nitrogen oxide emissions from 37 diesel engines up to 14 times higher than had been claimed, with every vehicle exceeding the legal limit of nitrogen oxide emissions.
vehicle owners who were seeking compensation of £3,000-4,000 per vehicle.[citation needed] United States Recalled Volkswagens stored at Gary/Chicago International Airport VW suspended sales of TDI-equipped cars in the US on 20 September 2015. On 21 September 2015 the EPA announced that should the allegations be proven, Volkswagen
Group could face fines of up to US$37,500 per vehicle (about US$18 billion in total).[275] In addition to possible civil fines, the United States Department of Justice Environment and Natural Resources Division were doing a criminal probe of Volkswagen AG's conduct.[276][277] 22 September 2015 The United States House Energy Subcommittee on
Oversight and Investigations announced that it would hold a hearing into the Volkswagen scandal while New York Attorney General Eric Schneiderman said that his investigation was already underway. [278] As of 29 October 2015, over 25 other states' attorneys general, and the Federal Bureau of Investigation in Detroit, were involved in similar
investigations.[257] On 12 November 2015, the FBI confirmed to engineering magazine Ingeniøren that it had an ongoing investigation, [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation, [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation, [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation, [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation [279] after previous unconfirmed to engineering magazine Ingeniøren that it had an ongoing investigation [279] after previous unconfirmed to engineering magazine Ingeniøren [279] after previous unconfirmed to engineering magazine [270] after previous unconfirmed to engine
Benz. The agency would initially focus on one used vehicle of each model, and widen the probe if it encountered suspicious data. [280] The EPA has described [when?] the hidden Volkswagen pollution as "knowing endangerment". [281] In May 2016, the owners of Mercedes-Benz confirmed that the US Justice Department asked Daimler AG to run an
internal investigation into its diesel emissions testing, as well.[240] On 4 January 2016, the Justice Department, on behalf of the EPA, brought suit against Volkswagen in the United States District Court for the Eastern District of Michigan in Detroit. The complaint, seeking up to $46 billion in penalties for Clean Air Act violations, [282] alleged that
Volkswagen equipped certain 2.0 and 3.0-litre diesel-engine vehicles with emissions cheating software, causing NOx pollution to exceed EPA's standards during normal driving conditions. It further claimed that Volkswagen entities provided misleading information and that material omissions impeded and obstructed "efforts to learn the truth about
the (excess) emissions".[282] while "so far recall discussions with the company have not produced an acceptable way forward".[128][283] On 9 January 2016, US officials criticized Volkswagen for citing German law in order to withhold documents from a group of states investigating the company's actions. Schneiderman also complained over
Volkswagen's slowness in producing documents from its US files, claiming the company "has sought to delay responses until it completes its 'independent investigation' several months from now".[282] On 12 January 2016, US regulators rejected Volkswagen's recall plans for its affected 2.0-litre diesel engines, submitted to CARB in December 2015,
claiming that these "do not adequately address overall impacts on vehicle performance, emissions and safety".[284][285] Volkswagen confirmed that its discussions with CARB will continue, and said that the company is working on bringing "a package together which satisfies our customers first and foremost and then also the regulators".[284] The
states of Arizona, West Virginia, New Mexico, and Texas, as well as Harris County, Texas, all filed separate lawsuits seeking restitution from VW. The company also faces investigations by 48 United States state attorneys (as of February 2016[update]).[286][287][288] On 29 March 2016, Volkswagen was additionally sued by the United States Federal
Trade Commission for false advertising due to fraudulent claims made by the company in its promotion of the affected models, which touted the "environmental and economic advantages" of diesel engines and contained claims of low emissions output. The suit was consolidated into existing litigation over the matter in San Francisco, which would
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allow the FTC to participate in global settlements over the matter. [289] The Ninth U.S. Circuit Court of Appeals ruled on 1 June 2020 that Volkswagen was liable for further legal damage lawsuits brought by state and local governments in the emissions fraud. The unanimous ruling by the court paved the way for two counties in Florida and Utah to

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proceed with litigation against Volkswagen, as well as potential further cases brought by jurisdictions in the US. By June 2020, VW had already expended $33.3 billion in settlements and other costs including buybacks of the excessively polluting diesel vehicles. In a statement, VW said it would ask the circuit court to review the ruling, and that the
company if necessary would take the case to the U.S. Supreme Court. [290] Charges against Volkswagen engineer working at Vol
had been purposely installed in US vehicles with the knowledge of his engineering team: "Liang admitted that beginning in about 2006, he and his co-conspirators realized that they could not design a diesel engine that would meet the
