

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

2015 OCT 16 P 3:29

CLERK US DISTRICT COURT
ALEXANDRIA, VIRGINIA

THE CENTER FOR AUTO SAFETY

Plaintiff,

v.

VOLKSWAGEN AG, VOLKSWAGEN OF
AMERICA GROUP, INC., VOLKSWAGEN
OF AMERICA, INC., AUDI OF AMERICA,
LLC, and AUDI AG,

Defendants.

Case No.

1:15-cv-1356
(Lolmsv)

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff The Center for Auto Safety (“CAS”) brings this action on its own behalf and on behalf of its members against Volkswagen AG (“VWAG”), Volkswagen of America Group, Inc. and Volkswagen of America, Inc. (collectively, “VWoA”), and Audi of America, LLC and Audi AG (collectively, “Audi”).¹ Plaintiff seeks injunctive and declaratory relief for Volkswagen’s violations of the the California Unfair Competition Law, the California Consumer Legal Remedies Act, the Michigan Consumer Protection Act, Massachusetts General Law chapter 93A, and the District of Columbia Unlawful Trade Practices Act. Plaintiffs make the following allegations upon information and belief.

I. NATURE OF THE ACTION.

1. Four years ago, Martin Winterkorn (“Winterkorn”), Volkswagen’s former Chief Executive Officer (“CEO”), announced Volkswagen’s goal to become the world’s largest

¹ Unless otherwise indicated herein, all of these defendants will be referred to collectively as “Volkswagen.”

automaker. “By 2018,” he told U.S. politicians gathered for the opening of a Volkswagen plant in Chattanooga, Tennessee, “we want to take our group to the very top of the global car industry.”² With only a relatively small share of the gigantic United States market, Winterkorn’s ambitious plan required a dramatic increase in sales in that market. And the way to increase sales here, Volkswagen decided, was to convince American consumers that its diesel-powered cars were a superior alternative, with better fuel efficiency, lower emissions, and uncompromised performance.

2. Between 2009 and September 18, 2015, Volkswagen aggressively marketed its so-called Clean Diesel Turbocharged Direct Injection (“TDI”) light passenger vehicles in the United States, spending millions of dollars on print, television, internet and point-of-sale advertising aimed at convincing American consumers that its cars were environmentally-friendly, fuel-efficient, powerful, and reasonably priced. In order to increase its market share, Volkswagen’s cars needed all those attributes to win over a skeptical American public. Compared with Europe, with its higher fuel costs, expensive cars and less stringent tailpipe emission standards, the United States market was a tough sell for diesel-powered passenger cars.

3. Until September 18, 2015, it looked as if Winterkorn’s ambitious plan had succeeded. In July of 2015, Volkswagen surpassed Toyota Corporation (“Toyota”) as the world’s largest automaker, selling 5.04 million vehicles in the first six months of this year, compared to Toyota’s 5.02 million.³

4. As noted above, the United States was a key part of this global strategy. As reported in *Automotive News*:

Back in 2007, the automaker vowed to crank up U.S. sales of its VW brand to 800,000 vehicles a year by 2018. It was a dizzying

² http://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?_r=0.

³ <http://www.usatoday.com/story/money/2015/07/28/volkswagen-surpasses-toyota-worlds-largest-automaker-first-half-2015/30772509/>.

sum, requiring more than a tripling of its volume at that time. Many in the industry scoffed.

But with steady precision, VW got the skeptics to take a second look. It launched a lower-priced, Mexico-made Jetta and built a plant in Chattanooga that began churning out a new Passat that better fit American tastes and budgets. VW sales doubled between 2009 and 2012, to nearly 440,000, lifting hopes that 800,000 was doable.⁴

By October 1, 2015, VWoA had reported sales of 264,215 passenger vehicles in the United States through September 15, indicating that before the scandal that is the subject of this Complaint surfaced, it was expecting another excellent sales year.⁵

5. Indeed, Volkswagen was so successful in achieving brand loyalty in the clean diesel market, consumers are now left with few options for purchasing comparable vehicles and are left with the dilemma of remaining loyal to Volkswagen or looking for a different type of vehicle. As the New York Times recently reported:⁶

“There’s a bit of a hole in the marketplace,” Ms. Caldwell said. “Other vehicles certainly could be substituted, but there aren’t a lot of affordable fun-to-drive diesels out there.”

Other fuel-efficient and earth-friendly options are also significantly more expensive. VW’s diesel technology has been the market’s most affordable, adding as little as \$700 to the price of a conventional gasoline model.

6. Unfortunately for American consumers, Volkswagen’s success in capturing market share was based on a lie. On September 18, 2015, the United States Environmental Protection Agency (“EPA”) and the California Air Resources Board (“CARB”) both notified Volkswagen that it had violated federal and state laws and regulations by using a “defeat device”--software

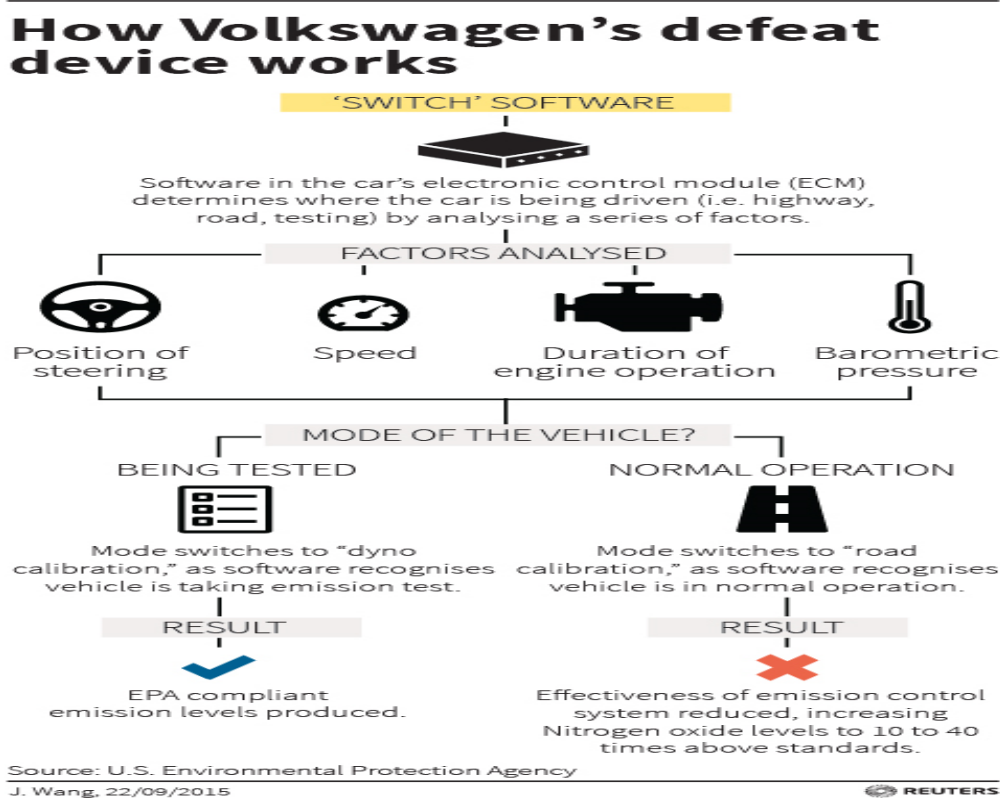
⁴ <http://www.autonews.com/article/20150126/RETAIL01/301269949/how-vw-veered--off-target>.

⁵ <http://media.vw.com/release/1080/>.

⁶ http://www.nytimes.com/2015/10/09/automobiles/with-vw-no-longer-an-option-diesel-buyers-have-few-choices.html?smprod=nytcore-iphone&smid=nytcore-iphone-share&_r=0

specifically intended to circumvent emission test procedures established by the EPA and by CARB. Those notices are attached as Exhibits 1 and 2 to this complaint.

7. Volkswagen’s “defeat device” is a “sophisticated software algorithm”⁷ that detects when the car is undergoing emissions testing. Under such laboratory test conditions, Volkswagen’s vehicles pass the EPA and CARB emissions tests with flying colors. Under normal driving situations, however, the software algorithm *turns off* the emissions control systems, allowing the cars to spew as much as 40 times the allowable amount of pollutants--specifically nitrogen oxides (“NOx”)--into the air. Elevated NOx contributes to the creation of ozone and smog, and is linked to asthma attacks, other respiratory diseases such as emphysema and bronchitis, and causes premature death. A diagram published in Reuters depicts its operation:

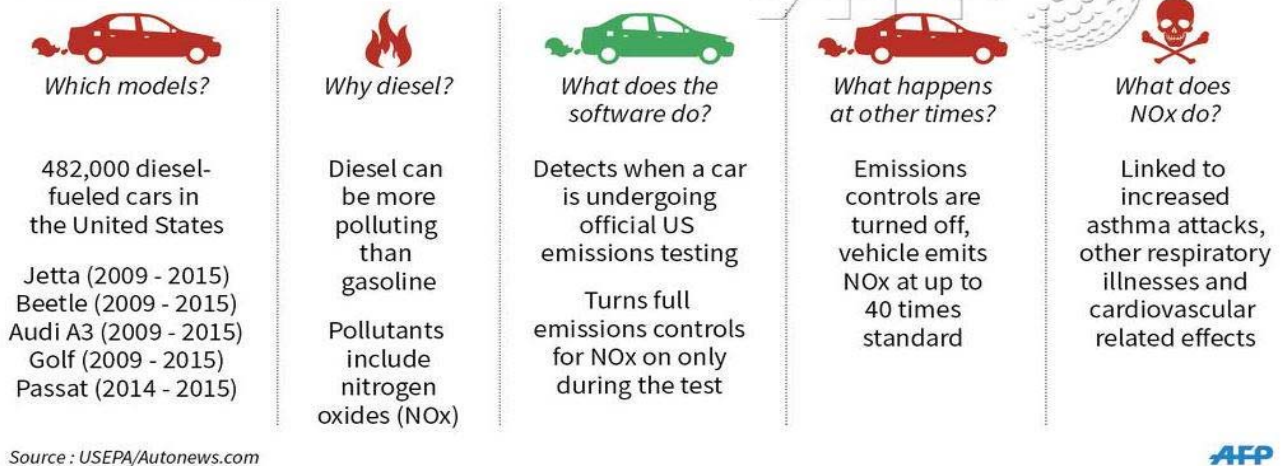


⁷ <http://www.theguardian.com/business/2015/sep/18/epa-california-investigate-volkswagen-clean-air-violations>.

8. The chart below, published by *Agence France Press*, provides a useful and concise primer on the known facts:

Volkswagen's alleged pollution-hiding cars

US Environmental Protection Agency says VW admitted it had equipped cars with software to cheat emissions tests



9. As noted below, dozens of fatalities in the United States over the last seven years have been attributed to the illegal use of this “defeat device.” The scandal has been popularly referred to as “Dieselgate.”

10. Volkswagen has admitted to installing these “defeat devices” in 11 million diesel vehicles that have been sold around the world, including 525,000 in the United States. As Michael Horn (“Horn”), the President and CEO of VWoA, candidly admitted: “[I]et’s be clear about this. **Our company was dishonest. With the EPA, and the California Air Resources Board, and with all of you. And in my German words, we have totally screwed up.**”⁸ (Emphases added). Horn further stated in a video on VWAG’s website that “[o]ur company betrayed the trust of **you, our customers, our employees, our dealers and the public.**”⁹ (Emphases added). And as

⁸ <http://www.roadandtrack.com/new-cars/car-technology/news/a26774/volkswagen-ceo-we-screwed-up/>. A YouTube video of this extraordinary concession can be found here: www.youtube.com/watch?v=Q6z8uUJE-jE.

⁹ <https://www.vwdieselinfo.com/>.

VWAG has posted on its website: “[g]overnment regulations limit the use of engine software that reduces the effectiveness of a vehicle’s emissions control systems. **Those are the ‘defeat device’ regulations, and regrettably, VW violated those regulations. We take full responsibility – and deeply regret that this happened.**”¹⁰ (Emphases added). In a September 23, 2015 press release available on VWAG’s website, the Executive Committee of VWAG’s Supervisory Board stated: “[t]he Executive Committee takes this matter extremely seriously. **The Executive Committee recognizes not only the economic damage caused, but also the loss of trust among many customers worldwide.**”¹¹ (Emphases added). Or, as Berthold Huber (“Huber”), Deputy Chairman of the Supervisory Board, was quoted as saying in a September 25 press release, “[t]he **test manipulations are a moral and political disaster for Volkswagen. The unlawful behavior of engineers and technicians involved in engine development shocked Volkswagen just as much as it shocked the public.**”¹² (Emphases added).

11. In light of the scandal, VWAG’s Management Board forced Winterkorn to resign as CEO of VWAG on September 23.¹³ In doing so, he stated that “**I accept responsibility for the irregularities that have been found in diesel engines.**” (Emphases added).¹⁴ He further observed that “[m]illions of people across the world trust our brands, our cars and our

¹⁰ <http://www.vwdieselinfol.com/faqs/>.

¹¹ http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2015/09/AR_Erklaerung.html.

¹² http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2015/09/Erklaerung.html.

¹³ <http://www.spiegel.de/international/business/falsified-emissions-scandal-push-volkswagen-to-limits-a-1055897.html>

¹⁴ <http://www.nytimes.com/2015/09/24/business/international/volkswagen-chief-martin-winterkorn-resigns-amid-emissions-scandal.html>. Notably, however, Winterkorn plans to stay as the Chairman of the Board of Directors of Porsche Automobil Holding SE, which owns a 52% controlling stake in VWAG; he is also still demanding payment of the ten million Euros owed to him under his employment contract, which does not expire until 2016. <http://www.spiegel.de/international/business/falsified-emissions-scandal-push-volkswagen-to-limits-a-1055897.html>.

technologies. I am endlessly sorry that we have disappointed this trust. I apologize in every way to our customers, to authorities and the whole public for the wrongdoing.”¹⁵ (Emphases added). He professed surprise that “**misconduct on such a scale**” (emphases added) occurred within the Volkswagen group, suggesting that he had no knowledge of it.¹⁶ It has been reported that Winterkorn was being investigated for fraud in connection with the conduct at issue here by prosecutors in Lower Saxony; however, more recently, those prosecutors have stated that any prosecution will await further factual information.¹⁷

12. Volkswagen has ordered its authorized dealers (“Volkswagen Authorized Dealers”) to cease selling the vehicles in which the defeat devices are installed. These include at least the VW Jetta TDI (Model Years 2009-15), the VW Jetta SportWagen TDI (Model Years 2009-14), the VW Golf TDI (Model Years 2010-15), the VW Golf SportWagen TDI (Model Year 2015), the VW Beetle TDI and VW Beetle Convertible TDI (Model Years 2012-15), the VW Passat TDI (Model Years 2012-15) and the Audi A3 TDI (Model Years 2010-15).¹⁸ These affected vehicles will be referred to in this Complaint as the “Affected Vehicles.”

13. Volkswagen’s internal investigation has resulted so far in the suspension of four executives: (a) Heinz-Jakob Neusser (“Neusser”); (b) Ulrich Hackenberg (“Hackenberg”); (c) Wolfgang Hatz (“Hatz”) and (d) Falko Rudolph (Rudolph).¹⁹ Spiegel Online described

¹⁵ <http://www.chicagotribune.com/business/ct-volkswagen-emissions-scandal-20150922-story.html>.

¹⁶ http://www.salon.com/2015/09/24/i_am_stunned_that_misconduct_on_such_a_scale_was_possible_what_you_need_to_know_about_the_volkswagen_mega_scandal/.

¹⁷ <http://www.autonews.com/article/20151001/COPY01/310019972/german-prosecutors-backtrack-on-winterkorns-role-in-vw-probe>.

¹⁸ <http://www.thetruthaboutcars.com/2015/09/vw-audi-canada-halting-sales-tdi-cars-following-us-inquiry/>; <http://www.vwdieselinfo.com/faqs/>.

¹⁹ <http://uk.reuters.com/article/2015/09/29/uk-volkswagen-emissions-idUKKCN0RS0U620150929>.

Hackenberg's departure, which was also typical of the others: "[h]e received news of his immediate suspension from the personnel department and was asked to turn in his company phone and leave his office. He has also been told not to set foot on company premises."²⁰

14. None of these people are mere obscure midlevel engineers. Hackenberg is a VWAG Board member for Technical Development.²¹ The same Spiegel Online article described Hackenberg as "a long-time confidant of Winterkorn and, up until just a few days ago, one of the most powerful men at VW." Hatz is a Porsche AG ("Porsche") Board of Management member in charge of Research and Development and is additionally Head of Engines and Transmissions Development for the Volkswagen Group.²² Neusser was responsible for engine development at Porsche commencing in 1998 and drivetrain development commencing in 2011; in October of 2012, he succeeded Hatz as Head of Powertrain Development at the Volkswagen Group.²³

15. The same Spiegel Online article notes that Hans-Dieter Pötsch ("Pötsch"), the VWAG Finance Chief and Board Chairman of VWAG, may also be under investigation by regulatory authorities. As discussed below, Volkswagen told the EPA about the use of a defeat device on September 3 (if not earlier), but disclosed it to investors only on September 20. "[T]he finance chief remained silent for 17 days. During these 17 days, hundreds of thousands of investors bought VW stock. When the scandal was finally made public on Sept. 20, the price of VW shares plunged by 40 percent, costing stockholders €35 billion."²⁴ VWAG's shares have been on a steady

²⁰ <http://www.spiegel.de/international/business/falsified-emissions-scandal-push-volkswagen-to-limits-a-1055897.html>.

