# Volkswagen and the High-tech Greenwash

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In several ways, the revelations that Volkswagen used software to cheat on vehicle emissions tests echo common threads of greenwashing cases against car manufacturers. However, in one significant respect, the Volkswagen scandal is much more than just another example of greenwashing. That is, the German automaker's use of software to deceive brings a novel technological aspect to greenwashing. This article discusses the Volkswagen scandal in the context of automobile greenwashing cases and highlights this new high-tech greenwashing.

#### I. Introduction

On September 18, 2015, the U.S. Environmental Protection Agency (EPA) revealed that some of Volkswagen's diesel vehicles have software that allows the nitrogen oxide (NOx) output to satisfy U.S. emissions standards during testing while producing much higher emissions during actual driving conditions.<sup>1</sup>

The German automaker admitted that it intentionally programmed a number of its diesel vehicles to activate emission controls only during America's NOx emissions tests.<sup>2</sup> Once the tests were complete, however, the software deactivated the emission controls, and the subject vehicles gave off NOx emissions at up to 40 times the permitted level.<sup>3</sup> "Noticeable" deviations between testing results and real-world use, Volkswagen says, affected 11 million vehicles worldwide.<sup>4</sup> The EPA has ordered that Volkswagen recall about 500,000 cars in America to fix the software.<sup>5</sup>

While Volkswagen has admitted to the deception in America, and the software is capable of cheating European emissions tests, it is not clear whether the automaker used the software the same way in Europe.<sup>6</sup>

Although not a conventional marketing statement, this deception is nevertheless an instance of green-washing – communicating false or misleading information about purported environmental benefits. As such, it may be helpful to view the Volkswagen emissions scandal in the context of greenwashing. As discussed herein, this analysis demonstrates the scandal to have some commonalities with other greenwashing cases, but also reveals a new theme which may portend the future of greenwashing.

# II. The Volkswagen Scandal Comports with Common Threads of Greenwashing

In one sense, the deceptive use of emissions control software by Volkswagen comports with a theme frequently encountered before in greenwashing, i.e., a product's real-world performance does not live up to its testing results.

The most common example is the charge that a car's actual gas mileage is considerably lower than an environmental regulator's fuel efficiency estimates. In recent years, these allegations have been made against Ford, Toyota, and Honda.

Two class action lawsuits filed against Ford in America are illustrative. In those, the plaintiffs alleged that the American automaker misrepresented the miles per gallon achieved by its Fusion and C-Max SE hybrid vehicles.<sup>7</sup> The complaints accused

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<sup>1</sup> The Economist, "A Mucky Business," 26 September 2015, available on the Internet at < http://www.economist.com/news/briefing/21667918-systematic-fraud-worlds-biggest-carmaker-threatens-engulf-entire-industry-and> (last accessed on 23 November 2015).

<sup>2</sup> The Economist, "Dirty Secrets," 26 September 2015, available on the Internet at < http://www.economist.com/news/leaders/ 21666226-volkswagens-falsification-pollution-tests-opens-door -very-different-car> (last accessed on 17 December 2015).

<sup>3</sup> Supra, note 2.

Supra, note 1.

Supra, note 1.

<sup>6</sup> Richard Westcott, BBC News, "VW cars can also cheat European emissions test, BBC learns," 23 November 2015, available on the Internet at <a href="http://www.bbc.com/news/business-34857404">http://www.bbc.com/news/business-34857404</a>> (last accessed on 23 November 2015).

<sup>7</sup> Complaint, Pitkin et al. v. Ford Motor Co. et al., Case No. 8:13-cv-00954-DOC-JPR (C.D. Cal. Feb. 8, 2013) (hereinafter "Pitkin Complaint"); Complaint, Strand et al. v. Ford Motor Co. et al., Case No. 8:12-cv-02232-DOC-JPR (C.D. Cal. Dec. 28, 2012) (hereinafter "Strand Complaint").

Ford of a "widespread misleading and deceptive advertising campaign throughout California and the United States" touting the cars' combined (city and highway) 47 miles-per-gallon (mpg) gas mileage estimate provided to the EPA.<sup>8</sup> According to plaintiffs, the EPA estimates do not provide actual mileage for a vehicle under normal, real life driving conditions because the test conditions were designed to maximize fuel mileage.<sup>9</sup> The EPA tests are conducted using lab machines called dynamometers instead of roads, one of the complaints says.<sup>10</sup> In addition, the highway portion of the test uses a speed range of only about 48-60 miles per hour and is performed by a professional driver.<sup>11</sup>

According to the complaints, Consumer Reports found that the C-Max hybrid achieved a combined 37 mpg, and the Fusion hybrid a combined 39 mpg, well under the advertised 47 mpg figure. The class plaintiffs accused Ford of misleading consumers by advertising the EPA mpg estimates as actual, expected mileage under normal, real world driving conditions while failing to disclose that the ratings are mere estimates based on particular testing conditions.