stricter US emissions standards, they designed and implemented [the defeat device] software".[54] On 7 January 2017, former top emissions compliance manager for Volkswagen in the US Oliver Schmidt was arrested by the FBI on a charge of conspiracy to defraud the United States.[291] On 11 January 2017 Volkswagen pleaded guilty to weaving a
vast conspiracy to defraud the US government and obstructing a federal investigation and agreed to pay a US$2.8 billion criminal fine and US$1.5 billion in civil penalties. In addition, six executives have been criminally charges in the
emissions scandal case. He has repeatedly denied any knowledge of the rigged emissions tests.[15] Settlement On 25 October 2016, a final settlement was approved by a judge. About 475,000 Volkswagen owners in the US were given the choice between a buyback or a free fix and compensation, if a repair becomes available. Volkswagen will begin
administering the settlement immediately, having already devoted several hundred employees to handling the process. Buybacks range in value from $12,475 to $44,176, including restitution payments, and vary based on mileage. People who opt for a fix approved by the Environmental Protection Agency will receive payouts ranging from $5,100 to
$9,852, depending on the book value of their car. Of the buyback, 138,000 had been completed by 18 February 2017 with 150,000 more to be returned. 52,000 chose to keep their cars. 67,000 diesel cars from model year 2015 were cleared for repairs, but left uncertainty about the future of 325,000 "Generation One" diesel VWs from the 2009-2014
model years, which use the "lean NOx trap" and would be harder to repair. [293] [294] In March 2018, Reuters reported that 294,000 cars from the buyback program have been stored at 37 regional US staging sites; [295] some of the first reported sites included: Colorado Springs, Colorado; [296] Pontiac, Michigan; [297] Baltimore, Maryland; [298] San
Bernardino, California; [299] and Gary, Indiana. [300] Volkswagen will also pay $2.7 billion for clean-emissions infrastructure. [301] Toward that end, Volkswagen formed a U.S. subsidiary called Electrify America, LLC., based in Reston, Virginia, that will manage the $2 billion brand-neutral zero-
emission vehicle infrastructure programs and marketing campaigns for the next ten years. The group will get four installments of $500 million, at 2+1/2-year intervals, subject to California Air Resources Board and U.S. EPA approval.[302] Volkswagen plans to install hundreds of chargers with 50, 150 and even some ultra-fast 320 kW charge rate,
beginning in California in 2017.[303][304] Competing charge networks (and automakers) saw the effort as controversial.[305][306] In August 2018, Electrify America launched the first national media advertising campaign to promote electric vehicles; it featured the Chevy Bolt, with other EVs in cameo roles.[307] Securities and Exchange Commission
lawsuit On 14 March 2019, the U.S. Securities and Exchange Commission filed a complaint against Volkswagen and its former CEO Martin Winterkorn alleging that they defrauded investors by selling corporate bonds and asset-backed securities while knowingly making false and misleading statements to government regulators, underwriters, and
consumers as to the quality of their automobiles.[308] Private actions By 27 September 2015 at least 34 class-action lawsuits had been filed in the United States[309][310][311] and Canada[312][313] on behalf of Volkswagen and Audi owners, accusing Volkswagen of breach of contract, fraudulent concealment, false advertising, and violations of
federal and state laws, and positing the "diminished value" of diesels that will be fixed to conform with pollution regulations, due to possible reductions in horsepower and fuel efficiency. [314] According to Reuters, one reason class action lawyers were able to mobilize so fast is that the company's marketing to upscale professionals, including jurists,
had backfired.[315] As of 30 September 2015[update], at least one investor lawsuit seeking class action status for holders of Volkswagen American Depositary Receipts had been filed in the United States seeking compensation for the drop in stock value due to the emissions scandal.[316] On 7 October 2015, the Los Angeles Times reported that the
number of class-action lawsuits filed had grown to more than 230.[317] On 19 November 2015, ABC News Australia reported that more than 90,000 VW, Audi and Skoda diesel vehicle owners had filed a class action lawsuit against Volkswagen in the country's Federal Court.[176] On 8 December 2015, the United States Judicial Panel on Multidistrict
Litigation issued an order consolidating over 500 class actions against Volkswagen into a single multidistrict litigation, MDL No. 2672, and transferred the entire MDL to Judge Charles R. Breyer of the federal district court for the Northern District
of California.[318][294] On 21 January 2016, Judge Breyer held a hearing on the requests by over 150 plaintiff's attorneys for some kind of leadership role in the gigantic Volkswagen MDL, of which over 50 sought to serve as lead counsel or to chair the plaintiffs' steering committee.[319] More than 100 of those attorneys tried to squeeze into his San
Francisco courtroom to argue their requests in person, and some of them had to stand in the aisles or in the outside hallway.[319] That afternoon, Judge Breyer issued an order naming 22 attorneys to a plaintiffs' steering committee, and of those, selected Elizabeth Cabraser of Lieff Cabraser as chair of the committee.[319] On the other side,
 Volkswagen hired Robert Giuffra of Sullivan & Cromwell as its lead defense counsel in the MDL.[320] On 14 March 2016, Volkswagen AG was sued in diesel engines. The suit on behalf of 278 institutional investors seeks €3.3 billion (US$3.