²¹ <http://www.audi.com/corporate/en/company/corporate-management/members-of-the-board/ulrich-hackenberg.html>.

²² http://press.porsche.com/more_about/executives/pag/hatz.php.

²³ http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2012/09/Dr_Heinz_Jakob_Neusser.html.

²⁴ <http://www.spiegel.de/international/business/falsified-emissions-scandal-push-volkswagen-to-limits-a-1055897.html>.

decline ever since, as reflected in this graphic from the *Telegraph* in the United Kingdom:



16. According to an October 3 article from Reuters, “[a]t an internal company meeting this week at the VW headquarters in Wolfsburg, Pötsch described the situation as an ‘existence-threatening crisis for the company’, Germany’s *Welt am Sonntag* reported in a release ahead of Sunday’s publication.”²⁵

17. As explained below, and contrary to the suggestions of some of Volkswagen’s spokespersons, the unlawful conduct here was not the action of renegade lower-level employees. It was instead the product of a concerted scheme by top executives at Volkswagen to save costs through use of the TDI technology, break into the United States diesel passenger car market by

²⁵ <http://mobile.reuters.com/article/idUSKCN0RX0GQ20151004>. Pötsch’s accession to the VWAG Board has been criticized. Hans-Christoph Hirt, a director of Hermes Equity Ownership Services, an adviser to pension fund investors in companies including Volkswagen, said the appointment created a “serious conflict of interest”: “[Pötsch] was a key VW executive for more than a decade and under German law the management board has a collective responsibility . . . The lawyers will surely demand that he recuse himself from any supervisory board meetings when management’s role is discussed.” <http://www.cnbc.com/2015/10/04/volkswagens-uniquely-awful-governance-at-fault-in-emissions-scandal.html>.

concealing from regulators and the public the inability of cars using that technology to meet federal and state emissions standards, market the TDI cars through an elaborate seven-year long campaign of false advertising and lying to state and federal officials, and thereby obtain a monopoly share of the United States Clean Diesel passenger car market.

18. The German periodical *Bild am Sonntag* revealed that Robert Bosch GmbH (“Bosch”), the supplier of some components of the emissions control system, used by Volkswagen in TDI diesel vehicles, also supplied Volkswagen with diesel software for test purposes. Bosch reportedly told VWAG in 2007 that using that software in vehicles on the road would be illegal.²⁶ Similarly, *Süddeutsche Zeitung* has reported that Neusser had ignored least one Volkswagen engineer’s warnings over “possibly illegal” practices in 2011.²⁷ Spiegel Online reported that groups within Volkswagen knew of potential issues as far back as 2005 or 2006.²⁸ Olaf Lies, a VWAG Board member, has stated publicly that **“[t]hose people who allowed this to happen, or who made the decision to install this software--they acted criminally. They must take personal responsibility.”**²⁹ (Emphases added).

19. As discussed in further detail below, Volkswagen has set aside the inadequate sum of 6.5 billion Euros (approximately \$7.2 billion) to deal with the fallout from this fraud. Numerous countries across the world are investigating the matter and here, in the United States, probes are being conducted by the United States Department of Justice (“DOJ”), a coalition of state attorneys general (“AGs”), and members of the United States House of Representatives. The EPA has ordered a recall.

²⁶ <http://www.autonews.com/article/20150927/COPY01/309279989/bosch-warned-vw-about-illegal-software-use-in-diesel-cars-report-says>.

²⁷ <http://www.sueddeutsche.de/politik/abgas-ffaere-vw-topmanager-schwer-belastet-1.2669920>.

²⁸ <http://www.spiegel.de/wirtschaft/unternehmen/volkswagen-aufsichtsrat-lies-macht-managern-vorwuerfe-a-1055381.html>.

²⁹ <http://www.bbc.com/news/business-3439.7426>.

II. THE PARTIES.

A. Plaintiff

20. CAS is a non-profit, Section 501(c)(3) public interest organization headquartered in Washington, DC. It was founded by consumer advocate Ralph Nader and Consumers Union in 1970 to provide consumers with a voice for auto safety and to provide information to consumers on how to purchase the best motor vehicle for their needs. CAS has over 15,000 members nationwide. CAS is dedicated to promoting automobile and highway safety, ensuring that defective and unsafe automobiles and automobile equipment are removed from the road, helping make roads safer for motor vehicles through safer designs and traffic, and working for improved fuel efficiency and lower emissions from motor vehicles.

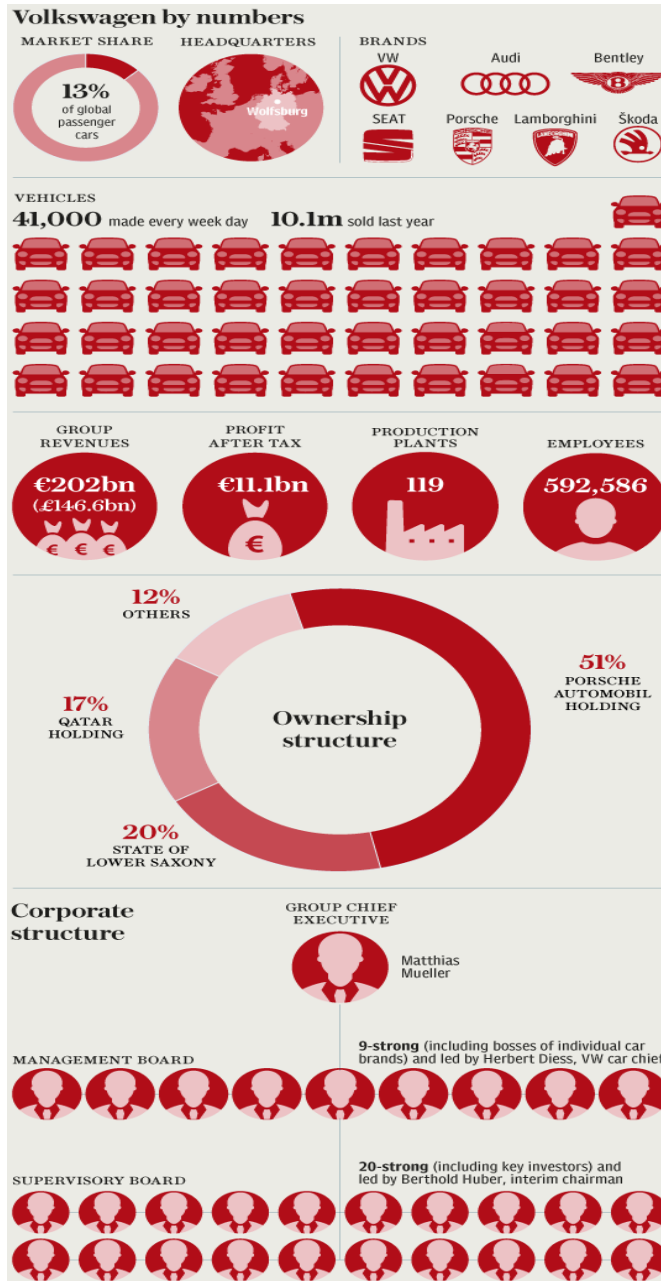
21. As part of its commitment to improved fuel efficiency, in 2008, the CAS integrated into its programs the Safe Climate Campaign which aims to fight global warming by promoting laws and regulations that require strict emissions standards. The Safe Climate Campaign also pushes automakers to make clean, energy efficient vehicles, and urges consumers to make energy-efficient choices in transportation.

22. CAS has individual standing as an organization because it has been harmed by Defendants' wrongful conduct as alleged herein. CAS had devoted considerable time and resources encouraging automakers to sell energy-efficient vehicles and encouraging members to purchase clean, energy-efficient vehicles. As a result of Defendants' unlawful conduct, CAS has had to redirect staff time and financial resources away from its planned activities.

23. CAS also has associational standing on behalf of its members who have claims against Defendants for the violations alleged in this complaint. In addition to the redress it seeks for its own injury, and where its members are entitled to so and the claims for relief otherwise permit, CAS seeks declaratory and injunctive relief.

B. Defendants

24. Defendant VWAG is a car corporation organized and existing under German law, with its principal place of business in Wolfsburg, Germany. VWAG is the parent company of Defendants VVoA and Audi. The structure of VWAG is set forth in the following chart:



25. Defendant Audi AG is a car corporation organized and existing under German law, with its principal place of business in Ingolstadt, Germany. It is owned by VWAG. Audi was

created when VWAG merged two of its companies, Auto Union and NSU Motorenwerke AG. Audi is a 99.55%-owned subsidiary of the Volkswagen Group. Audi is now Volkswagen's luxury vehicle brand, and uses the slogan "Truth in Engineering".

26. Defendant the Volkswagen Group of America, Inc. is a corporation organized and existing under New Jersey law. Its headquarters are in Herndon, Virginia. The Volkswagen Group of America, Inc. is a wholly-owned subsidiary of VWAG. It is one of the world's largest producers of passenger cars. Through Volkswagen of America, Inc., it sells the Beetle, Beetle Convertible, CC, Eos, e-Golf, Golf, Golf GTI, Golf SportWagen, Jetta, Passat, Tiguan, and Touareg vehicles through Volkswagen Authorized Dealers located in the United States. Volkswagen Group of America, Inc.'s operations in the United States include research and development; parts and vehicle processing; parts distribution; sales, marketing and service offices; financial service centers; and manufacturing.

27. Defendant Volkswagen of America, Inc. is owned and operated by the Volkswagen Group of America, Inc. and sells Volkswagen vehicles in the United States. Its United States headquarters are at the same address as Volkswagen Group of America, Inc. in Herndon, Virginia.

28. Defendant Audi of America, LLC is a subsidiary of Audi AG that sells Audi vehicles in the United States. Its United States headquarters are at the same address as Volkswagen Group of America, Inc. in Herndon, Virginia.

III. JURISDICTION AND VENUE.

29. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1332(a) and 1367. The cost of compliance with the requested injunctive relief exceeds \$75,000.

30. Venue is proper in this judicial district and in the Alexandria Division thereof pursuant to 28 U.S.C. § 1391(b) and (c), in that at least one of the Defendants resides in this judicial district, is licensed to do business or is doing business in this judicial district.

IV. TRADE AND COMMERCE.

31. Approximately 482,000 Affected Vehicles have been sold or leased in the United

States in a continuous and uninterrupted flow of interstate commerce and foreign commerce during the last seven years, including through and into this judicial district. The business activities of the Defendants substantially affected interstate trade and commerce in the United States and caused antitrust injury in the United States.

V. FACTUAL ALLEGATIONS.

A. Automobile Emissions Regulations in the United States.

32. Congress enacted the first major Clean Air Act (“CAA”) and established the EPA in 1970. The CAA, amended in 1975 and 1990, requires vehicle manufacturers to certify to the EPA that their cars and trucks will meet applicable federal emission standards.³⁰ The EPA administers a certification program to ensure that every vehicle complies with its emission standards. EPA-issued certificates of conformity are required for every vehicle sold in the United States, and the EPA must approve every vehicle entering United States commerce. In these certification efforts, the EPA relies on test data submitted by automobile manufacturers, which submit the vehicles to the agency’s testing procedures in their own laboratories. The EPA audits a small fraction of the new vehicles each year to ensure compliance in a process known as “confirmatory testing.”³¹

33. The Affected Vehicles, like any other car sold in the United States, were required to satisfy emission standards for certain air pollutants, including NOx. 40 C.F.R. §86.1811-4; Clean Air Act §101(b)(1) – (2), 42 U.S.C. §7401(b)(1)(2).

34. Section 203(a)(3)(b) of the CAA prohibits the manufacture, selling, or installation

³⁰ <http://www2.epa.gov/laws-regulations/summary-clean-air-act>.

³¹ <http://www.autonews.com/article/20151004/OEM11/310059955/vw-emissions-violations-put-self-certification-under-new-scrutiny>. The EPA has a webpage describing that process in detail. http://www3.epa.gov/otaq/cert/eng-cert/confirmatory/overviewconfirmatorytesting/overviewconfirmatorytestingscript_updated.pdf.

of any device that bypasses, defeats or renders inoperative a required element of a vehicle's emissions control system. 42 U.S.C. §7522(a)(3)(b). Section 203(a)(10) of the same statute also prohibits the sale of motor vehicles or engines that are not covered by valid certificates of conformity with applicable emissions standards. 42 U.S.C. §7522(a)(1). The regulatory requirements for defeat devices are set forth in 40 C.F.R. Part 86.

35. The EPA has been rigorous in punishing automobile manufacturers or engine makers that utilize defeat devices. For example, in late 1995, it entered into a \$45 million dollar settlement with General Motors Corporation regarding the use of defeat devices on 470,000 Cadillac cars.³² Likewise, in August of 1998, it fined Honda \$267 million and Ford \$7.8 million for selling vehicles equipped with defeat devices that prevented emission control systems from working properly.³³ Similarly, in October of that year, it and the DOJ fined seven truck and heavy duty equipment manufacturers \$83.4 million for engaging in similar conduct.³⁴

36. Volkswagen was or should have been aware of these precedents. Indeed, the company itself is a recidivist violator of the CAA. In July of 1973, the EPA referred to DOJ for legal action a claim that defeat devices were installed on 1973 Volkswagens. A copy of that referral is attached as Exhibit 3 to this complaint. The matter was settled for \$120,000 in March of 1974.³⁵ Similarly, in June of 2005, Volkswagen entered into a consent decree with DOJ whereby it paid a \$1.1 million penalty concerning its failure to notify the EPA of emissions defects

³² http://www.autosafety.org/sites/default/files/imce_staff_uploads/Cadillac%20%2445%20Million%20Defeat%20Device%20Penalty%2011-31-95.pdf.

³³ http://www.autosafety.org/sites/default/files/imce_staff_uploads/defeat.pdf

³⁴ <http://www2.epa.gov/enforcement/cummins-engine-company-diesel-engine-clean-air-act-settlement>.

³⁵ http://www.autosafety.org/sites/default/files/imce_staff_uploads/VW%20Defeat%20Device%20%24120%20C00%20fine%203-12-74%20Pr.pdf.

in certain vehicles manufactured at its facility in Mexico.³⁶ A copy of that decree is attached as Exhibit 4 to this Complaint.

37. CARB is a department of the California Environmental Protection Agency. It was created in 1967. California is the only state permitted to have such a regulatory agency, because it was created prior to the enactment of the CAA. CARB's mission is to "[t]o promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the effects on the economy of the state."³⁷

38. The EPA introduced phased in Tier 2 emissions standards from 2004 to 2009. California has similar standards in its CA LEV II standard. The Tier 2 Bin rating system applied to all passenger vehicles regardless of fuel type. Tier 2 Bin 5 standards—the ones applicable to the Affected Vehicles—imposed an emission rate for NOx of 0.07 grams per mile.³⁸

39. New cars that are sold bear stickers indicating that they are EPA-and/or CARB compliant. Here is a photograph of such a sticker on the inside of the hood of a TDI Audi A3, one of the Affected Vehicles.