A variation on this theme is the allegation that the testing protocols themselves are flawed, e.g., in law-suits against Hyundai and Kia about supposedly overstated fuel economy figures due to testing methods that were not compliant with EPA requirements.<sup>14</sup>

Like the Ford and Hyundai/Kia lawsuits, Volkswagen's greenwash is problematic because of the resulting adverse effects on the environment. In this case,

the actual NOx output is considerably greater than the testing output. But just as troubling as the result of the deception is Volkswagen's method of deception

## III. he High-tech Greenwash

The method seems to reflect a new trend of technological greenwashing. Rather than making false or misleading statements in ads and other marketing materials, or providing express representations of inflated numbers, this new form of greenwashing uses technology to deceive.

Technological greenwashing has appeared at least once before the Volkswagen scandal. A class action lawsuit filed in June 2015 in Los Angeles accused Ford of claiming that a software update for the Fusion Hybrid would increase performance and mileage. <sup>15</sup> According to the lead plaintiff, Dave DeLuca, the car's monitor displayed better mileage and less gas usage after the upgrade, but the numbers were inaccurate and the vehicle's actual mileage did not improve. <sup>16</sup>

What's new in the DeLuca case and the Volkswagen scandal is the software piece. After the dealer installed the software update in his car, Mr. DeLuca tested its performance and found that the vehicle's software relayed inaccurate mileage and incorrect gasoline usage figures. When he drove the car under allegedly optimal conditions, he found that the car's monitor was indeed displaying better mileage and less gas usage when the mileage had not actually increased. Mr. DeLuca performed another test, doing comparative driving runs with a gas-only Ford Fusion. He found that the gas-only Fusion displayed accurate numbers while Fusion Hybrid displayed inaccurate figures. He found that the gas-only fusion displayed inaccurate figures.

The high-tech greenwash perpetrated by Volkswagen is more insidious than typical greenwashing cases because the entire deception is cloaked in technology. Specifically, deep inside the vehicle where nobody could detect its actions, Volkswagen's software activated emission controls during testing only and subsequently deactivated them during actual use of the vehicles. It is similar to the allegations made against Ford in that software is the mechanism of deception. However, Volkswagen's greenwash arguably is even worse than the Ford Fusion allegations because there isn't even an affirmative misleading dis-

<sup>8</sup> Pitkin Complaint at ¶¶ 13-23.

<sup>9</sup> Pitkin Complaint at ¶ 27.

<sup>10</sup> Supra, note 10.

<sup>11</sup> Supra, note 10.

<sup>12</sup> Pitkin Complaint at ¶ 33.

<sup>13</sup> Pitkin Complaint at ¶¶ 9-11.

<sup>14</sup> Complaint, Hunter et al. v. Hyundai Motor America et al., Case No. 8:12-cv-01909-JVS-JPR (C.D. Cal. Nov. 2, 2012).

<sup>15</sup> Complaint, DeLuca v. Ford Motor Co. et al., Case No. BC583666 (Cal. Sup. Ct. Jun. 1, 2015) (hereinafter "DeLuca Complaint").

<sup>16</sup> DeLuca Complaint at ¶¶ 15-17.

<sup>17</sup> DeLuca Complaint at ¶ 16.

<sup>18</sup> DeLuca Complaint at ¶ ¶ 15-17.

<sup>19</sup> DeLuca Complaint at ¶ 17.

<sup>20</sup> Supra, note 20.

play in the vehicle connected to the software as in the Ford case, so consumers had no idea there were any representations being made at all.

### **IV. Conclusion**

Volkswagen's use of software to cheat on vehicle emissions tests echoes a common thread of greenwashing cases against car manufacturers. That is the charge that a product's real-world performance, in gas mileage for example, does not live up to its testing results. However, the German automaker's use of software to deceive brings a novel technological aspect to greenwashing. This high-tech greenwash perpetrated by Volkswagen is more insidious and disturbing than typical greenwashing cases because the entire deception is cloaked in technology such that consumers may not even be aware that representations are being made. Government watchdogs and consumer should be vigilant because this is unlikely to be the last of the high-tech greenwash.