billion at March 2016 exchange rate) in compensation.[321] BlackRock Inc., the world's largest asset manager, joined other institutional investors Service downgraded Volkswagen's Long-term
Issuer Default Rating by two notches to BBB+, with a negative outlook.[173][324] In May 2016, The Children's Investment Fund Management, run by Chris Hohn and retaining a 2 percent stake in Volkswagen preference stock, launched a campaign aiming to overhaul the company's executive pay system, arguing that "for years management has been
richly rewarded with massive compensation despite presiding over a productivity and profit collapse", thereby leading to an "aggressive management behavior" and contributing to the diesel emission scandal.[325] Later the same month, German investor group DSW called for an independent audit of Volkswagen's emissions-cheating practices,
arguing that the company's internal investigation might not necessarily make everything transparent to smaller shareholders. [326] On 28 June 2016, Volkswagen agreed to pay $15.3 billion[327] to settle the various public and private civil actions in the United States, the largest settlement ever of an automobile-related consumer class action in
United States history.[328] On 25 October 2016, a U.S. federal judge approved the settlement.[329] Up to $10 billion will be paid to 475,000 Volkswagen or Audi owners whose cars are equipped with 2.0-litre diesel engines. Owners can also opt to have their car repaired free of charge or can sell it back to the company, who will pay back its estimated
value from before the scandal began. Leases can also be terminated without incurring penalty charges. Independent of which options are selected, owners will still receive compensation ranging from $5,000 to $10,000 per affected car. Additionally, should they choose to decline the offer, they are free to pursue independent legal action against the
firm.[330] The settlement also includes $2.7 billion for environmental mitigation, $2 billion for environmental mitigation, $3 billion for environmental mitigation, $4 billion for environmental mitigation for envir
28 June 2016[update], no practical engineering solutions that would bring the vehicles into compliance with emission standards had been publicly identified.[327] The consumer settlement will resolve all claims by participating consumers against Volkswagen and all its associates, except for any potential claims against Robert Bosch GmbH.[327]
 Bosch supplied two exhaust treatment components and engine control software. [154] In the case of 3.0-litre V6 TDI engines, Volkswagen suggested it can provide an uncomplicated fix that will bring the vehicles into compliance without adversely affecting performance, a move that the company hopes will avoid an expensive buyback of these cars.