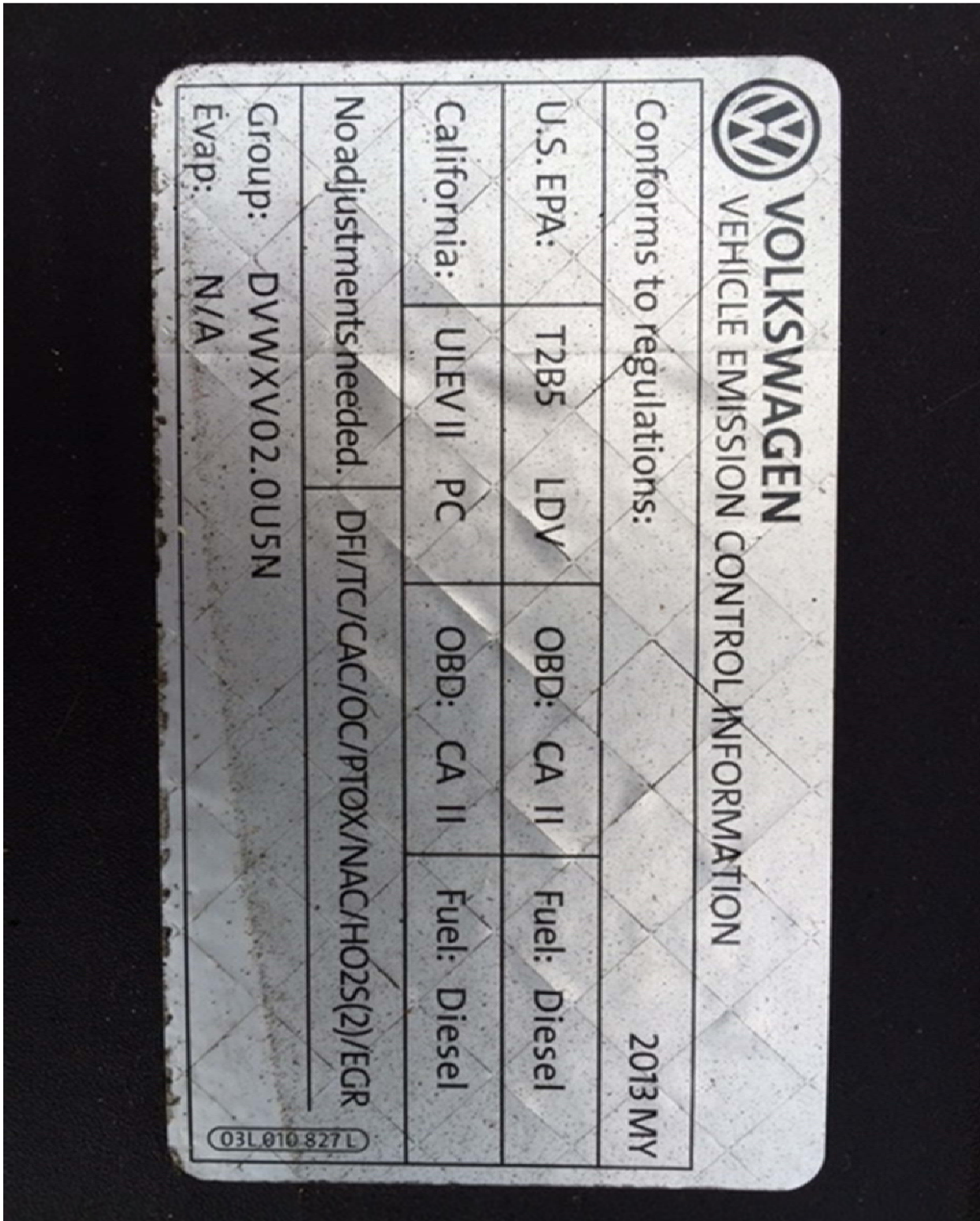


³⁶ http://www.autosafety.org/sites/default/files/imce_staff_uploads/volkswagen-cd.pdf.

³⁷ <http://www.arb.ca.gov/html/mission.htm>.

³⁸ <http://www.nctcog.org/TRANS/air/vehicles/tech/compliance/index.asp>.

And here is a similar sticker for a 2013 TDI Volkswagen Golf:



Through these types of notice, Volkswagen was representing to customers that the Affected Vehicles complied with federal and state emissions laws. This was an outright lie.

B. Diesel Cars and Control of NOx Emissions.

40. Diesel-powered cars, like gasoline-powered cars, must also meet the emissions standards established by the EPA and CARB. With diesel-powered engines, car manufacturers must use different--and more expensive--emission control systems than are used in gasoline-powered cars.

41. Diesel fuel has a greater energy density than gasoline. It converts heat into energy more efficiently than gasoline, sending less heat out of the tailpipe than gas-powered vehicles. Because it has greater energy density, diesel also is more efficient: diesel vehicles can get up to 30% more miles per gallon than similar gasoline-powered cars. In addition, because of their higher compression, diesel engines can generate a lot of torque, providing strong acceleration and additional power needed for towing.

42. While diesel vehicles have certain advantages over gasoline, they also have some disadvantages. Because diesel fuel is heavier and oilier than gasoline, it can generate more pollution. While diesel engines emit lower amounts of carbon monoxide than gasoline-powered engines, they emit more NOx.

43. Diesel fuel exhaust has been recognized by the World Health Organization to be a carcinogen for humans.³⁹

44. Automakers have faced significant challenges in controlling NOx emissions sufficiently to meet environmental standards, particularly with smaller vehicles, and particularly in the United States, which has some of the strictest emission controls in the world. The website of greencongress.com explains the two types of approaches diesel automobile manufacturers have

³⁹ http://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213_E.pdf.

used to deal with NO_x emissions:

Broadly, there have been two catalytic approaches used to reduce exhaust NO_x: urea-based selective catalytic reduction (SCR) and lean NO_x trap (LNT) catalysts.

--The urea-SCR (urea=AdBlue) approach requires on-board storage of the reductant fluid which is introduced into the exhaust upstream of the SCR catalyst. It is then converted to ammonia which interacts with NO_x on the SCR catalyst to form water and nitrogen.

--LNT technology utilizes fuel from the vehicle and advanced engine controls to enable periodic operation of the engine at rich air-to-fuel ratios to produce oxygen-depleted exhaust suitable for reducing NO_x stored on the LNT catalyst surface.⁴⁰

45. The article indicates that Volkswagen had planned to use both technologies as of 2007, but elected to go with the LNT approach (which it referred to as TDI). As explained below, the deciding factor was apparently cost. Because of the extra equipment (including a urea tank) and technology required to clean the NO_x emissions from the diesel exhaust, SCRs can add significantly to the cost of producing the engine. They also make diesel cars heavier than they otherwise would be, thus potentially decreasing fuel efficiency, torque and power.

46. Honda, which sells diesel cars in markets other than the United States, never tried to sell them here. That is because, according to Honda's research, "[t]he market would not bear the costs of doing diesel correctly." In order to meet the stringent United States emissions standards, Honda would have had to add costly emissions controls to every diesel model, which would make them more expensive than gasoline-powered competitors. "At such a high premium, customers simply wouldn't buy them."⁴¹

C. Volkswagen's Decision To Use TDI Technology.

47. Volkswagen has been selling cars in the United States since 1949, when it introduced the iconic Volkswagen Beetle. Although it was for many years the top-selling imported

⁴⁰ <http://www.greencarcongress.com/2015/09/20150921-vw2l.html>.

⁴¹ <http://mashable.com/2015/09/27/vw-dieselgate/#2VosDbcL7iqT>.

car in the United States, Japanese imports overtook Volkswagen and other European imports in the 1990s.

48. The decisive factor in the decision to use TDI technology in 2007-08 was the appointment of Winterkorn as CEO of VWAG in January of 2007. Winterkorn was involved in overseeing research and development and had that responsibility at the time he resigned as CEO. In 1995, he took over as the head of Volkswagen Group Product management and a year later, he assumed the role of Member of the Board of Management for “Technical Development” at the Volkswagen brand. He assumed a similar role when he became Chairman of the Board of Management at Audi.⁴²

49. Before Winterkorn took over as VWAG’s CEO on January in 2007, Volkswagen had partnered with Bosch and Daimler to explore the use of a diesel emissions control system called BlueTec.⁴³ BlueTec was a technology developed by the latter two companies and championed by Wolfgang Bernhard (“Bernhard”), former head of the Volkswagen brand and a former Daimler executive. BlueTec was an SCR technology; it required the use of a liquid urea tank, so that urea could be sprayed onto the emissions in order to neutralize the NOx. The urea tank not only takes up space and adds weight (disadvantages that are especially acute in the market for small, fuel-efficient cars), but also requires the owner to refill the tank, making the diesel engine more inconvenient than a traditional gasoline-powered car. When Bernhard left the company after Winterkorn took control, the BlueTec technology was scrapped for smaller vehicles. Volkswagen only began using a form of SCR technology on a few of its smaller vehicles in 2012.

50. *Automotive News* describes the sequence of events:

Bild am Sonntag said the roots of the crisis were planted in 2005 when then-VW brand Chief Wolfgang Bernhard wanted VW to

⁴² See http://www.volkswagenag.com/content/vwcorp/content/en/the_group/senior_management/winterkorn.html.

⁴³ For the source of this information, see <http://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html? r=0>.

develop a new diesel engine for the U.S. market. Bernhard recruited Audi engineer Rudolf Krebs who developed a prototype that performed well in tests in South Africa in 2006, the paper said.

Bernhard and Krebs argued that the only way to make the engine meet U.S. emission standards was to employ in the engine system an AdBlue urea solution used on larger diesel models such as the Passat and Touareg, according to the report.

This would have added a cost of 300 euros (\$335 in today's U.S. dollars) per vehicle -- a sum that VW finance officials said was too much at a time when a companywide cost-cutting exercise was under way.

Bernhard left VW in January 2007 before the diesel engine went into production. Krebs was moved to another role when Martin Winterkorn became VW Group and brand CEO in 2007.

Winterkorn, Audi's former CEO, asked Audi development boss Ulrich Hackenberg and Audi engine boss Wolfgang Hatz to move to VW's Wolfsburg headquarters and continue development work on the engine, *Bild am Sonntag* said.

The engine then ended up in VW Group diesels with its engine software manipulated to fool diesel emissions tests in the U.S.⁴⁴

Hatz and Hackenberg, as noted above, were two of the executives whom VWAG recently suspended.

51. Engineers at Volkswagen had been looking at an alternative to BlueTec technology, an alternative that ultimately evolved into the TDI "Common Rail" system. In 2006, Richard Dorenkamp, head of Volkswagen's diesel engine development, gave a presentation in Detroit. He described the TDI system Volkswagen engineers developed and how it could be used in small cars and meet increasing US demands for fewer emissions.⁴⁵ Volkswagen's TDI Clean Diesel pollution

⁴⁴ <http://www.autonews.com/article/20150927/COPY01/309279989/bosch-warned-vw-about-illegal-software-use-in-diesel-cars-report-says>. Winterkorn was generally very concerned about the costs associated with developing eco-friendly automotive engines. As he said at the 2014 Paris auto show, "[c]limate protection is not available free of charge. Every gram of reduction in [tailpipe] CO2 costs us 100 million euros. Every gram!" <http://blog.caranddriver.com/vws-winterkorn-to-greens-so-get-off-our-backs-already/>.

⁴⁵ http://www1.eere.energy.gov/vehiclesandfuels/pdfs/deer_2006/session7/2006_deer_dorenkamp.pdf.

control technology differed from the SCR technology used by other manufacturers to control NOx emissions. The greencarcongress.com article cited earlier describes it in detail. Instead of having a urea tank, the TDI Clean Diesel cars technology used a trap to collect NOx. While saving the space, weight and cost required by the urea tank in the SCRs, Volkswagen's TDI Clean Diesel technology--when it was operational--required additional use of fuel, thus degrading both gas mileage and performance. The trap was controlled by a computer module that could save fuel by allowing more pollutants to pass through the exhaust system.

52. In June of 2007, six months after Winterkorn took over as CEO of VWAG, Volkswagen issued a report entitled "Power Train and Fuel Strategy--The Path To The Future."⁴⁶

It stated:

In the first stage on the path to this independence, it will be important to utilize existing fossil fuels as efficiently as technically possible. Volkswagen is putting its stamp on this phase with vehicles such as the BlueMotion models, a universally fuel-efficient fleet of TDI engines, highly efficient and unique TSI engines, successful natural gas vehicles (EcoFuel) and a lineup of models that still leaves room for automotive dreams. Very soon these fundamental technologies will be further refined. **New powertrains, including an engine concept developed for use in the USA, under the working title "BlueTDI", are already in the prototype stage. These engines will fulfill the toughest emissions laws in the world – even the so-called "Tier2 Bin5" in California, one of the most stringent emissions standards in the world.** (Emphases added).⁴⁷

53. Volkswagen had planned to introduce the Jetta TDI Clean Diesel in the United States earlier than it eventually did. In November of 2007, it was reported as follows:

A problem with the emissions system in Volkswagen's new Jetta

⁴⁶ It can be found at http://www.volkswagenag.com/content/vwcorp/info_center/en/themes/2007/06/powertrain_and_fuel_strategy.html.

⁴⁷ In 2008, five VWAG engineers published a two-part article in the May and June issues of *MTZ* magazine saying they had resolved the issue of how to best control emissions and could now meet California standards through the use in part of a new on-board diagnostics system. Similarly, Achim Freitag, a testing engineer in Volkswagen's diesel development department, touted the new engine in a speech given later that year. See <http://www.pbs.org/wgbh/nova/next/tech/volkswagen-diesel-emissions/>.

TDI will delay the launch of the diesel sedan for about six months. The car is critical to VW's plans to get back on track in the United States.

VW spokesman Keith Price confirmed that the delay will be announced this week at the Los Angeles auto show. Price would not give specifics about the technical problem, but he said it has been fixed.

The technical changes engineers made to solve the problem mean the car must go through emissions testing and validation again, Price said.

VW dealers have been without a new diesel car to sell since last spring. Production of the new model, which will be sold in all 50 states, was scheduled to start in January. The car will be built in Puebla, Mexico.

U.S. sales originally were expected to begin in early spring, Price said. Now sales won't start until later in the summer."

"Sure, they're disappointed," Price said of dealers who have learned of the delay.

Price said there is a lot of pent-up demand from loyal VW diesel buyers for the next-generation Jetta, which has a new engine built in Germany and a new diesel fuel injection system.

"They're disappointed, but they see the point that this car has to be perfect," Price said of the dealers, adding, "They recognize the importance of this not only for their stores, but for the VW brand."

A fleet of about 40 Jetta TDIs is undergoing testing as part of the validation procedure.⁴⁸

54. What apparently happened is that the TDI technology failed initially to withstand United States emissions testing. The decision was made to delay the launch of the vehicle and activate the algorithm that functioned as a defeat device in the software management system. Horn confirmed this scenario orally in testimony given to the Subcommittee of Oversight & Investigations of the Energy & Commerce Committee of the United States House of

⁴⁸ <http://www.cleanmpg.com/forums/showthread.php?t=7254>.

Representatives on October 8 (“October 8 Hearing”).⁴⁹ This is consistent with the timing of the letter from Bosch described above that raised the illegality of such a tactic. It is also consistent with recent revelations that appeared in the October 4 issue of *Bild am Sonntag*:

An internal review at Volkswagen AG shows the decision to install software that reduces diesel emissions in testing was made just before serial production of the company’s EA 189 engine [used in many of the Affected Vehicles], German tabloid *Bild am Sonntag* said.

Bild said the software was first installed in its diesel engines in 2008, shortly before the EA 189 was mass produced. The move was taken because there was no way at the time to reconcile meeting emission standards within the targeted cost of the engine, the tabloid said in an advance release of the article to be published Sunday. Otherwise the company would have had to abandon the introduction of the engine, development of which was begun in 2005, the newspaper said.⁵⁰

55. This was not a course of conduct known to only a select few within Volkswagen.

As noted in one article:

The idea that a small group of relatively junior engineers would have done this on their own is not consistent with how engineers build complex, safety-critical systems.

The basic engine management software was written by component supplier Bosch. The responsibility for configuring the software for the EA189 engine would have involved a substantial, multi-disciplinary team of engineers at Volkswagen, working with engineers at the supplier Bosch.

Before the engines could have gone into production, those engineers and their managers would have reviewed and approved the design and calibration of the engine management systems.

They would have also agreed upon, and employed, a systematic testing schedule. This would have involved testing on an engine-only rig, road testing on private grounds as well as testing on public roads.

The anti-pollution engineers would have been responsible for ensuring that the engine management system was sending

⁴⁹ His testimony is on video at <http://www.c-span.org/video/?328599-1/hearing-volkswagen-emissions-violations>.

⁵⁰ <http://www.marketwatch.com/story/vw-began-using-emissions-software-in-2008-report-2015-10-04>.

appropriate commands to their components, and that their hardware was responding appropriately.

This kind of exhaustive testing is one of the reasons why developing new vehicle models costs billions of dollars and takes several years.

One possibility is that a large group of Volkswagen engineers conspired to falsify the written records of of this testing.

An alternative scenario is that accurate written testing records were made, showing that the pollution controls were inoperative in normal driving. These accurate records were reported through normal channels, and the engines went into production anyway.

It is very hard to imagine how either event could have occurred without the influence of senior managers.⁵¹

Horn virtually conceded as much at the October 8 hearing.

56. The 2009 Model Year TDI Jetta was introduced and passed the Tier 2 Bin 5 emissions test with flying colors. A Reuters article describes its successful launch:

Volkswagen had heavily marketed what it called “clean diesel” engines starting in 2008 with the 2009-model Jetta TDI. It appeared to have found a sweet spot between high-performance and fuel-efficiency with a zippy, fun-to-drive car that topped 40 miles per gallon in highway driving. Named “Green Car of the Year” at the Los Angeles auto show in 2008, the Jetta TDI was seen as a breakthrough in a country where diesel passenger cars occupy a tiny niche compared with Europe, where they are about half of the market.