[332] European Investment Bank's possible involvement In January 2016, documents obtained by CEE Bankwatch Network provided more details for a European Investment Bank's possible involvement In January 2016, documents obtained by CEE Bankwatch Network provided more details for a European Investment Bank's possible involvement In January 2016, documents obtained by CEE Bankwatch Network provided more details for a European Investment Bank's possible involvement In January 2016, documents obtained by CEE Bankwatch Network provided more details for a European Investment Bank's possible involvement In January 2016, documents obtained by CEE Bankwatch Network provided more details for a European Investment Bank's possible involvement In January 2016, documents obtained by CEE Bankwatch Network provided more details for a European Investment Bank's possible involvement In January 2016, documents obtained by CEE Bankwatch Network provided more details for a European Investment Bank's possible involvement Bank Statement Bank Statemen
creating cleaner drive trains. However, during the bank's annual press conference on 14 January 2016, the bank president, Werner Hoyer, admitted that the £400,000,000 loan might have been used in the creation of an emissions defeat device. [333] Many redacted documents obtained by Bankwatch, along with the EIB not disclosing the details of the
loan, hint to the bank possibly already knowing that there were some discrepancies with the 'Antrieb RDI' loan.[334] In 2017, the European Anti-Fraud Office (OLAF) found that Volkswagen had misled the bank about the car company's use of emissions cheating software, in a scandal that has become known as Dieselgate.[333] Also in 2017, Hoyer
said the bank did not find "any indication" that its loans had been misused. However, six months later news website Politico reported that Olaf had concluded that Volkswagen Great Canadian Clean Diesel Tour By 22 September 2015,
Volkswagen had admitted that 11 million vehicles sold in other Countries with 2.0 L 4-cylinder TDI engines sold in the US.[335] According to Volkswagen, vehicles sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in the US.[335] According to Volkswagen, vehicles sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in the US.[335] According to Volkswagen, vehicles sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines sold in other countries with the 1.6 L and 2.0 L 4-cylinder TDI engines are considered as a constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L and 2.0 L 4-cylinder TDI engines are constant of the 1.6 L 4-cylinder TDI engines are constant of the 1.6 L 4-cylinder TDI engines are constant of the 1.6 L 4-cylinder TDI engines 
the 2015 EA288 generation of the four-cylinder.[336] Worldwide, around 1.2 million Skodas[337] and 2.1 million Audis may contain the software, including TTs and Qs.[338] VW states that Euro6 model in Germany are not affected, while 2015 US models with the same EA288 engines are affected. This suggests that normal-operation measurements
that place the EA288 NOx emissions between the two standards' limits were readily available at Volkswagen headquarters in Germany. According to Müller, the 1.2 and 2.0-litre models may be updated by software, whereas the around 3 million 1.6-litre require various hardware solutions, and some cars may even be replaced. The cars are so diverse
that many different solutions are required.[339] Over one quarter of Volkswagen's sales in the US are diesel-powered vehicles. The corporation has chosen a market strategy that emphasizes clean diesel over electric cars or hybrid electric vehicles affected by the recall in the US include the following model years:[341][342][343]
[344][345] 2009-2015 Audi A3 2.0 L TDI 2009-2015 Volkswagen Beetle 2.0 L TDI 2009-2015 Volkswagen Beetle 2.0 L TDI 2009-2015 Volkswagen Beetle 2.0 L TDI 2009-2015 Volkswagen Jetta Sportwagen 2.0 L TDI 2012-2015 Volkswagen Passat 2.0 L TDI 2029-2015 Volkswagen Fassat 2.0 L TDI 2009-2015 Volkswagen Beetle 2.0 L TDI 2015 Volkswagen Beetle 2.0 L TDI 2009-2015 Volkswagen Jetta 2.0 L TDI 2009-2015 Volkswagen Beetle 2.0 L TDI 2009-2015 Volkswagen Beetle
The EPA revealed on 2 November 2015 that Volkswagen had shipped additional diesel models with defeat devices, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected, including several 2016 Audi Quattro diesels were also found affected and affected a
Giles, the EPA Assistant Administrator for Office of Enforcement and Compliance Assurance, called out the company for further refusing to take responsibility for its failure to comply with the law. Under US federal Clean Air Act, Volkswagen could be liable for up to $375 million in fines.[347] Resale value As of 26 October 2015[update], the resale
value of affected model cars in the US was down from 5 to nearly 16 percent depending on model as compiled by Black Book and Kelley Blue Book based on used car auction prices, the volume of which was also down.[348] On 15 March 2016, Volkswagen Financial Services took a writedown of €353,000,000 to cover a potential decline in the residual formula for the control of the cover and the cover 
value of the fleet of its leased cars.[349] Effects on Volkswagen corporate Stock value Price of Volkswagen AG (VOW.DE) stock, Adjusted Close. Width of line shows Volume. Text in green is the percent difference from the close on 17 September 2015.[350] Price of Volkswagen AG (VOW.DE)
stock 17 September -5 October 2015[350] Date Adj Close Volume % diff from previous day 17 September 161 112,700 -3.61% -3.61% 21 September 161 112,700 -3.61% -3.61% 23 September 161 112,700 -3.61% -3.61% 23 September 161 112,700 -3.61% -3.61% 24 September 170 -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -3.61% -