“It’s not your grandfather’s diesel,” Krause said in a September 2008 presentation to U.S. regulators, according to a video of the remarks.

[Norbert] Krause [head of VWoA’s environmental office until 2009] and other VW officials promised a diesel that would meet pollution laws in all states, including California where diesel engines had long been associated with smog and cancer-causing soot.

By that point, VW and other automakers had lobbied for almost a decade for regulators to give diesel another chance. In 2000, VW and other companies with an interest in promoting diesel, including Mazda, formed the Diesel Technology Forum to lobby for increased use in the United States as a way to reduce reliance on imported oil. In 2005, an energy bill signed by President George

⁵¹ <http://theconversation.com/where-were-the-whistleblowers-in-the-volkswagen-emissions-scandal-48249>.

W. Bush offered tax credits for diesel buyers. That gave the first wave of diesel Jetta buyers an income tax credit of \$1,300 each.

In 2009, after the new Jetta went on sale, VW dealers initially sold out, including in California where regulations had effectively shut the market to diesels earlier in the decade.⁵²

57. As noted in the article, *Green Car Journal* gave it the 2009 Green Car of the Year award and gave the TDI Audi A3 the 2010 Green Car of the Year Award.⁵³ Those awards have been rescinded in light of the present scandal.⁵⁴ The TDI Clean Diesels were a resounding success and VWoA sold many units.⁵⁵ As recently as its 2014 sustainability report, VWAG crowed about how “[t]he Volkswagen Group has a long tradition of resolute commitment to environmental protection” and how it intended to “put our creative powers to good use for the benefit of the people and the environment.”⁵⁶

58. At conferences and in published papers, Volkswagen extolled the efficiency and low emissions of its Clean Diesel technology.⁵⁷ And commentators agreed. One stated that Volkswagen was “the only company to have mastered the new emissions regulations using a compact, inexpensive treatment system. It allowed them to roll out diesel engines in one small car

⁵² <http://uk.reuters.com/article/2015/09/24/uk-usa-volkswagen-deception-insight-idUKKCN0RO2J720150924>.

⁵³ https://en.m.wikipedia.org/wiki/Green_Car_of_the_Year.

⁵⁴ <http://www.autoblog.com/2015/09/30/vw-stripped-of-green-car-of-the-year-awards-for-jetta-a3-diesel/>.

⁵⁵ The chronicle of its United States sales is found here: <http://www.ibtimes.com/volkswagen-diesel-scandal-heres-how-bad-volkswagen-sales-were-company-was-caught-2114603>.

⁵⁶ <http://www.autoblog.com/2015/09/30/vw-stripped-of-green-car-of-the-year-awards-for-jetta-a3-diesel/>.

⁵⁷ See, e.g., <http://www.sae.org/events/gim/presentations/2009/norbertkrause.pdf>; <http://dls.virginia.gov/GROUPS/transaccount/meetings/092010/CleanDiesel.pdf>; http://cleandieseldelivers.com/media/Douglas-Skorupski-VWoA_DTF_March2015.pdf.

after another at relatively low prices.”⁵⁸ Volkswagen’s competitors had long wondered how Volkswagen could produce a clean diesel engine at such an affordable price. As Robert Lutz, former vice chairman of General Motors Corporation, recounted: “I kept asking our engineers: ‘What’s wrong with you guys? VW seems able to do it.’ I said, ‘Are they magicians or something?’ The engineers said they couldn’t answer that question.”⁵⁹ Now, they have their answer. Volkswagen cheated.

59. The competitive advantages of cheating on emissions have now become clear. “Manipulating emissions results allowed Volkswagen to keep down engine costs in a ‘clean diesel’ strategy that was popular in Europe and at the heart of a drive to improve U.S. results.”⁶⁰ As an article in the *New York Times* put it, “[d]isabling the emissions controls brought major advantages, including much better mileage--a big selling point in Volkswagen’s push to dominate in America.”⁶¹ These sales were part of the reason VWAG was able to surpass Toyota as the world’s biggest automaker in 2015, as noted above. And they were sales built upon lies.

60. This systemic attitude of winning at all costs in spite of noncompliance with national environmental regulations is part of the corporate culture of Volkswagen, as explained at length in a September 24, 2015 *New York Times* article:⁶²

There is a long tradition of scandal and skulduggery in the auto industry, but few schemes appear as premeditated as Volkswagen’s

⁵⁸ <http://www.pbs.org/wgbh/nova/next/tech/volkswagen-diesel-emissions>.

⁵⁹ <http://www.freep.com/story/money/cars/2015/09/26/vw-cheat-emissions-diesel-engine-fallout/72612616/>.

⁶⁰ <http://www.reuters.com/article/2015/09/30/us-volkswagen-emissions-plan-idUSKCN0RT0OL20150930>.

⁶¹ <http://mobile.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?referer>.

⁶² http://www.nytimes.com/2015/09/25/business/international/problems-at-volkswagen-start-in-the-boardroom.html?_r=1.

brazen move to use sophisticated software to circumvent United States emissions standards.

That such a thing could happen at Volkswagen, Germany's largest company and the world's largest automaker by sales — 202.5 billion euros last year — has mystified consumers and regulators around the world. But given Volkswagen's history, culture and corporate structure, the real mystery may be why something like this didn't happen sooner.

“The governance of Volkswagen was a breeding ground for scandal,” said Charles M. Elson, professor of finance and director of the John L. Weinberg Center for Corporate Governance at the University of Delaware. “It was an accident waiting to happen.” The company, founded by the Nazis before World War II, is governed through an unusual hybrid of family control, government ownership and labor influence. Even by German standards, “Volkswagen stands apart,” said Markus Roth, a professor at Philipps-University Marburg and an expert in European corporate governance. “It's been a soap opera ever since it started.”

I spoke this week to a longtime former senior Volkswagen executive, who agreed that a scandal, especially one involving emissions, was all but inevitable at Volkswagen. He cited the company's isolation, its clannish board and a deep-rooted hostility to environmental regulations among its engineers.

The former executive, who spoke on the condition of anonymity because he now works at a competing global automaker, said that Wolfsburg, where Volkswagen is based in Lower Saxony and the city with the highest per capita income in Germany, is even more remote and isolated than Detroit was in its heyday. “The entire economy is automotive,” he said. “People have a completely uncritical view of cars and their impact on the environment because they all make a living from the industry.”

The Volkswagen board has been especially slow to move on environmental issues, investing less in electric and hybrid engine technology than industry leaders.

“There's an attitude among the German public that it's very unfair for the U.S. to target the auto industry over emissions,” Professor Roth said. “If you have electric cars and a coal-fired plant producing the electricity, you gain nothing.”

The former Volkswagen executive said Volkswagen's engineer-driven culture takes the notion even further. He said the engineers felt that the politicians were guilty of rank hypocrisy, especially in

the United States, also grumbling that electric cars make no sense as long as power plants are burning fossil fuels.

“There’s an attitude of moral superiority there,” he said. “The engineers think they know best.”

That Volkswagen is nonetheless obliged to obey applicable environmental laws, he said, is a notion likely to fall on deaf ears in Wolfsburg, especially compared to demands to be No. 1 in sales. (The motive for the software evasion is widely believed to have been to increase sales of diesel-powered cars in the United States.)

Thus, executives and engineers at Volkswagen were clearly unhappy with United States automotive emissions standards and were all too willing to sacrifice those standards (and their obligations under United States antitrust laws) in order to ensure that their company became the number one automaker in the world. The current scandal involving Volkswagen Clean Diesel TDI vehicles is a direct result of that arrogant intention to flout United States environmental laws. It is also a direct result of what has been described by one German executive as Volkswagen’s “uniquely awful” corporate governance.⁶³

D. The Clean Diesel Car Market.

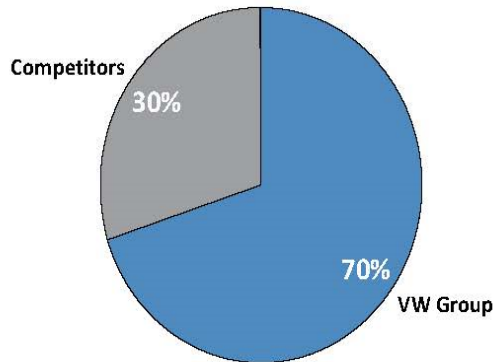
61. Volkswagen’s illegal conduct in this country occurred in the Clean Diesel passenger car market in the United States (the “Clean Diesel Car Market”), which can be viewed as a market of its own or as a submarket of passenger cars sold in this country. This fact was confirmed in a presentation by Douglas Skorupski (“Skorupski”), Manager of Power Train Strategy for VWoA, given to the Diesel Technology Forum (“DTF”) in March of 2015:

⁶³ <http://www.cnbc.com/2015/10/04/volkswagens-uniquely-awful-governance-at-fault-in-emissions-scandal.html>.

Diesel is an important differentiator for the VW Group

TDI – Turbocharged Direct Injection Diesel

Clean Diesel volume Cars and SUVs 2014

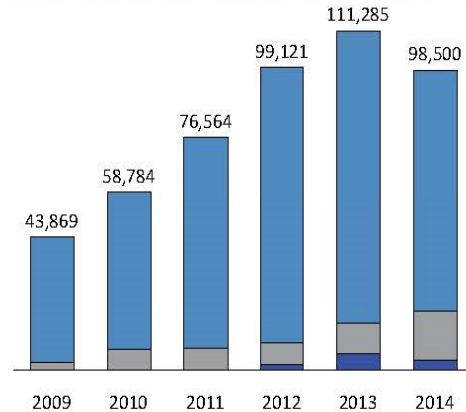


➔ VW Group US Diesel market share PC ~ 70 %

March 2015

VWoA- Product Strategy

Volkswagen Group Clean Diesel Sales Volume



➔ Strong growth since introduction

Source for competitor sales: Polk

4



62. Thus, VWoA clearly views clean diesel cars as a distinct market and Volkswagen's TDI technology as a factor that allowed it to obtain a monopoly share of that market.⁶⁴ It distinguished Clean Diesel cars from gasoline/electric hybrid cars based on superior performance:

⁶⁴ The presentation can be found at http://cleandieseldelivers.com/media/Douglas-Skorupski-VWoA_DTF_March2015.pdf. Bosch has similarly identified a distinct Clean Diesel car category: <http://www.low-carbonfuels.com/pdfs/acte2011presentations/Day1/Breakout1/LightDuty/ACT2011-Breakout1-FreitagAlexPresentation150.pdf>. And the EPA has noted that "Clean diesel" refers to a three-part emissions control system that combines cleaner diesel fuel, advanced engines and effective emissions control technology.

“[o]ne way Volkswagen aimed to achieve its lofty goal was by betting on diesel-powered cars — instead of hybrid-electric vehicles like the Toyota Prius—promising high mileage and low emissions without sacrificing performance.”⁶⁵ Similarly, a survey conducted by Strategic Vision for Volkswagen found that customers of diesel and hybrid vehicles are very different and there is “very little crossover from one to the other.”⁶⁶ The same article noted that Clean Diesel TDI and hybrid buyers differed demographically; the latter were “were just 51 percent male, 78 percent of them were married, 89 percent had no kids in the household, and their average age was 61”, while the former “included far more men than women[,] [f]ewer of them were married, but more of them had children in the house, and they were fully 17 years younger, with an average age of 44.” Likewise, a Volkswagen Clean Diesel IQ survey found that diesel car customers are highly aware of the benefits of clean diesel technology in contrast to hybrid and gasoline car customers. Furthermore, 94% of diesel customers will purchase clean diesel cars again while only 26% of hybrid and gasoline car customers will consider clean diesel cars for their next purchase.⁶⁷ All of this indicates little cross-elasticity of demand between hybrid vehicles and Clean Diesel vehicles.

63. Indeed, the major European competitors of Volkswagen in the Clean Diesel Car Market belong, along with Volkswagen, to an organization that is devoted to extolling the benefits of Clean Diesel cars.⁶⁸

64. Bloomberg Business noted that consumers are willing to pay a substantial premium

⁶⁵ <http://mobile.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-a-scandal.html?referer>.

⁶⁶ http://www.greencarreports.com/news/1080201_vw-diesel-buyers-hybrid-buyers-both-want-fuel-economy-but-beyond-that.

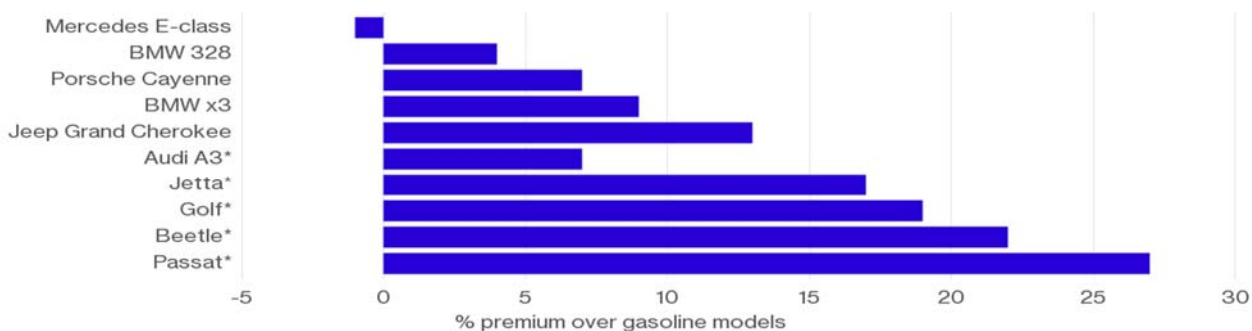
⁶⁷ <http://www.autosphere.ca/fleetdigest/2013/04/01/volkswagen-surveys-diesel-drivers/>. See also <http://www.cmu.edu/gdi/docs/diesel-and.pdf> (noting many key differences between diesel and hybrid car customers).

⁶⁸ <http://www.clearlybetterdiesel.org/index.html#cleanDiesel>.

for Clean Diesel vehicles over those of its competitors.⁶⁹

Diesel Power

Relative to gas models, Volkswagen's dirty diesels were sold for large premiums.



* VW models targeted by the EPA

Source: BMW, Daimler, Fiat-Chrysler, Volkswagen

Bloomberg

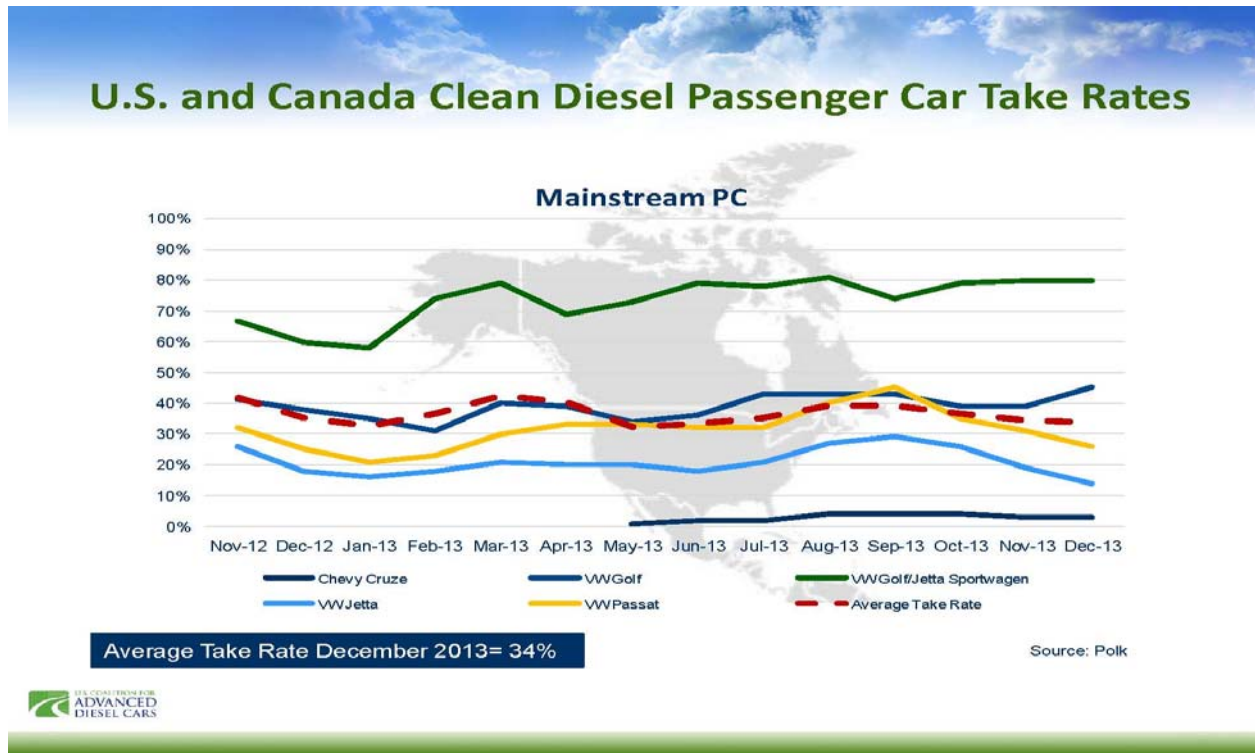
65. As the BloombergBusiness article goes on to explain:

The math on diesel has never been tidy. The additional mileage is great, but unless one drives a lot, it doesn't really cover the added expense for the engine and for the fuel itself. At current gas prices, the diesel premium on the Passat—some \$5,755—would buy enough gas to drive the gas-burning model for about 88,000 miles. **For the majority of diesel drivers, the factor that probably swung the decision was the apparent environmental benefit. The green aspect was the fulcrum.** (Emphases added).

Thus, Volkswagen's false claims about its TDI technology were a driving factor in the premium prices it charged consumers for such technology. As noted above, VWAG has taken full responsibility for the "economic damage" caused by its illegal conduct.

⁶⁹ <http://www.bloomberg.com/news/articles/2015-09-23/volkswagen-s-other-diesel-ruse-premium-pricing>.

66. A chart contained in a presentation made by CMW Research at the March 2015 DTF conference⁷⁰ underscores the differences in take rates between Volkswagen Clean Diesel cars and those made by its competitors:



67. The price premium for Clean Diesel vehicles is also reflected in this chart showing the price differentials between gasoline-powered models and Clean Diesel models of Volkswagen’s own cars:

Clean Diesel Price Premium				
Mode	Base	Mid-Level	Top-Level	Average
VW Jetta	\$2,860.00	\$1,570.00	\$1,030.00	\$1,820.00
VW SportWagen	\$5,570.00	\$1,680.00	\$0.00	\$2,416.67
VW Golf	\$2,400.00	\$1,000.00	\$1,000.00	\$1,466.67
VW Golf	\$2,950.00	\$1,000.00	\$1,000.00	\$1,650.00
VW Beetle	\$4,635.00	\$4,920.00	\$0.00	\$3,185.00
VW Beetle	\$4,080.00	\$530.00	\$700.00	\$1,770.00
VW Passat	\$5,755.00	\$2,845.00	\$2,135.00	\$3,578.33

⁷⁰ <http://cleandieseldelivers.com/media/Take-Rate-Slides-March-2014.pdf>.

Audi A3	\$2,300.00	\$2,300.00	\$2,300.00	\$2,300.00
Average	\$3,818.75	\$1,980.63	\$1,020.63	\$2,273.33

E. Volkswagen’s False Advertising.

68. Volkswagen, as part of its plan to increase sales and market share in the United States, increased its emphasis on diesel-powered cars and began marketing these cars heavily to the United States public beginning in 2008. It emphasized the TDI Clean Diesel cars’ environment-friendly engine, excellent gas mileage, and high-quality performance. In one advertisement (which, as of this writing, was available on Audi’s website after the scandal surfaced and is attached as Exhibit 5 to the Complaint),⁷¹ for example, Volkswagen claimed:

Getting more from less. Audi pioneered TDI® clean diesel engines to deliver more torque, lower fuel consumption and reduce CO2 emissions, compared to equivalent gasoline engines. The result of this revolutionary engineering delivers remarkable performance, while achieving increased fuel economy.

69. Another advertisement by VWAG for Clean Diesel cars asserts that

This ain’t your daddy’s diesel. Stinky, smoky, and sluggish. These old diesel realities no longer apply. Enter TDI Clean diesel. Ultra-low-sulfur fuel, direct injection technology, and extreme efficiency. We’ve ushered in a new era of diesel.⁷²

This internet advertisement is attached as Exhibit 6 to the Complaint.

70. Volkswagen’s advertising relentlessly touted the supposed fuel efficiency and environmental features of its Clean Diesel TDI vehicles. In 2009, Volkswagen introduced its “Meet the Volkswagens” campaign, which promoted “fuel efficiency, green credentials, cost of ownership and safety,” and compared Volkswagen’s diesel passenger cars to its competitors. According to Tim Ellis, Volkswagen’s marketing chief, the goal of this advertising campaign was to “grow the brand in the U.S.”⁷³ This campaign, among other things, included social media links

⁷¹

<https://web.archive.org/web/20150928180733/http://www.audiusa.com/technology/efficiency/tdi>

⁷² <https://web.archive.org/web/20150330110301/http://www.vw.com/features/clean-diesel/>.

⁷³ <http://abcnews.go.com/Business/story?id=7493781>.

to a blog (tdi.vw.com/tdi), which focused on Volkswagen's TDI clean diesel model.

71. Between 2011 and 2013, Volkswagen spent more than \$2.9 billion annually on advertising world-wide; many of those advertising dollars were directed at the United States public. Volkswagen issued hugely popular videos featuring the Golden Sisters, who purported to debunk the myths about polluting diesel cars.⁷⁴ Other videos that were highly successful included a "Truth or Dare" effort started in 2009 that was about "debunking the myths on clean diesel and fueling the passion of existing diesel owners"; a 2009 Audi video that proclaimed "diesel, no longer a dirty word"; and a Passat "being a Mom" video, all of which can be viewed on the *New York* magazine website.⁷⁵ Another well-known video showed German engineers of TDI Clean Diesel vehicles earning their "angel's wings."⁷⁶

72. Volkswagen also used point-of-purchase displays at the showrooms of Volkswagen Authorized Dealers such as the one depicted below:



⁷⁴ <http://blog.caranddriver.com/vws-hilarious-new-tdi-diesel-ads-return-excellent-viral-mileage/>.

⁷⁵ <http://nymag.com/daily/intelligencer/2015/09/vws-clean-diesel-ads-now-make-us-feel-dirty.html>.

⁷⁶ <https://www.youtube.com/watch?v=fwkPEza9FPw>.

73. As VWoA's Mark Barnes put it, the TDI Clean Diesel cars were "fantastic power train[s]" with "very good fuel economy." Yet "[i]t's also good for the environment because it puts out 25% less greenhouse gas emission than what a gasoline engine would. And thanks to the uniqueness of the TDI motor, it cuts out the particulate emissions by 90% and the emissions of nitrous oxide are cut by 95%. So a very very clean running engine. Clean enough to be certified in all 50 states."⁷⁷

74. In television and print advertisements and in social media, Volkswagen strived to present its Clean Diesel TDIs as the environmentally-friendly, fuel-efficient, fun-to-drive and reasonably priced passenger car. As noted above, Volkswagen's sham advertising campaign was a success. Unfortunately, all of these accolades were based on a sham perpetrated by Volkswagen for seven years.

F. Volkswagen's Defeat Device.

75. As noted above, Volkswagen's defeat device is described as a "sophisticated software algorithm" that detects when the car is undergoing emissions testing. The algorithm used information about how the car was being steered, how long the engine ran and atmospheric pressure to "precisely track" the conditions that corresponded to a federal emissions test, according to the EPA. During emissions testing, the software "turns on" the car's full emissions control system in order to pass the test. Under normal driving situations, however, these emissions control systems are *turned off*, allowing the cars to spew as much as 40 times the allowable amount of NOx into the air. As an EPA spokesman noted, the defeat device was "particularly difficult for us to detect."⁷⁸ This ruse went undetected for seven years, although as noted above, Bosch and one

⁷⁷ <http://www.businessinsider.com/volkswagen-preps-for-a-diesel-revolution-2009-10>.

⁷⁸ <http://www.washingtonpost.com/news/wonkblog/wp/2015/09/22/anatomy-of-volkswagons-deception-the-recall-that-never-fixed-any-cars/>. A useful timeline of how the scandal came to light is provided on the website of Cars.com: <https://www.cars.com/articles/vw-diesel-crisis-timeline-of-events-1420681251993/>.

of VWAG's own engineers complained about it to the company.

76. One technology blog has described Volkswagen's defeat device as follows:

The method by which Volkswagen diesel cars were able to thwart emissions tests and spew up to 40X the nitrogen oxide levels set by the Environmental Protection Agency was relatively simple. It was more likely no more than a single line of code used to detect when an emissions test was being performed and place the emissions system in an alternate mode — something as simple as a software “on/off” switch. Volkswagen AG CEO Martin Winterkorn, who stepping down as the result of his company's scandal, has said he had no knowledge of the emissions cheat, but software dev/test audit trails are almost certain to pinpoint who embedded the code and who authorized it. You can actually see who asked the developer to write that code,” said Nikhil Kaul, a product manager at test/dev software maker SmartBear Software. “Then if you go upstream you can see who that person's boss was...and see if testing happened...and, if testing didn't happen. So you can go from the bottom up to nail everyone.”⁷⁹

77. As also noted above, 482,000 vehicles were described as affected, with over 50,000 in the state of California.⁸⁰ In testimony at the October 8 Hearing, Horn put the number at approximately 525,000 vehicles.

78. In 2013 and again in 2014, the International Council for Clean Transportation (“ICCT”) published studies showing serious discrepancies between laboratory and in-use emissions of certain cars, including VW TDI Diesel cars used in Europe.⁸¹ A decision was made to test American Clean Diesel cars to show that they were success stories; the opposite turned out to be the case. The ICCT, in conjunction with researchers at and West Virginia University's Center for Alternative Fuels, Engines and Emissions (“CAFEE”) conducted on-road emissions tests on

⁷⁹ <http://developers.slashdot.org/story/15/09/24/1423225/how-did-volkswagen-cheat-emissions-tests-and-who-authorized-it>.

⁸⁰ <http://www.latimes.com/business/autos/la-fi-hy-california-dmv-vw-diesel-20150921-story.html>. This number excludes unregistered vehicles.

⁸¹ http://theicct.org/sites/default/files/publications/ICCT_LabToRoad_20130527.pdf; http://www.theicct.org/sites/default/files/publications/ICCT_LaboratoryToRoad_2014_Report_English.pdf

three vehicles sold in the United States: a 2013 TDI Passat, a 2012 TDI Jetta, and a BMW X5 SUV. These researchers found that for the Passat and Jetta, emissions were far higher than the emissions generated in the laboratory by CARB. The Jetta exceeded United States NOx emissions standard by 15 to 35 times, and the Passat by five to 20 times. In laboratory testing by CARB, in contrast, these same vehicles complied with United States NOx emissions standards. The CAFEE report is attached as Exhibit 7 to the Complaint. ICCT brought the information to the attention of CARB and the EPA, who commenced their own investigations and contacted Volkswagen. Volkswagen chalked the discrepancies up to “various technical issues and unexpected in-use conditions,” but agreed in December of 2014 to recall approximately 500,000 vehicles in order to apply a “software patch.”⁸²

79. After the remediation, CARB in May of 2015 tested a 2012 TDI Passat on the road and in the laboratory. It found some improvement in in-use NOx emissions, but not enough. An article in the *Philly Voice* describes what happened next.

On July 8, CARB shared its results with VW, but there was no change in Volkswagen’s position. Some officials privately questioned whether Volkswagen was deliberately violating the federal Clean Air Act by installing defeat devices -- software programmed to switch engines to a cleaner mode during official emissions testing, according to a person involved in the process.

During normal driving, the software then shuts off, enabling cars to emit as much as 40 times the legal limit of pollutants.

In early August, Oliver Schmidt, who followed [Norbert] Krause and preceded [Stuart] Johnson in VW’s U.S. engineering and environmental office, attended a conference in Traverse City, Michigan and told regulators Volkswagen stood by its conclusions that the problem was technical, people involved said.⁸³

80. Then, on August 21, there was a complete reversal. The *Philly Voice* article goes on to describe what happened:

After more than a year of stonewalling investigators, Volkswagen stunned two senior officials with the U.S. Environmental

⁸² <http://www.cnbc.com/2015/09/24/>.

⁸³ <http://www.phillyvoice.com/year-stonewalling-volkswagen-stunned-regulators/>.

Protective Agency and California's environmental watchdog by admitting the automaker hacked its own cars to deceive U.S. regulators about how much their diesel engines pollute.

That disclosure on Aug. 21, confirmed by two people with knowledge of the exchange, shows Volkswagen buckled to pressure from environmental regulators almost a month earlier than the scandal was made public. The admission to regulators came after a year during which VW officials insisted to regulators that tests on its diesel cars showing a spike in pollution levels on the road were in error.

At first, regulators were surprised that Volkswagen would make its confession at the conference, held in Pacific Grove, California. Minutes before Christopher Grundler, director of the EPA's transportation and air quality office, was to deliver a 9 a.m. speech to the conference, a Volkswagen representative told him about the deception. At the same meeting, representatives of the California Air Resources Board, a state agency that had been pushing VW hard, were also given a verbal notice of the deception, people with knowledge of the events said.

Volkswagen declined to comment on the sequence of events described to Reuters. It isn't clear which VW representative delivered the news of the deception to Grundler and the CARB. Stuart Johnson, head of VW's engineering and environmental office in the United States, was registered to attend the Aug. 21 conference, which was organized by the University of California, Davis. Johnson, who still works for VW in Auburn Hills, Michigan, did not respond immediately to a request for comment.

81. On September 3, Volkswagen officials further laid out the use of the defeat device to regulatory representatives.⁸⁴

82. Volkswagen was faced with the threat that the EPA it would not certify any of its 2016 models for sale in the United States until the questions surrounding the emissions discrepancies were answered. Volkswagen admitted that it relied upon a "second calibration" in the vehicles that was intended to run only during certification testing. This second calibration was triggered when a highly sophisticated software algorithm determined – after measuring factors like the position of the steering wheel, the vehicle's speed, pedal movement, and even barometric

⁸⁴ <http://docs.house.gov/meetings/IF/IF02/20151008/104046/HHRG-114-IF02-Wstate-HornM-20151008.pdf>.

pressure – that the car was being tested. Then it would configure the engine to reduce emissions of NOx. As David Clegern of CARB explained, “[w]e met with VW on several occasions and they continued to dispute our data, so we’d return to the lab. Over time, VW had no other explanations left, and it was our lab staff who actually got VW to admit that there was, in fact, a defeat device.”⁸⁵ As another CARB spokesperson told the *Washington Post*, “[t]hey basically ran out of excuses.”⁸⁶

83. The scandal surfaced on September 18, 2015, when CARB and the EPA announced that VWAG, Audi and VWoA had illegally installed emissions testing “defeat devices” in the aforementioned vehicles. *See* Exhibits 1 and 2. The EPA found violations of 42 U.S.C. §§7522(a), 7522(a)(1) and 7522(a)(3)(B), as well as 40 C.F.R. §§86.1854-12(a)(3)(ii) and 86.1854-12(a). The EPA identified the following affected vehicles:

Model Year	EPA Test Group	Make and Model(s)
2009	9VWXV02.035N	VW Jetta, VW Jetta Sportwagen
2009	9VWXV02.0U5N	VW Jetta, VW Jetta Sportwagen
2010	AVWXV02.0U5N	VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2011	BVWXV02.0U5N	VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2012	CVWXV02.0U5N	VW Beetle, VW Beetle Convertible, VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2012	CVWXV02.0U4S	VW Passat
2013	DVWXV02.0U5N	VW Beetle, VW Beetle Convertible, VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2013	DVWXV02.0U4S	VW Passat
2014	EVWXV02.0U5N	VW Beetle, VW Beetle Convertible, VW Golf, VW Jetta, VW Jetta Sportwagen, Audi A3
2014	EVWXV02.0U4S	VW Passat
2015	FVGAV02.0VAL	VW Beetle, VW Beetle Convertible, VW Golf, VW Golf Sportwagen, VW Jetta, VW Passat, Audi A3

84. As noted above, Horn of VWoA admitted that Volkswagen was dishonest with both

⁸⁵ <http://www.foxnews.com/leisure/2015/09/22/for-7-years-vw-software-thwarted-pollution-regulations/>.

⁸⁶ <http://www.washingtonpost.com/news/wonkblog/wp/2015/09/22/anatomy-of-volkswagonsdeception-the-recall-that-never-fixed-any-cars/>.

customers and regulators and Huber of VWAG called the matter a “moral and political disaster.”

85. Volkswagen has ordered its dealers to cease selling the Affected Vehicles⁸⁷ and has set aside a minimum of 6.5 billion Euros (\$7.2 billion) to deal with the fallout from this catastrophe, which it now concedes involved 11 million vehicles worldwide. An internal memorandum issued on September 22 details this:

Wolfsburg, 22 September 2015

Volkswagen AG has issued the following information:

Volkswagen is working at full speed to clarify irregularities concerning a particular software used in diesel engines. New vehicles from the Volkswagen Group with EU 6 diesel engines currently available in the European Union comply with legal requirements and environmental standards. The software in question does not affect handling, consumption or emissions. This gives clarity to customers and dealers.

Further internal investigations conducted to date have established that the relevant engine management software is also installed in other Volkswagen Group vehicles with diesel engines. For the majority of these engines the software does not have any effect.