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2015, the first day of trading after the EPA's Notice of Violation to Volkswagen became public, share prices of Volkswagen AG fell 20 percent. On 23 September, the stock quickly fell 10.5 percent, dropping below €100 to a record 4-year low before regaining
some lost ground.[352][353] Share prices of other German automakers were also affected, with BMW down 4.9 percent and Daimler down 5.8%.[354] A year later Volkswagen stock was down by 30 percent.[355] Qatar, one of the biggest Volkswagen stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[355] at a company stock was down by 30 percent.[35
value fell.[356] Sales The US sale of Volkswagens was 23,882 vehicles in November 2014.[357][358] In South Korea, sales in November 2015, a 24.7 percent decline from November 2014.[357][358] In South Korea, sales in November 2014.[357][358] In South Korea, sales in November 2014.[357][358] In South Korea, sales in November 2015, a 24.7 percent decline from November 2014.[357][358] In South Korea, sales in November 2014.[358][358] In South Korea, sales in November 2014.[358][358] In South Korea, sales in November 2014.[358][358] In South Kor
2015 exchange rates) for some models.[359] In Great Britain, the scandal did not affect sales, which increased in 2016 to an all-point high, placing Volkswagen second in the league of best-selling cars.[360] VW sales across Europe returned to growth in April 2016 for the first time since the scandal broke, with a group market share of 25.2 percent,
compared to its previous level of 26.1 percent. [361] Transgressions by other manufacturers Main article: Diesel emissions scandal The Volkswagen scandal The Volkswagen scandal more generally raised awareness over the high levels of pollution being emitted by diesel vehicles built by a wide range of carmakers, including Volvo, Renault, Mercedes, Jeep, Hyundai, Citroen,
BMW, Mazda, Fiat, Ford and Peugeot.[43][44] Independent tests carried out by ADAC proved that, under normal driving conditions, diesel vehicles including the Volvo S60, Renault's Espace Energy and the Jeep Renegade, exceeded legal European emission limits for nitrogen oxide (NOx) by more than 10 times.[44] Researchers have criticized the
inadequacy of current regulations and called for the use of a UN-sanctioned test called Worldwide harmonized Light vehicles Test Procedures that better reflects real-life driving conditions, as well as on-road emissions testing via PEMS. The two types of new test started to come into force in 2017, with critics saying that car firms have lobbied fiercely
to delay their implementation, due to the high cost of meeting stricter environmental controls.[43] The Volkswagen and several other car makes have been shown to pollute more than allowed.[42][43][44] A French government report in 2016 investigated 86 different
cars, and about 1/5th of those were found to comply with emission laws. Most did not. One car was measured to emit 17 times more than allowed.[362] An overview of tests showed that cars turned off the exhaust improvement device in many ordinary conditions, [363] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions, [363] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions, [363] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions, [363] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions, [363] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions, [363] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions, [363] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions, [363] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions, [365] with 5 out 38 cars complying with regulations in an English test.[364] A Germanus improvement device in many ordinary conditions in an English test.[364] A Germanus improvement device in many ordinary conditions in an English test.[364] A Germanus improvement device in many ordinary conditions in an English test.[364] A Germanus improvement device in many ordinary conditions in an English test.[364] A Germanus improvement device in many ordinary conditions in an English test.[364] A Germanus improvement device in many ordinary conditions in an English test.[364] A Germanus improvement device in many ordinary conditions in an English test.[364] A Germanus improvement device in many ordin
test showed 10 out of 53 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed to temperatures below 10 degrees Celsius.[365] A French test showed 4 out of 52 cars compliant when exposed test showed 4 out of 52 cars compliant when exposed test showed 4 out of 52 cars compliant when exposed test showed 4 out of 52 cars compliant when exposed test showed 4 out of 52 cars compliant when exposed test showed 4 out of 52 cars compliant when exposed test 
higher.[367] 38 out of 40 tested diesel cars failed a NOx-test since 2016.[52] Industry consequences Renault believes that diesel cars would become significantly more expensive when re-engineered to comply with new emissions regulations as a result of the Volkswagen disclosures, to the point that diesel cars may not be competitive.[368] Industry consequences Renault believes that diesel cars would become significantly more expensive when re-engineered to comply with new emissions regulations as a result of the Volkswagen disclosures, to the point that diesel cars may not be competitive.[368] Industry consequences Renault believes that diesel cars would become significantly more expensive when re-engineered to comply with new emissions regulations as a result of the Volkswagen disclosures, to the point that diesel cars may not be competitive.[368] Industry consequences are not be competitive.