Discrepancies relate to vehicles with Type EA 189 engines, involving some eleven million vehicles worldwide. A noticeable deviation between bench test results and actual road use was established solely for this type of engine. Volkswagen is working intensely to eliminate these deviations through technical measures. The company is therefore in contact with the relevant authorities and the German Federal Motor Transport Authority (KBA – Kraftfahrtbundesamt).

To cover the necessary service measures and other efforts to win back the trust of our customers, Volkswagen plans to set aside a provision of some 6.5 billion EUR recognized in the profit and loss statement in the third quarter of the current fiscal year. Due to the ongoing investigations the amounts estimated may be subject to revaluation.

Earnings targets for the Group for 2015 will be adjusted accordingly.

Volkswagen does not tolerate any kind of violation of laws whatsoever. It is and remains the top priority of the Board of Management to win back lost trust and to avert damage to our customers. The Group will inform the public on the further progress of the investigations constantly and transparently.

86. Volkswagen has indicated it will initiate a recall and remediation of the Affected Vehicles, but there is no “fix” that can be achieved that would not result in lesser mileage per gallon or degraded performance, two of the key attributes on which TDI Clean Diesel cars were

⁸⁷ See <http://pics3.tdiclub.com/data/3209/stop-sale-note3.pdf>.

sold.

Experts Reuters spoke to indicate that two potential fixes could be needed for the two types of emissions control systems featured on 482,000 cars in the U.S., complicating the recall and refit process. Some experts opined that just a software solution could make the affected vehicles compliant with EPA regulations, reducing the performance characteristics of the engines in the process, while others suspect that a hardware solution may be needed for older vehicles without the urea injection system.

A couple of experts warned that the potential solution could involve significantly increased consumption of urea, necessitating fill-ups at more frequent intervals such as every 5,000 miles, in addition to reducing the performance of the engines.⁸⁸

The same point was made by the West Virginia AG in a complaint filed on October 2 against Volkswagen for civil penalties. It is attached as Exhibit 8.⁸⁹ In that complaint, the West Virginia AG notes that “Volkswagen will not be able to comply with the EPA [recall] order to make the Affected Vehicles comply with emissions standards without substantially degrading their performance and fuel efficiency to a level below that advertised by Volkswagen, and below that experienced by consumers prior to, or when they purchased their vehicles.” Thus, there is no valid “cure” for Volkswagen’s conduct.

87. At the October 8 Hearing, Horn testified that the “software solution” might apply to only 95,000 vehicles. Another 430,000 would have to be retrofitted with new hardware, a process that could take at least one to two years. Horn also indicated that Volkswagen would not seek certification by environmental regulators of its 2016 Model Year diesel cars, due to nondisclosure of an “auxiliary emissions control device.”⁹⁰

88. Nor can any recall cure the tarnished reputation of Volkswagen’s TDI Clean Diesel

⁸⁸ <http://autoweek.com/article/car-news/vw-diesel-emissions-fix-may-require-2-solutions>.

⁸⁹ The AG of Texas has also sued Volkswagen.
https://www.texasattorneygeneral.gov/files/epress/01_Plaintiffs_Original_Petition_10.8.15.pdf.

⁹⁰ http://www.nytimes.com/2015/10/09/business/international/vw-diesel-emissions-scandal-congressional-hearing.html?_r=0.

vehicles and the substantial diminution of their resale value. The Kelley Bluebook has reported that prices for used Volkswagen diesel cars have declined by 21% in the last few weeks, reflecting the aftermath of Dieselgate.⁹¹ Thus, customers not only overpaid when they bought the Affected Vehicles, but have suffered a significant diminution of the resale value of their vehicles. Indeed, a survey of 460 fleet buyers in the United Kingdom revealed that 49% of them were reconsidering their contracts with Volkswagen in the aftermath of the Dieselgate revelations.⁹²

89. As noted above, the Executive Committee of the Board that accepted his retirement said that it “recognizes the economic damage caused” as well as the “loss of trust” among customers. No recall and supposed remediation can correct that.

90. A survey of vehicle owners conducted by AutoPacific⁹³ further reveals consumer disgust with Volkswagen. Only one in four have a positive opinion of Volkswagen, compared to three in four before the scandal. The corresponding figures for Audi were 29%, as opposed to 69%. Sixty-four percent of the survey respondents say they do not trust Volkswagen.

91. Steven Kalafer, a Volkswagen dealer, summed up the public thinking:

“This fraud makes Madoff look like the minor leagues,” Kalafer said from his dealership in Flemington, New Jersey. “It is the biggest fraud I have ever seen in all of business. Over \$300 billion of these products have been sold in Europe, \$15 billion [in] the United States. That dwarfs Ponzi and Madoff combined.”

“Customers are upset. They are upset that the brand they invested in, the brand they counted on, failed them,” he said.

“In all of the years that I have been in business, all of the frauds

⁹¹ <http://www.latimes.com/business/autos/la-fi-hy-auto-sales-20151001-story.html>.

⁹² <http://www.dailymail.co.uk/money/news/article-3258793/VW-scandal-deepens-revealed-half-company-car-buyers-ditch-embattled-firm.html>.

⁹³ <http://www.autopacific.com/news-app/story.248/title.volkswagen-s-reputation-takes-big-hit-with-vehicle-owners-autopacific-predicts-tough-road-ahead>.

that I have seen, this one just takes the cake,” he said.⁹⁴

92. But the illegal conduct by Volkswagen has not just resulted in economic damage and loss of consumer trust. It has caused **the death of dozens of people in the United States over the last seven years and degraded the health of many more**. On October 3, Associated Press (“AP”) laid out the facts.⁹⁵ AP calculated exhaust pollution year by year, starting with the ten to 40 times emissions level estimate by the EPA and then factored in mileage and car number totals from the Kelley Blue Book. It came up with a range of NOx pollution caused by the Affected Vehicles and then took it to scientists who modeled mortality rates, which were confirmed by a dozen experts in emissions, risk and public health, none of whom were environmental advocates or representatives of automobile manufacturers. The results are depicted in the chart that follows.

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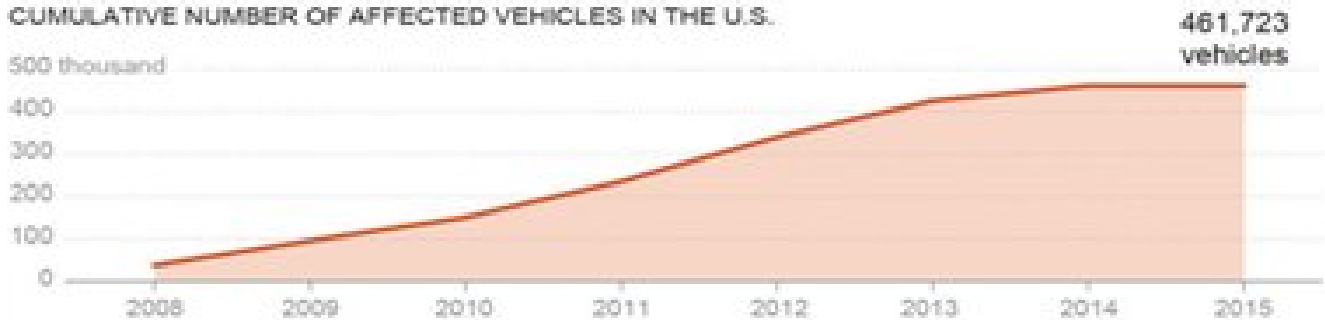
⁹⁴ <http://www.cnbc.com/2015/10/07/vw-dealers-customers-feel-betrayed-by-emissions-cheating-scandal.html>.

⁹⁵ <http://bigstory.ap.org/article/a6925f0af82e44aaa1a1ed4b55d030f6/ap-analysis-dozens-deaths-likely-vw-pollution-dodge>.

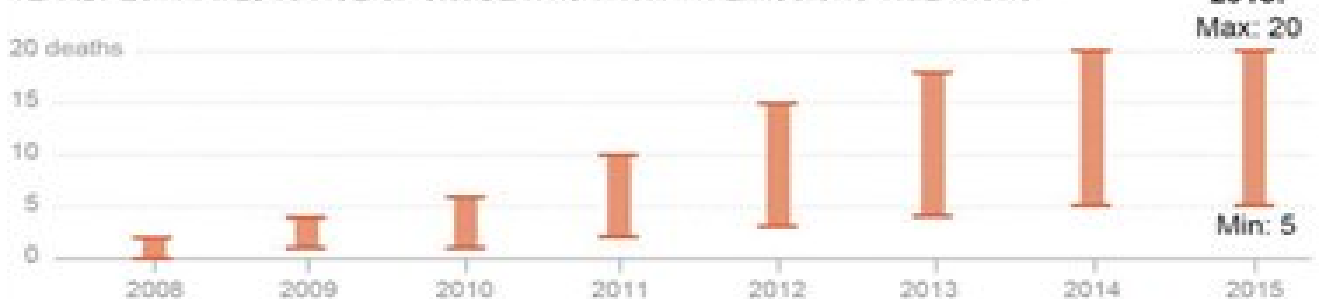
Calculating human toll of VW emissions problems

U.S. pollution resulting from Volkswagen's dodging of emissions tests is enough to have caused dozens of deaths since 2008. An AP analysis calculated upper and lower limits of pollution using the number of affected vehicles each year and average mileage. Scientists used that data in epidemiological computer models to estimate a range of deaths.

CUMULATIVE NUMBER OF AFFECTED VEHICLES IN THE U.S.

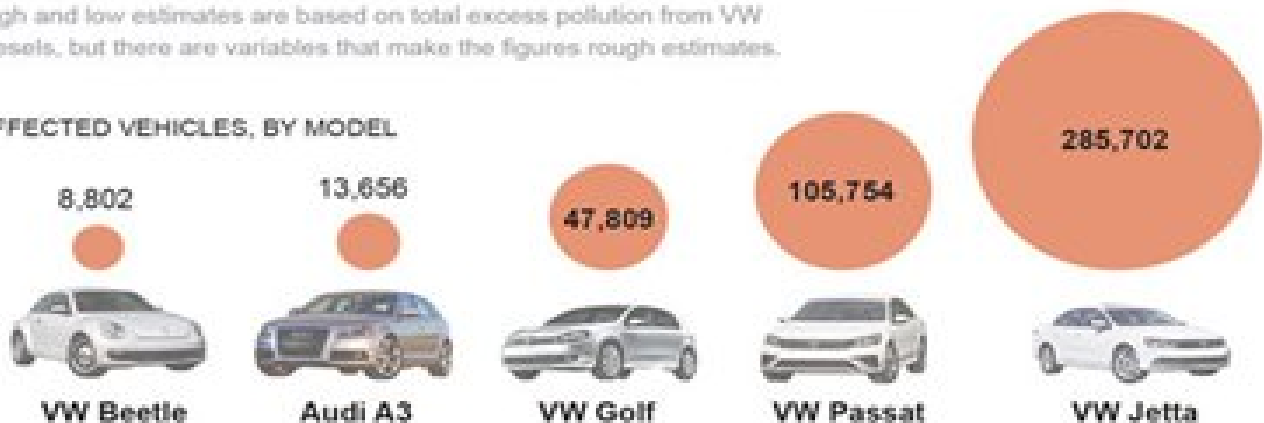


YEARLY ESTIMATED RANGE OF U.S. DEATHS FROM VW EMISSIONS VIOLATIONS



High and low estimates are based on total excess pollution from VW diesels, but there are variables that make the figures rough estimates.

AFFECTED VEHICLES, BY MODEL



NOTE: The total of 47,809 for VW Golf includes 3,530 VW Golf Sportswagen vehicles. The total figure of 461,723 is derived from Kelley Blue Book vehicle registration data. The Environmental Protection Agency estimates the total number of affected vehicles in the U.S. to be about 482,000.

SOURCES: AP analysis of data from the U.S. Environmental Protection Agency and Kelley Blue Book; Professor Peter Adams, Carnegie Mellon; Volkswagen; Audi

AP

93. As the AP article notes, the Affected Vehicles spewed enough NO_x over the course of seven years to significantly degrade the environment in urban areas. Eric Schneiderman, the New York AG has said that “[t]he stakes could not be higher for the health and safety of our communities who, if Volkswagen’s own admissions are true, have for years been breathing air containing excess pollution from their vehicles.”⁹⁶ Harris County Texas (where the City of Houston is located) has already sued Volkswagen for \$100 million in harm to air quality.⁹⁷

94. As noted in the *Minneapolis Star-Tribune* in a follow-up piece on the AP story:

Computer software allowed VW diesel cars to spew between 10 to 40 times more nitrogen oxides (NO_x) than allowed by regulation, making this “clearly a concern for air quality and public health,” said Janet McCabe, acting air quality chief for the U.S. Environmental Protection Agency.

Nitrogen oxides mostly form smog — that murky, dirty air that makes it hard to see and for some people to breathe — but also amplify a deadlier, larger problem: tiny particles of soot. Numerous medical studies show those tiny particles cause about 50,000 deaths a year in the United States, mostly from heart problems.

Nitrogen oxides can travel hundreds of miles, so pollution spewed in Pittsburgh can be felt on the East Coast, [Carnegie Mellon environmental engineer Professor Peter] Adams said.

Experts calculate how much pollution costs society by looking at the value of lost lives. In this case, Adams and other said the lost lives — valued at \$8.6 million apiece — overwhelm other costs such as lost work days or hospital costs. The overall annual cost of the extra pollutants from the VW diesels ranged from \$40 million to \$170 million, environmental engineering professors calculated. “Even the small increase in NO_x from VW diesel emissions is likely to have worsened pollution along the roadways where they have traveled, and affected the lives of hundreds of thousands of people,” said Dan Greenbaum, president of the Health Effects Institute in Boston.

⁹⁶ http://mobile.nytimes.com/2015/10/03/business/us-states-jumping-into-investigation-of-vw-emissions-deception.html?_r=0&referrer=https://www.google.com/.

⁹⁷ <http://www.wsj.com/articles/u-s-justice-department-conducts-criminal-probe-of-volkswagen-sources-say-1442869059>.

“To say millions of people of people are breathing poor air as the result of that is not off the mark,” said Greenbaum, who runs the institute that is funded by both the EPA and the auto industry to serve as an independent arbiter of the science.⁹⁸

95. The revelation of the scandal has led to numerous consequences in the United States. The DOJ is conducting a criminal probe of Volkswagen.⁹⁹ AGs in 30 states have initiated their own investigation.¹⁰⁰ A Texas judge has issued a temporary restraining order preventing the Affected Vehicles from being sold within the state. *See* Exhibit 9 to the Complaint. The Subcommittee of Oversight & Investigations of the Energy & Commerce Committee of the United States House of Representatives has initiated an investigation and sent letters to Volkswagen and the EPA.¹⁰¹ The Federal Trade Commission launched an investigation after Senator Bill Nelson (D-Fl) urged the agency to look into Volkswagen’s marketing of supposedly “clean diesel” vehicles.¹⁰² Leaders of the Senate Finance Committee are also calling for VW to repay over \$200 million worth of clean energy tax-credits buyers received as an incentive to purchase clean vehicles.¹⁰³ Fred Upton, the chairman of the full committee, has stated that “[t]he very notion of a carmaker intentionally violating our environmental laws is beyond belief...[R]eports of Volkswagen selling cars with devices aimed at skirting the law cannot, and will not be tolerated.

⁹⁸ <http://www.startribune.com/ap-analysis-dozens-of-deaths-likely-from-vw-pollution-dodge/330512421/>.

⁹⁹ <http://www.wsj.com/articles/u-s-justice-department-conducts-criminal-probe-of-volkswagen-sources-say-1442869059>.

¹⁰⁰ <http://www.law360.com/articles/707229/volkswagen-faces-multistate-probe-over-emissions-fraud>.

¹⁰¹ <http://energycommerce.house.gov/press-release/committee-leaders-request-documents-volkswagen-investigation-continues>.

¹⁰² <http://adage.com/article/cmo-strategy/ftc-joins-vw-emissions-probe/300916/>

¹⁰³ <http://www.law360.com/articles/714146/sens-demand-vw-return-200m-in-tax-credits>

Attempting to deceive regulators and customers is a double whammy of betrayal.”¹⁰⁴ Over 200 private lawsuits have been filed, many of them class actions. Among those class actions, most involve class claims for individual statewide classes, as opposed to federal claims for nationwide classes.

96. Outside the United States, several countries are investigating Volkswagen’s conduct.¹⁰⁵ Switzerland has banned the sale within its borders of certain Volkswagen TDI Diesel cars sold in Europe.¹⁰⁶ German prosecutors have raided VWAG’s headquarters in Wolfsburg.¹⁰⁷ Prosecutors in Paris have launched an investigation for suspected “aggravated” deception of affected vehicles sold in France; French Environment Minister Segolene Royal called Volkswagen’s conduct “a form of theft from the taxpayer and the state.”¹⁰⁸ The Italian antitrust authority has also commenced an investigation, saying “Volkswagen’s claims about emissions and certifications in advertising campaigns and information brochures distributed by dealers might have induced consumers to make an error in their choice.”¹⁰⁹

97. As noted above, Volkswagen has set aside \$7.2 billion to deal with the costs of the scandal. That will not be nearly enough. James E. Tierney, a former AG in Maine, has been quoted as saying that the costs to Volkswagen might be “‘incalculable,’ with each false

¹⁰⁴ <http://energycommerce.house.gov/press-release/suboversight-schedules-volkswagen-hearing-october-8>.

¹⁰⁵ https://en.m.wikipedia.org/wiki/Volkswagen_emissions_violations.

¹⁰⁶ <http://www.theguardian.com/business/2015/sep/26/volkswagen-emissions-scandal-switzerland-bans-sale-of-some-models>.

¹⁰⁷ <http://www.timesfreepress.com/news/business/aroundregion/story/2015/oct/08/breaking-german-prosecutors-conduct-search-raids-vw-emissions-probe/329409/>.

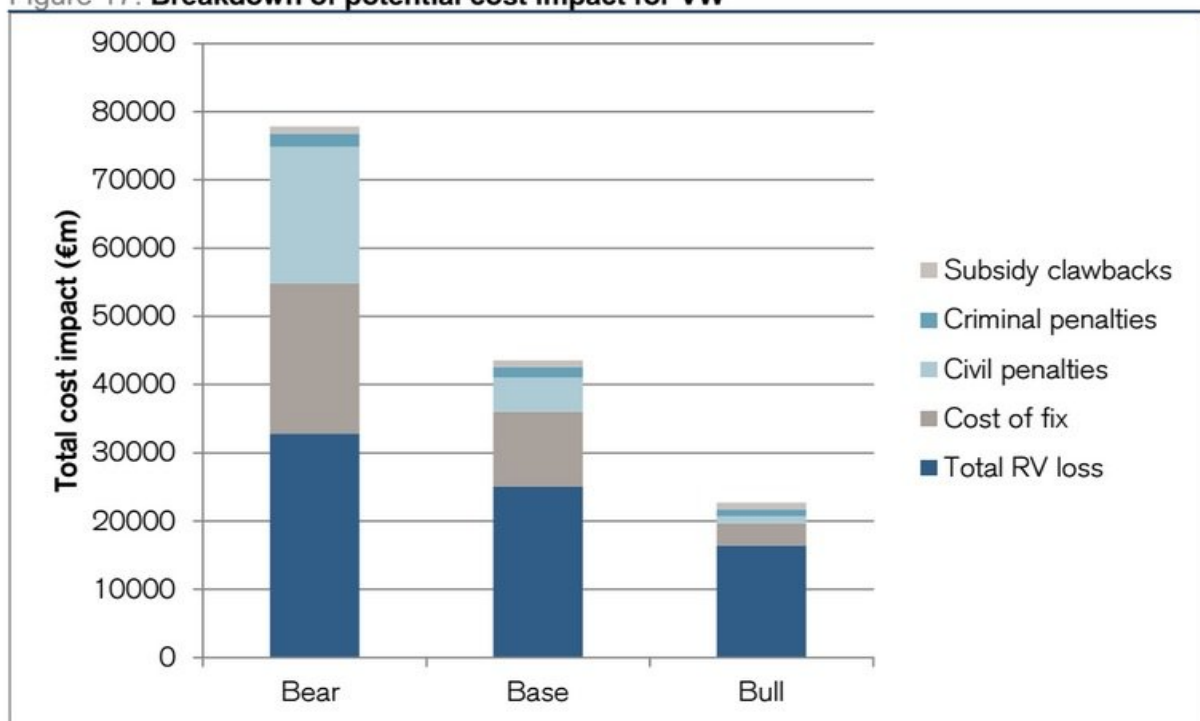
¹⁰⁸ <http://www.dailymail.co.uk/news/article-3257720/Paris-prosecutors-latest-launch-investigation-potential-fraud-Volkswagen-emissions-cheating-scam.html>.

¹⁰⁹ http://www.morningstar.com/news/dow-jones/TDJNDN_201510023140/italy-antitrust-body-opens-case-against-volkswagen-over-emissions.html.

advertisement to consumers, for example, carrying a potential penalty. ‘This product was designed to operate illegally, and that is very serious.’¹¹⁰

98. Nonetheless, some attempts at calculation have been made. On October 2, Credit Suisse disseminated an analysis showing Volkswagen’s anticipated costs in a “bull” scenario (where events turned out favorably to it), a “base” scenario, and a “bear” scenario (where events turned out unfavorably).¹¹¹ The “bull” scenario was \$25.6 billion in costs, while the “bear” scenario was \$87.1 billion. The analysis is summarized in the following chart:

Figure 17: Breakdown of potential cost impact for VW



Source: Credit Suisse estimates

Societe Generale has also presented dire predictions.¹¹² Volkswagen itself has since conceded that

¹¹⁰ http://mobile.nytimes.com/2015/10/03/business/us-states-jumping-into-investigation-of-vw-emissions-deception.html?_r=0&referrer=https://www.google.com/.

¹¹¹ <http://www.businessinsider.com/credit-suisse-volkswagen-shares-could-fall-another-20-2015-10?r=UK&IR=T>.

¹¹² <http://www.cbsnews.com/news/emissions-scandal-could-cost-volkswagen-more-than-35-billion/>.

the cost of Dieselgate will be far more than it initially anticipated.¹¹³ As can be seen, costs associated with criminal and civil penalties make up a significant portion of the differing amounts. Credit Suisse also predicts that Volkswagen's stock may decline another 20%.

VI. PLAINTIFF'S STANDING

99. CAS is a non-profit, Section 501(c)(3) organization whose aim is to provide consumers a voice for auto safety and quality. As such, CAS has standing to bring the present action on its own and on behalf of its members.

ASSOCIATIONAL STANDING

100. CAS's membership consists of approximately 15,000 individuals, including at least 200 in the District of Columbia, 450 in Massachusetts, 1500 in California, and 300 in Michigan. CAS members pay for the benefits of membership, which includes receiving a copy of CAS's annual *Car Book*. The *Car Book* makes recommendations on the best vehicles based on CAS's research of various factors, including fuel economy. CAS members rely on the information CAS gathers to make purchasing decisions when buying a new or used vehicle. In 2013 CAS rated the AUDI A4 as one of its overall "Best Bets," a rating that would not have been given had CAS known of Defendants' fraudulent reporting of the vehicle's fuel economy. In 2015 it recommended the Volkswagen Jetta. CAS members relied on CAS's recommendations in deciding which vehicle to buy. Had CAS known the true nature of Affected Vehicles' efficiency performance, CAS would not have rated them highly and its members would not have purchased the vehicles.

¹¹³ <http://www.techtimes.com/articles/92854/20151009/volkswagen-emissions-cheating-scandal-costs-five-times-more-than-expected-ceo-warns-employees-of-cutbacks.htm>,

101. Many of CAS's members would have standing in their own right to bring an action in this case. CAS has identified members who purchased Volkswagen's Clean Diesel vehicles. Any member who purchased an Affected Vehicle has suffered a concrete and particularized injury by purchasing or leasing a vehicle that they would not otherwise have purchased or leased; paying more for vehicles than they would have otherwise paid if they had known the true facts concerning the defeat devices; and purchasing vehicles, the value of which has been severely diminished, thus reducing their residual and/or resale value.

102. Defendants' illegal conduct has injured all members of CAS, regardless of whether or not they purchased an Affected Vehicle, due to Volkswagen's fraudulent scheme to deceive consumers as to the non-compliance of its vehicles to applicable emissions standards, and Volkswagen's pollution of the environment by selling vehicles which emitted NOx gasses in levels ten to forty times permitted by the EPA. These injuries are a direct result of Volkswagen's fraudulent activities.

103. CAS's member's injuries will be redressed by a successful result in this matter through declaratory and injunctive relief because such relief will effectively abate Volkswagen's illegal conduct and will prevent recurrence. Specifically—relief in this matter will eliminate Volkswagen's fraud, bring Affected Vehicles into compliance with emissions standards, and thereby reduce air pollution from the 525,000 Affected Vehicles.

104. The interest CAS is seeking protect in this case is germane to its purpose as an organization. CAS aims to lower vehicle emissions and promote fuel efficiency. CAS's Safe Climate Campaign aims to "slash auto emissions" and "hold polluters . . . accountable." In pursuing this case, CAS is working directly within its mission to reduce fuel emissions and educate the public about energy efficient vehicle choices. A successful outcome in this case will deter

future vehicle manufacturers from fraudulently manipulating their vehicles' emissions performance.

105. CAS's claims do not require the individual participation of each of its members to obtain the relief that it seeks. CAS only seeks injunctive and/or declaratory relief, not damages on behalf of members. Defendants violated and continue to violate various state and federal laws by fraudulently misrepresenting the Affected Vehicles' emissions, environmental standards, fuel efficiency, and performance. These practices affected all CAS members. CAS can establish the illegality of Defendants' practices through evidence of Defendants' conduct that is common to all members.

ORGANIZATIONAL STANDING

106. CAS also has standing to bring these claims on its own behalf because Defendants' conduct has caused a diversion of its resources and has frustrated its mission. Each year, CAS spends considerable time and financial resources researching and compiling reports on the country's best vehicles, working with automakers and governments to improve the efficiency of motor vehicles and the standards that govern them, and advising members on purchasing decisions. Relying on Volkswagen's misrepresentations, CAS gave the Affected Vehicles high ratings and recommended that its members purchase those vehicles. As a result of Defendants' unlawful activities, CAS will have to divert its financial and staff resources from its planned activities.

107. CAS will have to modify its vehicle ratings system to ensure that vehicles are not circumventing emissions testing procedures to obtain better fuel economy ratings. CAS will have to redirect staff time and financial resources to new mechanisms of vehicle rating for its annual *Car Book*.

108. Through its "Safe Climate Campaign", CAS spent time and resources working to

increase emissions standards that Defendants' violated. As a result of Defendants' fraud, CAS will now have to divert its time and resources to detect possible future fraudulent actions to subvert emissions standards. CAS will have to divert resources and staff time from current programs to help members of Congress conduct oversight investigations, to develop policy solutions to solve the VW problems, and prevent future frauds. Unless new funds are raised, resources will be diverted which would otherwise have been spent in different ways, such as encouraging consumers to switch to clean cars and to make other clean transportation choices.

109. As a result of defendants' fraud, hundreds of thousands of vehicles have been polluting the atmosphere by circumventing emissions standards. This pollution has undermined CAS's activities to reduce overall air emissions. CAS must work even harder, and devote additional time and resources to its emissions reduction campaigns to reduce overall air emissions as a means of compensating for the excess pollutants the Affected Vehicles continue to spew into the atmosphere.

110. In the absence of Volkswagen's misrepresentations about their vehicles' environmental impact, fuel efficiency, and performance, CAS would not have suffered these injuries.

CAUSES OF ACTION

FIRST CLAIM

Fraudulent Business Acts and Practices in Violation of California Business & Professions Code §§ 17200, *et seq.*

111. Plaintiff incorporates by reference each preceding and succeeding paragraph.
112. Plaintiff brings this cause of action individually and on behalf of its members.
113. California Business and Professions Code §§ 17200, *et seq.* prohibits acts of unfair competition, which mean and include any "fraudulent . . . business practices."

114. As more fully described above, Defendants' acts and practices with respect to the fuel efficiency, and performance of Affected Vehicles have a tendency to deceive, and have deceived, Plaintiff and its members, thus constituting a fraudulent business act or practice.

115. Defendants acted fraudulently for the purpose of section 17200 by misrepresenting and omitting truths regarding the Affected Vehicles' eco-friendly nature, fuel efficiency, and performance in their advertising, public statements, and marketing. These fraudulent statements were a material factor in inducing CAS members to purchase Affected Vehicles. CAS members suffered injury in fact and lost money and/or property as a result of Volkswagen's unlawful business acts and practices. CAS's members suffered harm when each member was required to pay a purchase price for their Affected Vehicles which they never would have purchased if the true facts were known, or paid a price in excess of what they would have paid had Volkswagen accurately disclosed the Affected Vehicles' characteristics. These misrepresentations also resulted in higher purchase prices for the Affected Vehicles and will result in lower resale value. CAS members suffered injury in fact as a result.

116. Defendants' fraudulent statements were a material factor in inducing CAS's ratings and recommendations for Affected Vehicles, and in pursuing particular activities in furtherance of its mission and policy goals. Defendants' fraud caused CAS to inaccurately rate and report on Affected Vehicles. CAS would have used staff time and financial resources differently had Volkswagen accurately disclosed the Affected Vehicles' characteristics. As a result of Defendants' fraud, CAS will now have to divert staff time and financial resources away from its mission and goals to: adjust its rating system so it is able to detect future fraudulent subversions of emissions standards; help members of Congress conduct oversight investigations of Defendants' fraudulent actions; develop policy solutions to solve the VW problems and prevent future frauds; and devote additional resources to reducing emissions to compensate for the additional pollution caused by Volkswagen's actions. Unless new funds are raised, resources will be diverted which would otherwise have been spent in different ways, such as encouraging

consumers to switch to clean cars and to make other clean transportation choices.

117. Defendants either knew, recklessly disregarded, or should have known that Volkswagen's statements were false, misleading, untrue, deceptive, or likely to deceive or mislead the public, Plaintiff and its members.

118. Plaintiff and its members relied upon Defendants' material omissions, nondisclosures and representations to their detriment.

119. Plaintiff's members have suffered injury in fact and have lost money as a result of defendants' unfair competition and violations of law in that they purchased vehicles for prices that were grossly inflated; they would not have purchased these vehicles had they known the true efficiency and nature of the Affected Vehicles; and they would not have been exposed to pollutants from the Affected Vehicles. Defendants' conduct has caused CAS injury in fact, a diversion of resources, and frustration of its mission. Had plaintiff known the true facts plaintiff would not have rated the Affected Vehicles highly, and would have used its staff time and resources differently with respect to its mission and purpose. Plaintiff is therefore entitled to the relief available under Business and Professions Code §§ 17200, *et seq.*, as detailed herein.

SECOND CLAIM

Unlawful Business Acts and Practices in Violation of California Business & Professions Code §§ 17200, *et seq.*

120. Plaintiffs incorporate by reference each preceding and succeeding paragraph.

121. Plaintiff brings this cause of action individually and on behalf of its members.

122. California Business and Professions Code §§ 17200, *et seq.* prohibits acts of unfair competition, which mean and include any "unlawful . . . business practices."

123. As alleged herein, Defendants routinely misrepresented Affected Vehicles' emissions, environmental standards, fuel efficiency, and performance in their advertising, public statements, and marketing.

124. As a result, Defendants' uniform policies, acts, omissions, and practices, among

others, violate numerous provisions of California statutory and common law including, but not limited to the following:

- Violating the CLRA; and
- Violating California’s False Advertising Law.

125. Plaintiff and its members relied upon these material omissions and misrepresentations to their detriment.

126. Plaintiff reserves the right to allege other violations of law that constitute unlawful business acts or practices based upon the above-described conduct. Such conduct is ongoing and continues to this date.

127. Plaintiff’s members have suffered injury in fact and have lost money as a result of defendants’ unfair competition and violations of law in that they purchased vehicles for prices that were grossly inflated; they would not have purchased these vehicles had they known the true efficiency and nature of the Affected Vehicles; and they would not have been exposed to pollutants from the Affected Vehicles. Defendants’ conduct has caused CAS injury in fact, a diversion of resources, and frustration of its mission. Had plaintiff known the true facts plaintiff would not have rated the Affected Vehicles highly, and would have used its staff time and resources differently with respect to its mission and purpose. Plaintiff is therefore entitled to the relief available under Business and Professions Code §§ 17200, *et seq.*, as detailed herein.

THIRD CLAIM
**Unfair Business Acts and Practices in Violation of
California Business & Professions Code §§ 17200, *et seq.***

128. Plaintiffs incorporate by reference each preceding and succeeding paragraph.

129. Plaintiff brings this cause of action individually and on behalf of its members.

130. California Business and Professions Code §§ 17200, *et seq.* prohibits acts of unfair competition, which mean and include any “unfair . . . business practices.”

131. Defendants’ conduct constitutes “unfair” business acts and practices because

Defendants' practices have caused and are "likely to cause substantial injury" to Plaintiff and its members which injury is not "reasonably avoidable" by Plaintiff and its members and is "not outweighed" by the practices' benefits to Plaintiff and its members.

132. As more fully described above, Defendants' misrepresentations and omissions in their advertising, public statements, and marketing constitute unfair business acts or practices within the meaning of Cal. Bus. & Prof. Code §§ 17200, *et seq.*, in that the justification for Defendants' conduct is outweighed by the gravity of the consequences to the general public.