wide, small diesel engines are being replaced by bigger ones,[369][370] and electric car sales have risen.[355] Suzuki had won the case to terminate its partnership with Volkswagen at the International Court of Arbitration of International Court of Arbitration of International Court of International 
this scandal. On 16 June 2016, Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments into the production of electric vehicles; Matthias Müller predicted that Volkswagen announced plans to make major investments in the production of electric vehicles; Matthias Müller predicted that V
the initiative by streamlining its operations and engaging in cost-cutting. Müller stated that the changes would "require us - following the serious setback as a result of the diesel issue - to learn from mistakes made, rectify shortcomings and establish a corporate culture that is open, value-driven and rooted in integrity".[372] Volkswagen plans a
battery factory near Salzgitter to compensate for the reduced numbers of piston engines. [373][374] In November 2016, Volkswagen and its labour unions agreed to reduce the workforce by 30,000 people until 2021 as a result of the costs from the violations. However, 9,000 new jobs would come by producing more electric cars. [375] Volkswagen CEO
Herbert Diess stated to the German financial publication Handelsblatt that the company planned to stop market in Israel. According to this
study, the Volkswagen emissions scandal had a statistically significant negative effect on the number of transactions in the secondary market involving the affected models (nearly -18 percent) and on their resale price (nearly -6 percent). The study also find that the reduction in the number of transactions was driven mostly by private sellers and that
non-private sellers barely shied away from the market. These findings suggest that the supply of used cars among private sellers is much more elastic relative to the supply of used cars among non-private sellers is much more elastic relative to the supply of used cars among non-private sellers. [377] Monkeygate In January 2018, it was revealed that Volkswagen had experimented on monkeys in May 2015 to prove that diesel exhaust
was not harmful to primates. The disclosure of the tests was named Monkeygate. [378] However, the test car was a Volkswagen Beetle fitted with the defeat device that produced far less emissions in the experiment than it would on the highway. [380] [381] Volkswagen's top lobbyist, Thomas Steg, was suspended on 23 January 2018. [382]
Reactions Political figures German Chancellor Angela Merkel stated she hoped that all facts in the matter would be made known promptly, urging "complete transparency". She additionally noted that Germany's Transport Minister, Alexander Dobrindt, was in ongoing communication with Volkswagen.[383] Michel Sapin, the French Finance Minister
called for an investigation of diesel-powered cars that would encompass the entire continent of Europea. [384] Catherine Bearder, MEP for South East England, commented on 27 October 2015 in the European Parliament that "we now have the political momentum for a radical overhaul that will ensure carmakers cannot dodge the rules", defending an
EU resolution meant to specifically "cut deadly pollution from diesel vehicles".[226] However, when the European Commission proceeded with passing legislation that allowed the car industry more time to comply with the newer regulation, while also permitting cars, even under the more "realistic" tests, to emit more than twice the legal limit of
nitrogen oxides (NOx) from 2019 and up to 50 percent more from 2021, Bearder denounced the legislation as "a disgraceful stitch-up by national governments, who are once again putting the interests of carmakers ahead of public health".[227] London Assembly member 2015 that diesel vehicles should not be legislation as "a disgraceful stitch-up by national governments, who are once again putting the interests of carmakers ahead of public health".[227] London Assembly member 2015 that diesel vehicles should not be legislation as "a disgraceful stitch-up by national governments," who are once again putting the interests of carmakers ahead of public health not be legislation as "a disgraceful stitch-up by national governments," who are once again putting the interests of carmakers ahead of public health not be legislation as "a disgraceful stitch-up by national governments," who are once again putting the interests of carmakers ahead of public health not be legislation as "a disgraceful stitch-up by national governments," who are once again putting the interests of carmakers and a disgraceful stitch-up by national governments, and a disgraceful stitch-up by national governments.