133. Defendants had reasonably available alternatives to further their business interests other than by misleading Plaintiff and its members about Affected Vehicles' eco-friendly nature, fuel efficiency, and performance. Indeed, the burden and expense of not installing the "defect device" is infinitesimal in comparison to the negative impact and injury to Plaintiff and its members.

134. Plaintiff and its members could not have reasonably avoided injury because, as more fully described above, Defendants' scheme was designed to keep Plaintiff and its members from knowing the truth about the Affected Vehicles' eco-friendly nature, fuel efficiency, and performance.

135. Defendants' failure to disclose these facts, coupled with the defeat device, made it nearly impossible for Plaintiff and its members to know the true nature of Affected Vehicles' eco-friendly nature, fuel efficiency, and performance.

136. Plaintiff and its members were never in a position to avoid injury, due to Defendants' active concealment of material information.

137. The practice of misrepresenting the eco-friendly nature of the Affected Vehicles, fuel efficiency, and performance deceived Plaintiff and its members into paying for services that were never rendered or the value of which was grossly inflated; making inaccurate recommendations on which products to buy; and focusing its staff time and resources working to increase emissions standards which were being flagrantly violated by Defendants. These actions

are contrary to public policy, immoral, unethical, oppressive, unscrupulous, and/or substantially injurious to consumers.

138. Defendants' conduct has violated statutory and common law, and the policy and spirit of California's statutory law including, but not limited to, California's Consumer Legal Remedies Act, California's Unfair Competition Law, California's False Advertising Law, and California Pollution Control laws and applicable regulations. These violations significantly harmed Plaintiff and its members.

139. Plaintiff and its members relied upon these material omissions and misrepresentations to their detriment.

140. Plaintiff's members have suffered injury in fact and have lost money as a result of defendants' unfair competition and violations of law in that they purchased vehicles for prices that were grossly inflated; they would not have purchased these vehicles had they known the true efficiency and nature of the Affected Vehicles; and they would not have been exposed to pollutants from the Affected Vehicles. Defendants' conduct has caused CAS injury in fact, a diversion of resources, and frustration of its mission. Had plaintiff known the true facts plaintiff would not have rated the Affected Vehicles highly, and would have used its staff time and resources differently with respect to its mission and purpose. Plaintiff is therefore entitled to the relief available under Business and Professions Code §§ 17200, *et seq.*, as detailed herein.

FOURTH CLAIM

Violations of the Consumers Legal Remedies Act (California Civil Code § 1750 *et seq.*)

141. Plaintiffs incorporate by reference each preceding and succeeding paragraph.

142. This cause of action is brought pursuant to the California Consumers Legal Remedies Act ("CLRA"), Civil Code § 1750, *et seq.*

143. The acts and practices described in this Complaint were intended to result in the sale of goods, specifically a motor vehicle, in consumer transactions. Volkswagen has violated,

and continue to violate California Civil Code § 1770, subdivisions (a)(9), (a)(7), (a)(16), and (a)(5) by:

- Representing to consumers purchasing the Affected Vehicles that these vehicles' eco-friendly nature, fuel efficiency, and high performance are as advertised and publicized.
- Representing in their advertising eco-friendly nature, fuel efficiency, and performance characteristics for the Affected Vehicles that are false.

144. Plaintiff and its members have suffered harm as a result of these violations.

145. Plaintiff's members have suffered harm as a result of Volkswagen's unlawful conduct because they purchased the Affected Vehicles believing, based on Volkswagen's representations, that the Affected Vehicles had certain characteristics that made them environmentally friendly, fuel efficient, and high performance, when in fact these vehicles cannot have these fuel efficiency and performance standards because their emissions do not comply with federal and state laws and regulations. These misrepresentations also resulted in higher purchase prices for the Affected Vehicles and the subsequent revelation concerning these resources would otherwise have been spent in other ways will result in lower resale value. CAS members suffered injury in fact when they were exposed to greater NOx emissions than represented by Volkswagen and permitted by law.

146. Plaintiff suffered harm as a result of Volkswagen's unlawful conduct because it recommended Affected Vehicles in its *Car Book*, and directed staff time and resources in pursuance of activities it would not have pursued had Volkswagen accurately disclosed the Affected Vehicles' characteristics. Plaintiff rated Affected Vehicles, believing, based on Volkswagen's representations, that the Affected Vehicles had certain characteristics that made them environmentally friendly, fuel efficient, and high performance, when in fact these vehicles cannot have these fuel efficiency and performance standards because their emissions do not comply with federal and state laws and regulations. These misrepresentations also resulted in CAS

having to divert staff time and financial resources away from its mission and goals to: adjust its rating system so it is able to detect future fraudulent subversions of emissions standards; help members of Congress conduct oversight investigations of Defendants' fraudulent actions; develop policy solutions to solve the VW problems and prevent future frauds; and devote additional resources to reducing emissions to compensate for the additional pollution caused by Volkswagen's actions. Unless new funds are raised, resources will be diverted which would otherwise have been spent in different ways, such as encouraging consumers to switch to clean cars and to make other clean transportation choices.

147. Volkswagen concealed from Plaintiff and its members accurate information concerning the emissions standards, fuel efficiency, and performance of the Affected Vehicles.

148. Volkswagen's misrepresentations and omissions described in the preceding paragraphs were intentional, or alternatively, made without the use of reasonable procedures adopted to avoid such errors.

149. Unless Volkswagen is enjoined from engaging in such wrongful actions and conduct in the future, members of the consuming public will be further damaged by Volkswagen's conduct.

FIFTH CLAIM
Violations of the Michigan Consumer Protection Act
(Mich. Comp. Laws § 445.901 *et seq.*)

150. Plaintiffs incorporate by reference each preceding and succeeding paragraph.

151. Michigan Consumer Protection Act, Mich. Comp. Laws § 445.901 *et seq.* prohibits “[u]nfair, unconscionable, or deceptive methods, acts, or practices in the conduct of trade or commerce.”

152. The acts and practices described in this Complaint were intended to result in the sale of goods, specifically a motor vehicle, in consumer transactions. Volkswagen has violated, and continue to violate Mich. Comp. Laws § 445.903, subsections (a), (e), and (l) by:

- Representing to consumers purchasing the Affected Vehicles that these vehicles' eco-friendly nature, fuel efficiency, and high performance are as advertised and publicized.
- Representing in their advertising emissions, environmental, fuel efficiency, and performance characteristics for the Affected Vehicles that are false.
- Representing that the Affected Vehicles were compliant with state and federal emissions regulations.

153. Volkswagen concealed from Plaintiff and its members accurate information concerning eco-friendly nature, fuel efficiency, and performance of the Affected Vehicles.

154. Volkswagen's misrepresentations and omissions described in the preceding paragraphs were made knowingly, and with the intent that consumers would purchase vehicles based on those representations.

155. Plaintiff's members have suffered harm as a result of Volkswagen's unlawful conduct because they purchased the Affected Vehicles believing, based on Volkswagen's representations, that the Affected Vehicles had certain characteristics that made them environmentally friendly, fuel efficient, and high performance, when in fact these vehicles cannot have these fuel efficiency and performance standards because their emissions do not comply with federal and state laws and regulations. These misrepresentations also resulted in higher purchase prices for the Affected Vehicles and the subsequent revelation concerning the "defeat devices" will result in lower resale value. CAS members suffered injury in fact when they were exposed to greater NOx emissions than represented by Volkswagen and permitted by law.

156. Plaintiff suffered harm as a result of Volkswagen's unlawful conduct because it recommended Affected Vehicles in its *Car Book*, and directed staff time and resources in pursuance of activities it would not have pursued had Volkswagen accurately disclosed the Affected Vehicles' characteristics. Plaintiff rated Affected Vehicles, believing, based on Volkswagen's representations, that the Affected Vehicles had certain characteristics that made

them environmentally friendly, fuel efficient, and high performance, when in fact these vehicles cannot have these fuel efficiency and performance standards because their emissions do not comply with federal and state laws and regulations. These misrepresentations also resulted in CAS having to divert staff time and financial resources away from its mission and goals to: adjust its rating system so it is able to detect future fraudulent subversions of emissions standards; help members of Congress conduct oversight investigations of Defendants' fraudulent actions; develop policy solutions to solve the VW problems and prevent future frauds; and devote additional resources to reducing emissions to compensate for the additional pollution caused by Volkswagen's actions. Unless new funds are raised, resources will be diverted which would otherwise have been spent in different ways, such as encouraging consumers to switch to clean cars and to make other clean transportation choices.

157. Volkswagen concealed from Plaintiff and its members accurate information concerning the emissions standards, fuel efficiency, and performance of the Affected Vehicles.

158. Volkswagen's misrepresentations and omissions described in the preceding paragraphs were intentional, or alternatively, made without the use of reasonable procedures adopted to avoid such errors.

159. Unless Volkswagen is enjoined from engaging in such wrongful actions and conduct in the future, members of the consuming public will be further damaged by Volkswagen's conduct.

SIXTH CLAIM

Violations of the Massachusetts General Statute 93A (Mass. Gen. Laws ch. 93A § 1 *et seq.*)

160. Plaintiffs incorporate by reference each preceding and succeeding paragraph.

161. Massachusetts General Statute, Mass. Gen. Laws ch. 93A § 1 *et seq.*, prohibits "unfair or deceptive acts or practices in the conduct of any trade or commerce."

162. As more fully described above, Defendants' acts and practices with respect to the fuel efficiency, and performance of the Affected Vehicles have a tendency to deceive, and have

deceived, Plaintiff and its members, thus constituting unfair, immoral, unethical, oppressive, and unscrupulous actions. These actions included:

- Falsely representing to consumers purchasing the Affected Vehicles that these vehicles' emissions, fuel efficiency, and high performance are as advertised and publicized.
- Falsely representing in their advertising emissions, environmental, fuel efficiency, and performance characteristics for Affected Vehicles that are false.
- Falsely representing that the Affected Vehicles were compliant with state and federal emissions regulations.

163. Volkswagen concealed from Plaintiff and its members accurate information concerning the emissions standards, fuel efficiency, and performance of the Affected Vehicles.

164. Volkswagen's misrepresentations and omissions described in the preceding paragraphs were made knowingly, and with the intent that consumers would purchase vehicles based on those representations.

165. Plaintiff's members have suffered harm as a result of Volkswagen's unlawful conduct because they purchased the Affected Vehicles believing, based on Volkswagen's representations, that the Affected Vehicles had certain characteristics that made them environmentally friendly, fuel efficient, and high performance, when in fact these vehicles cannot have these fuel efficiency and performance standards because their emissions do not comply with federal and state laws and regulations. These misrepresentations also resulted in higher purchase prices for the Affected Vehicles and the subsequent revelation concerning the "defeat devices" will result in lower resale value. CAS members suffered injury in fact when they were exposed to greater NOx emissions than represented by Volkswagen and permitted by law.

166. Plaintiff suffered harm as a result of Volkswagen's unlawful conduct because it recommended Affected Vehicles in its *Car Book*, and directed staff time and resources in pursuance of activities it would not have pursued had Volkswagen accurately disclosed the

Affected Vehicles' characteristics. Plaintiff rated Affected Vehicles, believing, based on Volkswagen's representations, that the Affected Vehicles had certain characteristics that made them environmentally friendly, fuel efficient, and high performance, when in fact these vehicles cannot have these fuel efficiency and performance standards because their emissions do not comply with federal and state laws and regulations. These misrepresentations also resulted in CAS having to divert staff time and financial resources away from its mission and goals to: adjust its rating system so it is able to detect future fraudulent subversions of emissions standards; help members of Congress conduct oversight investigations of Defendants' fraudulent actions; develop policy solutions to solve the VW problems and prevent future frauds; and devote additional resources to reducing emissions to compensate for the additional pollution caused by Volkswagen's actions. Unless new funds are raised, resources will be diverted which would otherwise have been spent in different ways, such as encouraging consumers to switch to clean cars and to make other clean transportation choices.

167. Unless Volkswagen is enjoined from engaging in such wrongful actions and conduct in the future, Plaintiff and members of the consuming public will be further damaged by Volkswagen's conduct.

SEVENTH CLAIM

Violations of the District of Columbia Consumer Procedures Protection Act (DC Code § 28-3901 *et seq.*)

168. Plaintiffs incorporate by reference each preceding and succeeding paragraph.

169. This cause of action is brought pursuant to the District of Columbia Consumer Procedures Protection Act, DC Code § 28-3901 *et seq.*

170. The acts and practices described in this Complaint were intended to result in the sale of goods, specifically a motor vehicle, in consumer transactions. Volkswagen has violated, and continue to violate California Civil Code § 28-3904, subdivisions (a), (b), (e), (f), and (x) by:

- Representing to consumers purchasing the Affected Vehicles that these vehicles'

emissions, fuel efficiency, and high performance are as advertised and publicized.

- Representing in their advertising emissions, environmental, fuel efficiency, and performance characteristics for the Affected Vehicles that are false.
- Representing that the Affected Vehicles were compliant with federal emissions regulations when they were not.

171. Plaintiff and its members have suffered harm as a result of these violations.

172. Plaintiff's members have suffered harm as a result of Volkswagen's unlawful conduct because they purchased the Affected Vehicles believing, based on Volkswagen's representations, that the Affected Vehicles had certain characteristics that made them environmentally friendly, fuel efficient, and high performance, when in fact these vehicles cannot have these fuel efficiency and performance standards because their emissions do not comply with federal and state laws and regulations. These misrepresentations also resulted in higher purchase prices for the Affected Vehicles and the subsequent revelation concerning the "defeat devices" will result in lower resale value. CAS members suffered injury in fact when they were exposed to greater NOx emissions than represented by Volkswagen and permitted by law.

173. Plaintiff suffered harm as a result of Volkswagen's unlawful conduct because CAS recommended Affected Vehicles in its *Car Book*, and directed staff time and resources in pursuance of activities it would not have pursued had Volkswagen accurately disclosed the Affected Vehicles' characteristics. Plaintiff rated Affected Vehicles, believing, based on Volkswagen's representations, that the Affected Vehicles had certain characteristics that made them environmentally friendly, fuel efficient, and high performance, when in fact these vehicles cannot have these fuel efficiency and performance standards because their emissions do not comply with federal and state laws and regulations. These misrepresentations also resulted in CAS having to divert staff time and financial resources away from its mission and goals to: adjust its rating system so it is able to detect future fraudulent subversions of emissions standards; help members of Congress conduct oversight investigations of Defendants' fraudulent actions; develop

policy solutions to solve the VW problems and prevent future frauds; and devote additional resources to reducing emissions to compensate for the additional pollution caused by Volkswagen's actions. Unless new funds are raised, resources will be diverted which would otherwise have been spent in different ways, such as encouraging consumers to switch to clean cars and to make other clean transportation choices.

174. Volkswagen concealed from Plaintiff and its members accurate information concerning the emissions standards, fuel efficiency, and performance of the Affected Vehicles.

175. Volkswagen's misrepresentations and omissions described in the preceding paragraphs were intentional, or alternatively, made without the use of reasonable procedures adopted to avoid such errors.

176. Unless Volkswagen is enjoined from engaging in such wrongful actions and conduct in the future, members of the consuming public will be further damaged by Volkswagen's conduct.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray that the Court enter judgment on its behalf and on behalf of its members, and:

A. Order the appointment of an independent organization to be External Compliance Monitor to monitor Volkswagen's compliance with federal and state environmental laws, as well as any other relief granted in the ultimate resolution of this case, and provide reports annually to the Court for a period no less than five years;

B. Order Volkswagen to pay a portion of its annual net profits into an independent fund administered by third parties approved by the Court who can disburse the funds to non-profit organizations that seek to monitor, educate people about, and/or remediate the deleterious environmental effects of vehicular diesel fuel emissions through advanced emissions controls and systems;

C. Adjudge and decree that Volkswagen has violated the California Pollution Control

Laws, California Business & Professions Code, the California Civil Code, the Michigan Consumer Protection Act, and Massachusetts General Statute 93A and that Plaintiffs and its members have been injured in their business and property as a result of Volkswagen's violations;

D. To the extent provided by law, enjoin and restrain Volkswagen, its subsidiaries, affiliates, successors, transferees, assignees and the respective officers, directors, partners, agents, and employees thereof and all other persons acting or claiming to act on their behalf from continuing to violate the California Pollution Control laws, California Business & Professions Code, the California Civil Code, the Michigan Consumer Protection Act, and Massachusetts General Statute 93A.

E. Award Plaintiffs and its members their costs of this suit, including reasonable attorneys' fees as provided by law; and

F. Order such other or further relief as may be just and proper.

IX. JURY TRIAL DEMAND.

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs demand a trial by jury of all of the claims asserted in this Complaint so triable.

DATED: October 16, 2015

Respectfully submitted,

By: _____

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