either be banned in the future, or face stringent tests before being allowed to enter London's low-emissions zone. The city's deputy mayor for the environment, Matthew Pencharz, responded that such measures could lead to serious economic problems. [385] Automotive industry and other commentators Major car manufacturers, including Toyota,
GM, PSA Peugeot Citroen, Renault, Mazda, Daimler (Mercedes Benz), and Honda, issued press statements reaffirming their vehicles' compliance with all regulations and legislation for the markets in which they operate; The Society of Motor Manufacturers and Traders described the issue as affecting "just one company", with no evidence to suggest
that the whole industry might be affected. [386] Renault-Nissan CEO Carlos Ghosn said it would be difficult for an automaker to conceal internally an effort to falsify vehicle emissions data, such as happened at Volkswagen AG: "I don't think you can do something like this hiding in the bushes." [387] Jim Holder, the editorial director of Haymarket
Automotive, which publishes WhatCar and AutoCar, opined that there had never been a scandal in the automotive industry, and that German companies operating abroad will face a decrease in competitiveness. [389] Alan
 Brown, chairman of the Volkswagen National Dealer Advisory Council, commented on the scandal's negative impact on US dealers, who were already struggling with overpriced products and a deteriorating relationship between the company and the dealer body. [390] Car and Driver similarly emphasized Volkswagen's inability to efficiently operate in
the US market, while also suggesting that the company had grossly underestimated the EPA's power, and inexplicably failed to go public before the story broke, despite receiving ample warning.[391] Tesla Motors CEO Elon Musk was asked about his opinion whether the scandal will weaken the consumer's view on green technologies; he responded
saying he expects the opposite to happen: "What Volkswagen is really showing is that we've reached the limit of what's possible with diesel and petrol. The time has come to move to a new generation of technology." [392] Similarly, analysts at Fitch suggested the Volkswagen diesel emissions crisis was likely to affect the entire automotive industry,
with petrol cars potentially enjoying a revival in Europe and greater investment being poured into electric vehicles. [92] Other commentators argued that the diesel engine will nevertheless regain its footing in the market, due to its international indispensability, low CO2 emissions and strong presence in the US pickup- and commercial-truck
segments.[391] On 29 September 2015, S&P Dow Jones Sustainability indexes after close of trading on 5 October 2015. Among the reasons for the de-listing, the statement issued by RobecoSAM cited social and ethical reasons, and confirmed that
Volkswagen will no longer be identified as an Industry Group Leader in the "Automobiles & Components" industry group.[393] In early October, Green Car Journal rescinded its Green Car Journal
models.[394] In December 2015, a group of business and environmental leaders, including Tesla CEO Elon Musk, addressed an open letter to CARB, urging the agency to absolve Volkswagen of recalling the 85,000 diesel vehicles affected by the scandal in the US, and argued that Volkswagen should instead be asked to allocate resources to an
accelerated rollout of zero-emissions vehicles ("cure the air, not the cars"). The letter, which includes a 5-step legally enforceable plan, argues that this course of action could result in a "10 for 1 or greater reduction in pollutant emissions as compared to the pollution associated with the diesel fleet cheating", while suggesting that the affected vehicles
on the road in California "represent an insignificant portion of total vehicles emissions in the State" and "do not, individually, present any emissions-related risk to their owners or occupants".[395][396] Similar requests were put forward by the American Lung Association, who petitioned the EPA to determine Volkswagen to promote zero-emissions
producing fewer emissions whenever the cars are being tested".[398] Media The Volkswagen TDI emissions scandal has received widespread negative media exposure, [399][400][401][402][403][404] with headlines fronting the websites of multiple news gathering and reporting organizations. [60][99][405][406] Reuters said that the crisis at
  Volkswagen could be a bigger threat to the German economy than the consequences of the 2015 Greek sovereign debt default. [407] Deutsche Welle, one of Germany's state broadcasters, said that a "lawsuit tsunami" was headed for Volkswagen and that the scandal had dealt a blow to the country's psyche and "Made in Germany" brand. [408] Popular
Mechanics said that the scandal "is much worse than a recall", highlighting that Volkswagen emissions cheating scandal has joined the ranks of other -gate suffix stories, with media coining both Dieselgate and Emissionsgate to describe it.[148][161][207][410][411][412] Public polling
Despite the scandal, one poll conducted for Bild suggested that the majority of Germans (55 percent) still have "great faith" in Volkswagen, with over three-quarters believing that other carmakers are equally guilty of manipulation.[413] Similarly, a poll conducted by the management consultancy Prophet in October 2015 indicated that two-thirds of
Germans believe the scandal to be exaggerated and continue to regard Volkswagen as a builder of "excellent cars".[414] A survey by Northwestern University's Kellogg School of Management, Brand Imperatives and Survata said that nearly 50 percent of US consumers had either a positive or very positive impression of Volkswagen, while 7.5 percent
had a "very negative" impression.[415] Another US survey by market researcher AutoPacific found that 64 percent of vehicle owners do not trust Volkswagen following the scandal.[416][417] See also Exhaust gas recirculation FTP-75 Goodhart's law - Adage about statistical measures
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